AN EXPLORATORY INVESTIGATION INTO INTEGRATED REPORTING COMPETENCIES

By

Mrs. R. Fourie	96054019	082 653 7511 ronel.fourie@pwc.com

Submitted in partial fulfilment of the requirements for the degree
MCom in Business Management

in the

FACULTY OF ECONOMIC AND MANAGEMENT SCIENCES

at the

UNIVERSITY OF PRETORIA

Study leaders:
Prof. D. de Jong, Mrs. R. Swart, Mr. P. Conradie

Date of submission:
2018-08-31

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

DEPARTMENT OF BUSINESS MANAGEMENT

Declaration Regarding Plagiarism

The Department of Business Management emphasises integrity and ethical behaviour with regard to the preparation of all written assignments. Although the lecturer will provide you with information regarding reference techniques, as well as ways to avoid plagiarism (see the *"Guidelines on Referencing*" document), you also have a responsibility to fulfil in this regard. Should you at any time feel unsure about the requirements, you must consult the lecturer concerned before submitting an assignment.

You are guilty of plagiarism when you extract information from a book, article, web page or any other information source without acknowledging the source and pretend that it is your own work. This does not only apply to cases where you quote the source directly, but also when you present someone else's work in a somewhat amended (paraphrased) format or when you use someone else's arguments or ideas without the necessary acknowledgement. You are also guilty of plagiarism if you copy and paste information directly from an electronic source (e.g., a web site, e-mail message, electronic journal article or CD-ROM) without paraphrasing it or placing it in quotation marks, even if you acknowledge the source.

You are not allowed to submit another student's previous work as your own. You are furthermore not allowed to let anyone copy or use your work with the intention of presenting it as his/her own.

Students who are guilty of plagiarism will forfeit all credits for the work concerned. In addition, the matter will be referred to the Committee for Discipline (Students) for a ruling. Plagiarism is considered a serious violation of the University's regulations and may lead to your suspension from the University. The University's policy regarding plagiarism is available on the Internet at *http://www.library.up.ac.za/plagiarism/index.htm*.

For the period that you are a student at the Department of Business Management, the following declaration must accompany **all** written work that is submitted for evaluation. No written work will be accepted unless the declaration has been completed and is included in the particular assignment.

	Student 1
I (full names & surname):	Ronel Fourie
Student number:	96054019

Declare the following:

1. I understand what plagiarism entails and am aware of the University's policy in this regard.
2. I declare that this assignment is my own, original work. Where someone else's work was used (whether from a printed source, the Internet or any other source) due acknowledgement was given and reference was made according to departmental requirements.
3. I did not copy and paste any information directly from an electronic source (e.g., a web page, electronic journal article or CD ROM) into this document.
4. I did not make use of another student's previous work and submitted it as my own.
5. I did not allow and will not allow anyone to copy my work with the intention of presenting it as his/her own work.

R Fourie

Signature: Student 1

TABLE OF CONTENTS

APPENDICES

AN EXPLORATORY INVESTIGATION INTO INTEGRATED REPORTING COMPETENCIES

ABSTRACT

Purpose: The purpose of the study was to explore the competencies needed to put integrated reporting into practice.

Design/methodology/approach: The research approach was designed as a generic qualitative inquiry, informed by the process of traditional job analysis. Semi-structured interviews were conducted out with 21 people involved in integrated reporting either as preparers or as consultants. In addition, secondary data analysis was conducted on existing competency frameworks of the IIRC, ACCA, CIMA and SAICA, selected because of updates made for integrated reporting. The primary and secondary data sources were coded and mapped to three competency categories namely: cognitive, functional and foundational competencies.

Findings: Integrated reporters fulfil a number of roles, namely as: interpreter of the <IR> Framework, systems architect, nexus of information, storyteller and innovator. Various cognitive, functional and foundational competencies were identified as critical within each of these roles. The bulk of the integrated reporters' time was spent on their role as nexus of information and storyteller. The integrated reporters' interpretation of the <IR> Framework was identified as the basis for their approach to presenting a business case for integrated reporting that may or may not be founded on the principle of sustainable value creation. Many reporters spent most of their time acting as custodians and editors of the information collected for the integrated report as well as writing of a specific story, while challenging the board to ensure that the information portrayed was complete. The specific story integrated reporters focussed on appeared to favour the information requirements of shareholders as opposed to the information needs of stakeholders. The ability to innovate is an aspirational role, underpinned by meta-competency. The ability of the integrated reporter to apply meta-competency will be increasingly important, as the integrated reporter spends more time in the role of innovator.

Research limitations/implications: The interviewees did not consider if the organisations they work for are successful at integrated reporting, therefore the competencies reflect their personal views of competencies required. As the competencies were compared to competencies set out in published competency frameworks, the limitation was mitigated to

some extent. The researcher was involved in preparing the integrated report for a non-listed organisation and in adjudicating integrated reports for an award at the time of the study.

Originality/value: This paper is the first to examine competencies required to put integrated reporting into practice as identified by preparers and consultant on integrated reporting. It makes an important contribution to the academic literature by adding to the limited body of research on integrated reporting and corporate governance in South Africa. The study provides insight into the roles that integrated reporters currently fulfil and how these roles may impact on the implementation of integrated reporting in future.

Keywords: integrated reporting; integrated report; meta-competency; competency; cognitive competency; functional competency; foundational competency; competency framework; job analysis.

AN EXPLORATORY INVESTIGATION INTO INTEGRATED REPORTING COMPETENCIES

1 INTRODUCTION

1.1 BACKGROUND

The skills required of an accounting professional or business leader are very different from those required thirty or forty years ago (Monterio, 2015). Some competencies, including soft skills, have become more important to the role of business leaders than cognitive competencies like academic knowledge (Siriwardane et al., 2014). One reason for the change in the required competencies for accounting professionals and business leaders can be ascribed to the global increase in the popularity and implementation of integrated reporting as the new reporting norm (Owen, 2013).

Why is integrated reporting seen as an evolution in corporate reporting? The reporting initiatives that preceded integrated reporting, such as triple bottom line reporting, social and environmental accounting and sustainability accounting focused on non-financial reporting. The non-financial reporting in the predecessor frameworks remained in silos and was not integrated into the financial reporting of organisational strategy (Yongvanich and Gutherie, 2006, Eccles et al., 2010, Stent and Dowler, 2015). Integrated reporting, on the other hand, reflects a holistic perspective on an organisation's ability to create value for all its stakeholders, not only for its investors, in the short, medium and long term (IIRC, 2013). Reporting on an organisation's ability to create value in the long term is not without its benefits.

A number of studies have been undertaken to demonstrate the benefits of integrated reporting which has resulted an increase in its popularity across the world. One such study found that the shares in organisations that practise integrated reporting were typically held by investors for longer periods of time (Kotsantonis et al., 2016). Shareholders and investors appear to be changing their investment behaviour, realising that organisations depend on finite resources if they want to continue creating value in the long term (Kotsantonis et al., 2016). These investors are looking to the integrated report to tell a holistic financial and non-financial story of the organisation and to reflect on how the organisation affects the capitals it uses (IIRC, 2013).

Who is involved in integrated reporting? As accounting professionals and business leaders are often involved in the process of integrated reporting, their traditional competencies have to be updated. Accounting professionals have traditionally focused on financial performance metrics and reporting. Integrated reporting requires an integrated approach to reporting financial and non-financial measures, which has resulted in a change in the traditional roles of professional accountants and others involved in putting integrated reporting into practice (Sridhar, 2012, Owen, 2013). The preparers and consultants of integrated reporting usually come from academic backgrounds, with accountants and management accountants often either leading the process or acting as integral parts of the team (Higgins et al., 2014). Starbuck (2012) believes that the role of the chief financial officer in integrated reporting will increase, as they are able to assess the interaction between sustainability initiatives and the performance by organisations. Starbuck (2012) acknowledges that paying more attention to the organisation's sustainability strategy will enable the chief financial officer to contribute to the success of the organisation's longer-term value creation.

Both professional accountants and people from other disciplines are involved in integrated reporting, and a number of comments have been made on the advantages that financial professionals bring to the process of integrated reporting. In support of this view, the accounting and management accounting profession, through various professional bodies, have claimed integrated reporting as a logical fit for the roles that accountants already play in organisations. This is based on their existing competencies in corporate reporting (IFAC, 2017). The President and CEO of the Institute of Management Accountants, made the following statement in an article when referring to the impact of integrated reporting on the management accounting profession: "*What a great time it is to be a management accountant, and what a great opportunity management accountants have to influence better business and a better society"* (Thomson, 2013:8).

It is believed that the existing competencies possessed by professional accountants could contribute to the process of integrated reporting, as accountants are able to ensure the consistency between financial, environmental, social and governance data (Roth, 2014). The challenges that professional accountants face as they continue to participate in putting integrated reporting into practice in organisations are those of working with specialists in a

wide range of technical fields, monitoring and reporting on non-financial performance measures and understanding the impact of organisations on all the capitals, not only on financial capital (Roth, 2014).

If accountants and other professionals are involved in the process of integrated reporting, what are the competencies that they need if they are to put integrated reporting into practice in the organisations in which they work or the consulting services they provide? The accounting education curriculum has continued to evolve and improve over the last few decades. One of the turning points in accounting education was the The Pathways Commission (2012) report, which identified the need for a change in accounting education. This would be adapted to the changing demands on the professional accountant. In order to describe the types of competencies needed by professional accountants, three categories of competencies were identified: foundational competencies, broad managerial competencies and accounting competencies (Pathways Commission, 2012).

Studies by Owen (2013) and Lawson et al. (2014) conclude that, in light of, amongst other developments in integrated reporting, accounting education should have a more strategic focus and should move away from focusing on technical skills that can be applied only at the transactional level. Another perspective is that neither technical skills nor soft skills are sufficient on their own. Daff et al. (2012) discuss the increased importance of emotional intelligence in addition to soft skills for professional accountants, which would enable them to deal with the complexity of the business environment. Lawson et al. (2014) use integrated reporting as an example of the complexities in present-day accounting. These complexities necessitate an updating of the competencies accountants need if they are to remain relevant. The competencies are gained through academic learning and practical experience, one complementing the other (Lawson et al., 2014).

There are also a few innovative perspectives on competencies that may play a role in the complexity created by integrated reporting. Brown and McCartney (1995), Delamare-Le Deist and Winterton (2005), as well as Sultana (2009), add an additional dimension to the trio of competencies referred to as cognitive, functional and foundational competencies. They refer to this additional competency as “meta-competency”, which is a person’s ability to grow in the other categories of competency, as and when required. Meta-competency is

also described as the ability to handle the intricacies of functioning in a management or executive role (Brown and McCartney, 1995).

> *"Meta-competences are a prerequisite for the development of capabilities such as judgement, intuition and acumen upon which competences are based and without which competences cannot flourish"* (Brown and McCartney, 1995:43).

In addition to new perspectives on competencies, the neglected competency in accounting education, according to Guthrie and Parker (2017), is the fact that social responsibility and accountability do not play a sufficiently significant role, if any, in accounting education and research.

> *"We see the future of our [accounting] discipline as one that is fully integrated with social practice, and in an ever more complex world, must extend way beyond its initial technical limits"* (Guthrie and Parker, 2017:12).

As professional accountants are involved in the integrated reporting process, it is necessary for professional accounting competency frameworks to be updated to incorporate competencies relating to integrated reporting. A number of competency frameworks have been updated. Such competency frameworks include that of the Association of Chartered Certified Accountants ("ACCA"), which was updated in anticipation of the release of the <IR> Framework (Owen, 2013). Accountants are, however, not the only integrated reporters, so the International Integrated Reporting Council ("IIRC") issued its Competence Matrix ("IR Matrix"), setting out some of the competencies needed by integrated reporters, regardless of their profession (IIRC, 2016). The IIRC developed its IR Matrix by engaging with stakeholders from all over the world. A number of South African organisations were part of the IIRC pilot program that contributed to the development of the <IR> Framework and were also part of the process of developing the IR Matrix (IIRC, 2011).

South Africa is described as the home of integrated reporting and is seen to be at the forefront of developments in integrated reporting (Burke and Clark, 2016). This is mostly because of the requirements of the South African stock exchange and King III. The King IV governance code has required listed companies to prepare integrated reports since 2010 (Burke and Clark, 2016). A discussion paper on the framework for integrated reporting was issued by the South African Integrated Reporting Committee ("IRC") in 2011, before the IIRC issued the <IR> Framework in 2013 (IRC, 2011). The integrated reporters in South Africa,

who have therefore been preparing integrated reporting since 2010, represent a good sample of preparers and consultants who are well suited to describing the competencies they have been applying in putting integrated reporting into practice.

1.2 PURPOSE OF THE STUDY

The purpose of the study was to explore the competencies needed to put integrated reporting into practice. This would be by means of semi-structured interviews and exploring the competencies preparers and consultants implementing integrated reporting believe are required when putting it into practice. This would include the various roles they fulfil as integrated reporters. The next step was to examine the existing competency frameworks for similar competencies. The identified competencies would be contrasted with those described in the existing competency framework. The final step would be to highlight the competencies identified in the competency frameworks which were not identified during the interviews.

1.3 CENTRAL AND SECONDARY RESEARCH QUESTIONS

The study aimed to answer the central and secondary research questions listed below.

Central research question:

- What competencies are needed to put integrated reporting into practice?

Secondary research questions

- What knowledge have integrated reporters gained that enables them to put integrated reporting into practice?
- What were the tasks that integrated reporters performed as part of the integrated reporting process?
- What were the skills, expertise or competencies required to perform these tasks?

1.4 RESEARCH CONTRIBUTION

Pratt (2009) highlights the importance of identifying gaps in previous studies but also of clarifying how this study contributed to filling those gaps. This study is different from the previous studies in accounting education, as it does not consider gaps in perceived competencies between trainee and employer, or the student and the formal education system. It rather considers the competencies needed to do integrated reporting, regardless of where or when these skills were obtained. This is also regardless of whether or not the integrated reporter is an accountant. Previously, the skills of newly-qualified professionals were considered, whereas this study considers the skills needed by practitioners with experience in integrated reporting.

It is important to fill this gap because accountants and other professionals are required to have the skills to do integrated reporting, yet very little research has been undertaken to understand what these skills are or where they are best learned. There has been limited research in South Africa on the impact of integrated reporting on the competency framework of professional accounting and other organisations. The research undertaken before compiling the IR Matrix was done on an international basis only and does not apply to any specific profession or territory (IIRC, 2016). This study would be valuable to training providers who want to tailor their courses to address the skills needed to put integrated reporting into practice in South Africa. The study has broader application, as most of the skills are not specific to any profession or territory.

Cardy and Selvarajan (2006) point out that an analysis of the skills required for a specific task are also important in a recruitment process as this enables the recruiter to ensure that applicants have the necessary skills or fill the skills gap in a group that has been tasked with a specific job, in this instance with integrated reporting. The study will be of interest to current and future professionals or to companies who want to employ or recruit a person or group of people to form part of the integrated reporting process in an organisation, as it will enable them to understand the competencies needed to be able to put integrated reporting into practice.

The study makes a link between the skills required and the concepts: competency, competency modelling and competency frameworks. This direct link has been lacking in previous studies. The study therefore brings new understanding to the concepts by addressing these concepts in combination with each other and therefore increases the quality of the findings in the study (Vaismoradi et al., 2013).

Chapter 2 provides a literature review on the evolution of integrated reporting as a corporate reporting framework, identifies who is typically involved in integrated reporting, some findings based on research on preparers of integrated reports and identifies trends and research on education on integrated reporting. As there is limited research on the topic of integrated reporting education, Chapter 2 also explores accounting education and the deficiencies identified in the accounting curricula. The literature review further provides clarity on the definition of the term “competency” as it is applied in a traditional job analysis. Chapter 3 sets out the methodology applied in the study. Chapter 4 includes findings and discussions on the themes identified during the research. Lastly Chapter 5 concludes on the competencies needed to put integrated reporting into practice.

2 LITERATURE REVIEW

In Part 1 of this chapter, the researcher describes the evolution of integrated reporting, specifically in South Africa. In Part 2, the study explores the question “Who is involved in integrated reporting?” Part 3 evaluates the complexities identified by preparers putting integrated reporting into practice. Part 4 examines the trends and research in education on integrated reporting and finds that most of the literature relates to the deficiencies in accounting education. Part 5 discusses the concept “competencies” and the various perspectives on what the term represents. Part 6 describes the contribution of the study at hand.

2.1 THE EVOLUTION OF INTEGRATED REPORTING

The quest for the improved reporting of financial and non-financial information is not new, even though Adams (2015:23) describes integrated reporting as “*a different way of thinking about corporate success and reporting”*. A number of reporting initiatives however preceded integrated reporting, each of which have had some influence on the final framework (Eccles et al., 2015).

Reporting on measures of financial, social and environmental performance has always been in high demand (Burke and Clark, 2016). Non-financial information was already included in the annual reports of the early experimenters: Novozymes, Novo Nordisk and Natura in 2002 (Eccles et al., 2015). These companies appreciated the impact of their operations on the broader environment and the equally important obligation on them, as corporate citizens, to report on this impact (Eccles et al., 2015). In their discussion on the initial impact of integrated reporting on existing corporate reporting practices, Stent and Dowler (2015) identify the 2005 article by (White) as setting the scene for non-financial reporting and therefore integrated reporting. Eccles et al. (2015) further credit the *One Report* by *Eccles and Krzus (2005)* and the article *Integrated reporting: Issues and implications for reporters* by *Solstice Sustainability Works Inc (2005)* as the initial expert observations of the concept, integrated reporting.

Other reporting developments over the past decade include, amongst others, enhanced business reporting, value added statements, social accounting (Dierkes and Preston, 1977), and environmental accounting (Ullman, 1976), reporting on intellectual capital, balanced score card and reporting on the "triple bottom line", including the entity's social, environmental and economic impacts (King and Atkins, 2016, Higgins et al., 2014, Rambaud and Richard, 2015, Stent and Dowler, 2015).

Yongvanich and Gutherie (2006) refer to Hope and Hope (1998) in reference to the fact that early intellectual capital reporting had already identified categories of capitals relating to customers, infrastructure and employees (Yongvanich and Gutherie, 2006). The balanced score card finds its roots in the 1980s and sets out to include both financial and non-financial performance measures in line with the company's strategy and from the perspective of its shareholders and customers (Kaplan and Norton, 1992, Yongvanich and Gutherie, 2006). Their study of the use of the "triple bottom line" is a popular guideline used by companies for non-financial reporting, Sridhar (2012) concludes that it does not reflect true sustainability, as it is not integrated with the company's performance or strategy.

Gray and Laughlin (2011) refer to the renewed focus on social matters as a result of the revival of corporate social responsibility as a corporate attempt at addressing very limited aspects of sustainability. Dierkes and Preston (1977) had already referred to the obligation of organisations to consider their role in polluting the environment in what was then referred to as "corporate social accounting". Gray and Laughlin (2011) reflect on the progress made by social accounting in relation to financial accounting and find that it remained on the fringe, often to be interpreted as a costly burden. In their reflection on social accounting and its development, Gray and Laughlin (2011) highlight the fact that there is often a lack of appreciation for the ethical reasons for social accounting and not enough regulation to enforce social accounting, as well as limited tangible action taken by organisations to review their unsustainable practices. Schaltegger and Burritt (2017) attribute the initial rise of environmental accounting to increased stakeholder activism and to the increased costs associated with scarce resources, especially in an increasingly global trading environment. Schaltegger and Burritt (2017) distinguish between "*conventional accounting*" and monetary measures of environmental impacts referred to as "*ecological accounting*".

The reporting movement that remains in the forefront of non-financial reporting is sustainability reporting, specifically the sustainability reporting framework guidelines published by the GRI (Stent and Dowler, 2015). Maas et al. (2016) believe that the key motivation for an organisation to report on its sustainable performance is in order to obtain or maintain its social operating license by strengthening its reputation and brand. Burritt and Schaltegger (2010) identify two distinct schools of thought when it comes to sustainability accounting and reporting through a review of recent literature on the topic. The first approach is critical of whether business can ever be sustainable and the second supports the integration of sustainability factors into business decisions and encourages the development of tools to facilitate this integration (Burritt and Schaltegger, 2010).

According to Burke and Clark (2016:274), South Africa has been at the forefront of developments in integrated reporting, as reference is made to South Africa as "*the home of integrated reporting*." The South African Report on Corporate Governance, King III, called for a more holistic view of a company's performance, which would include its financial performance and its sustainability in the form of an integrated report in 2009 (Burke and Clark, 2016). In light of this recommendation in King III, the IRC of South Africa, issued a discussion paper in 2011 titled *Framework for integrated reporting and the integrated report.* The discussion paper recommended an integrated report which combines financial and non-financial measures and indicated how the company would continue to be of benefit to all its stakeholders in the long term (IRC, 2011).

The recommendation in King III, and now King IV, for companies to prepare an integrated report that integrates sustainability practices and company strategy, remains voluntary for all organisations in South Africa (Eccles et al., 2015, PwC, 2016). Even though King III proposes the voluntary disclosure of an integrated report, South African listed companies have been preparing integrated reports since 1 March 2010 as a result of the Johannesburg Stock Exchange ("JSE") including the King Codes in its Listings Requirements (IRC, 2011). King IV, effective from 1 April 2017, continues to promote the preparation of an integrated report as an output of applying integrated thinking in an organisation (PwC, 2016).

The principles contained in the IRC discussion paper preceded the IIRC discussion paper and framework, and integrated sustainability, economic and governance considerations into

its draft reporting model (Owen, 2013). The presentation of environmental, sustainability and other information is not new and is referred to collectively as non-financial information (White, 2005). As no formal integrated reporting framework existed before 2013, companies globally prepared integrated reports based on the integrated reporting principles in King III, the IRC discussion paper or the IIRC's discussion paper *Towards Integrated Reporting – Communicating Value in the 21st Century* released in 2011 (Dumay et al., 2016). In their research on integrated reporting, Burke and Clark (2016) found that currently, the IIRC <IR> Framework is widely used as an guideline for preparing integrated reports.

The role-players responsible for setting up the IIRC were the Global Reporting Initiative ("GRI"), the pioneers in non-financial reporting, and the Prince's Accounting for Sustainability Project ("A4S") (IIRC, 2011, GRI, 2013, White, 2005). In 2011, after its formation, the IIRC promptly set up a pilot program with the purpose of drafting an integrated reporting framework (IIRC, 2011). The <IR> framework was drafted according to the inputs from preparers of integrated reports worldwide, referred to as the "pilot program companies". The founding members of the pilot program include two South African companies, namely Gold Fields and Eskom. These later increased to eight South African companies out of a total of 140 participating companies worldwide (IIRC, 2011). One of the companies that experimented in integrated reporting from as early as 2004, Novo Nordisk, was also part of the group of founding companies (Eccles et al., 2015).

The <IR> framework, issued in December 2013, was endorsed by the IRC in South Africa shortly after being published as "*Good practice on how to prepare an integrated report*" (IIRC, 2013). In the published <IR> framework, an integrated report is described as "*a concise communication about how an organisation's strategy, governance, performance and prospects, in the context of its external environment, lead to the creation of value in the short, medium and long term"* (IIRC 2013). Integrated reporting, on the other hand, results in an integrated report but is based on the internal process of assessing the impact of all business decisions on all the various capitals altered by such decisions (IIRC, 2013). After the <IR> framework was issued, the Corporate Reporting Dialogue ("CRD") was established, including a number of organisations such as the International Accounting Standards Board ("IASB"), the Climate Disclosure Standards Board ("CDSB"), GRI, to name

a few. It acknowledges that neither financial reporting nor sustainability reporting alone reflects the value creation of an entity (King and Atkins, 2016).

In light of the emergence of integrated reporting, the International Federation of Accountants ("IFAC"), of which the South African Institute of Chartered Accountants ("SAICA") and a number of accounting professional bodies worldwide are members. The IIRC have signed a Memorandum of Understanding to promote cooperation, coordination and alignment on the issue of integrated reporting (IFAC, 2017) .

The adoption of integrated reporting as a corporate reporting framework has not resulted in a complete turn-around in corporate reporting practices in most organisations. The next section reflects on research into the practices resulting from putting integrated reporting into practice.

2.2 PUTTING INTEGRATED REPORTING INTO PRACTICE

2.2.1 Integrated reporting practices in South Africa

A number of recent studies have considered complexities relating to the implementation of integrated reporting. A number of these studies were conducted in South Africa and these have highlighted areas of development relating to interpretation of the <IR> Framework, sustainability, stakeholder engagement as well as a lack of tangible change in existing reporting structures as a result of implementing the <IR> Framework. A review of four South African integrated reporters for the period 2012-2014 noted that reporters grapple with the reason for and benefit of preparing an integrated report (Du Toit and Van Zyl, 2017). A recent study on a number of preparers found that the purpose of the integrated report was not grasped by preparers (McNally et al., 2017).

In terms of stakeholder engagement, the studies of <IR> practices in South Africa had mixed views on the effectiveness of stakeholder engagement. One of the recent studies, in 2017, of 9 South African organisations found that these organisations do not sufficiently engage with stakeholders to understand their legitimate needs in order to assist the organisation to inform the content of its integrated report (McNally et al., 2017). If organisations are not engaging with stakeholders to understand what should be included in the integrated report,

another study found that that management often use integrated reports to manage perceptions of the organisation held by its stakeholders (Atkins and Maroun, 2015).

Despite some of the negative perceptions of the impacts of the <IR> Framework, not all the findings were negative. Atkins and Maroun (2015) interviewed twenty institutional investors in South Africa, and noted that they place an increased focus on environmental, social and governance ("ESG") matters when considering integrated reports. The interviewed institutional investors noted that organisations that prepare integrated reports, and the market they operate in, were increasingly trustworthy and authentic as a result Atkins and Maroun (2015). Another study on the legibility of integrated reports of organisations listed on the JSE stock exchange in 2015 and 2016, in contrast to the institutional investors' view, concluded that the more complex the language in an integrated report, the more awards it might win, even though it may not be useful to its readers (Du Toit and Van Zyl, 2017).

Despite the view by institutional investors that integrated reporting results in a bigger focus on ESG matters, there was still a lack of buy-in from a board perspective. In terms of the recent study on integrated reports, boards do not place sufficient emphasis on the requirement to integrate, manage and monitor sustainability performance alongside financial performance as part of implementing integrated reporting (McNally et al., 2017).

Changing existing processes and practices appears to remain a challenge to integrated reporters. The recent study identified a number of hurdles to the effective implementation of integrated thinking and in integrated reporting (McNally et al., 2017). It was found that organisations use existing internal reporting processes and procedures to determine what should be included in the integrated report, instead of changing existing reporting processes when implementing integrated reporting (McNally et al., 2017). Information collection and interpretation was noted as a problematic area for organisations, especially due to the lack of change in systems and processes (McNally et al., 2017).

Another obstacle to implementing integrated reporting, according to the institutional investors interviewed, was that organisations do not take ownership of the integrated reporting process by relying heavily on consultants (Atkins and Maroun, 2015). The research further found that the integrated reports were split into elements with each element being

prepared by separate teams and based on a compliance focussed, tick-box approach (McNally et al., 2017).

2.2.2 Other integrated reporting practices

Further abroad a number of studies have reached similar conclusion. A study of 15 Australian organisations implementing integrated reporting identified that the early integrated reporters used existing reporting processes to do so, without, what the study refers to as "*radical, transformative change to reporting processes"* (Stubbs and Higgins, 2014:1068). A study of six integrated reporting adopters in Columbia identified that less than half of the organisations implemented more drastic process changes for collecting and analysing information while most of the organisations made less formal changes (Macias and Farfan-Lievano, 2017). In a study on the implementation strategy of integrated reporting in five Italian public sector organisations, it was noted that there were two distinctive approaches to implementing integrated reporting and each of the approaches have significantly different outcomes. Most of the organisations followed a push strategy that confirmed, like previous studies, that such a strategy only resulted in minimal changes in existing, advanced reporting processes (Gutherie et al., 2017). The implementation of a pull strategy however, resulted in the implementation of integrated thinking as a separate, radical change in reporting (Gutherie et al., 2017).

Consideration was given to whether integrated reporting achieves weak accountability through reputation management or strong accountability through robust stakeholder engagement and cultural change. The study concluded that strong accountability is implied by robust stakeholder engagement, integration between strategy and business model and integration between financial and non-financial information (Silvestri et al., 2017).

