DRIVERS OF SUSTAINABILITY REPORTING QUALITY AMONG JSE LISTED FIRMS IN SOUTH AFRICA: A STAKEHOLDER PERSPECTIVE

BY

GABRIEL TAFIRENYIKA NGORIMA

Submitted in accordance with the requirements for the degree of

DOCTOR OF BUSINESS LEADERSHIP (DBL)

At the

GRADUATE SCHOOL OF BUSINESS LEADERSHIP

UNIVERSITY OF SOUTH AFRICA (UNISA)

Promoter: Professor Pumela Msweli

2019

STATEMENT OF ORIGINAL AUTHORSHIP

I certify that the work presented in this thesis is to the best of my knowledge and understanding original, except as acknowledged in the text. The material has not been submitted, either in whole or in part, for a degree at UNISA or any other university. I also certify that, to the best of my knowledge, any assistance received in preparing this thesis, and all sources used, have been acknowledged.

DEDICATION

To my parents Phineas and Abigail Ngorima, you have encouraged me to pursue knowledge and success. To my team, Michael, Glorious and Issabel: team, I have set the standard, you can achieve more through Christ who strengthens you. To my dear wife Tafadzwa, for all your support and prayers.

ACKNOWLEDGEMENTS

It is my desire to take this chance to express my sincere thanks to all who assisted me during this study. I would also like to apologise to those I do not mention by name here; however, I am deeply grateful for their kind support.

I would like to express my sincere gratitude to the promoter of my studies, Professor Pumela Msweli, for her valuable input in the various stages of this study. Professors' unwavering support, encouragement, critical comments and guidance have made this research a success. She is a true scholar who has inspired me deeply and welcomed me into the real academic fraternity.

The support of Ms Tumi Seopa, Prof Breggie Van der Poll and the many other SBL academics and staff was an inspiration to the study.

To all the participants of this study, who voluntarily gave me their time and critical insights on the issues investigated under this study.

I am indebted to my wife Tafadzwa, and our three children Michael, Glorious and Issabel, who graciously allowed me to take time to pursue my studies.

Thank you to my wider family who supported and prayed for me.

ABSTRACT

This study contributes towards the ever-growing research field of sustainability reporting within the broader context of integrated reporting. Sustainability reporting is the integration of the environmental, social and economic aspects of an organisation in the communication with stakeholders. South Africa's Johannesburg Stock Exchange (JSE) has taken a leading role in the drive for integrated reporting. The aim of the study was to determine the quality of sustainability reporting for the JSE listed firms post the introduction of listing requirements for integrated reporting. Reports of good quality enable stakeholders to make sound decisions from the reported information. The study was limited to sustainability reporting for JSE listed firms. The theoretical lens for the study is the stakeholder theory developed by Freeman (1984).

The study analyses perceptions of sustainability practitioners on quality of sustainability reporting for JSE listed firms for the period of 2009 to 2017. In this study, the focus was to gain rich insights from sustainability practitioners involved in the sustainability reporting value chain of JSE listed firms. This included report preparers, report assurance providers, report users and other report critical reviewers. The recordings of the semi-structured interviews undertaken in this study were transcribed verbatim and analysed using a descriptive analysis technique called Tesch's coding. The researcher reviewed the information, probed and summarised the main themes that emerged from the qualitative research.

The study shows that there are no explicit mandatory requirements for integrated reporting and sustainability reporting for JSE listed firms, contrary to the perception of some scholars and practitioners. The publication of integrated and sustainability reports is, however, now business best practice for firms on the JSE. Admittedly, this is partly because of King Codes recommendations of South Africa that promotes integrated reporting. Sustainability reporting has been improving over a nine-year period, but this cannot be solely attributed to the listing requirements. Basic interventions such as listing requirements for integrated reporting on the JSE and the shareholder compacts on South Africa's State-owned companies, although not explicitly mandatory, have contributed in promoting integrated and sustainability reporting in South Africa.

There are many drivers of sustainability reporting for JSE listed firms. These can be categorised as internal and external drivers. The internal drivers can also be regarded as

critical success factors for sustainability reporting quality for JSE listed firms. The study revealed the dominance of the two drivers of sustainability reporting, namely stakeholder demands and the role of leadership in shaping sustainability reporting in the South African context. The combination of the two drivers on sustainability reporting for JSE listed firms confirms the assumptions of the stakeholder theory.

In the process of determining the trends in reporting and the actual drivers for improved quality in reporting, the cross-cutting theme that emerged was that different organisations are in different stages of their reporting journey. There are early adopters and late adopters. Organisations that choose to be involved in integrated reporting and sustainability reporting experience a real journey of reporting, hence various organisations are at different stages depending when and how they commenced their reporting journey. The researcher coined that process "sustainability reporting life stages".

The study further found that there are many determinants for quality of sustainability reporting for JSE listed firms. The sustainability practitioners perceive quality from the view of the Global Reporting Initiative and Integrated Reporting Council frameworks, thus confirming the entrenchment of the two frameworks in the South African context. The best option assurance mechanism in the form of the Combined Assurance Model was observable in the better reporting sectors on the JSE and State-owned companies. The critical paths for sustainability reporting have been provided, indicating the need for sustainability leadership and stakeholder inclusiveness.

Key words: Best Practice, Critical paths for sustainability reporting, Integrated reporting, Stakeholders in sustainability reporting, Quality of Sustainability Reporting.