2.2.3 The business case for integrated reporting at the expense of sustainability

There appears to be tension between the business case for integrated reporting and its ability to progress sustainable value creation (Adams, 2015, Brown and Dillard, 2014, Flower, 2015, Thomson, 2015). Adams (2015) believes that the link between the capitals and sustainability has not yet been crystallised in research. Sustainability remains a

segregated topic with separate disclosure that often won't make the materiality cut to be included in the integrated report (Adams, 2015). The business case for integrated reporting appears to fall short in that it supports current business and reporting practices rather than challenging the current practices to be more sustainable (Brown and Dillard, 2014).

Flower (2015) argues that sustainability accounting was an original objective of the IIRC but that this objective was set aside in favour of investor value. In addition, there is an allegation that only outcomes and impacts that directly affects the organisation, would be considered for disclosure in an integrated report regardless of its impact on parties external to the organisation (Flower, 2015). In addition, the requirements in the <IR> Framework are not considered to be strong enough to result in significant change in reporting practices (Flower, 2015). Thomson (2015), in response to the comments made by Flower (2015), agrees that integrated reporting and the requirement to prepare an integrated report would not result in significant change in sustainable value creation and limits the possibility for significant social and environmental change.

Tweedie and Martinov-Bennie (2016) compared the requirements in existing sustainability frameworks (Accounting for Sustainability Project, GRI and King on Corporate Governance in South Africa) to the <IR> Framework. The focus was shifted away from key sustainability principles by the requirements in the <IR> Framework including: to focus on the report, rather than on accountability; to focus on "*organisational over social stakeholders"*; to focus on investors' information needs over those of stakeholders (Tweedie and Martinov-Bennie, 2016).

Not all the requirements in the <IR> Framework move away from sustainable value creation. The principle in the <IR> Framework that requires investors to have a longer-term perspective on an organisation's profitability does, if applied appropriately, impact on the ability of an organisation to improve environmental and social sustainability in the longer-term (Tweedie and Martinov-Bennie, 2016).

2.3 WHO IS INVOLVED IN IR?

Professional accounting bodies have taken note of integrated reporting and have agreed to work together to promote it amongst its members (IIRC, 2017). These professional accounting bodies, have claimed integrated reporting as a logical fit to the roles that accountants already play, based on their existing competencies in corporate reporting (IFAC, 2017). In terms of its commitment to integrated reporting, the International Federation of Accountants ("IFAC") stated, in its Policy Position paper in 2017, that it "*strongly supports and encourages the involvement of professional accountants in this important emerging field"* (IFAC, 2017). IFAC is of the view that professional accountants' role in an organisation is that of "*creators, enablers, preservers, and reporters of sustainable value for their organisations"* and that this role fits in with the objectives of integrated reporting (IFAC, 2010). The 2017 IFAC Policy Position paper sets out roles and contributions that accountants make to integrated reporting. The IFAC paper, advocates for the skills that accountants would bring to the process of integrated reporting: "*The skills and experience of professional accountants are well suited to advancing organisational reporting... Professional accountants are also well placed to facilitate integrated thinking"* (IFAC, 2017:8). This is mainly because of the roles they fulfil as professional accountants involved in reporting in organisations, as assurance providers and as consultants (IFAC, 2017) as described in Table 1 below.

Table 1: Roles and contributions made by professional accountants

Roles	Contributions made by professional accountants
Professional accountants in organizations	• Develop business case • Manage performance • Implement reporting arrangements and systems • Assess and assist in development of governance and risk management • Assess and assist in development of strong internal controls
Assurance practitioners	Enhance credibility of organizational reporting by providing assurance organizational reporting

Roles	Contributions made by professional accountants
Professional accountants providing professional services	Advisory and consulting roles on organizational reporting (especially for small- and medium-sized entities.

Source: IFAC (2017)

Another professional body that has supported the IIRC since its inception is the Chartered Institute of Management Accountants ("CIMA"). Botes and Sharma (2017), in their study on the gap between the accounting management curriculum and practice, confirm that management accountants are involved in integrated reporting, specifically as it relates to sustainable development practices in companies.

The IR Matrix does not identify any specific profession or professional body as the custodians of integrated reporting, but rather acknowledges that the professionals who are already occupied with corporate reporting in organisations have some of the skills that form a basis for the required skillset needed to engage in integrated reporting (IIRC, 2016). If there is no clear fit between any specific profession and integrated reporting, there must be additional complexity in its application. In their study on disclosure practices of early adopters of integrated reporting in Australia, Stubbs and Higgins (2014) identify the challenges that integrated reporting bring to reporting teams. One of the challenges is the strategic focus of integrated reporting is the fact that integrated reporting focuses on both financial and non-financial information to measure an organisation's ability to create value for its stakeholders (Stubbs and Higgins, 2014). Because of this complexity and the involvement of a number of professions, Stubbs and Higgins (2014) decided not only to interview finance teams but also to include sustainability teams in their study. The study found that the early application of integrated reporting in Australia has not resulted in "*revolutionary transformation of the existing financial and sustainability reporting approaches and processes* and that *finance people are not seen as inappropriate people to be involved in non-financial reporting"* (Stubbs and Higgins, 2014).

Sustainability reporting preceded integrated reporting and contains a great deal of non-financial disclosure. We therefore have to consider which internal functions in an organisation were involved in sustainability reporting before integrated reporting was

applied. In a study on the role of management accountants as it relates to accounting for sustainable development in New Zealand, Mistry et al. (2014) found that both accountants and management accountants are a key part of the sustainability reporting process when the organisation itself is committed to sustainable development. There are also a number of perspectives saying that accountants should not take part in sustainability and reporting on non-financial information. In their study on internal processes followed by early integrated reporters in Australia, Stubbs and Higgins (2014) refer to a number of earlier articles that concluded that sustainability reporting had previously been undertaken by the communications, marketing or public relations departments or by separate departments specifically tasked with sustainability or corporate social responsibility reporting.

Higgins et al. (2014) in their interviews in Australian companies involved in sustainability reporting, concluded, contradicting previous studies, that accountants are believed to have the necessary skills to take ownership of the sustainability reporting process or be part of a multi-disciplinary team responsible for producing the sustainability report. Stubbs and Higgins (2014) found that these structures appear to have changed for integrated reporting, as the finance functions, headed up by the chief financial officer, are in most instances part of or leading the multi-disciplinary teams involved in integrated reporting. This finding was mirrored in a study of integrated reporting in Italian public sector organisations where the finance function was found to be a part of the integrated reporting team .(Gutherie et al., 2017).

There are a number of reasons why accountants should be involved in sustainability reporting and integrated reporting as part of a multi-disciplinary team. Starbuck (2012) identifies the benefits of having the chief financial officers (in most cases a professional accountant by training) involved in sustainability practices. A key benefit, highlighted by Starbuck, to the organisation is the ability of many chief financial officers to assess how sustainability initiatives impact on the organisation’s key metrics, such as profit and return on investment. Another benefit is the fact that being involved in sustainability and integrated reporting could enable the chief financial officer to balance short-term market demands against longer-term sustainable development and value creation (Starbuck, 2012). An article by Roth (2014) in the *Chartered Public Accountant (CPA) Journal* highlights that, although there are some complexities in integrated reporting with which accountants may not be

familiar, they should at least be involved in setting up reporting processes as well as ensuring data accuracy and uniformity between the financial and non-financial data presented.

A number of reasons were noted as to why accountants should or should not be involved in integrated reporting. Van Bommel (2014:1157) maintains that, without further empirical research into the practices of integrated reporting, there is a risk that "*integrated reporting gets captured by investors and accountants"* to the detriment of society and the objectives of sustainable development. One specific study by Adams (2002) concluded that the internal reporting processes are influenced by the view that "*accountants are not considered appropriate people to be involved in non-financial reporting"* (Stubbs and Higgins, 2014)

If integrated reporting brings new challenges to corporate reporting teams (Stubbs and Higgins, 2014), it would be interesting to understand whether any measures have been put in place by professional accounting bodies and other professional organisations to update their training curriculum and teach their members the skills required to put integrated reporting into practice. The next section explores the developments in accounting education as a result of organisations adopting integrated reporting.

2.4 TRENDS AND RESEARCH IN THE EDUCATION OF INTEGRATED REPORTING

2.4.1 Limited research on the impact of integrated reporting on accounting education

Accountants and management accountants are involved in putting integrated reporting into practice as the leaders of the projects or as part of multi-disciplinary teams (Stubbs and Higgins, 2014). These same accountants have been identified as having some useful skills that could be used to put integrated reporting into practice (Starbuck, 2012). These skills stem from their involvement in financial reporting and in some instances in social and environmental reporting. De Villiers et al. (2014) encourages research in integrated reporting to consider research done on social and environmental accounting as well as financial reporting. In search for research on accounting education and the impact of integrated reporting it was noted that leading academic journals on accounting education have not been inundated with articles on integrated reporting. Limited research has been published

in the last 10 years on the impact of integrated reporting on accounting education, other than in a reputable accounting education journal's special edition of *Accounting Education: An International Journal* (Apostolou et al., 2015).

An extended search for research on integrated reporting in general, reveals that most of the early articles (around or after the issues of the <IR> Framework) include arguments in support of the concept integrated reporting (Dumay et al., 2016). A number of articles also critically evaluating integrated reporting practices applied by organisations .(Dumay et al., 2016). Dumay et al. (2016) claim that research on integrated reporting has not yet established its benefits and legitimacy. Lawson et al. (2014) and McNally et al. (2017) use integrated reporting as an example of the complexities in present day accounting that necessitate an update on the competencies accountants need to ensure that they remain relevant. The onus is on Universities to update their curricula to incorporate concepts such as sustainability and integrated reporting (McNally et al., 2017).

2.4.2 Update of the ACCA competency framework and the IR matrix

An article by Owen, addressing education in integrated reporting, appeared in the special integrated reporting edition of the *Accounting Education: An International Journal.* The article details the impact of integrated reporting on the ACCA competency framework and the resulting updates to include the missing <IR> Framework elements (Owen, 2013). Owen describes the process of updating the ACCA competency framework as an engagement with employers (Owen, 2013). Owen comments that, as more and more organisations adopt integrated reporting, the accounting curriculum should include <IR> Framework elements. Further, both the methods of delivering such a curriculum and the way in which learners are evaluated should be adapted (Owen, 2013). The studies by Owen and Lawson et al. (2014) conclude that accounting education should have more of a strategic focus and should move away from focusing on technical skills that can be applied at only a transactional level. In a study in Nigeria on whether the management accounting curriculum should be updated for integrated reporting, Babajide et al. (2015) concluded that, based on the responses from the management accountants surveyed, integrated reporting skills should be taught in the management accounting curriculum. Interestingly fewer than half of the management

accountants surveyed were aware of the concept, integrated reporting (Babajide et al., 2015).

Another key development in the limited realm of integrated reporting education was the release of the IR Matrix in 2016 (IIRC, 2016). The IR Matrix was drafted by an expert advisory group established by the IIRC, which obtained input from its network of participating organisations (IIRC, 2016). The IR Matrix states that the learning outcomes set out in the document add to the existing competencies of the professionals who engage in reporting (IIRC, 2016).

2.4.3 Impact of the Pathways Commission on accounting education

If accounting education is not concerned with integrated reporting, then what is it concerned with? A further review of the articles categorised by Apostolou et al. (2015) as relating to "curricular issues" reveals that a number of these articles refer to the impact of the recommendations of the Pathways Commission (2012) on accounting education (Lawson et al., 2014, Bianco et al., 2014, Bruns, 2014, Apostolou et al., 2015). The Pathways Commission was established with the backing of both the American Accounting Association ("AAA") and the American Institute of Certified Public Accountants ("AICPA") and issued a report in 2012 titled *Charting a National Strategy for the Next Generation of Accountants* (The Pathways Commission, 2012). This report makes two recommendations that are essential to a necessary evolution in accounting education (Apostolou et al., 2015, The Pathways Commission, 2012). The first recommendation is that accounting education should follow an integrated learning approach that focuses not only on technical knowledge but also on other skills, such as soft skills (Apostolou et al., 2015, Lawson et al., 2014).

The second recommendation states that accounting education should stem from a competency-based framework (Apostolou et al., 2015). The proposed "*integrated competency-based framework"* for accounting education therefore recommends teaching and assessment techniques that integrate various competencies in a way that resembles real-life business scenarios in which various disciplines are combined to measure, manage and report on an organisation's value creation (Lawson et al., 2014). The need for integrated competencies is emphasized by Raghavan and Thomas (2014) in their discussion of the

need for accountants to use their skills to understand an integrated business strategy built on multi-disciplinary cooperative networks. An article by Hardy and Deppe (1995) titled *Competency-based accounting education* could be seen as a precursor to the conclusions reached in the Pathways Commission, as it describes the challenges and learnings from the implementation of a competency-based, integrated accounting curriculum at the Brigham Young University. The new curriculum was developed as a result of the University receiving a grant from the Accounting Education Change Commission, a commission set up by the AAA, in 1990. The five competencies taught during the study include: written and oral communication; teamwork and people skills; critical thinking and working under pressure (Hardy and Deppe, 1995).

2.4.4 Identifying soft skills as a gap in accounting education

The notion that accountants should not only be technically strong but that they should also be trained to have a broader skillset is not new (Smith and Steenkamp, 2015). These non-technical skills are often referred to as soft-skills, and are deemed necessary for an accountant to be able to effectively use his or her technical knowledge (De Villiers, 2010). The task force set up by the AAA and the Institute of Management Accountants ("IMA") to prepare an integrated competency-based framework for accounting education as recommended by the Pathways Commission, states that "*despite repeated proposals that the goal of accounting education was to produce creative, adaptive life-long learners, meagre progress has been made in accomplishing these goals"* (Lawson et al., 2014:311).

One of the early discussions of the broader set of competencies essential to the future of the accounting profession is that by Deppe et al. (1991). Deppe et al. (1991) reviewed a number of studies between 1979 and 1989 and compared the most pertinent competencies identified in each of these studies to come up with a list of competencies that are essential for a professional accountant. They then confirmed these by analysing the responses to more than 500 surveys. The Deppe list includes: critical thinking and problem solving; communication skills; interpersonal and leadership skills; knowledge of the profession and organisations serviced by the profession; professionalism and ethical behaviour; lifelong learning; and effectively dealing with pressure (Deppe et al., 1991).The competencies listed in the Deppe (1991) study are considered to be essential for accountants and have been

found lacking again-and-again in subsequent studies. These studies considered the gaps identified in competencies of accounting students and entry level accountants when compared with the expectations of those same accounting students, academics, employers and the like. (These and other competency deficiencies identified are set out in Table 2).

Ahadiat and Smith (1994) surveyed the recruiters from 357 organisations in the US and found that "*personality and social characteristics such as reliability*" were identified as the most important competencies of newly-appointed accountants. Bui and Porter (2010) refer to a study performed by the ICCA in 1994, during which 325 Australian accounting firms surveyed confirmed that communication skills, technology skills and interpersonal skills are lacking when it comes to newly-appointed accounting graduates.

Moving on to the next century, the themes in the gaps of companies identified are similar. (Arquero et al., 2001), performed a survey of 2014 employers of graduate management accountants who were found to lack the ability to manage stress, delegation skills and knowledge of the profession. In 2005, a survey of about 2000 employers in the UK and Spain found that management accountants should possess the skills of teamwork, organisational knowledge, computing skills, communication skills and time management (Hassall et al., 2005). De Lange et al. (2006) confirmed some of these findings, surveying 310 Australian university graduates who felt that they lacked interpersonal skills as well as communication and computing skills. A study of 236 accounting graduates with between two and ten years' experience, in New Zealand, established that communication skills, problem-solving and critical thinking, professionalism and business acumen were the most important skills required by accountants in business and the profession (Carr et al., 2006).

Kavahagh and Drennan (2008) surveyed both new graduates and employers and concluded that, in addition to technical skills, employers placed emphasis on communication skills, analytical skills and the ability to work together in a team. They cited professionalism and business acumen. As a result of a survey of 174 graduates and employers, Jackling and De Lange (2009) concluded that accounting education needs extensive reforms, as new graduates lack the skills needed to work in a team. They also lack leadership skills, and struggle with verbal communication and interpersonal skills.

Throughout the 2000s, a number of professional accounting bodies, including the ACCA (2012), CIMA (2010), ICAEW (2012) and IFAC (2015), expressed views on the soft skills required by accountants (Chaffer and Webb, 2016). Chaffer and Webb (2016) summarise these as "*influencing/negotiating skills, flexible approach, conflict management skills, effective delegation, resource management skills and professional demeanour".* In addition to the studies by the professional bodies, a number of research articles contributed to the discussion on the missing skills. Through various student focus-groups held over a period of time, Stoner and Milner (2010) found that students believe that developing soft skills such as time management, analytical skills and the disposition to lifelong learning was a complex, but necessary endeavour.

De Villiers (2010) discusses how soft skills enhance the ability of accounting graduates to apply their technical skills in complex business environments. Types of critical soft skills identified during this study include skills in communication, strategic thinking, leadership and ethical conduct, to name a few (De Villiers, 2010). Bui and Porter (2010) investigate the "*expectation-performance gap in accounting education"* by means of a literature review and by conducting interviews with accounting students, academics, entry level accountants and employers. They identify communication skills, applying theory in a practical manner, and the ability on the part of the accounting students to understand their role as critical, yet lacking, skills.

Technical skills are not sufficient and soft skills are not enough on their own. Daff et al. (2012) discuss the increased importance of emotional intelligence in addition to soft skills in accounting education. The lack of soft skills is again confirmed by Tempone et al. (2012), who conducted numerous interviews with employers and accounting professional bodies and confirm that communication skills, team work skills and self-management are the most important qualities for new accounting graduates in the Australian market. A study in Tunisia including 81 students and 48 practitioners draws attention to the misconception held by students that technical skills are most important. The study confirms the importance for accounting graduates of having skills such as ethical awareness, communication skills, critical analysis and teamwork skills. Apostolou et al. (2015) refer to yet another empirical study, this time in Hong Kong, by Chen (2013) who identifies the absence of accounting graduate skills in the areas of written and verbal communication and a lack of appreciation

of the broader business domain. In another study, students were asked to make recommendations for improvement in the accounting curriculum and one of the recommendations was to "*encourage students to think for themselves, develop their own ideas and voice their own opinions"* (Smith and Steenkamp, 2015:684). Chaffer and Webb (2016) confirm the lack of understanding of the functioning of a business and how it manages its resources, as well as communication skills in accounting graduates. Similarly, a recent study by Botes and Sharma (2017), through a survey of 1,200 management accountants in South Africa, indicated that their university curriculum did not equip them with the required computer skills, analytical skills, the ability to solve complex problems and the ability to write reports or prepare presentations. A summary of all the soft skills gaps is included in Table 2 below.

2.4.5 Incorporating sustainability into accounting education

In addition to identifying soft skills gaps, research in accounting education has also focused on how the concept of sustainability is incorporated into the accounting education curriculum. Hazelton and Haigh (2010) describe the complications encountered during two specific projects that were incorporated into an accounting curriculum with the objective of instilling the concept of sustainable development. (Apostolou et al., 2015) refer to a survey done by Wynder, Wellner and Reinhard (2013), in which they observe that a student group, from universities in Australia and Germany placed more emphasis on sustainable development as a strategic imperative for business, in comparison with the accounting practitioner control group. Lillah and Viviers (2014) questioned South African accounting students and found that the current accounting curriculum did not develop them as good environmental citizens. Apostolou et al. (2015) refer to McPhail (2013), who promotes sustainable development and human rights as integral to the accounting curriculum. Guthrie and Parker (2017) look back over the last 30 years of accounting research and states that research has lagged behind when it comes to the interdisciplinary nature of the role that accountants fulfil in business, specifically as it relates to being a responsible corporate citizen.

2.4.6 Call for reform in accounting education

All the research highlighted above calls for fundamental reform and change in the accounting education curriculum to include the seemingly missing skills. Apostolou et al. (2017:23) state that "*as the product we provide students, the curriculum should be in a continuous state of evaluation and possible revision"*. Changing a curriculum is not without its challenges though. Based on feedback from tertiary institutions, the current academic curriculum for chartered accountants is considered to be crammed, focusing mainly on accounting principles with no room for additional subjects or concepts (Venter and De Villiers, 2013). A recent study by Chaffer and Webb (2016) put a different perspective on the call for an update to the curriculum. Their study compared the perceptions of missing competencies between graduate and non-graduate CIMA trainees and found that, despite curriculum changes, the perceived competency gaps were similar (Chaffer and Webb, 2016). They call for more focus in accounting research on the pedagogy of the missing skills (Chaffer and Webb, 2016).

Interestingly, Bui and Porter (2010) conducted interviews with all the relevant stakeholders in the accounting education system in New Zealand, including students, academics, graduate trainees and employers, and concluded that they attribute the expectation gap to the fact that the various stakeholders do not talk to each other. Bui and Porter (2010) also attribute it to a lack of communication between employers and educators, but also to limitations set by professional bodies (Bui & Porter, 2010). Cooper and Robson, (2006) and Greenwood et al., (2002) claim that professional bodies determine what an accountant should be, which may inadvertently result in limitations on the accounting curriculum.

Whether due to a lack of communication or for other reasons, newly qualified accountants do not appear to have the skills necessary to function as accountants. Most of the skills that were lacking based on the various studies can be categorised as "soft skills" and accountants do not, in some instances, have an appreciation of the concept of sustainable development.

The following table summarises all the soft skills gaps and competency deficiencies identified in the various accounting education studies.

Table 2: Summary of competency deficiencies identify in accounting education literature

Author	Year	Competencies													
		Communication skills	Critical thinking	Team- work	People skills	Professionalism	Leadership skills	Business acumen	Technology and computer skills	Analytical skills	Ethical behaviour	Knowledge of the profession	Dealing with pressure and stress	Lifelong learning	Time management	Other
Deppe et al	1991	✔	✔		✔	✔	✔				✔	✔	✔	✔		
Ahadiat and Smith	1994															Reliability
ICCA	1994	✔			✔				✔							
Hardy and Deppe	1995	✔	✔	✔	✔											Working under pressure
Arquero et al	2001											✔	✔			Delegation skills
Hassal et al	2005	✔		✔					✔						✔	Organisational knowledge
De Lange et al	2006	✔			✔				✔							
Carr et al 2006	2006	✔	✔			✔		✔								

Table 2: Summary of competency deficiencies identify in accounting education literature

Author	Year	Competencies													
		Communication skills	Critical thinking	Team- work	People skills	Professionalism	Leadership skills	Business acumen	Technology and computer skills	Analytical skills	Ethical behaviour	Knowledge of the profession	Dealing with pressure and stress	Lifelong learning	Time management	Other
Kavahagh and Drennan	2008	✔		✔		✔				✔						
Jackling and De Lange	2009	✔		✔	✔		✔									
Stoner and Milner	2010									✔				✔	✔	
De Villiers	2010	✔					✔				✔					Strategic thinking
Bui and Porter	2010	✔										✔				Applying theory in a practical manner
Daff et al	2012															Emotional intelligence
Tempone et al	2012	✔		✔												Self-management
Chen	2013	✔						✔								

Table 2: Summary of competency deficiencies identify in accounting education literature

Author	Year	Competencies													
		Communication skills	Critical thinking	Team- work	People skills	Professionalism	Leadership skills	Business acumen	Technology and computer skills	Analytical skills	Ethical behaviour	Knowledge of the profession	Dealing with pressure and stress	Lifelong learning	Time management	Other
Smith and Steenkamp	2015		✔													
Chaffer and Webb	2016					✔		✔								Influencing/negotiation skills; flexible approach; conflict management skills; effective delegation; resource management skills
Botes and Sharma	2017	✔	✔						✔	✔						

Source: Adapted from various sources as indicated

2.5 COMPETENCIES

2.5.1 Competence vs competency

There appears to be confusion in the literature (Delamare-Le Deist and Winterton, 2005, Sultana, 2009, Sanghi, 2016, Brown and McCartney, 1995) regarding the terminology of competency framework, more specifically the difference between competence and competency. Many articles in the human resources field dealing with competency frameworks start off by explaining why they believe the terms *competence* and *competency* have different meanings but are nevertheless used interchangeably in academic and other literature (Delamare-Le Deist and Winterton, 2005, Sultana, 2009, Sanghi, 2016, Brown and McCartney, 1995). Sanghi (2016:335) states that competence "*describes what people can do while the other [competency] focuses on how they do it"*. Further distinguishing factors between the two terms are that *competence* is seen to refer to the attributes of a job or functional area, whilst *competency* is said to relate to attributes or behaviours of a person (Sanghi, 2016, Delamare-Le Deist and Winterton, 2005, Cardy and Selvarajan, 2006). Brown and McCartney (1995), state that a person's competence indicates whether they can do a specific job. Sultana (2009) acknowledges that the difference in the use of the terms *competency* or *competence* may be attributed to the former being American and the latter being British English.

Delamare-Le Deist and Winterton (2005) claim that, at the onset of the discipline, analysis of competencies in the USA were largely behavioural and performance-driven. Cardy and Selvarajan (2006), ascribe the propagation of the term *competency* to the American Professor R.E. Boyatzis' (1982) book *The Competent Manager.* In the UK a functional or job-focused approach was followed, with both the UK and the US combining these approaches of late. Some of the other countries, such as France and Germany, which entered the competency debate at a later stage, adopted an improved, more rounded approach to mapping the competencies of various professions (Delamare-Le Deist and Winterton, 2005). Regardless of the term used, competencies are captured by most professional bodies in a competency framework that gives structure to the numerous skills required to be a member of that profession (Lester, 2014).

The best way to understand the intricacies of the term competency is to consider some of the definitions used. Hardern (1995) defines *competency* as skills, knowledge and attributes or as functional outcomes. Even though the term skills is often used as a sub-set of competencies, it is also used to describe the same concept (Botha, 2001). A comprehensive definition of skills, one that describes its intricacies is:

> *"special abilities that are gained and developed through experience and performance in a practice environment that reflects the complexity, uncertainty, instability, uniqueness and value-conflict of real practice situations, and involves knowing-in-action, reflection-in-action and reflection-about-action"* (Botha, 2001).

The Chartered Global Management Accountant ("CGMA") Competency Framework definition of competencies describes it as functions that are relevant to each of the four knowledge area. Technical, business, people and leadership skills are the four knowledge areas and examples of competencies include financial accounting and reporting and project management are considered to be competencies under each knowledge area (CGMA, 2014). The SAICA Competency Framework describes competencies as "*the ability to execute a task in the real world"* (SAICA, 2015b). The SAICA Competency Framework points out that competencies are obtained by gaining knowledge and understanding as well as through practical experience (SAICA, 2015b).

2.5.2 Composition of competency frameworks

In search of guidance on the composition of competency frameworks, the researcher came across an article in the *Assessment & Evaluation in Higher Education Journal* in which Lester (2014) reviewed 40 competency frameworks representing various professional bodies in the UK. He found that most of these frameworks contain a broad set of skills needed by a professional to be successful in a specified field (Lester, 2014). A key distinguishing factor in the more effective competency frameworks Lester reviewed is that these frameworks not only focus on skills required by a specific job but also include the broader characteristics needed by a professional in a dynamic and complex work environment (Lester, 2014). The key purpose of these frameworks, including those of professional accounting bodies reviewed, is to set standards against which an entrant to the relevant profession can be measured to determine whether they satisfy the entrance criteria (Lester, 2014). Brown and McCartney (1995) attribute the concept of accreditation standards to the Management

Charter Initiative, created in 1988 in the UK. Brown and McCartney (1995:44) state that accreditation is based on the assumption that

> *"…there is a common core of skills and knowledge which all managers or professionals share, which they require in order to perform their roles effectively, and which are capable of fair and impartial assessment".*

2.5.3 Competency frameworks

Reference is often made in academic articles to the competency frameworks of professional bodies being updated, for example, the update of the ACCA competency framework and the latest update of the SAICA competency framework (Smith and Steenkamp, 2015 andOwen, 2013).The update of the SAICA competency framework is stated to be necessitated by a growing global trend that requires accounting programs to include soft skills training on topics such as ethics, leadership and communication skills (Smith and Steenkamp, 2015). The ACCA competency framework was also updated to incorporate the skills required by accountants to do integrated reporting (Owen, 2013). The competency framework of the Chartered Institute of Management Accountants (CIMA) was updated in 2015 to include integrated reporting as a strategic reporting tool (CIMA, 2015).

A competency framework that is not linked to a specific profession is the IR Matrix. The IR Matrix was developed by engaging with individuals and organisations involved in integrated reporting and sets out learning outcomes that add to the existing competencies of the professionals who engage in integrated reporting (IIRC, 2016).

This section sets out, for each of the competency frameworks that have been updated as a result of integrated reporting: IR Matrix; CGMA Competency Framework; SAICA Competency Framework; ACCA Competency Framework; a summary of the competency framework's layout, purpose and key chapters that were considered. Each of the frameworks has its own competency categories and levels, as described below.

2.5.3.1 *IR Matrix*

The IR Matrix was identified as the first document containing a list of skills required to put integrated reporting into practice. According to the document, it was set up *to provide clear guidance as to the knowledge, skills and behaviours necessary to work in an <IR> environment* (IIRC, 2016). All of the competencies listed in the IR Matrix were considered when answering the interview questions, as the whole document relates to the process of putting integrated reporting into practice.

The IR Matrix is structured into four competency areas being: integrated reporting, integrated thinking, the integrated report and implementing integrated reporting. Each of the competency areas is divided into two competency levels. The two levels of competency described in the IIRC Competence Matrix are the introductory and practitioner levels. The "*introductory learning outcomes*" are aimed at people who are required only to have sufficient knowledge of integrated reporting in order to understand and explain the concepts. The second level of competencies is seen as an increased level of competency described as "*practitioner learning outcomes*". Having practitioner-level competencies would enable a person to implement integrated reporting in an organisation.

Both competency levels were considered as part of this analysis. In addition to the two stated levels of competencies, the IR Matrix states that the list of skills is in addition to "*the existing professional and business skills possessed by many of those already involved in reporting"* (IIRC, 2016). There was no information in the document itself on what these professional or business skills might be and no reference to what the professions or professional bodies are that require or prescribe these existing reporting skills.

The IR Matrix is divided into the four areas of competency, described in Table 3 namely: integrated reporting, integrated thinking, integrated report and implementing integrated reporting. Each area addresses a number of specific subjects with identified competencies on these subjects relevant to the introductory and practitioner levels.

Table 3: Summary layout of the IR Matrix

Area of competency	Subject	Level	
Integrated reporting	Evolution of the IR movement	Introductory level	Practitioner level
	Adopting IR		
Integrated thinking	Value creation		
	The capitals		
	The value creation process		
	Achieving integrated thinking		
Integrated report	The guiding principles		
	The content elements		
	Presenting an integrated report		
Implementing integrated reporting	Implementing an information management system		
	Planning the annual preparation process		
	Credibility, trust and assurance		

Source: IIRC (2016) (adapted)

The table above is a summary of the areas of competency, the subjects that the IR Matrix addresses under each area of competency and the levels of competency addressed in each subject.

2.5.3.2 *CGMA Competency Framework*

The original document selected for analysis was the CGMA Competency Framework. The framework makes no specific reference to integrated reporting but states that it sets out to *help management accountants and their employers understand the knowledge requirement and assess the skills needed for both current and desired roles* (CGMA, 2014). The CGMA Competency Framework represents the competencies required of a management accountant registered with the Chartered Institute of Management Accountants ("CIMA").

The CGMA Competency Framework is divided into four knowledge areas which are each, in turn, divided into four proficiency levels. Each of the four proficiency levels represents a level someone might occupy in an organisation from the entry level through to the executive level. All the competencies are underpinned by ethics, integrity and professionalism as foundational competencies. The CGMA Competency Framework states its assumption that the requirement for specific technical knowledge reduces as proficiency levels increase. It also states its assumption that the requirement for leadership skills increases as proficiency levels increase. Business skills and people skills increase between the foundational and intermediate levels but remain relatively constant between the intermediate, advanced and expert levels. Table 4, below sets out the competencies and proficiency levels as set out in the CGMA Competency Framework.

Table 4: Knowledge areas and proficiency levels in the CGMA competency framework

<table>
<tr><th>Competencies</th><th colspan="4">Proficiency level (role in an organisation)</th></tr>
<tr><td>Technical skills</td><td rowspan="4">Foundational level (staff/entry level)</td><td rowspan="4">Intermediate level (supervisor/ manager)</td><td rowspan="4">Advanced (senior manager)</td><td rowspan="4">Expert (executive/ C-suite)</td></tr>
<tr><td>Business skills</td></tr>
<tr><td>People skills</td></tr>
<tr><td>Leadership skills</td></tr>
<tr><td colspan="5">Ethics, integrity and professionalism</td></tr>
</table>

Source: CGMA (2014) (adapted)

As most professional bodies divide their competency frameworks and detail curricula, the 2015 CIMA Professional Qualification Syllabus was the second document that was analysed, as it is cross referenced back to the CGMA Competency Framework. The CIMA Professional Qualification Syllabus is set out in three levels of competencies described as the operational level, the management level and the strategic level. The competencies in the curricula address three pillars described as the enterprise pillar, the performance pillar and the financial pillar. The enterprise pillar addresses the design and execution of strategy and links the competencies of change management, project management and relationship management as integral to the successful implementation of strategy in an organisation. The performance pillar focuses on the tools and techniques of management accounting and risk management to monitor strategy implementation. The financial pillar centres on financial

accounting and reporting. If the student passes the practical experience assessment after obtaining the academic qualifications, the student becomes a member of CIMA and is awarded the CGMA designation.

Table 5 summarises the competency levels (strategic, management and operational) and the pillars (enterprise, performance and financial) that make up the CIMA professional qualification syllabus. Under each of the pillars is a subject relevant to the various competency levels (e.g. for the enterprise pillar at strategic level, strategic management is the relevant subject).

Table 5: CIMA professional qualification summary of the syllabus

	Practical experience assessed		
	Enterprise Pillar	**Performance Pillar**	**Financial Pillar**
Strategic level	Strategic Management	Risk Management	Financial Strategy
Management level	Project and Relationship Management	Advanced Management Accounting	Advanced Financial Reporting
Operational level	Organisational Management	Management Accounting	Financial Reporting and Taxation

Source: CIMA (2015) (adapted)

The CIMA Syllabus refers to integrated reporting as being one of the topics for which the current version of the syllabus was updated. There is, however, no reference to the location of these updates.

2.5.3.3 *SAICA Competency Framework*

SAICA is recognised as the professional body for chartered accountants in South Africa. Being a chartered accountant registered with SAICA is the most requested business designation in South Africa (Venter and De Villiers, 2013). In order to become a chartered accountant, a student should enrol at a tertiary institution and obtain a SAICA accredited

degree followed by a post-graduate Certificate in the Theory of Accounting ("CTA") (SAICA, 2015a). After obtaining the academic qualifications on a full-time or part-time basis, the student enrols for a "learnership programme" with an accredited training office. An accredited training office could be in either public practice (auditors) or outside of public practice. Within the first few months of on-the-job training, the student writes the first of two professional examinations referred to as the Initial Test of Competence ("ITC") (SAICA, 2015a). The document providing guidance for this examination is titled the *Competency Framework Detailed Guidance for the Academic Programme – Competencies of a CA(SA) at the point of the Initial Test of Competence (ITC) (assessment of core technical knowledge) (version 10)* (SAICA, 2017). Table 6 summarises the competencies and related proficiency levels for both the ITC and APC.

SAICA recently revised its "competency framework" and has issued a new framework which is effective from 1 January 2019. It contains the "core technical knowledge" examined in the ITC (SAICA, 2017). The second professional examination, the Assessment of Professional Competence ("APC"), is written by the student after 20 months of practical experience gained while employed in an accredited training office (SAICA, 2015a) The document providing guidance for this examination is titled *Guidance for Professional Programmes – Competencies of a CA(SA) at the point of the Assessment of Professional Competence* (SAICA, 2015b). The last document consulted is called the *Training programme – prescribed competencies (revised 2015)* (SAICA, 2016). All three documents make reference to the others, which is why all three were included in the assessment. The SAICA competency framework states that it *encapsulates the competencies (broad range of knowledge, skills and attributes) of a CA(SA) at entry point to the profession* (SAICA, 2017).

Table 6: Competencies and proficiency levels for ITC and APC levels

Competencies for ITC and APC	**Proficiency levels**		
Ethical behaviour and professionalism	Awareness	Initiates the task	Completes the task
Personal attributes			
Professional skills			
Competencies in strategy, risk management and governance			
Competencies in accounting and external reporting			

Competencies for ITC and APC	Proficiency levels		
Competencies in auditing and assurance			
Competencies in Financial Management			
Competencies in management decision making and control			
Competencies in taxation			

Source: SAICA (2017) (adapted)

The document setting out the ITC competencies was further considered. It includes detail on all the major updates to the competency framework in 2014, 2016, 2017. The framework was updated in 2014 to incorporate integrated reporting into pertinent sections of the report (SAICA, 2017). The framework specifically states that the update incorporated concepts relating to integrated reporting in the section dealing with *strategy, risk management and governance* and do not include competencies that would enable a trainee to prepare an integrated report (SAICA, 2017). The report does make specific reference to a pervasive skill that was added to the competency framework, which requires that a CA(SA) "demonstrates good corporate citizenship attributes" (SAICA, 2017). The ITC competency framework specifically sets out SAICA's perspective on integrated reporting as a collection of regulated financial statements, optional sustainability reporting and governance reporting (SAICA, 2017). The research has therefore included the skills and competencies identified that specifically relate to sustainability reporting referred to as *good communication skills, being forward thinking and applying professional judgement* (SAICA, 2017).

2.5.3.4 *ACCA Competency Framework*

It was evident in the discussion on the CGMA Competency Framework that to identify competencies needed to implement integrated reporting within a framework where these competencies are not specifically referenced is complex. The advantage of the ACCA Competency Framework is that Owen (2013) specifically identifies the sections that were updated or that already address the required competencies in his article.

The ACCA Competency Framework sets out a number of categories of competencies with ethics and professionalism acting as an overarching competency to all of the categories as summarised in Table 7.

Table 7: ACCA Competency Framework competency categories

Competency categories		
Ethics and professionalism		
Audit, assurance and advisory	Corporate and business reporting	Financial management
Governance, risk and control	Leadership and management	Stakeholder relationship management
Strategy, technology and innovation	Sustainable management accounting	Tax advisory

Source: ACCA (2017)

2.5.3.5 *Summary*

All of the competency frameworks refer to an update as a result of the change in corporate reporting because of integrated reporting. It is, however, not equally clear in the competency frameworks what the updates for integrated reporting entailed. As a result, the competencies were identified in the secondary data, by searching for words that link the competencies to concepts contained in the <IR> Framework, such as “integrated reporting”, “value creation” and others.

2.5.4 Methodologies for compiling competency frameworks

Mansfield (1996) describes three broad methodologies that were used to develop competencies frameworks or models, the first being a “*single-job competency model”* and the second a “*one-size-fits-all competency model”*. The “*one-size-fits-all”* model is typically applied to a group of people at a specified level in an organisation e.g. executive level. He suggests a third model, which he calls the “*multiple-job approach”,* which is made up of a set of common foundational competencies and functional competencies that can be tailored to specific roles within an organisation (Mansfield, 1996).

Sanchez and Levine (2009) describe two methodologies for building competency frameworks as "*traditional job analysis"* and "*competency modelling"*. They describe "*competency modelling"* as a tool that should not be linked to performance on a specific job but rather influences behaviour by aligning a specific role with the strategic objectives of an organisation. Competency modelling is dynamic and envisages the future progression of the role it is modelling. An assessment of a person's competencies against the model always remains subjective and based on judgement (Sanchez and Levine, 2009). "*Traditional job modelling",* on the other hand, comprises a catalogue of skills, knowledge and abilities needed to complete a specified job. At the heart of a job analysis, or "*traditional job modelling"* approach is an existing job and the competencies needed to do that job (Cardy and Selvarajan, 2006). "*Traditional job modelling"* has its limitations, as the content of the model is directly impacted by the people compiling the model's understanding of what the job entails (Sanchez and Levine, 2009). Frias-Aceituno et al. (2013) advocate the use of both models, but also acknowledge that the models used in practice are often a combination of the two.

In Lester (2014) review of 40 competency frameworks, he considered the methodology used to prepare the frameworks. He identified two methodologies, the "*activity-based approach"* and the "*attribute-based approach"*. The "*activity-based approach"*, otherwise referred to as the functional, outcomes-based approaches or "*traditional job-analysis"* is considered to be the most prevalent approach used in competency frameworks of many professional organisations (Hardern, 1995, IIRC, 2016, Cardy and Selvarajan, 2006, Lester, 2014). According to Cardy and Selvarajan (2006), competencies may be presented by "*the most important and/or most time-intensive tasks and duty areas"* performed by a number of functions in an organisation.

The "*attribute-based approach"* was traditionally popular in the US and focuses on the qualities of an accomplished person in a specific profession (Lester, 2014). The "*activity-based approach"* was more popular in the UK and Europe and focuses on the output that a competent person would deliver (Lester, 2014). Lester (2014) acknowledges that many models mix attributes, such as values, with activities into an outcomes-based framework.

2.5.5 Competency categories used when compiling competency frameworks

Bui and Porter (2010) refer to studies undertaken by the Institute of Chartered Accountants in England and Wales ("ICAEW") and the American Institute of Certified Public Accountants ("AICPA") in the mid- and late 1990s that grouped the competencies required by professional accountants into three broad competency categories, which are "*functional competencies (technical accounting expertise), broad business competencies (a broad business perspective and general business skills), and personal competencies (including strategic thinking and management, communication, leadership, and interpersonal skills; and an ability to adapt to change and to work in global markets)"* (Bui and Porter, 2010). The Pathways Commission (2012) similarly identify a general structure for classifying competencies as foundational competencies, accounting competencies and broad management competencies (Lawson et al., 2014). Even though the three broad categories identified have been called by different names, they include similar groups of competencies. Comparing the competencies identified by Bui and Porter (2010) and Lawson et al. (2014), the following categories would broadly align: the first category of competencies, "*functional competencies"* or "*accounting competencies"* respectively and this category includes all the technical skills or technical knowledge (Table 8, column 2). The second category is called "*business competencies"* or "*broad management competencies"* and is often referred to as business acumen (Table 8, column 3). The last group of skills is called "*personal competencies"* or "*foundational competencies"* and represents most of the soft skills (Table 8, column 4). As is evident in the table below, the classifications have both uniformities and inconsistencies.

Table 8: Comparison of competency categories

Comparison between competencies	Accounting or functional competencies	Broad management or business competencies	Foundational or personal competencies
Competencies that are consistent in the Pathways Commission and Bui and Porter (2010)	External reporting and analysis	Core business competencies or general business skills	Communication
			Interpersonal skills

Comparison between competencies	Accounting or functional competencies	Broad management or business competencies	Foundational or personal competencies
Competencies that are similar	Planning, analysis and control		Strategic thinking and management
			Analytical thinking and problem solving
Competencies that are unique to either approach	Information systems	Process management and involvement	Quantitative methods
	Assurance and internal control	Governance, risk and compliance	Technological skills
	Technical accounting expertise		
	Taxation		
Contradicting competency categories		Leadership	Leadership
	Professional values, ethics and attitudes	Ethics and social responsibility	

Source: Bui and Porter (2010) and Lawson et al. (2014) (adapted)

The human resource field acknowledges that there are many competencies needed by a professional or a profession (Delamare-Le Deist and Winterton, 2005, Sultana, 2009). These competencies are grouped in a slightly different way to those of the Pathways Commission and Bui and Porter. Sultana (2009) refers to the European Qualification Framework definition of competency, which identifies four categories: cognitive competency, functional competency, ethical and personal competency. The first of the four types of competencies (included in Table 4) is referred to as *cognitive competenc*y, being knowledge gained through experience (Sultana, 2009, Delamare-Le Deist and Winterton, 2005). Botha (2001) refers to Jarvis (1983), who split knowledge into *knowing that,* knowledge gained through academic training and *knowing how to*, knowledge gained through practical experience. As highlighted in the SAICA Competency Framework, knowledge on its own is not enough and there are other skills that contribute to the set of competencies required by a professional (SAICA, 2015b).

The second category of competencies identified in the human resources field (summarised in Table 4) is "*functional competency, those things that a person should be able to do when they are functioning in a given area of work, learning or social activity*" (Sultana, 2009). In line with Sultana's definition, Botha (2001), also describes a functional competency as *being able to* perform a function in real life conditions as in a specific profession. The last two categories can be described as personal competency and ethical competency (Sultana, 2009). These two categories are often grouped together into one category that is referred to as social or "*foundational competency*" (Delamare-Le Deist and Winterton, 2005). Table 9 summarises this category into one competency. Brown and McCartney (1995), Delamare-Le Deist and Winterton (2005) and Sultana (2009) add an additional category to which they refer as "*meta-competency*", which is a person's ability to mature in the other categories of competencies. Meta-competency is included in Table 9 as the fourth competency category. Meta-competencies come to the fore in a complex work environment (Brown and McCartney, 1995).

Lester (2014), in a review of 40 competency frameworks from various professions, concludes that all professions and therefore all competency frameworks share the same generic competencies. These generic competencies align with the social or foundational competency category described by Sultana (2009), as it encapsulates personal competencies, ethical competencies and soft skills. Lester (2014) describes four types of generic competencies: "*ethics, professionalism and judgement*; *developing self, others and profession*, *managing self, work, processes and others*; *communication, client and public relations*". In addition to generic competencies, Lester states that each profession has its own particular competencies. Table 9 sets out a summary of the key competency categories with a description of each category.

Table 9: Summary of competencies considered in competence modelling

Competency category	**Competency description**
Cognitive competency	Having academic knowledge, and knowledge on how to perform certain tasks based on past experience.

Competency category	Competency description
Functional competency	Skills or know-how needed to be able to perform a specific function or do a specific job.
Foundational competencies or "soft-skills"	Soft-skills and attributes including: ethics, professionalism and judgement; developing self, others and profession; managing self, work, processes and others; communication, client and public relations.
Meta competency	Ability to increase proficiency in the other competencies as needed, typically in complex work environments.

Source: Lester (2014) Brown and McCartney (1995), Delamare-Le Deist and Winterton (2005) and Sultana (2009) (adapted)

Having reflected on the categories of competencies, it is important to understand how these competency categories are typically combined into competency frameworks or models. Mansfield (1996) defines a competency model as "*a detailed, behaviourally specific description of the skills and traits that employees need to be effective in a job".* In other words, a competency model is a comprehensive collection of all the competencies required to do a specific job well. It however appears that, as with the differences in the definition of competency (Delamare-Le Deist and Winterton, 2005, Sultana, 2009, Sanghi, 2016, Brown and McCartney, 1995), there is no consensus as to the appropriate methodology to use when compiling a competency framework (Pearlman & Barney, 2000). In an analysis of past and current practices in competency modelling by a specifically constituted Job Analysis Competency Modelling Task Force, they found that there "*are no rules to guide practice in this area, for either competency modelling or job analysis"* (Shippmann et al., 2000:735).

2.6 IMPACT OF LITERATURE REVIEW ON IDENTIFYING COMPETENCIES NEEDED TO PUT INTEGRATED REPORTING INTO PRACTICE

The competencies the generally make up a competency framework include cognitive, functional, foundational and meta-competencies (Lester, 2014, Brown and McCartney, 1995, Delamare-Le Deist and Winterton, 2005, Sultana, 2009). This study focuses on understanding the competencies used by people putting integrated reporting into practice (*functional competencies*) and the knowledge needed to be able to put integrated reporting

into practice (*cognitive competencies*) as well as the soft skills they apply in this role (*foundational competencies*).

The accounting education literature on updates to the SAICA and ACCA competency frameworks and the IR Matrix states that updates were made through a process of stakeholder engagement (SAICA, 2017, IIRC, 2016, Owen, 2013) The discussions in the human resource field by Cardy and Selvarajan (2006) suggest a number of approaches to compiling a competency framework. Both Cardy and Selvarajan (2006) and Sanghi (2016), describe one of the traditional approaches to competency modelling as a job analysis. ".

The process followed in a "*traditional job-analysis"*, set out in Figure 1 below, is considered to be the most prevalent approach used in competency frameworks of many professional organisations (Hardern, 1995, IIRC, 2016, Cardy and Selvarajan, 2006, Lester, 2014). When performing a job analysis, one would firstly understand the responsibilities of the relevant professional, and then identify the skills they need to fulfil these responsibilities (Sanghi, 2016). For example if a person is responsible for putting integrated reporting into practice; the competencies they would need would be determined by the role they fulfilled (Cardy and Selvarajan, 2006). The competencies are identified through a job analysis by interviewing participants who were, as part of their job, either preparing integrated reports of who were consulting on integrated reporting. The competencies explored in the study are those of the individuals who are involved in putting integrated reporting into practice.

Figure 1: Process followed in a traditional job analysis

Source: Cardy and Selvarajan (2006), Sanghi (2016) (adapted)

3 METHODOLOGY

Part 1 of this methodology chapter is a description of and motivation for the specific qualitative research design used. Part 2 of the chapter explains the sources of the data and sampling approach followed for the collection of both the primary and secondary data. Part 3 sets out the methods of data collection used, including an interview guide used during the semi-structured interviews. Part 4 describes the methods used for data analysis. Part 5 summarises the ethical considerations relevant to the study and Part 6 explains how the researcher ensured quality and rigour in the approach followed and also discusses the researcher's own biases in the research process. Part 7 highlights the researcher's biases that may have impacted on the research project.

3.1 DESCRIPTION OF AND MOTIVATION FOR THE SPECIFIC QUALITATIVE RESEARCH DESIGN USED

The research strategy was qualitative and the research was designed as a generic qualitative inquiry. The research was not done in terms of one of the more well-known qualitative methodologies such as grounded theory, phenomenology, ethnography or case-study research, as it did not seek to build a theory, understand the underlying context of experiences, study the behaviour of a culture or study a single case (Percy et al., 2015, Kahlke, 2014, Sandelowski, 2000, Caelli et al., 2003, William et al., 2015). The outcome of this exploratory study was not to describe or analyse a specific case or behaviour, neither to develop a theory and is not related to a social phenomenon. Generic qualitative research seeks to study the attitudes, opinions, perceptions and knowledge individuals have gained through their various experiences (Guest et al., 2013). A generic qualitative approach was therefore considered to be best suited to answering the research question in this study, as the study set out to understand the different perspectives, or diversity in the experiences of the participants involved in putting integrated reporting into practice in their organisations or in the organisations to which they provide consultation services (Neergaard et al., 2009, Stubbs and Higgins, 2014). William et al. (2015) state that generic qualitative inquiry "*is appropriate when a fully qualitative survey approach is desired"*. The qualitative study of variety in a research topic, amongst participants is described by Jansen (2010) and Winkelhage et al. (2013) as a "*qualitative survey design"*.

Sandelowski (2000:334) describes the generic qualitative approach as "*amenable to obtaining straight and largely unadorned (i.e. minimally theorised or otherwise transformed or spun) answers to questions of specific relevance to practitioners and policy makers"*. More specifically to the research question, Percy et al. (2015) differentiate between a study that reflects on the internal sense making of an experience compared to one that reflects on the outward opinions relating to experiences. Outward opinions are better explored through a generic qualitative approach. A generic qualitative approach was therefore appropriate for addressing the research question relating to the competencies needed to put integrated reporting into practice with the use of semi-structured interviews in which the participants described their experiences and understanding of the required competencies needed to put integrated reporting into practice.

3.2 SAMPLING

3.2.1 Primary data sampling

In order to explore the experiences of knowledgeable participants through semi-structured interviews as part of the primary data collection, the researcher applied a diversity sampling method by purposively selecting participants who were involved in putting integrated reporting into practice in their organisations or who were providing consultation services to organisations on integrated reporting (Jansen, 2010). All the participants could be described as prototypical, in other words they were an ideal fit as participants who were experienced in the process of putting integrated reporting into practice (Pratt, 2009). Creswell (2012:206) states that: "*In qualitative research, you select people or sites that can best help you understand the central phenomenon"*.

One can select the most relevant people only by knowing who is most impacted by the topic at hand. The researcher therefore, selected specific participants whom the researcher believed would contribute to the discussion of the research question and who were therefore directly impacted by the research problem. Deppe et al. (1991), in their study on "*emerging competencies for the practice of accounting"*, identify practitioners as ideally placed, as a result of their experience, to provide insight into the competencies required to perform their roles. The participants who were selected were considered to be practitioners in

implementing integrated reporting as they either were part of the team putting integrated reporting into practice in the organisations they worked for, or they consulted on the process of putting integrated reporting into practice at a number of organisations. The participants selected were either known by the researcher to be involved in the integrated reporting teams or were known to the researcher as consultants on integrated reporting.

Another strategy in purposive sampling that will provide a richer variety to the data gathered is to intentionally select participants who are known to have varied viewpoints on the research question (Polit and Beck, 2012). This is also a key distinguishing factor of the purposive sampling technique of “maximum variation sampling” in which participants with differing characteristics are selected (Plano Clarke and Creswell, 2015). This method of sampling is particularly useful, as any common themes that are identified in the data gathered from these diverse participants will be valuable when addressing the research question (Polit and Beck, 2012). The purposive sample has a number of distinguishing factors, including: participants who work in organisations and have the responsibility for implementing integrated reporting and participants who provide consultation services to organisations on integrated reporting. The participants included people with an accounting or finance background, and others with sustainability or communications backgrounds, amongst others. In the interest of disclosure, it should be noted that the researcher knew many of the participants before the interviews, as some of the participants worked with the researcher or had been introduced to the researcher through integrated reporting networks (Pratt, 2009). None of the participants resulting from the snowball sampling method used to get more participants through referrals from the first round of participants were known to the researcher. The qualifications and titles of the interviewees are set out Figure 2 below.

During the interviews, the participants were asked if they could recommend other practitioners who were equally knowledgeable in integrated reporting and who were also involved in putting integrated reporting into practice or provided consulting services to organisations (Pratt, 2009). This referral or snowball sampling method, through suggestions from participants, enabled the exploration of new insights from a more diverse grouping of participants (Plano Clarke and Creswell, 2015, Polit and Beck, 2012). This technique was, however, applied with caution so as not to divert attention from the central research question: “*What competencies are needed to put integrated reporting into practice?”* (Creswell, 2012).

None of the referred participants were known by the researcher before the interviews (Pratt, 2009).

A total of 21 semi-structured interviews were performed, based on the participants identified through purposive diversity sampling and snowball sampling. Interviews were conducted with 11 preparers and 10 consultant in integrated reporting.

The sample size could be affected by a number of variables, including the complexity of the research problem and the quality of the information gathered during the interviews (Polit and Beck, 2012). Pratt (2009) states that there is no “magic number” for interviews and that it depends on the research question. Saturation is a state in which no new information is gathered through additional interviews (Polit and Beck, 2012). The researcher believes that saturation was reached with the 21 interviews conducted, as no new information came to light.

3.2.2 Secondary data sampling

Secondary data was selected through purposive sampling by identifying competency frameworks relating to professional bodies and organisations that have specifically stated that their competency framework is prepared or updated to incorporate integrated reporting (Bryman and Bell, 2015).

Specific professional bodies’ competency frameworks were identified based on the fact that either the competency framework itself or other literature refers to the fact that the frameworks were updated to incorporate competencies relating to integrated reporting. Three of the competency frameworks relate to professional accounting and management accounting professionals. The reason for the inclusion of these competency frameworks is the fact that the competency frameworks have been updated for integrated reporting as accountants and management accountants are often involved in the process of putting integrated reporting into practice (Starbuck, 2012, IFAC, 2017a, Stubbs and Higgins, 2014). Table 10 sets out the professional bodies’ competency frameworks selected and the reference to the competency framework having been updated to incorporate integrated reporting.

Table 10**:** **Competency frameworks selected with relevant updates**

Organisation or professional body	**Extract from text indicating that the competency framework was updated for integrated reporting**
International Integrated Reporting Council (IIRC)	"*The <IR> Competence Matrix has been developed to help organisations identify the knowledge, skills and behaviours they need to adopt Integrated Reporting and realise its benefits*" (IIRC, 2016)
Association of Chartered Certified Accountants (ACCA)	"*This paper reports on ACCA's support of and response to the latest initiatives in IR, in particular the impact this will have on the education and training of accountants in order to reflect these new principles to prepare the twenty-first-century accountant for a much more challenging role in the near future*" (Owen, 2013a)
Chartered Institute for Management Accountants (CIMA)	"*New material such as "Big Data", sustainability, integrated reporting and finance function transformation has been added*" (CIMA, 2015)
South African Institute of Chartered Accountants (SAICA)	"*Major changes" in the 2014 and 2016 versions of the competency framework document listed integrated reporting as a "major change".* (SAICA, 2017)

Source: IIRC (2016), Owen (2013), CIMA (2015), SAICA (2017)

Based on the competency frameworks selected, the documents set out in Table 11 were identified as containing detail on the competencies required by the professional organisation of its members.

Table 11**:** **Documents for each organisation or professional body selected for analysis**

Professional body or organisation	**Collective reference used in this research study**	**Documents**
International Integrated	IR Matrix	The <IR> Competence Matrix – Learning outcomes for <IR> Training (IIRC, 2016)

Professional body or organisation	Collective reference used in this research study	Documents
Reporting Council (IIRC)		
Chartered Institute of Management Accountants (CIMA)	CGMA Competency Framework	CGMA Competency Framework syllabus (CGMA, 2014) 2015 Professional qualification (CIMA, 2015)
South African Institute of Chartered Accountants (SAICA)	SAICA Competency Framework	Guidance for Professional Programmes – Competencies of a CA(SA) at the point of the Assessment of Professional Competence (SAICA, 2015b) Competency Framework Detailed Guidance for the Academic Programme – Competencies of a CA(SA) at the point of the Initial Test of Competence (ITC) (assessment of core technical knowledge) (SAICA, 2017) SAICA Training programme – Implementation guide – effective 1 January 2016 (SAICA, 2016)
Association of Chartered Accountants (ACCA)	ACCA Competency Framework	Web-based Competency Framework (ACCA, 2018) "*Integrated Reporting: A Review of Developments and their Implications for the Accounting Curriculum*" G Owen (2013).

Source: Researcher compiled, references included in table

3.3 DATA COLLECTION

3.3.1 Primary data collection

The participants in the study were putting integrated reporting into practice in their organisations or were assisting organisations to do so as integrated reporting consultants.

The interviews were performed by direct, face-to-face communication with participants at a time and in a venue of their choosing. The participants were therefore aware of the research study and the topic of the research study in the artificial interview environment and may consequently have altered their answers. The study was considered to be non-experimental, as the interviewer had no intention of purposefully changing any factors impacting on the participant but is rather seeking to understand specific experiences by the participants through semi-structured interviews (Creswell, 2013).

The sources of primary data included recorded interviews and interview transcripts. Rowley (2012:261) states that "*interviews are generally used in conducting qualitative research, in which the researcher is interested in collecting "facts", or gaining insights into or understanding of opinions, attitudes, experiences, processes, behaviours, or predictions"*. Semi-structured Interviews were ideal for this study as they enabled the researcher to gain more insight and a detailed understanding of the participants' views and experiences. Even though semi-structured interviews are conducted based on a few questions that were prepared in advance, the questions and time spent on exploring specific statements made by the participants are left up to the interviewer (Rowley, 2012). An in-depth interview enables the researcher to probe and obtain detailed responses on exactly what the participant believes to be relevant (Mack et al., 2005). This method was most beneficial for this research study as it allowed the researcher the opportunity to probe and gain insights into the competencies identified by each participant within their realm of experience as preparers or consultants in integrated reporting.

The interviews were conducted at the time and place agreed between the researcher and contributor and were scheduled to last no more than an hour. The average time of each interview was 44 minutes. The interviews ranged between just under half an hour and just over an hour in duration. The researcher recorded all the interviews using a recording application on a pre-tested cell phone device (iPhone application), as all the participants agreed to it. All the recordings were successfully saved and were shared with the transcriber. Even though the interviews were recorded, the researcher also took high-level notes that were intended to assist the researcher in the unlikely event that the recording device failed (Mack et al., 2005). The recording device worked in all instances and transcripts were done

on the full recorded interviews. The high-level field notes were used during the interviews to inform follow-up questions.

Each interview was transcribed for further analysis. The researcher enlisted the assistance of a professional transcriber, who was able to transcribe the interview verbatim in Microsoft Word, a computer-based format. All the data, which included recordings and transcripts, were converted into computer files and labelled consistently to ensure that nothing was lost or misplaced (Creswell, 2012, Mack et al., 2005). The transcriber retained the original audio file labelling when labelling the transcripts. All the interview transcripts were shared with the participants for confirmation that it accurately reflected their recollection of the content of the interview as a procedure of member checking. Only two participants recommended slight updates to the transcript, which were incorporated into the transcripts before further analysis.

The interviews started with an open-ended question designed to draw out the participant's own experience relating to the topic of integrated reporting (Table 12, questions 1 to 3). The interview then continued with questions to cover critical elements stated on the interview guide as well as with probing questions to gain an in-depth understanding of the contributor's insights and views (Table 12, questions 4 to 10). The interviews were concluded by asking if there was anything else that the participant wished to add with reference to additional competencies that had not been addressed in .the interview questions (Table 12, question 11) (Galletta, 2001). The table below sets out the interview questions as they relate to the research questions.

The interviews were conducted as part of a traditional job analysis to understand what competencies are needed to put integrated reporting into practice (Cardy and Selvarajan, 2006). A traditional job analysis sets out to produce a list of the knowledge required and the skills and aptitude needed by a person to be able to complete a specific job (Cardy and Selvarajan, 2006). In the context of this study, that job is to put integrated reporting into practice as employee of an organisation or as a consultant assisting the organisation. This study can also be described as an activity-based assessment of the competencies needed to put integrated reporting into practice as an activity-based assessment focuses on the output that a competent person would deliver when performing a specific role (Hardern,

1995, IIRC, 2016, Cardy and Selvarajan, 2006, Lester, 2014). In the context of this study, the output or activity that was investigated was putting integrated reporting into practice.

Table 12: **Interview questions relating to research questions**

What are the main research questions the interview is designed to answer? (secondary research questions)	**Interview questions**
Introduction	1. What is your role at [company name]? 2. What are your qualifications and where did you obtain them? 3. In your own words, describe what IR means to you?
What knowledge have you gained that enables you to put IR into practice?	4. What frameworks or other guidance do you commonly use in the process of putting IR into practice? 5. What is the relevance of these frameworks to the process of IR at [company name]? a. [follow-up] Complete the sentence: In order to be able to put integrated reporting into practice you should know that……
What are the processes followed by the organisation to put IR into practice?	6. What are the processes in place to implement IR at [company name]?
Who is involved in the IR process and what are the tasks they need to perform as part of the IR process?	7. What are the titles or job descriptions of the different people involved in the IR process in your company? a. [probing question] Who is ultimately responsible to approve the integrated report?
Describe the tasks that you are required to perform to put IR into practice.	8. What tasks do you perform in the process of implementing IR?

What are the main research questions the interview is designed to answer? (secondary research questions)	Interview questions
	a. [follow-up] Which of the tasks are the most important? b. [follow-up] Which of the tasks are the most time consuming?
What are the skills, know-how or things that you should be able to do to perform these tasks?	9. What are the specific skills that are required to perform these tasks? [if asked what I mean by skills] "those things that a person should be able to do when they are functioning in a given area of work, learning or social activity" [follow-up] Complete the sentence: In order to be able to put integrated reporting into practice you should be able to ….. [follow-up] What skills are needed to perform the most important tasks in the IR process? [follow-up] What are the skills needed to perform the most time consuming tasks in the IR process?
Where was this knowledge gained?	10. Where did you learn how to …[refer to previous question]
Closing	11. Are there any other competencies that we have not discussed, that you believe are relevant to be able to put IR into practice?

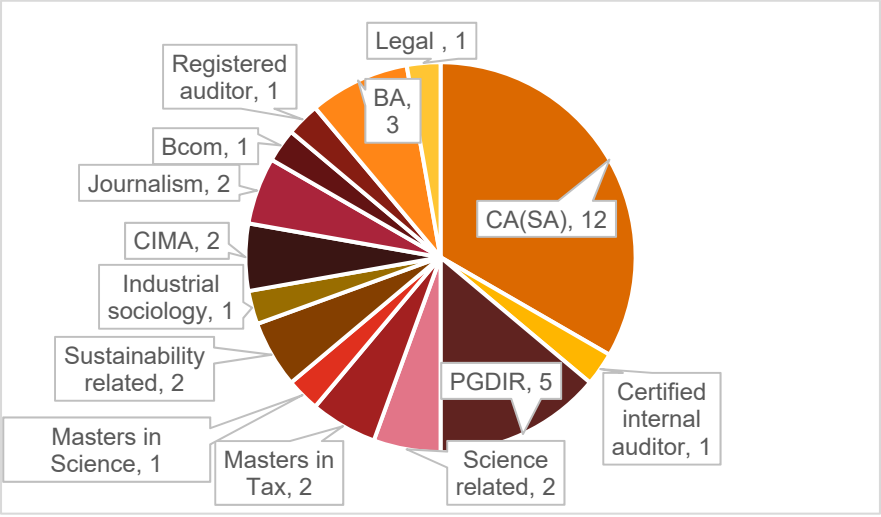
Source: Researcher

The process of primary data collection and analysis preceded the secondary data analysis to avoid unintended bias. In other words the interview questions were not structured or asked in such a way that could influence the outcome. An influence to the outcome of the interviews would be for the interview questions to merely confirm a list of competencies that were

already identified in the existing competency frameworks of specific professional organisations. The interviews were conducted with participants from a variety of academic backgrounds in order to identify a broader list of competencies needed to put integrated reporting into practice. The academic background include the Chartered Accountant qualification in South Africa ("CA(SA)"), a post-graduate diploma in Integrated Reporting ("PGDIR"), and various other qualifications as set out in Figure 2. More than half of the interviewees (15 interviewees) hold more than one academic qualification resulting in a total of 36 qualifications amongst the 21 interviewees. The interviewees consisted of 10 consultants in integrated reporting and 11 preparers, who hold a wide range of titles within their respective organisations including:

- Head of external reporting
- Internal financial reporting specialist
- Group technical accountant
- Group financial reporting manager
- Group integrated, sustainability and ESG reporter
- Head of strategy and transformation
- Group sustainability manager
- Head of sustainability
- Climate change and sustainability development manager
- Integrated reporting editor
- Team member in the integrated reporting and financial reporting team

Figure 2: **Qualifications of interviewees**



Source: Interview transcripts

3.3.2 Secondary data collection (competency frameworks)

The secondary data was collected by interrogating the selected documents (set out in Table 11) of each of the competency frameworks (set out in Table 10), to answer two of the original interview questions. The interview questions answered by these documents are set out in Table 13 below. None of the other research questions were included, as they were not considered relevant or appropriate to the interrogation of the secondary information. The questions that were omitted were relevant to the participants who were putting integrated reporting into practice and would not be relevant to a competency framework.

Table 13**: Questions relating to secondary data collection**

What are the main research questions the competency framework analysis is designed to answer?
Describe the tasks that you are required to perform to put IR into practice.
What are the skills, know-how or things that you should be able to do to perform these tasks?

Source: Researcher

3.4 DATA ANALYSIS

3.4.1 Primary data analysis

The data analysis process that was applied to the primary data, the semi-structured interviews, is described as thematic analysis which involves coding or giving meaning to participants' experiences of the research problem by identifying specific topics or premises in the data (Braun and Clarke, 2012). Vaismoradi et al. (2013:398) state that a thematic analysis assumes that the data reflects the truth and during a thematic analysis, "*the researcher wants to find out about the actual behaviour, attitudes, or real motives of the people being studied"*. Similarly, this study aims to identify the actions the participants perform to put integrated reporting into practice.

Saldana (2013) suggests that a novice researcher could consider a combination of basic coding methods as a starting point. The step-by-step process set out by Braun and Clarke

(2012) is a reasonable guide for thematic data analysis and it was applied in my analysis. The first step involved gaining in-depth knowledge of the data through repetitive and methodical reading of the interview transcripts and listening to the interview recordings (Braun and Clarke, 2012, Rowley, 2012). It also involved making notes on initial thoughts on the data content (Braun and Clarke, 2012).

The second step involved initial coding based on the research questions. The process of coding was done either based on the face-value of the words used in the interview (manifest content) or by highlighting the hidden meanings that link to the research question (latent content) (Braun and Clarke, 2012).Vaismoradi et al. (2013) describe manifest content as the categories identified in aggregating the data and latent content as the themes identified in the data. Braun and Clarke (2012) emphasise that coding should be a comprehensive, complete and organised process. The first part of this process was to apply a structural coding technique in which the transcripts were organised into sections based on the interview questions, ensuring that all of the parts of the transcribed interviews were matched up with one or more of the interview questions (Saldana, 2013). In order to apply this coding technique, an Excel spreadsheet was set up with the interview questions listed in rows in the far left column (column A). Each participant's answered questions and follow-up questions were copied into the cell adjacent to the interview question to which it related. If the whole answer or a part of the answer to any of the interview questions or follow-up questions answered another interview question, they were allocated, on a systematic basis, to the relevant interview question. Table 14 represents an example of the process followed in the initial coding of the transcripts.

Table 14**:** **Illustrative example of structural coding worksheet for primary data**

A	**B**	**C**	**D**	**E**
Interview question	**Participant 1**	**Coding**	**Participant 2**	**Coding**
Question 1: What is your role at [company name]?	I am responsible for the integrated report and for sustainability reporting, so I do a	Preparer	So, I own my own company called x, predominantly writing integrated reports, but also trying to bring more	Consultant CA

A	B	C	D	E
	lot of the reporting on ESG issues, on a number of platforms.		than just words. So, a creative style and also an understanding, with my accounting, CA background, helps me to be a little bit more analytical when I do the reports.	

Source: Researcher

An additional column was added to the right of the original transcribed text and the information was coded according to a combination of coding methods. The additional coding methods: attribute coding, descriptive coding, versus coding, in-vivo coding and learn coding, as described in Table 15, were employed for the first cycle of coding (Saldana, 2013):

Table 15**:** **Description of coding methods**

First cycle coding methods	Description of coding methods
Attribute coding	Including basic identifiers within the data such as the participant's characteristics, e.g. preparer or consultant.
Descriptive coding	Identify basic topics within each section of data e.g. understanding materiality.
Versus coding	Identifying the conflicting dualism within the data e.g. integrated reporting vs integrated thinking.
In vivo codes	Codes based on words used by the participant during the interview e.g. "tick-box approach".
Learn coding or eclectic coding	Adding and building on the identified codes by repeating the coding process.

Source: Saldana (2013)

In order to make sense of the codes identified in the first cycle, a code mapping technique was applied. This technique requires that the initial codes are categorised, re-categorised

and then grouped into categories (Saldana, 2013). The process of categorising and re-categorising was done in the following manner. An Excel worksheet was created on which the first column contained the reference to each participant in the study from Participant 1 to Participant 21. The column headings were populated with the three competency categories: cognitive competency, functional competency and foundational competency. The competencies each have the meaning ascribed to them as set out in Table 16.

Table 16**:** **Summary of competencies considered in competency modelling**

Competency category	**Competency description**
Cognitive competency	Having academic knowledge, and knowledge on how to perform certain tasks based on past experience.
Functional competency	Skills or know-how needed to be able to perform a specific function or do a specific job.
Foundational competencies or "soft-skills"	Soft-skills and attributes including: ethics, professionalism and judgement; developing self, others and profession; managing self, work, processes and others; communication, client and public relations.

Source: Researcher

Table 17 describes an example of the use of the code-mapping technique that involved grouping the codes identified in the first cycle of coding into the three competency categories: cognitive competency, functional competency and foundational competency.

Table 17**:** **Categorisation of initial coding into key competency categories**

	Cognitive competencies	**Functional competencies**	**Foundational competencies**
Participant 1	IR Framework	Understand value creation across capitals	Think strategically

Source: Researcher

The initial categorisation of the competencies was informed partly by the interview questions. The interview questions specifically aimed at identifying the knowledge and skills

needed to put integrated reporting into practice. The questions were worded in such a way as to solicit the three main categories of competencies used in competence modelling processes (Sultana, 2009). The codes were mapped to each of the relevant competency categories. Table 18 sets out the competency category the researcher set out to identify through each of the specific interview questions:

Table 18**:** **Interview questions matching competency categories**

Interview questions	**Competency category**
Interview question 3: In your own words, describe what integrated reporting means to you. Interview question 4: What framework or other guidance do you commonly use in the process of putting integrated reporting into practice?	Cognitive competencies
Interview question 6: What are the processes followed by the organization to put integrated reporting into practice? Interview question 8: What tasks do you perform in the process of implementing integrated reporting? Follow-up questions question 8: Which tasks are the most important or the most time consuming? Interview question 9: What are the specific skills that are required to perform these tasks?	Functional competencies
Interview question 9: What are the specific skills required to perform these tasks?	Foundational competencies

Source: Researcher

After the initial classification of the initial codes into the three competency categories, each competency category was further analysed to identify themes and sub-themes. The third step in the process of data analysis was searching for themes (Braun and Clarke, 2012). Saldana (2013) refers to DeSantis & Ugarriza (2000:358) and states that a theme "*captures and unifies the nature or basis of the experience into a meaningful whole"*. Themes were identified through a collection of related categories into a joining theme that addressed the research question. The ultimate goal of identifying themes is in order to answer the research question through relevant themes (Braun and Clarke, 2012). In order to standardise the

search for functional competencies in the interviews, the terminology used in the <IR> Framework as its guiding principles and content elements was used to identify specific functional competencies.

The fourth step involved consideration of the relevance and appropriateness of the emerging themes in the context of the data set (Braun and Clarke, 2012). It could also include creating a thematic map (Braun and Clarke, 2012). The thematic map was created in the format of a table. This process was repeated until all the relevant themes had been identified and reviewed and the thematic map or table was updated accordingly.

In the fifth step of the analysis, names were assigned to the themes and each theme was defined in a way that was descriptive and identified each theme in the context of the research question (Braun and Clarke, 2012). The theme names were added to the thematic table and are discussed in the findings section of the study.

The outcome of the analysis was a write-up that included convincing extracts (proof quotes), from the interviews, as examples that can be linked back to the research questions (Vaismoradi et al., 2013). The focus was on how the results could best be presented in a creative manner (Vaismoradi et al., 2013) one that highlighted the key theme that flowed throughout all the data (Vaismoradi et al., 2013). As Pratt (2009) suggests, a leading theme was identified and highlighted in the final write-up of the data analysis and contained a balance of primary data and secondary data analysis.

3.4.2 Secondary data analysis

Secondary data analysis in this study involved the identification of the competencies required by a number of professional bodies, including the IIRC, SAICA, ACCA and CIMA, ,in order to put integrated reporting into practice. The analysis was performed by asking the following interview question of the secondary data:

- What are the specific skills required to perform tasks related to integrated reporting?

The answers to the interview question were then further analysed by conducting exploratory content analysis (Guest et al., 2013). Vaismoradi et al. (2013) quote Elo and Kyngas, (2008) in describing the process followed during content analysis. The first step, similar to thematic analysis, entailed familiarisation with the content of the documents selected. For each of the selected competency frameworks, a summary was made of its layout and key chapters.

The second step (set out in Table 19) is described as "*open coding and creating categories, grouping codes under higher order headings, formulating a general description of the research topic through generating categories and subcategories as abstracting"* (Vaismoradi et al., 2013:401) For the process of coding, the answers to the two interview questions were identified and documented on an Excel worksheet for each of the competency frameworks.

Table 19**: Illustrative example of structural coding worksheet for secondary data**

A	**B**	**C**	**D**	**E**
Interview question	IR Matrix	Coding	CGMA Competency Framework	Coding
What are the specific skills that are required to perform tasks related to integrated reporting?	"*Participate effectively as part of a team planning and coordinating the implementation of Integrated Reporting, including integrated thinking, within an organization*."	work as part of a team implement integrated thinking plan and coordinate integrated reporting implementation	*"So, in addition to accounting and analytical skills, finance professionals must also have an understanding of the organisation, its business model, its strategic context and its competitive position. They also need the people and leadership skills necessary to ensure that the accounts, information,*	understand the org's business model understand the org's competitive position understand the org's strategy people skills leadership skills provide relevant information, analysis and insights to management

A	B	C	D	E
Interview question	IR Matrix	Coding	CGMA Competency Framework	Coding
			analysis and insights which they can supply to management are applied effectively."	ensure that information provided to management is applied effectively.

Source: Researcher

The third step was reporting on the process followed and the results of the analysis by using conceptual maps or categories, and a story line. The same three categories of competencies were identified in this process of open coding, including cognitive competency, functional competency and foundational competency. In order to standardise the search for functional competencies in the competency frameworks, the terminology used in the <IR> Framework as its guiding principles and content elements, were used to identify specific functional competencies. All the foundational competencies that could be linked to putting integrated reporting into practice were identified. Some of the competencies were identified by using a word-search of key words. The words used in word searches of each of the competency frameworks are listed in Table 20 below.

Table 20**: Word-searches performed on the selected competency frameworks during the secondary data analysis**

Functional competency keywords
Integrated report
Integrated reporting
Non-financial
Value creation
Capitals
Business model
Governance

Functional competency keywords
Stakeholders

Source: Researcher

3.4.3 Comparison between primary and secondary data

The secondary data analysis was inductive as it was analysed separately from the primary data analysis. This was because it did not inform the interview questions and was not used as pre-determined competencies that were confirmed during the semi-structured interviews. The competencies identified in the four frameworks were used firstly to confirm that the competencies identified in the interviews were contained in the competency frameworks. Competencies identified that were not comparable with those identified in the interviews, but that were still considered relevant to an understanding of the competencies needed to put integrated reporting into practice were discussed separately in the findings chapter.

The method used to compare competencies identified in the interviews with competencies identified during the secondary data analysis was first to compare competencies that were categorised as cognitive, functional or foundational. In the functional competency category, the coded competencies identified during the primary data analysis were compared with the competencies coded as part of the secondary data analysis based on the <IR> Framework guiding principles and content elements. For example, identifying a link between performance and remuneration was highlighted as a competency falling under the "performance" content element in both the primary and secondary data analysis.

Competencies identified in the analysis of the four competency frameworks that were not directly comparable with those identified during the primary data analysis, but that were still relevant to the integrated reporting process, were grouped into the relevant themes and roles fulfilled by the integrated reporter.

3.5 ETHICAL CONSIDERATIONS

The key ethical matters to consider in a qualitative research study can be divided into various stages. Before the study was undertaken it was approved by the Research Ethics Committee of the Faculty of Economic and Management Sciences at the University of Pretoria. The ethical clearance document is included as Appendix B to this document. Each participant was informed of the purpose of the research and they voluntarily signed a consent form to take part in the research project. An example of the consent form is included as Appendix C to this document. Research was conducted with the necessary respect for the participants and their contribution with minimal personal disturbance. When analysing and presenting the data, the participants remained anonymous and their contribution remained confidential. Data was reported honestly and without bias while taking into account the rules concerning using the work of others as part of the research project (Creswell, 2013). The participants were not harmed physically or psychologically in the execution of this study, as the study did not focus on psychologically sensitive topics.

The proposal, including the attached application for ethical clearance, served as a request for approval from the University of Pretoria to continue with the study (Appendix B). Each participant was informed about the overall purpose of the research project by means of an e-mail or at the start of the interview. The participants were allowed the opportunity to decide not to participate at the start of the interview or were alternatively requested to sign the consent form (Appendix C). The consent form set out the researcher's promises towards the participant relating to time commitment and confidentiality. The participants were also informed of their right to withdraw from the interview at any point without explanation to the researcher. As the identified participants were not concentrated at any one company or institution, a formal letter of introduction was not deemed necessary.

One of the measures to ensure that no plagiarism had been committed was to submit the proposal and the final document through Turnitin in order to consider and correct the Originality Report for any inadvertent reference issues (Appendix A).

3.6 DEMONSTRATING QUALITY AND RIGOUR

The four Guba criteria of credibility, transferability, dependability and confirmability should be applied to the research study to ensure the required levels of quality and rigour are

adhered to (Shenton, 2004, Polit and Beck, 2012). The credibility of a study speaks for its trustworthiness and authenticity and its achievement in attaining what it set out to achieve (Shenton, 2004). To ensure the credibility of the research study, a few measures were taken, including having used well recognised research techniques as set out in the preceding sections in this research study (Shenton, 2004). The use of triangulation in the form of data source triangulation ensured that perspectives from a diverse sample of participants on the research topic had been obtained by interviewing both the participants tasked with preparing integrated reports for organisations and participants who consult on integrated reporting with organisations. As the participants were given the option of refusing to be interviewed, data that was gathered could be assumed to be from willing contributors, which added to the credibility of the data collected (Shenton, 2004). The right of refusal was implemented in the study by the use of consent forms (Appendix C) and informing the participants that they could at any point stop participating without reason. In addition, the researcher implemented the recommended approach of regular discussion with research supervisors to gain from their experience and insights (Shenton, 2004). In order to ensure the credibility of transcripts, the participants were asked to read and approve or make changes to transcripts if they did not agree with the output.

Transferability relates to the ability of the reader to sufficiently understand the context of the research study in order to duplicate it elsewhere (Shenton, 2004). The researcher ensured that the findings set out sufficient detail about the background and environment in which the study was conducted (Polit and Beck, 2012). In addition the researcher ensured that the research findings set out scope of the research project in sufficient detail (Shenton, 2004).

Shenton (2004:63) believes that "*dependability criteria are difficult in qualitative work, although researchers should at least strive to enable a future investigator to repeat the study"*. Another researcher should be able not only to repeat the study but also to end up with the same or similar results. If the processes followed during the research study address credibility, the research study can already, to some extent, be considered dependable (Shenton, 2004). In order to provide sufficient detail, the research study sets out the research design in detail (Chapter 3: Methodology). The research study includes information on the data-gathering procedures followed and a reflection on the "*effectiveness of the process of inquiry undertaken"* (Shenton, 2004:68).

Finally confirmability relates to the fact that the research findings are not unduly influenced by the researcher's biases (Shenton, 2004). The use of triangulation by having compared data gathered in the interviews with data found through the secondary data analysis is one method that will be used to ensure confirmability. In addition, any suspected predispositions were identified and critically discussed with the research supervisors, wherever considered necessary (Shenton, 2004). As much information as was practicable was documented in a research log relating to the primary and secondary data analysis, as the output of the research activities undertaken during the research project.

3.7 DESCRIPTION OF RESEARCHER BIASES

The researcher identified a number of biases that impacted on the research study. The first bias related to the fact that, at the time of the study, the researcher was also responsible for putting integrated reporting into practice at an organisation. This enabled the researcher to have first-hand insight into the successes and frustrations voiced by the participants, as they were putting integrated reporting into practice in their organisations, or were consulting on the process of doing so. The researcher faced many of the same frustrations in the process of putting integrated reporting into practice.

The second bias related to the fact that, at the time of the research study, the researcher was involved in the adjudication of an integrated reporting award. This resulted in the researcher's curiosity and questions around whether organisations reward participants for winning awards.

The third bias that the researcher wanted to highlight was the fact that the researcher was, at the time of the research study, of the view that integrated reporting has significant potential as a corporate reporting tool but that it is, in many instances, not appropriately implemented or understood. This has resulted in the researcher identifying the theme relating to the integrated reporter as interpreter of the <IR> Framework and in identifying the difference between participants and organisations focused on the integrated report, and those focused on integrated reporting.

4 FINDINGS AND DISCUSSION

4.1 INTRODUCTION

This part of the chapter sets out the findings as competencies needed to put integrated reporting in the various roles that integrated reporters fulfil in organisations. In analysing the competencies needed to put integrated reporting into practice, it was noted that integrated reporters have to fulfil a number of roles in the organisations for which they work or consult. A number of key themes also emerged in connection with each of these roles, highlighting the different competencies used by these integrated reporters as they put integrated reporting into practice. A summary of these findings are set out in Table 22.

The findings section of this chapter sets out the five roles that integrated reporters fulfil as well as the identified themes within each of the roles fulfilled by the integrated reporter. It further sets out the cognitive, functional and foundational competencies specifically required in each of these roles and themes. These competencies are further compared to the competencies set out in existing competency frameworks of professional organisations that have recently been updated to incorporate integrated reporting as a field of competency. The discussions part of the chapter further unpacks some of the observations made during the research project.

The competencies identified were grouped into three competency categories (set out in Table 21), including: cognitive competencies, functional competencies and foundational competencies (Botha, 2001, Sultana, 2009). A number of functional competencies were identified in each of the roles played by the integrated reporter. These functional competencies are output driven and reflect a task that the integrated reporter should be able to perform in fulfilling the various identified roles of systems architect, nexus of information, storyteller and innovator. Foundational competencies represent personal competencies that are often referred to as soft skills (Lawson et al., 2014).

Table 21: **Competencies considered in the job analysis**

Competency category	Competency description
Cognitive competency	Having academic knowledge.
Functional competency	Skills or know-how needed to be able to perform a specific function or do a specific job.
Foundational competency	Soft-skills and attributes including: ethics, professionalism and judgement.

Source: Lester (2014) Brown and McCartney (1995), Delamare-Le Deist and Winterton (2005) and Sultana (2009) (adapted)

The study does not comment on whether the participants were effective in their role of putting integrated reporting into practice or whether their organisations have produced a good integrated report or have mature reporting processes in place. The maturity of an organisation's reporting processes, its understanding of the integrated reporting concept and the objectivity of the integrated report, however, affect the different roles that the integrated reporter fulfils. Each participant interviewed confirmed that they were required to put integrated reporting into practice, either as a preparer of integrated reports or as a consultant who assisted clients in the implementation of integrated reporting. All of the participants functioned as part of a team of differing sizes. The competencies identified were considered to be competencies that each member of the integrated reporting team contributed to the process of putting integrated reporting into practice. These competencies should therefore be present in individual integrated reporters.

Even though the participants fulfil one core role, which is putting integrated reporting into practice, this role was found to contain five facets. It was noted that not all five of the facets were relevant to the integrated reporting teams in each of the organisations. The five roles that the integrated reporters fulfilled are: as an interpreter of the <IR> Framework, as a systems architect, as a nexus of information, as a storyteller and as an innovator of integrated reporting.

As interpreter of the <IR> Framework, the integrated reporter should understand what integrated reporting is trying to achieve through an in-depth knowledge of the <IR> Framework. As a systems architect, the integrated reporter is required to reverse engineer

integrated thinking into the organisation's systems and continually improve on the journey of integrated reporting. The integrated reporter as nexus of information is required to interrogate large volumes of information, especially where information systems are manual and informal. In the integrated reporter's role as nexus of information, the integrated reporters also act as the custodians and editors of the information. In the role as storyteller, the integrated reporter has a platform to challenge leadership on its integrated reporting views as advocate for a specific integrated reporting story. The story that the storyteller advocates could be influenced by the motivation to report for awards.

Part 2 of this section sets out the findings chapter and includes Table 22 that summarises the roles integrated reporters fulfil and the competencies identified that are relevant to each of these roles. Table 22 captures both the primary and secondary data analysis findings. Part 3 to Part 7 include the findings for each of the roles that the integrated reporter fulfils that was identified during the primary data analysis. The competencies identified in each of the roles are contrasted with the competencies identified during the secondary data analysis (in other words the finding sets out if the competencies were found in the selected competency frameworks). The roles integrated reporters fulfil are as: interpreter of the <IR> Framework; as systems architect; as nexus of information; as storyteller; and as innovator. Part 8 discusses the competencies that were only identified in the secondary data analysis of the competency frameworks that are relevant to the integrated reporting process. Part 9 includes a discussion on the impact of the maturity of the reporting organisation on the roles of the integrated reporter, the changing roles of the integrated reporter, the advocacy role of the integrated reporter and a discussion on meta-competency.

4.2 FINDINGS ON THE ROLES INTEGRATED REPORTERS FULFIL AND COMPETENCIES NEEDED TO FULFIL THESE ROLES

The table sets out the roles that interacted reporters fulfil, the themes identified and the competencies needed in each of the themes, set out in the three competency categories: cognitive, functional and foundational competencies.

Table 22: **Roles and competencies needed to perform the roles of integrated reporters**

Role	Theme	Competencies identified by integrated reporters	Competencies identified in competency frameworks	IIRC	CGMA	SAICA	ACCA
Integrated reporter as interpreter of the <IR> Framework	The business case for integrated reporting	Understanding the requirements of the <IR> Framework (C)		■			
		Ability to present a business case for integrated reporting (F1)		■	■	■	
			Sustainability mindset (F2)			■	■
Integrated reporter as systems architect	Reverse engineering integrated thinking		Determining material social, environmental and financial impacts (F1)				■
		Identify connections (F1)		■	■		
		Report financial and non-financial measures (F1)			■	■	■
		Align performance and remuneration (F1)				■	■
		Strategic mindset (F2)		■	■	■	■
			Implement an information management system (F1)	■	■	■	

Role	Theme	Competencies identified by integrated reporters	Competencies identified in competency frameworks	IIRC	CGMA	SAICA	ACCA
Integrated reporter as systems architect	Continuous improvement	Finding the gaps (F1)				■	
		Resourcefulness (F2)				■	
			Stakeholder engagement (F1)	■	■	■	■
Integrated reporter as nexus of information	Custodian of information	Interrogator of integrity of information (F1)				■	
		Project management skills (F2)		■	■	■	
		Interpersonal skills (F2)		■	■	■	■
	Editor of information	Concise presentation of volumes of information (F1)		■		■	
		Analytical thinking (F2)			■	■	
Integrated reporter as storyteller	Speak truth to power	Assess completeness in reporting (F1)		■			
		Influencing skills (F2)					
	Telling a specific story	Identify shareholder information needs (F1)				■	
		Communication skills (F2)		■	■	■	■

Role	Theme	Competencies identified by integrated reporters	Competencies identified in competency frameworks	IIRC	CGMA	SAICA	ACCA
Integrated reporter as storyteller	Telling a specific story		Determine materiality for the integrated report (F1)				
	Reporting for awards	Understanding the requirements of the <IR> Framework (C)					
Integrated reporter as innovator		Meta competency					

Source: Researcher

C – Cognitive competency

F1 – Functional competency

F2 – Foundational competency

4.3

4.3 INTEGRATED REPORTER AS INTERPRETER OF THE <IR> FRAMEWORK

The role of interpreter of the <IR> Framework involves formulating a business case for integrated reporting. The competencies required to be able to fulfil this role is summarised in Table 23 as a cognitive understanding of the requirements of the <IR> Framework, a functional competency of being able to present a business case for integrated reporting and foundational competency of having a sustainability mindset.

Table 23**: Competencies of integrated reporter as interpreter of the <IR> Framework**

Roles	Themes	Competencies identified by integrated reporters		Competencies identified in competency frameworks	Similar competencies identified in competency frameworks			
		Cognitive competencies	Functional competencies	Foundational competency	IIRC	CGMA	SAICA	ACCA
Integrated reporter as interpreter of the <IR> Framework	The business case for integrated reporting	Understanding the requirements of the <IR> Framework.			✔			
			Ability to present a business case for integrated reporting		✔	✔	✔	
				Sustainability mindset			✔	✔

Source: Researcher

4.3.1 Understanding the requirements of the <IR> Framework

All the participants highlighted the <IR> Framework as the basis used to put integrated reporting into practice in their organisations or at their clients. The integrated reporter is therefore the interpreter for integrated reporting, as set out in the <IR> Framework. The competency required by the integrated reporters as interpreters of the <IR> Framework was identified as an in-depth knowledge and understanding of the <IR> Framework. This includes an in-depth understanding and knowledge of its fundamental concepts, guiding principles and content elements (IIRC, 2013). The role of the integrated reporter as interpreter of the <IR> Framework can also be found in the IR Matrix.

The competencies set out for the introductory level of the IR Matrix are considered to aptly describe the cognitive competency needed for the role of integrated reporter as interpreter of the <IR> Framework.

Many of the integrated reporters believed that the <IR> Framework is misapplied. This is evident in their interpretation of what integrated reporting represents to them, as well as in their opinions of how other integrated reporters appear to apply the concepts in the <IR> Framework. In response to the interview question asking the participants to describe integrated reporting in their own words, seventeen of the participants described integrated reporting in the context of integrated thinking. The participants described integrated reporting in their own words as integrated performance management, impacting on how decisions are made by management, all the while considering the impact the organisation has on the broader economic, social and environmental elements and the value it creates for its stakeholders. In terms of the <IR> Framework, there is more to putting integrated reporting into practice than merely preparing an annual integrated report. The IIRC (2013:33) definition of integrated reporting is "*a process founded on integrated thinking that results in a periodic integrated report by an organisation about value creation over time and related communications regarding aspects of value creation".*

Participant 20 reiterated that integrated reporters must have a good understanding of the concepts contained in the <IR> Framework.

> Participant 20: "*So, I guess the skill set is, I think having been part of the IIRC process right from its start, it's having a good understanding of what the IIRC is asking for and what integrated reporting is trying to achieve."*

The concept of integrated reporting is considered to be misapplied in some instances. The <IR> Framework is used as a checklist to compile an annual integrated report, which is used as a marketing document, as highlighted by the following integrated reporters:

> Participant 13: "*Because business culture in South Africa is very much, I won't do things until I'm forced to do things. So, they're doing an integrated report, but it's a tick-box."*

> Participant 5: "*in our company, integrated reporting is viewed as a marketing opportunity."*

> Participant 6: "*… but I think a lot of it [integrated reporting] is used as marketing as well, just to give some other information to the market…".*

The lack of understanding by preparers of the intention behind the <IR> Framework was highlighted in recent studies on the difficulties encountered by preparers when putting integrated reporting into practice (Du Toit and Van Zyl, 2017, McNally et al., 2017).

4.3.2 Ability to present a business case for integrated reporting

The functional competency identified in this role was the ability to present a business case for the adoption of integrated reporting to those charged with governance. Participant 1 summarises this process as a cumbersome one.

> Participant 1: "*The other challenge that is quite time consuming, but some people just skip it, it's really getting the board on side in terms of everything you're trying to achieve through integrated thinking and therefore integrated reporting as the product. So, that's a very timely process to engage with the board. Again, that's generalising but some boards might be better than others, but generally the time spent to get the board's support on messaging, themes, content and then getting that content, is probably the most time consuming of tasks*."

Participant 12 described the proses of building a business case with the board, as an engagement with the board on the issues faced by the organisation. Once this engagement has taken place, the board easily approves the final report as they understand the business case underlying the reporting process.

> Participant 12: "*…it was also the session that we took to the board to say, you know, we sat with your management, this is what they think are the issues that will impact your business. But as a board member, what are you seeing, that's part of approving the integrated reporting.*"

A search for this competency in the competency frameworks returned three references, summarised in Table 24. The ability to present a business case for integrated reporting was

highlighted by the IR Matrix as a required competency. A similar competency in the CGMA Competency Framework refers to the ability to articulate the benefit of the integrated report, although it would depend on whether integrated reporting supports the preparation of the integrated report. The SAICA Competency Framework refers only to applying integrated thinking with little context to explain what that might imply.

Table 24**: Competency frameworks on presenting a business case for integrated reporting**

Competency Framework	**Creating a business case for integrated reporting**
IR Matrix	Present the business case for the introduction of Integrated Reporting, including integrated thinking, to an organisation.
CGMA Competency Framework	Advise on the use of sustainability and integrated reporting to inform stakeholders of relevant information concerning the interaction of a business with society and the natural environment.
SAICA Competency Framework	Considers and applies integrated thinking.
ACCA Competency Framework	

Source: IIRC (2016), CGMA (2014), SAICA (2017) (adapted)

The role of the integrated reporter as interpreter of the <IR> Framework is crucial, as the integrated reporter advocates for better corporate reporting. The IFAC (2017) has identified a similar role and competency for professional accountants and that is the ability to develop a business case for integrated reporting. Where the integrated reporter is not able to develop and sell the business case for integrated reporting to management, the legitimacy of integrated reporting is called into question.

The legitimacy of integrated reporting was challenged by authors such as Van Bommel (2014), who is of the opinion that, without further empirical research into the practices of integrated reporting, there is a risk that the reporting process remains a self-serving tool of

the organisation, to the detriment of society and the objectives of sustainable development. This tension between the business case for integrated reporting and its ability to progress sustainable value creation, has been highlighted by a number of researchers as a hurdle for the future development of integrated reporting as a legitimate corporate reporting initiative (Adams, 2015, Brown and Dillard, 2014, Flower, 2015, Thomson, 2015). It is evident from the discussions with the participants that the use of an integrated report as a marketing document is, in fact, self-serving.

4.3.3 Sustainability mind-set

A competency that was not specifically highlighted by the participants was that of having a mind-set that would consider the broader environmental impacts of actions and decisions. The concept of value creation in the <IR> Framework sets out to consider the broader impact of an organisation on society and the environment (IIRC, 2013). There is an argument to be made that it is difficult for the integrated reporter to apply a sustainability mind-set to the activities of an organisation, without having those values underlying their own behaviour.

We highlight again the fact that a number of researchers believe that the <IR> Framework, although it set out to promote sustainability, has failed in doing so in favour of providers of financial capital (Flower, 2015, Thomson, 2015, Brown and Dillard, 2014).

The SAICA competency framework makes reference to good corporate citizenship characteristics and the ACCA competency framework refers to ethical and sustainability principles as a competency as set out in Table 25.

Table 25: Competency frameworks on sustainability mindset

Competency Framework	Sustainability mindset
IR Matrix	-
CGMA Competency Framework	-

Competency Framework	Sustainability mindset
SAICA Competency Framework	Understand and can apply all aspects of good corporate citizenship
ACCA Competency Framework	Embed ethical and sustainability principles and examine ethical and environmental dimensions in the form of values and judgements

Source: SAICA (2017), ACCA (2017) (adapted)

4.4 INTEGRATED REPORTER AS A SYSTEMS ARCHITECT

The integrated reporter often fulfils the role of a systems architect. The role implies that the integrated reporter assumes responsibility for ensuring that the necessary internal processes are put into place to support integrated reporting. This aspect of the role of the integrated reporter is often neglected, as they are compelled to spend most of their time preparing the integrated report. Two key themes were identified; one that the integrated reporter is often responsible or assumes the responsibility for reverse engineering the process of integrated thinking, after having prepared an integrated report. Secondly, the integrated reporter is expected to demonstrate continuous improvement in what is often referred to as a journey in integrated reporting. The themes and competencies for the integrated reporters' role as systems architect is set out in Table 26.

Table 26**:** **Competencies of integrated reporter as systems architect**

Roles	Themes	Competencies identified by integrated reporters		Similar competencies identified in competency frameworks			
		Functional competencies	Foundational competencies	IIRC	CGMA	SAICA	ACCA
Integrated reporter as systems architect	Reverse engineering integrated thinking	Identify connections		✔	✔	✔	
		Report financial and non-financial measures			✔	✔	✔
		Align performance and remuneration				✔	✔
			Strategic mindset	✔	✔	✔	✔
	Continuous improvement	Finding the gaps				✔	
			Resourcefulness				

Source: Researcher

4.4.1 Reverse engineering integrated thinking

The ability to reverse engineer integrated thinking implies that the integrated reporter is often given or assumes the responsibility for putting into place systems that mirror the information reported in the integrated report. Integrated reporters often identify the limitations of existing

systems through the reporting process, and then put processes and controls in place to correct these limitations. Participant 19 attributes this to the fact that many South African companies prepared an integrated report before implementing integrated reporting.

> Participant 19: "*I think South African companies are backwards-engineering it [integrated reporting] now so that they've reported some stuff out there and now they've got to figure out, well how do we get this information into our internal systems and into our internal decision making. Some are doing that and others aren't."*

Participant 10 described the responsibility of the integrated reporter as one of fixing systems to improve the process.

> Participant 10: "*And I think people get too focused on, my job is the report, no your job's not the report, your job is to lead integrated reporting. So, you're responsible to drive integrated thinking. Much like I said to the guys, from a financial statement perspective, if you say well this note is poor because of poor process that happens on a monthly basis, that's your job, go fix the poor process."*

Participant 16 highlights this realisation that, without internal processes that facilitate integrated thinking, the reporting process would not be meaningful:

> Participant 16: "*in my mind in order for integrated reporting to be successful, there's got to be something that happens before that. I don't think that you can have integrated reporting without actually having made your decisions in an integrated way. Otherwise you're just pulling together random pieces of information which don't actually stack up to anything."*

Participant 10 referred to the complexity of reporting if there are many different systems in place without formal controls.

> Participant 10: *"it's the accuracy of the information that you're providing that may or may not live in a system, or lives in disparate systems. So, it kind of, forty different systems where you've got to go find all of these KPI's."*

Owen (2013a) reiterates the requirement for accounting education to focus more on *developing proactive systems of governance, internal control or risk management.*

Three functional competencies and one foundational competency were identified by the participants as those the integrated reporter uses in the role of systems architect required to reverse engineer integrated thinking. The first functional competency is the ability to

create connections between various elements in the organisation, including, for example, between material issues and strategy. The second functional competency identified is the ability to align internal reporting to external management for better decision-making. The third functional competency identified is the ability to advocate for the alignment between performance management and executive remuneration. The foundational competency that stands out in the integrated reporters' role as systems architect is having a strategic mind-set.

4.4.1.1 *Identify connections*

The first functional competency identified was the ability to identify and demonstrate connections between various elements in the organisations. The <IR> Framework describes the guiding principle of connectivity of information as *…a holistic picture of the combination, interrelatedness and dependencies between the factors that affect the organisation's ability to create value over time (IIRC, 2013).* Even though the guiding principle refers to the connections reflected in the integrated report, many of the participants who consult on integrated reporting use the topic of connectivity as a discussion point with management and the board to identify material issues and, in doing so, identify connections. Connections that the participants specifically referred to were those between the material issues faced by the organisation, the risks and opportunities identified by the organisation, its strategy and business model, as well as key performance indicators. Participants see the ability to create links within the strategy and management of the organisation as integral to the process of putting integrated reporting into practice, and did not focus only on the ability to create connections in the integrated report.

Participant 1 specifically described this competency as the ability to identify the links between the material issues impacting on the organisation, its strategy and key performance measures.

> Participant 1: "… *get to what are your material issues, considering all that information. Once you have that, then I think you can start understanding how that all links into your strategy, well let's say mainly into your strategy and then with regard to your strategy, what are the key metrics you're using to measure where your performance is against your strategy and your performance in terms of those material issues."*

Participant 2 highlighted the difference between the annual reporting process and the integrated reporting process as the ability to identify connections between financial and sustainability elements that impact on the organisation.

> Participant 2: "*It's not that much different to when we did our annual reports, if I look back at my corporate experience and also dealing with companies that I work with. But I think that there is a greater connection between the sustainability areas and the finance areas."*

The participants identified the ability to identify and demonstrate connections between various elements within the organisation as a competency in the process of reverse engineering integrated thinking. The ability to create connections was also identified as a competency in the three frameworks set out in Table 27.

Table 27**: Competency frameworks on identifying connections**

Competency Framework	**Creating connections**
IR Matrix	Manage interrelatedness and dependencies between factors affecting value creation
CGMA Competency Framework	Evaluate non-financial measures and interaction with financial measures
SAICA Competency Framework	Link financial reporting to integrated reporting
ACCA Competency Framework	-

Source: IIRC (2016), CGMA (2014), SAICA (2017) (adapted)

The ability to create connections was identified in three of the four competency frameworks. Both the CGMA and the SAICA frameworks refer to creating links between financial and non-financial information. The IIRC framework refers to the broader elements that impact on value creation. The <IR> Framework defines value creation as a process of changes in the capitals as a result of the organisation's business model (IIRC, 2013). The connections in

the <IR> Framework are therefore broader than merely relating to financial and non-financial performance management, as described in the CGMA frameworks. The SAICA framework made reference only to the connections created in reporting, and did not refer to them as part of the broader implementation of integrated thinking.

4.4.1.2 *Report on financial and non-financial performance measures*

The second functional competency performed by the integrated reporter as systems architect is to report on both financial and non-financial performance measures in the integrated report. There is often a lack of alignment between the broader organisational financial strategy and its sustainability strategy.

The purpose of alignment between financial performance measures and non-financial performance measures is to assist management in making better decisions based on a balance of financial and non-financial key performance indicators. Internal performance metrics used for decision-making should be aligned to address the impact of the organisation on all the capitals, not only on financial capital. Participant 1 highlighted that the information that reported internally should be used in preparing an integrated report.

> Participant 1: "*So, you're getting that information in, you're using that information for decision-making along the way and then you get to the end of the year where it's a matter of bringing that together into a story, rather than putting the data together at that point in time."*

This competency is not unique to the integrated reporting process, as Participant 15 describes the absence of an integrated internally implemented performance management system.

> Participant 15: "*I remember going to a GRI event here, and people were talking about using the [IR] framework and stuff and I made the point, I raised my hand and I said, but how many of us are applying integrated thinking and integrated performance management, and seeing the report as just an outcome of that? And I got, you know, people were like, what are you talking about?"*

Even though performance measures are available in some entities and are used throughout the year, Participant 4 described the complexity of identifying key performance metrics for reporting when they are not available as part of internal management reporting.

Participant 4: "*Because sometimes this information comes from clearly defined KPI's. Sometimes the companies don't even have the non-financial KPI's to sufficiently measure this data and to capture it. So, it's very difficult. I think the first step is to ensure that the KPI's are in place and then to capture this information*."

The participants identified the competency to report on both financial and non-financial performance measures, and similar competencies were identified in the four frameworks evaluated, set out in Table 28.

Table 28**: Competency Frameworks on using financial and non-financial performance measures**

Competency Framework	**Using financial and non-financial performance measures**
IR Matrix	-
CGMA Competency Framework	Discuss the use of traditional financial and non-financial performance measures
SAICA Competency Framework	Ensure non-financial information enhances the fair presentation of the entity's performance
ACCA Competency Framework	Directs organisational performance through the selection and measurement of financial and non-financial performance indicators.

Source: CGMA (2014), SAICA (2017), ACCA (2017) (adapted)

Reference to the use of both financial and non-financial performance measures was found in some form in three of the four frameworks. The CGMA framework referred to consideration of the use of both financial and non-financial metrics. The ACCA framework specifically refers to the competency to measure the organisation's performance by using both financial and non-financial performance measures. The SAICA competency framework refers to non-financial performance measures in the context of reporting of those measures in addition to financial performance measures.

4.4.1.3 *Align performance and remuneration*

The third functional competency is the ability to advocate for the alignment of balanced key performance indicators and executive remuneration. This competency is described as the ability to advocate for alignment, as it is assumed that the integrated reporter is not in the position to set executive remuneration but is in the position to influence it. The link between key performance measures and executive remuneration was often described as the best evidence of the integration of a broader perspective on value creation into the business (Owen, 2013). Participant 21 describes how the key performance metric that impacts on executive remuneration, should drive behaviour that benefits the organisation as a whole.

> Participant 21: "*It's in their own interest, like every CEO, MD has KPI's that they need to achieve, one of the components is also the efficiency component which I call sustainability… There's certain components with certain things that he has to do to bring that down, because it's in our interest as well. Remember, as a company if you can save without any shortcuts, it's money in the bank effectively as well".*

Participant 19 reiterates that alignment would evidence that integrated thinking is applied by the organisation.

> Participant 19: "*I guess in my mind, if you really wanted to see whether they'd done so or not, you'd start off by looking at the way in which remuneration is structured. So, if you found that the remuneration actually had elements of, kind of financial as well as non-financial, that it was kind of this broader based approach, that did take into account multiple stakeholders, well then, I think you can say probably they've got their act right internally."*

The ability to advocate for the alignment of financial and non-financial key performance indicators to executive remuneration was identified as a competency in the process of reverse engineering integrated thinking. Only one of the frameworks analysed, the ACCA competency framework, makes specific reference to the alignment of executive remuneration with performance measures set out in Table 29.

It can be assumed that the reference to performance measures in this context is balanced, as the ACCA competency framework makes reference to both financial and non-financial performance indicators. The SAICA competency framework merely makes reference to obtaining and appreciating the impact that a link between remuneration and performance

measure could have on the strategy of an organisation. None of the other competency frameworks make reference to the structure of executive remuneration.

Table 29**:** **Competency frameworks on aligning performance and remuneration**

Competency Framework	**Align performance and remuneration**
IR Matrix	-
CGMA Competency Framework	-
SAICA Competency Framework	Understands the importance of identifying appropriate measures of performance and linked remuneration
ACCA Competency Framework	Align executive remuneration with performance measures

Source: ACCA (2017),SAICA (2017) (adapted)

4.4.1.4 *Strategic mind-set*

The foundational competency of having a strategic mind-set was highlighted by a number of participants as being critical to enabling the implementation of integrated thinking. The participants emphasised that integrated thinking requires a broader perspective on the ability of the organisation to create value, and that value creation can be understood only by someone with a strategic mind-set. As the participants believe that they have a role to play as systems architects, having a strategic mind-set applies to more than the preparation of the integrated report, but applies rather to the process of putting integrated reporting into practice. Participant 13 referred to this as the ability to see the bigger picture.

> Participant 13: "*… being able to see the bigger picture and not get so focused on reporting on KPI's, that's all that matters. So, to identify it in the first place is more a strategic, bigger picture view."*

Participant 1 highlighted the importance of the ability of the integrated reporter to think strategically.

> Participant 1: "*… the ability to think strategically around important issues such as where you've got resources that are constrained and you don't know how to assess a decision, between two decisions the company has to make, how do you assess those trade-offs? So, a bit of understanding of how to think strategically."*

Participant 9 uses strategic thinking as recruitment criteria for the integrated reporting team.

> Participant 9: "*So, the systemic thinking, strategic thinking is what I'm looking for in my team."*

The competency frameworks analysed do not all necessarily refer to strategic mind-set as a competency, but require the ability to evaluate and comment on the strategy applied by the organisation set out in Table 30.

Table 30**:** **Strategic competencies described in the competency framework**

Competency Framework	**Description of strategic competencies**
IR Matrix	Explain how strategic focus on capitals creates value
CGMA Competency Framework	Evaluate the process of strategy formulation.
SAICA Competency Framework	Identifies and evaluates an entity's strategies.
ACCA Competency Framework	Acts proactively and thinks strategically.

Source: IIRC (2016), CGMA (2014), SAICA (2017), ACCA (2017) (adapted).

The IIRC framework requires insight into the link between strategy and value creation. The CGMA framework requires insight into the strategy creation. Similarly, SAICA requires the ability to evaluate the organisation's strategy. The ACCA framework refers specifically to the

ability to think strategically. Having the ability to sufficiently understand the organisation's strategy to comment on its effectiveness, would require a strategic mind-set.

The inclusion of having a strategic mind-set as a competency was also highlighted by (Owen, 2013) in the assessment of the impact of integrated reporting on accounting education. (Owen, 2013) suggests that accounting education should no longer focus on the transactional level in an organisation, but should rather focus on a more strategic, longer-term perspective on the ability of an organisation to create value.

4.4.2 Continuous improvement

The integrated reporter as systems architect is also responsible for ensuring the continuous improvement in the integrated report. As there is no substance to an integrated report that is not backed by integrated thinking, the integrated reporter is compelled to look for areas of improvement in the integrated reporting process. The functional competency identified is the ability to use the integrated reporting process to recognise and fix gaps in the integrated reporting process. The foundational competency identified is resourcefulness.

4.4.2.1 *Finding the gaps*

The functional competency is the ability to use the integrated reporting process to identify system gaps in the organisation's risk management processes, strategy or business model. Participant 18 refers to the ability to identify gaps as a specific competency.

> Participant 18: "*I can tell you where's your gaps and where you need to improve, but it's your decision to make. And it's about telling what you're doing but not giving them the recipe."*

Participant 19 refers to this competency of being able to identify systems gaps for future improvement as an integral part of the integrated reporting process.

> Participant 19: "*So, I think that's true and raise that continuous feedback loop that says how are we doing, what do we need to change? But I think, if you think about what integrated reporting is, it's telling the story about not just how you're creating value now but also how you're going to create value in the future."*

The ability to use the integrated reporting process as a mechanism for identifying gaps and initiating continuous improvement was identified as a competency by the participants. A similar competency was identified in only one of the competency frameworks analysed, set out in Table 31.

Table 31: **Strategic competencies described in the competency frameworks**

Competency Framework	**Description of strategic competencies**
IR Matrix	-
CGMA Competency Framework	-
SAICA Competency Framework	Evaluates an entity's strategies and makes recommendations for improvement
ACCA Competency Framework	-

Source: SAICA (2017) (adapted)

The SAICA competency framework refers to the competency to evaluate the organisation's strategy and make suggestions for enhancing the strategy. This competency is not in the context of the integrated reporting process, but is rather linked to the broader ability of the professional accountant to think strategically.

4.4.2.2 *Resourcefulness*

The foundational competency described as resourcefulness encompasses resourcefulness in the process of putting integrated reporting into practice. Resourcefulness was described as unconventional thinking and the ability to challenge customary practices and processes by Participant 2 and Participant 19:

Participant 2: "*…and then I also think you need to be a creative, out the box type of thinker."*

Participant 19: "*I think the traditional roles often accompany kind of traditional metrics. So, the traditional roles, I don't, in many of the companies actually that I deal with, I guess those traditional roles are there and they continue to be there. I think a lot of it is kind of activity based rather than outcomes based."*

Being an out of the box, resourceful thinker was therefore identified as one of the competencies of the integrated reporter in the role of systems architect. None of the competency frameworks make reference to resourcefulness or a similar competency.

4.5 INTEGRATED REPORTER AS A NEXUS OF INFORMATION

The organisations where the participants act as integrated reporters have significantly different processes in place and therefore varying levels of integrated reporting maturity. Regardless of the maturity of the internal systems underpinning the integrated reporting process, all the integrated reporters referred to their role relating to the collection and verification of information. Burke and Clark (2016) through interviews with early reporters in the US and the EU, also identified the collection of accurate data as a *never-ending and time-consuming process*" This role comes to the fore as part of the process of putting together the integrated report. The two roles integrated reporters fulfil are those of custodian of information and editor of information, as set out in Table 32.

Table 32**:** **Competencies of integrated reporter as nexus of information**

Roles	Themes	Competencies identified by integrated reporters		Similar competencies identified in competency frameworks			
		Functional competencies	Foundational competencies	IIRC	CGMA	SAICA	ACCA
Integrated reporter as nexus of information	Custodian of information	Interrogator of information				✔	
			Project management skills	✔	✔	✔	
			Interpersonal skills	✔	✔	✔	✔
	Editor of information	Concise presentation of volumes of information		✔		✔	

Roles	Themes	Competencies identified by integrated reporters		Similar competencies identified in competency frameworks			
		Functional competencies	Foundational competencies	IIRC	CGMA	SAICA	ACCA
			Analytical thinking		✔	✔	

Source: Researcher

4.5.1 Custodian of information

In the role of the integrated reporter as custodian of information, one functional competency and two foundational competencies were identified. The functional competency was the ability to ensure that the information is relevant and reliable through interrogation knowledge of the business. The foundational competency that stood out in this role as custodian of information was the ability of the integrated reporter to apply project management skills and people skills in the process of collecting information for the integrated report.

4.5.1.1 *Interrogator of information*

The first functional competency identified in the integrated reporters' role as custodian of information was the ability to interrogate information as part of the information management process. Participant 9 described interrogating the information as asking the question "Why?" to gain insight into the relevance of the information. According to Participant 9 the ability to interrogate the information is an inherent ability that the integrated reporting team should have.

> Participant 9: "*So, we ask certain questions throughout the year, and we receive answers which allows us to have a really holistic view on how we transform our resources, where we actually provide value or not. First is they [the integrated reporting team] need to be able to ask the question why, almost involuntarily."*

Participant 10 described the competency as the ability to continue interrogating the information until the integrated reporter is certain that it is relevant and reliable with the "So what?" question.

> Participant 10: "*People often put down what they did, not what they achieved, or what was the outcome of what you did. So, you have to probe and ask, so what does that*

mean? …you'd call it the "so-what" question. So you do something, so what? So why does it matter? …you said you trained so many people, so what? So let's try to get to … what does it mean?. Okay, because we trained people, we found that trained people are more likely to stay than untrained people."

Participant 21 stated that knowledge of all the aspects of the business assisted in the integrated reporter's role as custodian of information.

> Participant 21: "*And then they look at me to say, is this what these guys are saying, do you think? I'll say it makes sense because I've been there and you know, I can vouch for what they're saying, or I'd be cautious to make that statement because I'm not so sure if this is actually what happens in that business."*

Participants 2 and 14 referred to knowledge of the business enabling the integrated reporter to identify inaccuracies in reported information.

> Participant 2: "*Absolutely. Knowledge of the business. And some of them know, when they look at a figure, it looks wrong, so they really know their business very well, inside out".*

> Participant 14: "*But when you look at the report, you must have a feel for the business so if there's something in there that doesn't make sense, you must be able to evaluate, is it making sense, does it look right, etc".*

The competency to interrogate information, either by asking the right questions or through knowledge of the business, to ensure that it is relevant and reliable should be inherent in the abilities of the integrated reporting team. Even though reliability is a guiding principle within the <IR> Framework, no specific competencies are identified in the IR Matrix that address this guiding principle other than the ability to explain the role played by governance structures to ensure the reliability of the information in the integrated report. The ability to interrogate the information by asking the right questions and probing for the underlying meaning of the reported information is a competency of the integrated reporters themselves and is separate from the governance and other oversight roles over the integrated reporting process. (Owen, 2013) confirms the competency to be able to interrogate information by referring to the ability of accounting professionals to "*demonstrate higher-level synthesis and evaluation skills"*.

The integrated reporter's ability to use knowledge of the business to ensure the reliability of information is considered a key competency, set out in Table 33. None of the frameworks

make reference to this competency. Only SAICA identifies the need for considering the integrity of information in the integrated report. The reference in the framework is, however, only to financial information, and there is no guidance on how this consideration should be made practically.

Table 33**:** **Competency frameworks on integrity of information**

Competency Framework	**Integrity of information**
IR Matrix	-
CGMA Competency Framework	-
SAICA Competency Framework	Consider integrity of financial information in integrated reporting
ACCA Competency Framework	-

Source: SAICA (2017) (adapted)

4.5.1.2 *Project management skills*

Project management and time management skills as foundational competencies were referred to by 15 of the participants as a critical skill in putting integrated reporting into practice. Many of the participants referred to the challenges faced by project managers when information is not submitted punctually. In many instances, the inability to manage the project could derail the entire process of preparing an integrated report on time. Participants 6 and 13 referred to the complexity of managing the information-gathering process.

> Participant 6: "*It's very difficult to coordinate the whole project and to get the information on time, because you have so many different inputs that goes into the report."*
>
> Participant 13: "*… you need a strong project manager … But that saying, it's all about project management, actually knowing what has to happen when and chasing and*

making it happen. That's how you get it coordinated, you know, a bit like how we try to do it."

The complexity of managing the information=gathering process also depends on the maturity of the information management system that is in place. As many participants made reference to project management skills as critical to the integrated reporter's role as nexus of information, it may be that these systems are not yet mature.

Three of the four frameworks refer to project management skills as set out in Table 34.

Table 34**: Competency frameworks on project management skills**

Competency Framework	**Description of project management skills**
IR Matrix	Plan and coordinate the implementation of integrated reporting
CGMA Competency Framework	Lead in developing and implementing complex project plans
SAICA Competency Framework	Plans and effectively manages teams and projects
ACCA Competency Framework	-

Source: IIRC (2016), CGMA (2014), SAICA (2017) (adapted)

The IIRC framework refers to project management, specifically the integrated reporting project. The CGMA framework refers to the ability to develop and implement complex project plans and the SAICA framework adds the element of managing teams in addition to projects. Project management is a foundational skill that is endemic to any project that an integrated reporter may undertake. One would expect that not all of the members of the integrated reporting team would take the lead on the integrated reporting project. There should ideally be only one project manager who sets out and monitors the integrated reporting project. Project management competencies may, however, apply to the annual project of preparing the integrated report, or a project to implement integrated reporting systems. All three of the

competency frameworks (IIRC, CGMA and SAICA) refer to the competency, not only to set the project in motion but also to lead the project.

4.5.1.3 *Interpersonal skills*

The second foundational competency, interpersonal skills, was identified as a foundational competency that is specifically relevant to the role of the integrated reporter as custodian of information. Interpersonal skills have two elements, building relationships and teamwork. A majority of the participants specifically referred to the use of the cross-functional team in the integrated reporting process, where interpersonal skills may be even more essential than in divisional teams. This cross-functional team often includes a governance body responsible for integrated reporting e.g. a social and ethics committee or an audit committee, a core team driving the integrated reporting process, including members of management and content owners. In some organisations the team also includes consultants and other service providers who contribute to the layout and design of the integrated report. The core team therefore needs interpersonal skills to be able to build relationships with everyone involved, regardless of subject area or level within the organisation to ensure their co-operation in this often complex process. The core integrated reporting team themselves should also work together effectively to achieve, the outcome of the process, being the integrated report.

Participant 9 referred to the importance of teamwork in the integrated reporting team.

> Participant 9: "*Teamwork is very important because you have to, you're not writing your section, you're writing as a team. So, we've got really good teamwork between us, that's important.*"

Participant 11 also referred to interpersonal skills as a competency essential to the integrated reporting process.

> Participant 11: "*What else? Obviously you have to get along with people. Unless you are one of those people that go in, get the information and go back and write the report. But it but it does not work like that here, you work with people all the time.*"

It is clear that the integrated reporter needs the skill to work as part of a cross-functional team taken from all levels within the organisation, to prepare the integrated report. This is

also evidenced by the people competencies found in all four of the competency frameworks, set out in Table 35.

Table 35**:** **Interpersonal skills described in the competency frameworks**

Competency Framework	**Description of people skills**
IR Matrix	Participate effectively as part of a team, working with diverse cross-functional teams
CGMA Competency Framework	Drive cross-functional initiatives across the business that create value
SAICA Competency Framework	Work effectively as a team member
ACCA Competency Framework	Experience is required to understand how best to motivate and manage people to optimise performance and effectiveness.

Source: IIRC (2016), CGMA (2014), SAICA (2017), ACCA (2017) (adapted)

The IIRC and SAICA frameworks refer to the competency of working as a part of the team and the CGMA competency framework of driving cross-divisional projects. The ACCA framework refers to the underlying skills of being able to motivate and manage people to perform optimally.

4.5.2 Editor of information

As editor of information, the integrated reporter should have the functional competency to sift through volumes of information and report on the information in a concise manner. As editor of information, the integrated reporter should focus on the foundational competency, analytical thinking.

4.5.2.1 *Concise presentation of volumes of information*

The <IR> Framework only requires that the integrated report be concise. A few participants highlighted the ability to scrutinise volumes of information as a competency. Nine participants identified the ability to articulate elements of the integrated report in a concise manner as a specific functional competency. Participants 6 and 18 specifically refer to the skill to present volumes of information in a concise manner.

> Participant 6: "*It would also be, you know, the skill of being concise, because you don't want reams and reams, that nobody is going to read. You want something which is to the point, nothing more, nothing less."*

> Participant 18: "*Other people's skill is taking this thick stack of documents and transforming it into a two-page chapter."*

There is a skill in the ability to sift through volumes of information and reporting in a concise manner. Two of the four frameworks also refer to this skill set out in Table 36.

Table 36**: Competency frameworks on conciseness of information**

Competency Framework	**Conciseness of information**
IR Matrix	Draw information from a variety of sources and perspectives through research, analysis and synthesis
CGMA Competency Framework	
SAICA Competency Framework	Synthesize the views of others Integrate ideas and information from various sources
ACCA Competency Framework	

Source: IIRC (2016), SAICA (2017) (adapted)

The IIRC framework refers to the ability to research, analyse and summarise information from a number of sources. SAICA refers to the ability to summarise the views of others and to source information from various sources.

(Owen, 2013) refers to the ability of accounting professionals to gather different types of information from a number of sources and to present that information in a meaningful way as the broader effects of the organisation on society and the environment. This is in line with the conciseness competency identified by the participants.

4.5.2.2 *Analytical thinking*

The ability to think analytically in the role of editor of information was identified as a competency by the participants. Analytical thinking was identified as a competency as it enables the integrated reporter to follow a coherent, methodical thought process when preparing the integrated report. Analytical thinking was highlighted by Participant 2, who is a chartered accountant, as a skill that is commonly found among chartered accountants.

> Participant 2: "*And I think analytical skills is important, so I think that's where the CA helps me a lot…"*

Participant 9 specifically highlighted the fact that the ability to think analytically or systematically is a skill more to be found in people with a scientific background. Both accountants and non-accountants are usually part of the integrated reporting teams.

> Participant 9:"*I'm looking for people with more scientific background, because then they naturally have this tendency to order things, to put them in a system. They are able to think in a systemic way."*

The ability to think in an analytical manner when working with information is the competency of an integrated reporter. Two of the frameworks analysed, refer to this competency, set out in Table 37.

Table 37: **Analytical thinking described in the competency frameworks**

Competency Framework	**Description of analytical thinking as a competency**
IR Matrix	-
CGMA Competency Framework	Analytical skills
SAICA Competency Framework	Analyse cause and effect relationships and make logical inferences
ACCA Competency Framework	-

Source: IIRC (2016), CGMA (2014), SAICA (2017), ACCA (2017) (adapted)

The CGMA framework refers broadly to analytical skills and the SAICA framework refers to the ability to make logical conclusions after analysing information.

4.6 INTEGRATED REPORTER AS A STORYTELLER

As storyteller, the integrated reporter engages with executives and boards and challenges them to adhere to principles such as transparency and completeness in their integrated reporting. Often the integrated reporter also advocates for a specific organisational story, which is often influenced by investors and analysis. In some instances, if incentivised to do so, integrated reporters report to win awards. The themes and competencies required for the role of the integrated reporter as storyteller is set out in Table 38.

Table 38**: Competencies of integrated reporter as storyteller**

Roles	Themes	Competencies identified by integrated reporters			Similar competencies identified in competency frameworks			
		Cognitive competency	Functional competencies	Foundational competencies	IIRC	CGMA	SAICA	ACCA
Integrated reporter as nexus of information	Speak truth to power		Assess completeness in reporting		✔			
				Influencing skills				
	Telling a specific story		Identify shareholder information needs				✔	
				Communication skills	✔	✔	✔	✔
	Reporting for awards	Understanding the <IR> Frameworks			✔			

Source: Researcher

4.6.1 Speaking truth to power

The concept of “speaking truth to power” refers to a comment made by one of the participants who provides consulting services to organisations on integrated reporting. The participant said that they were in a privileged position to be able to discuss and challenge the board and executives on integrated reporting concepts. It was noted that it was often easier for consultants on integrated reporting, to challenge the board and executives on concepts such as transparency. This may be because the consulting integrated reporter was not employed by the organisation and was not bound by the organisation’s internal hierarchies. An employee who was not an executive might not be able to challenge the

executives or the board on their decisions, as they are dependent on the organisation for employment and remuneration.

One functional competency and one foundational competency were identified in the role that the integrated reporter fulfils when speaking truth to power. The first functional competency was the ability to challenge the completeness of the information reported on in the integrated report. The foundational competency was leadership skills, specifically being able to influence decisions at executive levels.

4.6.1.1 *Assess completeness in reporting*

Assessing and challenging transparency in integrated reporting addresses the integrated reporting guiding principle "completeness" (IIRC, 2013). The <IR> Framework described completeness as the disclosure of a balance between good and bad news, knowing how much to disclose, and at what level of detail and accuracy (IIRC, 2013). Participant 16 described the privileged position of being able to challenge the board on their misplaced preconceived ideas on transparency and completeness of information reported on in the integrated report.

> Participant 16: "*We kind of see ourselves as the court jesters of the day. So, you know, we occupy an incredibly privileged position at the top table, like an auditor or a banker, because people are terrified of disclosure, and you know, they're terrified of putting stuff out there in the public domain … which is the whole point I guess. So, you know, the first thing is really to speak truth to power, to ask the difficult questions behind closed doors, to challenge them, to disclose, to be honest, to be truthful."*

Participant 12 described the reason why completeness in reporting is critical, as information is no longer owned by organisations but is publicly available. Therefore an organisation should not think that it can hide information, especially that relating to negatives, as the information may already be available to its stakeholders.

> Participant 12: "*You know what, that's the thing, if you are not being fair then you won't be that transparent. And my advice always will be, somebody out there would have read it somewhere in the media, so you cannot just keep quiet about it."*

Participant 21 explains how the organisation was transparent about its challenges.

Participant 21: "…we like to be transparent about those kind of things and say listen here, there were challenges here and this is the story."

Participant 20 attributed the lack of ability to challenge the board to absence of maturity in the organisational governance structures.

Participant 20: "*But others, and I think I'd say that it reflects a greater, how do I put it, maturity in the organisation, where they're willing to have a tough discussion. So, I know certain companies that we've worked with, they really don't tolerate tough discussions in that organisation".*

The ability to challenge the board on the transparency and completeness of their reporting was identified as a competency. The <IR> Framework refers to the fact that integrated reporting, if done in accordance with the <IR> Framework, "*enhances transparency and accountability, which are essential in building trust and resilience"* (IIRC, 2013).

No competencies were identified in the competency frameworks relating to completeness and reporting except for a reference in the IR Matrix, included in Table 39. The IR Matrix states that the integrated reporter must be able to explain the interaction between completeness and materiality. It may be that the competency to assess and challenge the completeness in reporting is preceded by the competency of being able to identify material issues in the context of the organisation. Once an issue had been identified as material, disclosure of that issue would be required, whether the outcome of the material issue was positive or negative.

Table 39**:** **Competency frameworks on completeness of reporting**

Competency Framework	**Completeness of information**
IR Matrix	Explain how materiality relates to both conciseness and completeness
CGMA Competency Framework	-

Competency Framework	Completeness of information
SAICA Competency Framework	
ACCA Competency Framework	-

Source: IIRC (2016) (adapted)

4.6.1.2 *Influencing skills*

In the context of integrated reporting, influencing skills refer to the ability of the integrated reporter to challenge and influence matters relating to integrated reporting at an executive and board level. Participant 13 believed that the integrated reporter should be positioned as a credible contributor to discussion on the integrated reporting process.

> Participant 13: "*Then it's, again it depends whether, where people are pitched and how they do it, I mean, some are very strategically positioned and they sort of run those materiality workshops and develop their content outline and understand material issues and have started creating dashboards as you should do. But there's others that are quite un-strategically positioned and just try and put a report together based on the framework and just try and fill in the gaps*."

Participant 20 referred specifically to the ability to exert influence in the organisation with competency at the right levels on matters relating to integrated reporting.

> Participant 20: "*I think the most critical competency is the understanding of the broader societal context and the value creation process and also being able to challenge the executive team. And sometimes they don't have that credibility in their organisation. Or the attitudes to ask tough questions of the executives*."

None of the competency frameworks refer to the competency relating to the ability to influence management. This is not a competency that can be gained in isolation. Influencing skills are established when the integrated reporter gains and applies a number of other competencies, such as knowledge of the <IR> Framework, the communication skills to deal

with the topic of integrated reporting and resourcefulness enabling innovative action to solve the complex problems faced by organisations.

4.6.2 Telling a specific story

In the role of storyteller, the integrated reporter often tells a specific story. The one functional competency identified by the participants was the ability to identify the information the providers of capital want to see disclosed in the integrated report. The foundational competency identified that is critical to this role was communication skills.

4.6.2.1 *Identify shareholder information needs*

The first functional competency of engaging with investors and shareholders links to the guiding principle of stakeholder relationships, as set out in the <IR> Framework. However, the participants did not refer to engagement with stakeholders in order to understand their information needs, but referred specifically to engagement with the providers of capital and potential providers of capital represented by shareholders and investors.

Having the competency to engage with broader stakeholders rather than with just shareholders would enable the preparers of integrated reports to "*provide insight into the nature and quality of the organisation's relationships with its key stakeholders".* (IIRC, 2013:34). However, many of the participants referred to investors and analysts in the context of the story they were reporting on rather than to the broader stakeholders who are affected by the organisation. It was evident that the integrated reporters themselves or the members of management were aligning their story to the information needs of shareholders and investors.

Participant 2 referred to the importance of shareholders in driving the story in the integrated report.

> Participant 2: "*Investor relations and your FD would know what the analysts are looking for. So, that goes to their shareholders, so that's quite important with the integrated report, you need to also please your shareholders and know what they're looking for and address those issues."*

Participant 6 indicated that the questions raised by investors directly influenced the contents of the integrated report.

> Participant 6: "*And as they [investors] ask the questions, that helps us to identify what needs to be in the document and also in the AFS [annual financial statements], and that's then how we change this on a yearly basis to make sure that the information that the investors want is actually in there. And some of the things that doesn't matter, we'll have to take out to make a shorter document but that has a purpose and is helpful."*

Participant 5 pointed out that investors are not interested in anything but profits, which is why the organisation's integrated reporting story focused on financial performance.

> Participant 5: "*So, if we don't have more investors who care about things other than profits, I don't see our company doing much more in other areas of the business".*

Participants 20 and 21 pointed out that South African investors were the reason for integrated reporting focusing on financial performance. Specific stories were not integrated as they were more concerned with financial performance in comparison with foreign investors.

> *Participant 21: "…I think the South African investor is still very much financially driven. I think it's a culture, it's a South African culture….Whereas the overseas investors think very differently. They want to know, are you going to be sustainable in the next couple of years. Yes, you're making money now but is your business geared up to ride all of this uncertainty that's actually happening. Because they're not interested in short termism, let's put it this way."*

> Participant 20: "*I think the foreigner investors have a deeper understanding of some of the societal issues, and see ESG issues more strategically, but, and while the investor community is shifting, I still think the mainstream is some way off where it needs to be."*

The competency to identify the information needs of investors and shareholders is somewhat controversial in South Africa, as it appears to contradict the requirements of the stakeholder-focused approach set out in the King IV code (Institute of Directors South Africa, 2016). Even though the approach followed by the participants appears to contradict King IV, it is in line with the primary purpose of the <IR> Framework (IIRC, 2013). The <IR> Framework sets out to "*explain to providers of financial capital how an organisation creates*

value over time" (IIRC, 2013:4). The contradiction, however, becomes more evident in the explanation in the <IR> Framework, which is that value creation includes both financial and other relevant information (IIRC, 2013). It appears that the integration of non-financial information into the performance measure of organisations is constrained by the information requirements of investors and analysts.

The only competency framework that refers to the ability to identify the information needs of shareholders is the SAICA competency framework, set out in Table 40. It is ironic that the competency framework of South African professional accountants would list engagement with investors and lenders as a specific competency when it is the South African investor community that is blamed for placing undue emphasis on financial performance. Perhaps South African organisations are giving shareholders and analysts too much power over what they report in the integrated report.

Table 40: **Competency frameworks on shareholder engagement**

Competency Framework	**Shareholder engagement**
IR Matrix	-
CGMA Competency Framework	-
SAICA Competency Framework	Identify information needs of investors and lenders
ACCA Competency Framework	-

Source: SAICA (2017) (adapted)

4.6.2.2 *Communication skills*

Communication skills in the context of the integrated reporter's role as storyteller were highlighted by most of the participants. Communication skills come in a number of forms,

including knowing what to say, how to say it and how to write it down. Participant 3 referred to communication skills as language skills.

> Participant 3: *"I think we spend a lot of time on the actual writing and then making sure that, you got let's say ten different people providing content, making sure the language is consistent, there's that golden thread that runs through from end to end*."

Participant 16 referred to the role of integrated reporter as that of storyteller.

> Participant 16*: "Ours is about story telling. Our role is really about telling a unique story and trying not to, you know, not to bully the story into the framework, but to use the framework exactly as that name would suggest, to tell a better story."*

Participant 19 described communication skills as a specialised competency with many facets.

> Participant 19: "*I think you can ask communication experts about what that means but certainly it's the ability to get your message across in a clear, succinct, unambiguous way. I think it's about better use of text, better use of narratives, better use of pictures."*

Communication skills are an important part of the integrated reporter's role as storyteller. All the frameworks referred to communication skills as a competency as highlighted in Table 41.

Table 41**:** **Communication competencies described in the competency frameworks**

Competency Framework	**Description of communication as a competency**
IR Matrix	Communicate effectively
CGMA Competency Framework	Communicate effectively and assertively in high risk situations
SAICA Competency Framework	Communicates effectively and efficiently

Competency Framework	Description of communication as a competency
ACCA Competency Framework	Engages and communicates information effectively to stakeholders

Source: IIRC (2016), CGMA (2014), SAICA (2017), ACCA (2017) (adapted)

All four of the frameworks refer to the ability to communicate effectively. Communication skills have a number of facets, all of which are important to the process of putting integrated reporting into practice.

4.6.3 Reporting for awards

In their role as storyteller, integrated reporters are sometimes incentivised to report so that the organisation wins awards for its integrated report. Many of the participants described the competency needed to report for awards as a theoretical understanding of what the <IR> Framework requires, and therefore what the judges would be looking for when adjudicating the award. It was evident in discussions with some of the participants that, even though organisations win awards, they may not have implemented the <IR> Framework as intended. Some participants even went as far as acknowledging that they were aware of significant gaps in integrated reporting in their organisations or that they were instrumental in fabricating integrated reporting in an award winning integrated report.

Participant 18 described the judges' requirements as a tick-box approach to integrated reporting.

> Participant 18: *"If you're too stuck on the theoretical requirements, you forget the fact that you have to write a unique value-creation story of your company, and in the best way that your stakeholders will understand, not making sure you've ticked off all the theoretical requirements and that when reporting judges look at it, they'll give you a good rating."*

Participant 20 described how a report could meet all the requirements of the <IR> Framework and win awards without integrated reporting being put into practice in the organisation.

Participant 20: "*But you know, you can game the IR [integrated report], you can game it so that you win awards. And I've seen it, and sometimes we've helped companies do that. Which is not great. So, there's just one company I'd rather not work for again, because I think they look too good through their IR [integrated report], when it's not properly done, you know. There isn't a genuine interrogation of the value creation process in that organisation.*"

The only competency therefore identified to report to win awards is an in depth knowledge of the <IR> Framework, which represents a cognitive competency.

4.7 THE INTEGRATED REPORTER AS INNOVATOR

Table 42: Integrated reporter as innovator

Roles	Competencies identified by integrated reporters
Integrated reporter as innovator	Meta-competency

Cardy and Selvarajan (2006) state that competencies are often identified as the most time-consuming tasks. It was evident from the discussions with integrated reporters that they are spending time on planning and monitoring information collection and ensuring that the information collected is accurate. However, they would like to achieve more progress through integrated reporting. The participants were asked which part of the integrated reporting process was the most time-consuming and they identified the following tasks:

- Identifying material matters for reporting
- Looking for and collecting information
- Ensuring the accuracy of information
- Writing the integrated report.

If these were the most time-consuming parts of the integrated reporting process, they directly influenced the integrated reporters' roles and competencies. It was clear that the

integrated reporters wanted more time and to be empowered to be innovative and able to realise the benefits of integrated reporting for their organisations.

Participant 5 expresses frustration with the lack of innovation and focus on the integrated report.

> Participant 5: "*So, we are thinking about how we are going to report on more things, but there hasn't really been an initiative to say, how we are going to understand the company's impact in society, or on the environment".*

Participant 18 expressed frustration with the process and the lack of realised benefits through the integrated reporting process.

> Participant 18: "*You really need to apply your mind to it. You can actually have a lot of internal benefit for your company and I don't think everyone realises that. It's just a report that needs to go out".*

Burke and Clark (2016), in interviews with early adopters in the US and EU, identified the chance for organisations to be involved in developing new guidelines and industry specific metrics in their integrated report. Only one of the integrated reporters referred to innovation in the context of developing key performance indicators. Participant 19 described the importance of innovation in the broader context of the organisation's business model remaining relevant.

> Participant 19: "*It might be, I think increasingly, you're seeing companies start to say well, maybe I need something like an innovation officer on this team. What happens if I get disrupted? What's the possibility of us disrupting ourselves before others do?"*

In a case study on integrated reporting in South Africa, Du Toit and Van Zyl (2017) emphasised the importance of innovation and that integrated reporters should "*develop a mind-set to continuously improve their reporting*". It is evident from further research on existing integrate reporting practices that preparers are rather following a silo and tick-box disclosure approach to integrated reporting and are not considering innovative approaches to integrated reporting (McNally et al., 2017).

4.8 COMPETENCIES IDENTIFIED IN THE COMPETENCY FRAMEWORKS

Some competencies were identified in the four competency frameworks that could be considered to be associated with integrated reporting, and therefore relevant, even though they were not identified by the participants interviewed. The functional competencies identified in the competency frameworks that were not identified in the interviews were:

- the ability to engage with stakeholders
- the ability to determine materiality in the context of the integrated report
- the ability to determine materiality in the context of social, environmental and economic issues faced by the organisation
- the ability to implement an information management system.

The foundational competency identified:

- having a sustainability mind-set

4.8.1 Engaging with stakeholders

The ability to engage with stakeholders as part of the integrated reporting process forms an aspect of the <IR> Framework guiding principles (IIRC, 2013). Not only is it critical to understand the relationships between the organisation and its stakeholders but stakeholder engagement forms the basis of understanding how the organisation's activities create value for these stakeholders and how the organisation attends to their concerns (IIRC, 2013).

The IIRC framework refers to the ability to identify the nature and quality of stakeholder relationships and to develop new engagement channels if the existing ones are not sufficient. The IIRC competency framework does not allude to the topics of these stakeholder engagements. The CGMA and ACCA frameworks refer to the integrated report as a tool for communication with stakeholders. However, it appears that the communication is one-sided. SAICA refers to obtaining an understanding of the information requirements of stakeholders and addressing those in non-financial reporting. It does not specify what the format of the non-financial reporting might be.

Table 43: **Competency frameworks on shareholder engagement**

Competency Framework	**Stakeholder engagement**
IR Matrix	Identify and describe nature and quality of stakeholder relationships Design additional approaches to stakeholder engagement, if not sufficient.
CGMA Competency Framework	Advise on the use of integrated reporting to inform stakeholders of interaction between the organization, society and natural environment
SAICA Competency Framework	Consider needs of stakeholders in non-financial reporting
ACCA Competency Framework	Discloses non-financial information to provide a holistic view for stakeholders of the organisation.

Source: IIRC (2016), CGMA (2014), SAICA (2017), ACCA (2017) (adapted)

Stakeholder engagement is a complex subject area with its own guidelines and practices. It should, however, be a critical skill in the arsenal of an integrated reporter, specifically in the role of the integrated reporter as systems architect.

4.8.2 Determining materiality

Being able to identify material issues that are ultimately reflected in the integrated report is a competency that the integrated reporter would apply as systems architect, nexus of information and storyteller. The IIRC (2013) requires the integrated report to ultimately reflect "*information about matters that substantively affect the organisation's ability to create value".*

Even though the reference to materiality is limited to the context of the integrated report, the concept applies to all of the roles that the integrated reporter fulfils. The reason that the

ability to identify material issues would be relevant to all five roles that the integrated reporter fulfils is that the identification of material issues permeates the focus areas of the organisation's strategy. The strategy in turn impacts on the performance measures and internal reporting of the organisation. The importance and emphasis on aspects of information collected by the integrated reporter as nexus of information would depend on the determination of material issues. Lastly, the story in the integrated report would reflect matters that are material to the organisation.

As two of the four competency frameworks identify the ability to determine materiality specifically for the integrated report, it was listed as a competency relating to the role of the integrated reporter as storyteller. The ACCA does not refer to materiality in the context of the integrated report, but refers rather to the material effect that the organisation has from an economic, social and environmental perspective. This competency was highlighted as part of the integrated reporters' role as systems architect.

Table 44**:** **Competency frameworks on materiality**

Competency Framework	**Materiality determination as a competency**
IR Matrix	Design an appropriate materiality determination process for the purpose of preparing and presenting an integrated report.
CGMA Competency Framework	-
SAICA Competency Framework	Explains how materiality is defined for the context of the integrated report.
ACCA Competency Framework	Account for the sustainable performance of the organisation, using financial and non-financial key performance measures of its material social, environmental, economic, and financial impacts on key stakeholders.

Source: IIRC (2016), CGMA (2014), SAICA (2017), ACCA (2017) (adapted)

4.8.3 Implementing an information management system

Even though many of the participants referred to their role as nexus of information, none referred to the implementation of an information management system as a solution to the information-gathering process. It is not clear why the participants did not refer to a system solution to their information challenge. The competency was therefore grouped with the integrated reporters' role as systems architect. In interviews, Burke and Clark (2016) also identified the necessity for organisations to invest in information systems to assist with the process of ensuring the accuracy of data collected.

All four frameworks make specific reference to the implementation of an information management system as set out in Table 45. The IIRC framework refers to the ability to implement an information management system and the CGMA framework refers to the evaluation of the effectiveness of existing information management systems. The SAICA framework takes a step back and refers to the design of information systems to facilitate the collection of reliable, non-financial information. The ACCA competency framework considers the use of appropriate technology to enable effective information management. Therefore, if information reliability is addressed as part of the design of an information management system, it would reduce the requirement for an integrated reporter to interrogate the information they receive and it would reduce the time they spend as nexus of information. It is a competency used by the integrated reporter in the role as systems architect.

Table 45**:** **Competency frameworks information management systems**

Competency Framework	**Information management systems**
IR Matrix	Implement information management system
CGMA Competency Framework	Evaluate information systems required for successful strategic implementation
SAICA Competency Framework	Design and develop information systems for non-financial information

Competency Framework	Information management systems
	Design procedures to ensure reliability of non-financial information
ACCA Competency Framework	Consults on the design and use of current and emerging technology and information systems to improve strategic decision-making and organisational performance

Source: IIRC (2016), CGMA (2014), SAICA (2017), ACCA (2017) (adapted)

4.9 DISCUSSION

4.9.1 Changing existing processes remains a challenge to integrated reporters

An inverse relationship was identified between the roles that integrated reporters fulfilled and the integrated reporting maturity of the organisations for which they worked or consulted. Without maturity of systems and processes, integrated reporters interpret their role as that of systems architect, attempting to put systems in place to facilitate integrated reporting. As highlighted by McNally et al. (2017), it was found that organisations make due with existing systems without spending sufficient time changing these systems to accommodate the concepts in integrated reporting.

The integrated reporters also fulfil the role of nexus of information, collecting and interrogating information to ensure reliability and completeness and as storyteller challenging management on the holistic story to be told to shareholders and stakeholders. When asked which roles they spend most of their time on, both preparers and consultants referred to their role as nexus of information and as storyteller as set out in Figure 3. A role that was not highlighted as significantly time consuming was that of interpreter of the <IR> Framework and a role that was not highlighted at all was that of innovator.

Stubbs and Higgins (2014) refer in their assessment of early integrated reporters in Australia that the change they identified was at best *incremental*. In this study, the remaining role of the integrated reporter as systems architect implies that there is still room for systems change in the integrated reporting practices in most organisations. By implication, the lack of systems change or maturity, also directly impacted on the other roles that the integrated reporters fulfilled.

In their role as nexus of information, and in the absence of sophisticated information management systems, integrated reporters appeared to be overwhelmed by the volumes of information they were required to interrogate and summarise for presentation in the integrated report. This further confirms a recent finding that information collection and interpretation is a problematic area for organisations, especially due to the lack of change in systems and processes (McNally et al., 2017).

As storytellers, integrated reporters were challenged by the lack of completeness in reporting by executives and the board. Another challenge to the role of storyteller is the continued focus on shareholder information needs, at the expense of the legitimate needs and interests of other stakeholders. The risk is that the integrated report is used to manage perceptions of the organisation held by its stakeholders and not as a tool to promote sustainable growth (Atkins and Maroun, 2015).

It is evident that the requirement to prepare an integrated report has not resulted in every organisation putting processes in place to facilitate integrated reporting (Macias and Farfan-Lievano, 2017, Gutherie et al., 2017, Stubbs and Higgins, 2014, McNally et al., 2017). Organisations have not updated management systems and processes for integrated reporting and not all organisations were focusing on continuous improvement as described by Participants 1 and 13.

> Participant 1: "*If you're looking for information, I think that's taking the most time. A few reasons being, people don't understand what information is important, it hasn't been set up as important so therefore systems and processes haven't been set up to collect that information. Where they have, the systems and processes are typically not very mature".*

> Participant 13: "*They [SA businesses] are not changing their strategy, they're not changing their risks. Business cannot continue as it is in the way we treat the environment, and the way we treat people, how we operate in the new economy. But it's not legislated and so, businesses don't care, that's perhaps, I'm being very cynical maybe, but that's what I see".*

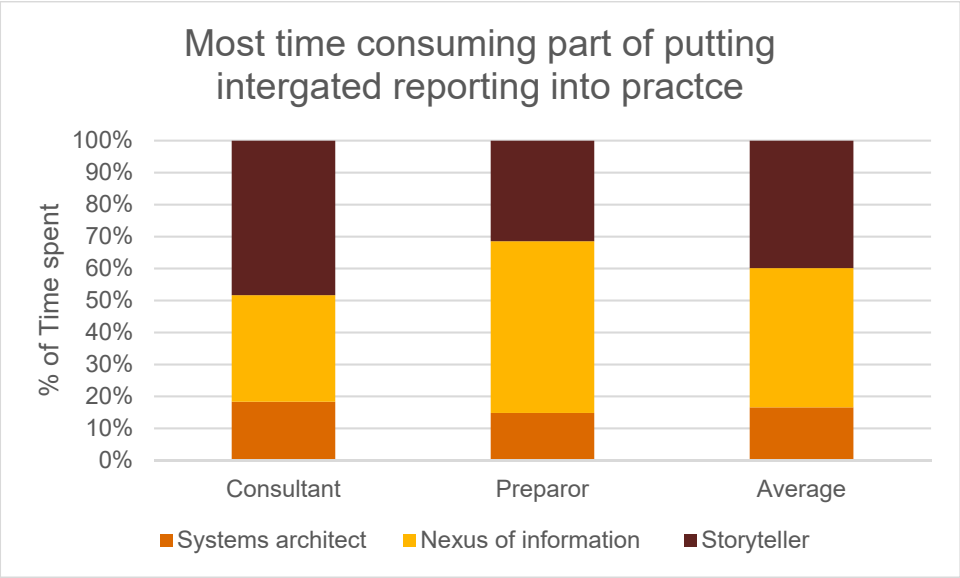
Participant 18 referred to the impact of increased maturity in systems and processes on the integrated reporting process.

> Participant 18: "*The company is finally starting to improve this process and that process, that's something, they're using it [integrated reporting] to tangibly affect how they run the business, which is great*".

There is a clear co-dependency between the role of the integrated reporter as interpreter of the <IR> Framework, nexus of information, systems architect and storyteller that integrated reporters assume as they put integrated reporting into practice. As these roles change according to the integrated reporting maturity of the organisation, so do the competencies needed by the integrated reporters.

The frustration that the integrated reporters expressed with their roles as systems architect, nexus of information and storyteller indicated that they wanted their organisations to experience the benefits of integrated reporting. If integrated reporters were able to spend less time on the roles of systems architect, nexus of information and storyteller in a mature organisation, they could spend more time on being innovative in their application of the various concepts of integrated reporting. Such innovations may include new ways of measuring and understanding the broader impacts of the organisation on society and the environment. Such innovation may also include refining the organisation's strategy, risk management, business model and performance measures, which in turn will increase the accountability of the organisation (Silvestri et al., 2017). If integrated reporters were spending the bulk of their time on fixing processes and collecting and interrogating information and on crafting a storyline, it is understandable that they would not have time to truly implement integrated reporting as it was intended for the benefit of the organisation (Du Toit and Van Zyl, 2017, McNally et al., 2017).

Figure 3: Roles on which most time is spent



4.9.2 Changing roles of the integrated reporter

If the maturity of the organisation's integrated reporting impacts on the roles fulfilled by the integrated reporter, it would impact directly on the competencies used by the integrated reporter in those roles. Owen (2013), maintains this in an assessment of the changes required in accounting curricula as a result of integrated reporting. The changes that Owen (2013) referred to include a shift from the traditional, transactional focus of accounting education to a more strategic and holistic understanding of business and the environment in which it operates.

The second change was for a longer-term perspective on the ability of the business to create value rather than developing a short-term. perspective (Owen, 2013, Tweedie and Martinov-Bennie, 2016). In addition, Owen (2013) referred to the change in competencies of accountants as the ability to prepare and evaluate forward-looking information rather than a mere historical performance of the business. It would be better to be able to discuss performance from both the narrative and numerical viewpoints, and for performance measure to include both financial and non-financial measures (Silvestri et al., 2017).

It was not possible to confirm how the competency frameworks were updated to incorporate competencies relating to integrated reporting. However, both the integrated reporters and the competency frameworks used in the secondary data analysis confirmed some, but not all of the new competencies identified by Owen (2013). The changes identified by Owen can be mapped to the following competencies identified during this study.

Table 46**: Comparison between changes in competencies identified by Owen (2013) and competencies identified in this study**

Changes in the competencies of accounting professionals identified by Owen (2013)	**Competencies identified in this study**
Shift from a transactional, operational focus to a strategic focus	Strategic mindset

Changes in the competencies of accounting professionals identified by Owen (2013)	Competencies identified in this study
Long-term perspective compared to a short-term perspective	
Review of forward-looking information	
Qualitative and quantitative performance assessment	
Financial and non-financial performance measures	

Source:Owen (2013) adapted and this study

Most of the participants and all the competency frameworks analysed reiterated the view that the integrated reporter should have a strategic perspective on the organisation in order to be able to put integrated reporting into practice.

Owen (2013) further points out that integrated reporting require competencies that enable the integrated reporter to hold a long-term perspective on the organisation's future, rather than maintaining a short-term focus. The foundational competency of having a sustainability mind-set identified for the integrated reporter as innovator requires a longer-term perspective on the ability of the organisation to be able to continue to create value for its stakeholders.

Owen (2013) makes reference to the ability of the integrated reporter for "*prospective rather than retrospective analysis"* .This change in perspective did not emerge strongly either from the discussions with participants or from the competency frameworks and appears to be an area for future focus. Participant 16 attributed a lack of future targets in integrated reporting to a lack of confidence.

> Participant 16; "*I think, it's confidence. If your strategy is right and you've done everything you possibly can to reconcile the interests of your stakeholders, so if you were confident that you are right, and how are you confident that you are right? You've spoken to people and you've listened to them. You've made a call based on*

good information. If you really think, we're on the right track, surely it's not such a big ask to put a target to it?"

Another competency area is the ability to prepare "*qualitative commentary as well as quantitative information*" Owen (2013). Integrated reporters are quite proficient at interrogating qualitative and quantitative information in their role as nexus of information.

Lastly, Owen (2013) identifies a change in competencies based on the requirement that integrated reporting results in "*reports on wider business performance metrics"* over and above financial performance. In the role as system architects, the integrated reporters should be proficient at identifying and reporting on both financial and non-financial performance measures.

4.9.3 Advocacy role of the integrated reporter

A number of studies have been conducted on the use of sustainability disclosure to hide meagre sustainability results (Stacchezzini et al., 2016) or to focus on intellectual capital achievements to manage perceptions of an organisation or obscure negative performance (Melloni, 2015, Atkins and Maroun, 2015). The use of reporting to obscure actual performance or focus on positives was confirmed by the integrated reporters, who identified that some organisations were using integrated reporting as a marketing tool or as a means of winning reporting awards.

When the integrated reporter is unable to enact strategic change, either because it is not their assigned role (Higgins et al. (2014), or, owing to a lack of maturity in the organisation's integrated reporting processes, or the fact that management stifles their ability to implement integrated reporting, the integrated reporter takes on an advocacy role. This role of integrated reporter as advocate of the <IR> Framework principals spans all five of the roles that integrated reporters fulfil: interpreter of the <IR> Framework, systems architect, nexus of information, storyteller and innovator.

Participant 5 humorously described the experience of advocating for integrated reporting with a new employer, just to be told that the organisation was not interested in improving its integrated reporting practices.

> Participant 5: "*I sat with the CEO to talk about what are we going to include in the next integrated report, and he told me, look I don't want to drive a Ferrari, I want a Corolla that gets me from point A to point B. Because I was very excited, I went from a report identifying everything that we could improve on, and I didn't even present all of that to him, I just sat down and said, I'd like to discuss including more integrated information and he was like, huh uh, we're not going there. We're driving a Corolla. Let's just stick to that."*

As the home of integrated reporting, according to Burke and Clark (2016), should South Africa not be at the forefront of developments in integrated reporting? It is concerning, then, that the integrated reporters interviewed believed that the concepts set out in the <IR> Framework were misapplied by the organisations for which they work or provide consultation services and that they needed to continue to advocate for a better application of the <IR> Framework. Participant 20 stated that the <IR> Framework is misunderstood.

> Participant 20: "*That's [the <IR> Framework] not sufficiently understood by quite a few companies and also by the consultants that are advising companies."*

As systems architects, the integrated reporters are advocating for integrated reporting through changes in the existing systems and processes. These systems and processes should be in place not only for integrated reporting, but also for internal decision-making. The integrated reporters continue to apply their knowledge of the <IR> Framework to challenge the existing internal processes and practices and to advocate for a more integrated approach to performance management. Owen (2013:350) specifically refers to an integrated reporting outcome of an accounting curriculum to "*account for the sustainability performance of the organisation, using financial and non-financial key performance measures of its material social, environmental, economic, and financial impacts on key stakeholders"*.

Integrated reporters are not afraid to speak up for integrated reporting. Participant 15 reflected on an experience where it appeared that performance management was not integrated as intended by the <IR> Framework.

> Participant 15: "*I remember going to a GRI event here, and people were talking about using the [integrated reporting] framework and I raised my hand and I said, but how many of us are applying integrated thinking and integrated performance*

management, and seeing the report as just an outcome of that? And, you know, people were like, what are you talking about?"

As nexus of information, the integrated reporters all describe how they continue to advocate for the disclosure of more reliable and relevant information. Participant 10 explained how the integrated reporter would draw out the relevance of information by asking the "So what?" question until the information is considered to be relevant and reliable enough to be reported. The focus was on drawing out the impact of the activities of the organisation on its stakeholders.

> Participant 10: "*You'd call it the so-what question. So, you do something, so what? Why does that matter? You're talking about staff, why does it matter for staff? So what? Okay, you said you trained so many people, so what? So, what does it mean? Okay, because we trained people, we found that trained people are more likely to stay than untrained people. So I've learned to ask that question, interrogate information will, I guess, you understand what the information means?"*

The integrated reporter as storyteller has an even greater advocacy role. Participant 16 highlighted that, in the role of storyteller, the integrated reporter can challenge executives and the board to adhere to the principles of integrated reporting, such as transparency, reliability and completeness of information.

> Participant 16: "*So, you know, the first thing is really to speak truth to power, to ask the difficult questions behind closed doors, to challenge them, to disclose, to be honest, to be truthful."*

In all five of the identified roles of integrated reporters, the study revealed some form of advocacy for the principles underpinning integrated reporting. Some integrated reporters were content with seeing small changes in organisations as a result of their employing their advocacy role, while others expressed significant frustration at the lack of change they witnessed in the implementation of integrated reporting.

The overarching advocacy role of the integrated reporter implies that there is an additional role that integrated reporters should be playing, and that is integrated reporter as innovator. Participant 16 refers to the fact that business has to think differently about how it creates sustainable value. The integrated reporter can play an integral role by being innovative in the ways it puts integrated reporting into practice to at least improve the ability of the organisation to be sustainable in the long-term.

> Participant 16: "*And I suppose we're back to sustainable growth. The issues with it is, it's the only way to get it right. Well, I don't think that one can get it right. I suppose it requires a kind of innovation. And business's role in coming up with a new form of capitalism. But when it's their very interests that are being challenged in doing so, that's a big ask. Because these companies don't move very quickly. Integrated reporting or not."*

Owen (2013) states that the developments in integrated reporting as well as an update in the curricula of professional accountants could result in more transparent and more accountable corporate reporting. The advocacy role of the integrated reporter is ultimately to advocate for more transparent integrated reports that hold the organisation, and therefore management, accountable to its stakeholders for the way in which the organisation creates value in the long term.

4.9.4 Meta-competency

In his assessment of the impact of integrated reporting on accounting curricula, Owen (2013:350) stated that the greatest impact would be that the "*accounting curriculum must draw from a broader range of business disciplines than included currently".* As integrated reporters fulfil the various roles as interpreter of the <IR> Framework, systems architect, nexus of information, storyteller and innovator, the competencies they apply change. Competencies are not, however, switched on or off and can be used interchangeably in these roles. The ability to know how and when to use which competencies and to leverage each of the competencies depending on the role, can be described as a meta-competency. (Brown and McCartney, 1995) maintain that

> *"[m]eta competence is the overarching ability under which competence shelters. It embraces the higher order abilities which have to do with being able to learn, adapt, anticipate and create*"

The competency category meta-competency is essentially the ability to leverage off competencies when faced with complex environments or situations. Lawson et al. (2014) identify integrated reporting as such a complexity As integrated reporters fulfil the various roles they are assigned, or the roles they assign to themselves, they are forced to use all the competencies in their arsenal interchangeably. When asked what skills are needed to

put integrated reporting into practice, Participant 1 just responded that many interchangeable skills are required.

> Participant 1: "*the first point is multi-skilled*."

Participant 20 described the ability to apply competencies over and above their traditional academic competencies.

> Participant 20: "*and those CFO's that I think really get this and that have been really useful, is they see beyond traditional accounting training*."

In terms of Daff et al. (2012), none of the categories of competencies, cognitive, functional or foundational, function in isolation and it is the foundational competencies that pull the other competencies together to enable integrated reporters to deal with the complexity of integrated reporting, in the business environment.

A competency that could be interpreted to be a meta-competency was identified specifically was resourcefulness. Resourcefulness was identified as a competency in a very complex role where the integrated reporter, as systems architect, has to find ways of continually improving the integrated reporting process. While being resourceful, and thinking creatively about alternatives and solutions, the integrated reporter is essentially drawing from any one of the other functional or foundational competencies.

The application of meta-competencies would play an increasing role as the integrated reporter is required to be more innovative and resourceful. Resourcefulness would be required as the integrated report fulfils the new role of innovator but also as the integrated reporter fulfils an advocacy function across the other roles. The integrated reporter would have to use the identified competencies as well as meta-competencies to continuously adapt and change as they defend and call for more sustainable value creation.

5 CONCLUSION

The roles that integrated reporters fulfil in organisations are diverse and are not completely captured in the <IR> Framework or any of the existing competency frameworks evaluated in this research study. The roles are a function of the maturity of the systems and processes put into place in various organisations as this study confirms the findings on previous research studies that integrated reporting does not result in a significant system changes in most organisations (McNally et al., 2017, Gutherie et al., 2017).

5.1.1 Meta-competency and the integrated reporter as innovator

The identified roles that integrated reporters fulfil are as: interpreter of the <IR> Framework; systems architect; nexus of information; and storyteller. Another key function fulfilled by the integrated reporter across its roles is the advocacy role. The role emerged based on the frustration voiced by the participants in how they are unable to apply the <IR> Framework as intended and the desire of integrated reporters to spend less time on fixing systems and interrogating information and more time on being innovative in understanding the ability of the organisation to create sustainable value in the long term. The researcher identified a fifth aspirational role of the integrated reporter as innovator. As innovator, the integrated reporter is able to balance its competencies in complex situations by applying a competency referred to as a meta-competency (Brown and McCartney, 1995).

5.1.2 Integrated reporters as interpreter of the <IR> Framework

Each of the roles that integrated reporters fulfil has its own identified cognitive, functional and foundational competencies. As interpreter of the <IR> Framework, the integrated reporter needs an in-depth knowledge of the <IR> Framework. According to Burke and Clark (2016), South Africa has been in the forefront of developments in integrated reporting and they refer to South Africa as "*the home of integrated reporting*". This appears to be true, as South African listed companies have been preparing integrated reports since 2010. It is concerning then that the integrated reporters in this study are unable to apply the <IR> Framework as intended as a result of immature systems and lack of time and resources.

The integrated reporters themselves identified that the <IR> Framework is used as a disclosure checklist to prepare a report which is, in many instances, used as a marketing document or a document that speaks to shareholder information needs. There is significant advocacy required for the correct interpretation of the <IR> Framework and the accountability of the organisations towards all stakeholders. There appears to still be tension between the business case of preparing an integrated report, and the ability of the <IR> Framework to promote sustainable value creation (Adams, 2015, Brown and Dillard, 2014, Flower, 2015, Thomson, 2015).

5.1.3 Integrated reporter as systems architect

In order to fulfil the role of systems architect, the integrated reporter is required to reverse engineer integrated thinking into systems and processes. The competencies that the integrated reporter requires in this role of systems architect is first to be able to identify connections between elements within the organisation, in other words to practice integrated thinking. The competency frameworks evaluated refer to this competency as the ability to direct the interdependent elements within the organisation that impact on its ability to create value. In order to implement integrated thinking, the integrated reporter should have the ability to think strategically. All of the competency frameworks require competencies addressing having a strategic mind-set. The integrated reporter fulfils an advocacy role in calling for the alignment between performance measures and executive remuneration. Alignment of performance measures and remuneration is often flagged as evidence of integrated reporting.

Even though organisations have been preparing integrated reports for a number of years, the role of systems architect remains relevant as the organisation strives to continuously improve. In this process of continuous improvement the integrated reporter should be able to identify gaps in the systems that require future improvement. Being able to identify these gaps and recommend improvements was only identified as a competency in one of the existing frameworks evaluated. The ability to take an organisation on a journey of improvement may not be a competency that every integrated reporter has, as it requires a measure of creativity, or the ability to think out of the box. The foundational competency

identified in this was resourcefulness. Resourcefulness is a typical meta-competency as it implies the ability to adapt and innovate in complex situations.

5.1.4 Integrated reporter as nexus of information

The third role that integrated reporters fulfil is as custodian and editor of information. Integrated reporters flagged this role as very time-intensive. As custodian, the integrated reporter is required to interrogate the information through “Why?” and “So what?” questions until it makes sense in the organisational context. While interrogating information, the integrated reporter is advocating for a better understanding of how the organisation impacts on broader society and the environment in which it functions. Another skill was the ability for the integrated reporter to gauge the integrity of the information presented through an in-depth knowledge of the business.

In this role as nexus of information, the integrated reporter depends heavily on two foundational competencies - project management skills and people skills. Both these skills have been identified in the competency frameworks evaluated.

As editor of information the integrated reporter requires the ability to sift through volumes of information and present the information in a concise and understandable manner. The foundational skill that adds to this competency is that of analytical or logical thinking.

5.1.5 Integrated reporter as storyteller

In the fourth role of the integrated reporter, that of storyteller, a number of competencies were identified. The first competency, which is not mirrored in any of the competency frameworks, is the ability to speak truth to power by advocating for transparency in an organisation’s reporting. Transparency would entail finding balance in presenting both negative and positive aspects of the organisation, all the while remembering that the organisation’s information is not contained in a closed system but is publicly available to its stakeholders. The foundational competency that is critical to the role is influencing skills in terms of which the integrated reporter has the ability to influence the organisation’s executives.

It was also noted that, as a storyteller, most of the integrated reporters focused on a story for the organisation's shareholders. Three of the frameworks refer to a broader stakeholder perspective when contemplating the organisation's story, while the SAICA competency framework refers to the information needs of the organisation's shareholders.

Regardless of the story to be told, the critical competency required by the integrated reporter is communication skills. All of the competency frameworks refer to effective communication as a required competency. Interestingly, almost all the studies on accounting curriculum deficiencies in the last thirty years flag communication skills as lacking accounting education.

5.1.6 Contribution and future research opportunities

This study provides new perspectives on competency development for integrated reporters and would be of benefit to future developers of competency frameworks for integrated reporters. It contributes to the literature on integrated reporting, as it discusses the roles that integrated reporting fulfil in organisations and also discusses the changes in these roles as a result of the maturity of organisations' integrated reporting processes.

The study makes a link between the skills required and the concepts: competency, competency modelling and competency frameworks. This direct link has been absent from previous studies. The study therefore brings new understanding to the concepts by addressing them in combination with each other, thereby increasing the quality of the findings in the study (Vaismoradi et al., 2013).

It would be interesting in future research to understand whether these role and related competencies change over time and whether organisations start to implement more systems and processes relating to integrated reporting, as well as whether more integrated reporters are able to take on the aspirational role of innovator.

5.1.7 Researcher biases

Lester (2014) identifies the fact that interviews were conducted over a specific period in time and the relatively small size of the population of participants was a potential limitations. Possibly the characteristics are present only in that population. A limitation that the researcher identified in this study is the fact that the study itself does not ask the participants to judge or evaluate whether they are successful in implementing integrate reporting. It also does not focus on the competencies used by the best implementers of integrated reporting. One of the reasons is that the researcher acknowledges that there are differing views as to what constitutes the successful implementation of integrated reporting. It is the researcher's opinion that award-winning reports do not necessarily imply that integrated reporting is underpinned by robust integrated thinking.

The researcher would like to remind the reader of a number of biases that may have impacted on the research study. The first bias related to the fact that, at the time of the study, the researcher was also responsible for putting integrated reporting into practice at an organisation. This enabled the researcher to gain first-hand insight into the successes and frustrations that were voiced by the participants as they put integrated reporting into practice in their organisations, or consulted on the process of doing so. The researcher faced many of the same frustrations in the process of performing this task.

The second bias related to the fact that, at the time of the research study, the researcher was involved in the adjudication of an integrated reporting award. This resulted in the researcher's curiosity and questions arising from whether organisations reward participants for winning awards.

The third bias that the researcher wanted to highlight was the fact that the researcher was, at the time of the research study, of the opinion that integrated reporting has significant potential as a corporate reporting tool but that it is, in many instances, not appropriately implemented or understood. This has resulted in the researcher identifying the theme relating to the integrated reporter as interpreter of the <IR> Framework and in identifying the difference between participants and organisations focused on the integrated report, and those focused on integrated reporting.

6 LIST OF REFERENCES

ACCA. 2017. *Competency framework* [Online]. Available: http://competencyframework.accaglobal.com/ [Accessed 28 July 2017].

ACCA 2018. Competencies - explore our comprehensive set of professional competencies. 2018.

ADAMS, C. A. 2015. The International Integrated Reporting Council: A call to action. *Critical Perspectives on Accounting,* 27**,** 23-28.

AHADIAT, N. & SMITH, K. J. 1994. A factor-analytic investigation of employee selection factors of significance to recruiters of entry-level accountants. *Issues in accounting education,* 9**,** 45-58.

APOSTOLOU, B., DORMINEY, J. W., HASSELL, J. M. & REBELE, J. E. 2015. Accounting education literature review (2013-2014). *Journal of Accounting Education,* 33**,** 69-127.

APOSTOLOU, B., DORMINEY, J. W., HASSELL, J. M. & REBELE, J. E. 2017. Accounting education literature review (2016). *Journal of Accounting Education,* 39**,** 1-31.

ARQUERO, J., ANES, J. A. D., HASSALL, T. & JOYCE, J. 2001. Vocation skills in the accounting professional profile: The Chartered Institute of Management Accountants (CIMA) employers' opinion. . *Accounting Education,* 10**,** 299-313.

ATKINS, J. & MAROUN, W. 2015. Integrated reporting in South Africa in 2012: Perspectives from South African institutional investors. *Meditari Accountancy Research,* 23**,** 197-221.

BABAJIDE, O., IMOLEAYO, O. & UWALOMWA, U. 2015. Should integrated reporting be incoporated in the management accounting curriculum? . *International Journal of Education and Research,* 1.

BIANCO, C., LEVY, E., MARCEL, M., NIXON, M. & OSTERHELD, K. 2014. From silos to pipelines: Free flow of content via course integration. . *Advances in Accounting Education,* 15**,** 167-200.

BOTES, V. L. & SHARMA, U. 2017. A gap in management accounting education: fact or fiction. *Pacific Accounting Review,* 29**,** 107-126.

BOTHA, W. J. J. 2001. Pre-qualification education of registered accountants and auditors in South Africa: Perspectives on whether the education process is normatively justifiable. *Meditari Accountancy Research,* 9**,** 33-59.

BRAUN, V. & CLARKE, V. 2012. Thematic analysis. *In:* COOPER, H. (ed.) *APA Handbook of Research Methods in Psychology: Research Designs.* American Psychological Association.

BROWN, J. & DILLARD, J. 2014. Integrated reporting: On the need for broadening out and opening up. *Accounting, Auditing & Accountability Journal,* 27**,** 1120-1156.

BROWN, R. B. & MCCARTNEY, S. 1995. Competence is not enough: meta-competence accounting education. *Accounting Education,* 4**,** 43-53.

BRUNS, S. M. 2014. Accounting integration issues: From AECC to Pathways and beyond *Advances in Accounting Education,* 15**,** 127-134.

BRYMAN, A. & BELL, E. 2015. *Business research methods*, Oxford University Press.

BUI, B. & PORTER, B. 2010. The expectation-performance gap in accounting education: An exploratory study. *Accounting Education,* 19**,** 23-50.

BURKE, J. J. & CLARK, C. E. 2016. The business case for integrated reporting: Insights from leading practitioners, regulators, and academics. *Business Horizons,* 59**,** 273-283.

BURRITT, R. L. & SCHALTEGGER, S. 2010. Sustainability accounting and reporting: fad or trend? *Accounting , Auditing & Accountability Journal,* 23**,** 829-846.

CAELLI, K., RAY, L. & MILL, J. 2003. "Clear as mud": Towards greater clarity in generic qualitaive research. *International Journal of Qualitative Methods***,** 1-13.

CARDY, R. L. & SELVARAJAN, T. T. 2006. Competencies: Alternative frameworks for competitive advantage. *Business Horizons,* 49**,** 235-245.

CARR, S., CHAU, F. & PERERA, H. 2006. University accounting curricula: the perceptions of an alumni group. *Accounting Education,* 15**,** 485-501.

CGMA 2014. CGMA Competency Framework.

CHAFFER, C. & WEBB, J. 2016. An evaluation of competency development in accounting trainees. *Accounting Education,* 26**,** 431-458.

CIMA 2015. 2015 CIMA professional qualification syllabus.

COOPER, D. J. & ROBSON, K. 2006. Accounting, professions and regulation: Locating the sites of professionalization. *Accounting, Organizations and Society,* 31**,** 415-444.

CRESWELL, J. W. 2012. *Education research: planning, conducting and evaluating quantitative and qualitative research,* Boston, MA, Pearson.

CRESWELL, J. W. 2013. *Qualitative inquiry & research design: Choosing among five approaches,* USA, Sage.

DAFF, L., DE LANGE, P. & JACKLING, B. 2012. A comparison of generic skills and emotional intelligence in accounting education. *Issues in accounting education,* 27**,** 627-645.

DE LANGE, P., JACKLING, B. & GUT, A. M. 2006. Accounting graduates' perceptions of skills emphasis in undergraduate courses: an investigation from two Victorian universities. *Accounting and F inance,* 46**,** 365-386.

DE VILLIERS, C., RINALDI, L. & UNERMAN, J. 2014. Integrated Reporting: Insights, gaps and an agenda for future research. *Accounting, Auditing & Accountability Journal,* 27**,** 1042 - 1067.

DE VILLIERS, R. 2010. The incorporation of soft skills into accounting curricula: preparing accounting graduates for their unpredictable futures. *Meditari Accountancy Research,* 18**,** 1-22.

DELAMARE-LE DEIST, F. D. & WINTERTON, J. 2005. What is competence? *Human Resource Development International,* 8**,** 27-46.

DEPPE, L. A., SONDEREGGER, E. O., STICE, J. D., CLARK, D. C. & STREULING, G. F. 1991. Emerging competencies for the practice of accountancy. *Journal of Accounting Education,* 9**,** 257-290.

DIERKES, M. & PRESTON, L. E. 1977. Corporate Social Accounting Reporting for the physical environments: A critical review and implementation proposal. *Accounting, Organizations and Society,* 2**,** 3-22.

DU TOIT, E. & VAN ZYL, R. 2017. Integrated reporting by South African companies: a case study. *Meditari Accountancy Research,* 25**,** 654 - 674.

DUMAY, J., BERNARDI, C., GUTHRIE, J. & DEMARTINI, P. 2016. Integrated reporting: A structured literature review. *Accounting Forum,* 2016**,** 1-20.

ECCLES, R. G., CHENG, B. & SALTZMAN, D. 2010. The landscape of integrated reporting: Reflections and next steps. *In:* ECCLES, R. G., CHENG, B. & SALTZMAN, D. (eds.). Massachusetts: Harvard Business School.

ECCLES, R. G., KRZUS, M. P. & RIBOT, S. 2015. Meaning and momentum in the integrated reporting movement. *Journal of Applied Corporate Finance,* 27**,** 8-17.

FLOWER, J. 2015. The International Integrated Reporting Council: A story of failure. *Critical Perspectives on Accounting,* 27**,** 1-17.

FRIAS-ACEITUNO, J. V., RODRIGUEZ-ARIZA, L. & GARCIA-SÁNCHEZ, I. M. 2013. Is integrated reporting determined by the country's legal system? An expoloratory study. *Journal of cleaner production,* 44**,** 45-55.

GALLETTA, A. 2001. *Mastering the semi-structured interview and beyond: From research design to analysis and publication,* New York, New York University Press.

GRAY, R. & LAUGHLIN, R. 2011. It was 20 years ago today. *Accounting , Auditing & Accountability Journal,* 25**,** 228-255.

GREENWOOD, R., SUDDABY, R. & HININGS, C. R. 2002. Theorizing change: The role of professional associations in the transformation of institutionalized fields. *Academy of Management Journal,* 45**,** 58-80.

GRI. 2013. The sustainability content of integrated reports - a survey of pioneers. Available: https://www.globalreporting.org/resourcelibrary/GRI-IR.pdf [Accessed 5 March 2016].

GUEST, G., NAMEY, E. E. & MITCHELL, M. L. 2013. *Collecting Qualitative Data: A field manual for applied research,* California, SAGE Publications Inc.

GUTHERIE, J., MANES-ROSSI, F. & ORELLI, R. L. 2017. Integrated reporting and integrated thinking in Italian public sector organisations. *Meditari Accountancy Research,* 25**,** 553-573.

GUTHRIE, J. & PARKER, L. D. 2017. Reflections and projections: 30 years of the interdisciplinary accounting, auditing and accountability search for a fairer society. *Accounting , Auditing & Accountability Journal,* 30**,** 2-17.

HARDERN, G. 1995. The development of standards for competence in accounting. *Accounting Education,* 4**,** 17-27.

HARDY, J. W. & DEPPE, L. A. 1995. A competency-based, integrated approach to accounting education. *Accounting Education,* 4**,** 55-75.

HASSALL, T., JOYCE, J., ARQUERO, J. & ANES, J. A. D. 2005. Priorities for the development of vocational skills in management accountants: a European perspective. *Accounting Forum,* 29**,** 379-394.

HAZELTON, J. & HAIGH, M. 2010. Incorporating sustainability into accounting curricula: Lessons learnt from an action research study. *Accounting Education,* 19**,** 159-178.

HIGGINS, C., STUBBS, W. & LOVE, T. 2014. Walking the talk(s): Organisational narratives of integrated reporting. *Accounting, Auditing & Accountability Journal,* 27**,** 1090-1119.

IFAC 2010. Competent and versatile - How professional accountants in business drive sustainable organisational success.

IFAC 2017. Enhancing organizational reporting: Integrated Reporting Key. *IFAC policy position* 8.

IIRC. 2011. *IIRC announces selection of global companies to lead unique integrated reporting pilot programme* [Online]. Available: http://integratedreporting.org/news/iirc-announces-selection-of-global-companies-to-lead-unique-integrated-reporting-pilot-programme/ [Accessed 6 July 2015 2015].

IIRC. 2013. *The International <IR> Framework* [Online]. Available: http://integratedreporting.org/wp-content/uploads/2013/12/13-12-08-THE-INTERNATIONAL-IR-FRAMEWORK-2-1.pdf [Accessed 22 June 2015 2015].

IIRC 2016. The <IR> Competence Matrix. *Learning outcomes for <IR> Training.*

IIRC 2017. IIRC welcomes significant enforsement of Integrated Reporting by IFAC.

INSTITUTE OF DIRECTORS SOUTH AFRICA 2016. King IV: Report on corporate governance for South Africa 2016.

IRC 2011. Framework for Integrated Reporting and the Integrated Report - Discussion paper. Integrated Reporting Committee of South Africa.

JACKLING, B. & DE LANGE, P. 2009. Do accounting graduates' skills meet the expectations of employers? A matter of convergence of divergence. *Accounting Education,* 18**,** 369-385.

JANSEN, H. 2010. The logic of qualitative survey research and its position in the filed of social research methods. *Forum: Qualitative social research,* 11.

KAHLKE, R. M. 2014. Generic qualitative approaches: pitfalls and benefits of methodological mixology. *International Journal of Qualitative Methods***,** 37-52.

KAPLAN, R. S. & NORTON, D. P. 1992. The balanced scorecard - Measures that drive performance. *Harvard Business Review,* 70**,** 71-79.

KAVAHAGH, M. H. & DRENNAN, L. 2008. What skills and attributes does an accounting graduate need? Evidence from student perceptions and employer expectations. *Accounting and F inance,* 48**,** 279-300.

KING, M. & ATKINS, J. F. 2016. *Chief Value Officer, Accountants can save the planet,* Saltaire, UK, Greenleaf Publishing Limited.

KOTSANTONIS, S., PINNEY, C. & SERAFEIM, G. 2016. ESG integration in investment management: Myths and realities. *Journal of Applied Corporate Finance,* 28**,** 10-17.

LAWSON, R. A., BLOCKER, E. J., BREWER, P. C., COKINS, G., SORENSEN, J. E., STOUT, D. E., SUNDEM, G. L., WOLCOTT, S. K. & WOUTERS, J. F. 2014. Focusing accounting curricula on students' long-run careers: Recommendations for an intergated competency-based framework for accounting education. *Issues in accounting education,* 29**,** 295-317.

LESTER, S. 2014. Professional competence standards and frameworks in the United Kingdom. *Assessment & Evaluation in Higher Education,* 39**,** 38-52.

LILLAH, R. & VIVIERS, S. 2014. *African Journal of Business Ethics,* 8**,** 5-28.

MAAS, K., SCHALTEGGER, S. & CRUTZEN, N. 2016. Integrating corporate sustainability assessment, management accounting, control, and reporting. *Journal of cleaner production,* 2016**,** 1-12.

MACIAS, H. A. & FARFAN-LIEVANO, A. 2017. Integrated reporting as a strategy for firm growth: multiple case study in Colombia. *Meditari Accountancy Research,* 25**,** 605-628.

MACK, N., WOODSONG, C., MACQUEEN, K. M., GUEST, G. & NAMEY, E. 2005. *Qualitative Research Methods: A data collector's field guide,* North Carolina, Family Health International.

MANSFIELD, R. S. 1996. Building competency models: approaches for HR professionals. *Human Resource Management* 35**,** 7-18.

MCNALLY, M., CERBONE, D. & MAROUN, W. 2017. Exploring the challenges of preparing an integrated report. *Meditari Accountancy Research,* 25**,** 481-504.

MELLONI, G. 2015. Intellectual capital disclosure in integrated reporting: an impression management analysis. *Journal of Intellectual Capital,* 16**,** 661-680.

MISTRY, V., SHARMA, U. & LOW, M. 2014. Management accountants' perception of their role in accounting for sustainable development. *Pacific Accounting Review,* 26**,** 112-133.

MONTERIO, B. J. 2015. Integrated Reporting - A chat with the experts. *Strategic Finance***,** 35-39.

NEERGAARD, M. A., OLESEN, F., ANDERSEN, R. S. & SONDERGAARD, J. 2009. Qualitative description - the poor cousin of health research? . *BMC Medical Research Methodology,* 9.

OWEN, G. 2013. Integrated reporting: a review of developments and their implications for the accounting curriculum. *Accounting Education,* 22**,** 340-356.

PERCY, W. H., KOSTERE, K. & KOSTERE, S. 2015. Generic qualitative research in psychology. *The qualitative report,* 20**,** 76-85.

PLANO CLARKE, V. & CRESWELL, J. W. 2015. *Understanding research: a consumer's guide,* Upper Saddle River, NY, Pearson Education.

POLIT, D. F. & BECK, C. T. 2012. *Nursing research: generating and assessing evidence for nursing practice.,* Philadelphia, PA, Wolters Kluwer Health/ Lippincott Williams & Wilkins.

PRATT, M. G. 2009. For the lack of a boilerplate: tips on writing up (and reviewing) qualitative research. *Academy of Management Journal,* 52**,** 856-862.

PWC 2016. King IV, An outcomes-based corporate governance code fit for a changing world. *Steering Point.* Johannesburg.

RAGHAVAN, K. & THOMAS, E. R. 2014. Instability, innovation and accounding education. *Journal of Accounting and finance,* 14**,** 76-83.

RAMBAUD, A. & RICHARD, J. 2015. The "Triple Depreciation Line" instead of the "Triple Bottom Line": Towards a genuine integrated reporting. *Critical Perspectives on Accounting*.

ROTH, H. P. 2014. Is Integrated Reporting in the Future? . *The CPA Journal,* March 2014**,** 62-67.

ROWLEY, J. 2012. Conducting research interviews. *Management research review,* 35**,** 260-271.

SAICA 2015a. *Becoming a CA(SA)* [Online]. Available: https://www.saica.co.za/Training/BecomingaCA/tabid/157/language/en-ZA/Default.aspx [Accessed 24 June 2015].

SAICA 2015b. Guidance for Professional Programmes : Competencies of a CA(SA) at the point of the Assessment of Professoinal Competence (APC).

SAICA 2016. Training programme: Prescribed competencies. *Effective 1 January 2016 and applicable to all trainees whose training contracts have an end after 30 Apri 2017.*

SAICA 2017. Competency Framework Detailed Guidance for the Academic Programme. *Competencies of a CA(SA) at the point of the Initial Test of Competence (ITC) (assessment of core technical knowledge).*

SALDANA, J. 2013. *The Coding Manual for Qualitative Researchers,* California, SAGE Publications Inc.

SANCHEZ, J. I. & LEVINE, E. L. 2009. What is (or should be) the difference between competency modeling and tranditional job analysis? . *Human Resource Management Review,* 19**,** 53-63.

SANDELOWSKI, M. 2000. Whatever happened to qualitative description? . *Research in nursing & health,* 23**,** 334-340.

SANGHI, S. 2016. *The Handbook of Competency Mapping, Understanding, Designing and Implementing Competency Models in Organizations,* New Delhi, SAGE.

SCHALTEGGER, S. & BURRITT, R. 2017. *Contemporary environmental accounting - issues, concepts and practices,* New York, Routledge.

SHENTON, A. K. 2004. Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information***,** 63-75.

SHIPPMANN, J. S., ASH, R. A., CARR, L., HESKETH, B., PEARLMAN, K., BATTISTA, M., EYDE, L. D., KEHOE, J. & PRIEN, E. P. 2000. The practice of competency modeling. *Personnel Psychology,* 53**,** 703-740.

SILVESTRI, A., VELTRI, S., VENTURELLI, A. & PETRUZZELLI, S. 2017. A research template to evaluate the degree of accountability of integrated reporting: a case study. *Meditari Accountancy Research,* 25**,** 675-704.

SIRIWARDANE, H. P., HU, B. K. H. & LOW, K. Y. 2014. Skills, knowledge, and attitudes important for present-day auditors. *International Journal of Auditing,* 18**,** 193-205.

SMITH, S. & STEENKAMP, G. 2015. The competencies developed in an undergraduate accounting course before SAICA's competency framework was effective: a student's perspective. *Journal of economic and financial sciences,* 8**,** 666-688.

SOLSTICE SUSTAINABILITY WORKS INC. 2005. Integrated reporting - issues and implications for reporters. Available: https://www.vancity.com/lang/fr/SharedContent/documents/IntegratedReporting.pdf [Accessed 5 March 2016].

SRIDHAR, K. 2012. Is the triple bottom line a restrictive framework for non-financial reporting? . *Asian Journal of Business Ethics,* 1**,** 89-121.

STACCHEZZINI, R., MELLONI, G. & LAI, A. 2016. Sustainability management and reporting: the role of integrated reporting for communicating corporate sustainability management. *Journal of cleaner production,* 2016**,** 1-9.

STARBUCK, S. 2012. The not-so-odd couple: The CFO and sustainability. *Corporate Finance Review,* 17**,** 5-10.

STENT, W. & DOWLER, T. 2015. Early assessments of the gap between integrated reporting and current corporate reporting. *Meditari Accountancy Research,* 23**,** 92-117.

STONER, G. & MILNER, M. 2010. Embedding generic employability skills in an accounting degree: development and impediments. *Accounting education: an international journal,* 19**,** 123-138.

STUBBS, W. & HIGGINS, C. 2014. Integrated Reporting and internal mechanisms of change. *Accounting, Auditing & Accountability Journal,* 27**,** 1068-1089.

SULTANA, R. G. 2009. Competence and competence frameworks in career guidance: complex and contested concepts. *International Journal of Educational Vocational Guidance,* 9**,** 15-30.

TEMPONE, I., KAVAHAGH, M. H., SEGAL, N., HANCOCK, P., HOWIESON, B. & KENT, J. 2012. Desirable generic attributes for accounting graduates into the twenty-first century: the views of employers. *Accounting Research Journal,* 25**,** 41-55.

THE PATHWAYS COMMISSION 2012. Charting a national strategy for the next generation of accountants. *In:* AAA & AICPA (eds.). US.

THOMSON, I. 2015. 'But does sustainability need capitalism or an integrated report' a commentary on 'The International Integrated Reporting Council: A story of failure' by Flower, J. *Critical Perspectives on Accounting***,** 18-22.

TWEEDIE, D. & MARTINOV-BENNIE, N. 2016. Entitlements and Time: Integrated Reporting's Double-edged Agenda. *Social and Environmental Accountability Journal,* 35**,** 49-61.

ULLMAN, A. A. 1976. The corporate environmental accounting system: a management tool for fighting environmental degradation. *Accounting, Organizations and Society,* 1**,** 71-79.

VAISMORADI, M., TURUNEN, H. & BONDAS, T. 2013. Content analysis and thematic analysis: Implications for conducting a qualitative descriptive study. *Nursing and Health Sciences,* 15**,** 398-405.

VAN BOMMEL, K. 2014. Towards a legitimate compromise?: An exploration of integrated reporting in the Netherlands. *Accounting, Auditing & Accountability Journal,* 27**,** 1157-1189.

VENTER, E. R. & DE VILLIERS, C. 2013. The accounting profession's influence on academe: South African evidence. *Accounting, Auditing & Accountability Journal,* 26**,** 1246-1278.

WHITE, A. L. 2005. New wine, new bottles: the rise of non-financial reporting. *A Business Brief by Business for Social Responsibility*.

WILLIAM, H. P., KOSTERE, K. & KOSTERE, S. 2015. Generic qualitative research in psychology. *The qualitative report,* 20**,** 76-85.

WINKELHAGE, J., SCHREIER, M. & DIEDERICH, A. 2013. Priority setting in health care: Attitudes of physicians and patients. *Health,* 5**,** 712-719.

YONGVANICH, K. & GUTHERIE, J. 2006. An extended performance reporting framework for social and environmental accounting. *Business Strategy and the Environment,* 15**,** 309-321.

APPENDIX A

- Turnitin Originality Report -

APPENDIX B

- Ethical Clearance -

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Economic and Management Sciences

RESEARCH ETHICS COMMITTEE

Tel: +27 12 420 3395
E-mail: ronel.rensburg@up.ac.za

29 September 2017

Prof D de Jongh
Albert Luthuli Centre for Responsible Leadership

Dear Professor de Jongh

The application for ethical clearance for the research project described below served before this committee on 27 September 2017.

Protocol No:	EMS032/17
Research title:	An exploratory investigation into integrated reporting competencies
Principal researcher:	R Fourie
Student/Staff No:	96054019
Degree:	MCom (Business Management)
Supervisor/Promoter:	Prof D de Jongh
Department:	Business Management

The decision by the committee is reflected below:

Decision:	Approved
Conditions (if applicable):	None
Period of approval:	27 September 2017 – 30 September 2018

The approval is subject to the researcher abiding by the principles and parameters set out in the application and research proposal in the actual execution of the research. The approval does not imply that the researcher, student or lecturer is relieved of any accountability in terms of the Codes of Research Ethics of the University of Pretoria if action is taken beyond the approved proposal. If during the course of the research it becomes apparent that the nature and/or extent of the research deviates significantly from the original proposal, a new application for ethics clearance must be submitted for review.

Please convey this information to the researcher. We wish you success with the project.

Sincerely

pp PROF RS RENSBURG
CHAIR: COMMITTEE FOR RESEARCH ETHICS

cc: Prof AJ Antonites
Student Administration

APPENDIX C

- Informed Consent Form -

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Consent for participation in an academic research study

Dept. of Economic and Management Sciences

AN EXPLORATORY INVESTIGATION INTO INTEGRATED REPORTING COMPETENCIES

Research conducted by: Ms R. Fourie (96054019)
Cell: 082 653 7511

Dear participant

You are invited to participate in an academic research study conducted by Ronel Fourie, a Master's student from the Department of Economic and Management Sciences at the University of Pretoria.

The purpose of this qualitative study is to understand the competencies needed to put integrated reporting into practice.

Please note the following:

- This study involves a semi-structured personal interview. Your name will not appear in the final research report and the answers you give during the interview will be treated as strictly confidential. You cannot be identified in person based on the answers you give.
- Your participation in this study is very important to me. You may, however, choose not to participate and you may also stop participating at any time without any negative consequences.
- The interview will take about 1 hour of your time.
- The results of the study will be used for academic purposes only and may be published in an academic journal. I will provide you with a summary of the findings on request.
- Please contact my study leaders, Rene Swart (e-mail: rene@up.ac.za) (Office phone: +27 (0)12 420 6442) or Pieter Conradie (e-mail: Pieter.Conradie@up.ac.za) (Office phone: +27 (0)12 420 5929) if you have any questions or comments regarding the study.

Please sign the form to indicate that:

- You have read and understand the information provided above.
- You give your consent to participate in the study on a voluntary basis.

_____ _____

Respondent's signature Date

APPENDIX D

- Interview Guide –

Table 1: Interview Guide

What are the main research questions the interview is designed to answer? (secondary research questions)	**Interview questions**
Introduction	1. What is your role at [company name]? 2. What are your qualifications and where did you obtain them? 3. In your own words, describe what IR means to you?
What knowledge have you gained that enables you to put IR into practice?	4. What frameworks or other guidance do you commonly use in the process of putting IR into practice? 5. What is the relevance of these frameworks to the process of IR at [company name]? a. [follow-up] Complete the sentence: In order to be able to put integrated reporting into practice you should know that……
What are the processes followed by the organisation to put IR into practice?	6. What are the processes in place to implement IR at [company name]?
Who is involved in the IR process and what are the tasks they need to perform as part of the IR process?	7. What are the titles or job descriptions of the different people involved in the IR process in your company? a. [probing question] Who is ultimately responsible to approve the integrated report?
Describe the tasks that you are required to perform to put IR into practice.	8. What tasks do you perform in the process of implementing IR? a. [follow-up] Which of the tasks are the most important? b. [follow-up] Which of the tasks are the most time consuming?
What are the skills, know-how or things that you should be able to do to perform these tasks?	9. What are the specific skills that are required to perform these tasks? [if asked what I mean by skills] “those things that a person should be able to do when they are functioning in a given area of work, learning or social activity” [follow-up] Complete the sentence: In order to be able to put integrated reporting into practice you should be able to ….. [follow-up] What skills are needed to perform the most important tasks in the IR process? [follow-up] What are the skills needed to perform the most time consuming tasks in the IR process?
Where was this knowledge gained?	10. Where did you learn how to …[refer to previous question]
Closing	11. Are there any other competencies that we have not discussed, that you believe are relevant to be able to put IR into practice?

APPENDIX E

- List of Acronyms -

Acronym	Description
AAA	American Accounting Association
ACCA	Association of Chartered Certified Accountants
AICPA	American Institute of Certified Public Accountants
CDSB	Climate Disclosure Standards Board
CGMA	Chartered Global Management Accountant
CIMA	Chartered Institute of Management Accountants
CRD	Corporate Reporting Dialogue
GRI	Global Reporting Initiative
ICAEW	Chartered Accountants in England and Wales
IFAC	International Federation of Accountants
IIRC	International Integrated Reporting Council’s
IRC	Integrated Reporting Committee of South Africa
<IR> Framework	IIRCs Integrated Reporting Framework
JSE	Johannesburg Stock Exchange
SAICA	South African Institute of Chartered Accountants

APPENDIX F

- List of Tables and Figures -

Tables

Figures