TABLE OF CONTENTS

STATEMENT OF ORIGINAL AUTHORSHIP i
DEDICATION ii
ACKNOWLEDGEMENTS iii
ABSTRACT iv
ABBREVIATIONS xii
CHAPTER 1: INTRODUCTION 1
1.1. Background on Sustainability Reporting 2
1.2. Background on Integrated Reporting (IR) 3
1.3. Background on King Code of Corporate Governance Principles 4
1.4. Global Reporting Initiative 6
1.5. Background to Research Problem 7
1.6. Research Problem Statement 8
1.7. Research Questions 11
1.8. Research Objectives 11
1.9. Overview of JSE 11
1.10. South African Sustainability Disclosure Legislative context 12
1.11. Theorising Sustainability Reporting 15
1.12. Assumptions of the study 16
1.13. Delimitations of the study 17
1.14. Definition of Key Terms 18
1.15. Conclusion & Significance of Study 19
CHAPTER 2: LITERATURE REVIEW 20
2.1. Concept of sustainability reporting 20
2.2. Quality of sustainability reporting 20
2.3. Integrated and Sustainability reporting quality trends 21
2.4. Sustainability reporting tools 22
a. Global Reporting Initiative 22
b. SIGMA project 23
c. The Global Compact 23
d. World Business Council for Sustainable Development 23
e. Standards 24
f. Ratings and indices 24
g. MultiCapital Scorecard 24

h. Other Sustainability Reporting Tools 24
2.5. Drivers of sustainability reporting 25
2.6. Role of Stakeholders in Sustainability Reporting 26
2.7. Role of Leadership in Sustainability Reporting 27
2.8. Best Practice in Sustainability and Integrated Reporting 28
2.9. Assurance in Sustainability Reporting 29
2.10. Theories for Integrated and Sustainability Reporting 30
a. Shareholder Theory 30
b. Legitimacy Theory 30
c. Voluntary Disclosure Theory 31
d. Institutional Theory 31
e. Accountability Theory 32
f. Agency Theory 32
g. Stakeholder Theory 33
2.11. Conclusion on Literature Review 34
3. CHAPTER 3: METHODOLOGY 35
3.1. Introduction and Epistemology 35
3.1.1 Purpose of Study 35
3.1.2 Unit of Analysis 35
3.1.3 Research Questions 35
3.1.4 Epistemology 36
3.2. Research approach 36
3.3. Research Methods 37
3.3.1 Semi-structured Interviews 37
3.3.2 Review of Third-Party Rating Agencies Reports (Secondary Data) 43
3.4. Analysis of Data 43
3.5. Validity and Reliability 45
3.6. Ethical Considerations 46
3.7. Conclusion for Research Methodology 46
4. CHAPTER 4: FINDINGS 48
4.1. Introduction 48
4.2. Final Sampling Procedure 48
4.3. Process for building evidence 52
4.4. Research Study Sample Description 54
4.5. Findings for Research Question 1 58
4.5.1 Defining Quality of Sustainability Reports 58

4.5.2 Interpretation of Listing Requirements 60
4.5.3 Support for Mandatory Requirements for Reporting 66
4.5.4 Reporting Quality Trend Analysis 69
a. Reporting Quality Trend Analysis (Primary evidence) 69
b. Quality Trend Analysis from Supplementary Secondary Sources 75
4.5.5 Sectoral Analysis on Quality of Reports 78
4.5.6 Summary of Findings for Research Question 1 84
4.6. Findings for Research Question 2 86
4.6.1 External Drivers for Reporting 86
4.6.2 Internal Drivers for Reporting 98
4.6.3 Sustainability Reporting Life Stages 102
4.6.4 Summary of Findings for Research Question 2 107
4.7. Findings for Research Question 3 109
4.7.1 Materiality to Stakeholder 110
4.7.2 Stakeholder Involvement 110
4.7.3 Context of the Reporting Organisation 111
4.7.4 Key Performance Indicators 111
4.7.5 Improvements 111
4.7.6 GRI Principles 111
4.7.7 Challenges of Transparency and Assurance 114
4.8. Findings for Research Question 4 116
4.8.1 Current Types of Assurance 116
4.8.2 Standards for Assurance 118
4.8.3 Role of Assurance in Sustainability Reporting 119
4.8.4 Challenges of Assurance 120
4.8.5 Summary of Findings for Research Question 4 121
4.9. Findings for Research Question 1: Control Sample of SOCs 122
4.9.1 Trends in Reporting 122
4.10. Findings for Research Question 2: Control Sample –SOCs 123
4.10.1 External Drivers for Reporting for SOCs 123
4.10.2 Internal Drivers for Reporting for SOCs 125
4.11. Findings for Research Question 3 for South African SOCs 125
4.12. Findings for Research Question 4 for South African SOCs 125
4.13. Conclusion on Findings from SOCs 126
4.14. Stakeholders of South Africa's Large Organisations 128
4.15. Critical Paths for Sustainability Reporting 134

5. CHAPTER 5: DISCUSSION 136
5.1. Discussion on Research Question 1 137
5.1.1 Mandatory or Non-Mandatory IR Listing Requirements 138
5.1.2 Desirability of Mandatory Requirements 139
5.1.3 Trends in the Quality of Sustainability Reporting 140
5.1.4 Sectoral Analysis of Sustainability Reporting Quality 140
5.2. Discussion on Research Question 2 141
5.3. Discussion on Research Question 3 145
5.4. Discussion of Research Question 4 149
5.5. Discussion on Findings from the Control Sample of SOCs 151
5.6. Contribution to Theory 153
5.7. Research Gaps and Avenues for Further Studies 154
CHAPTER 6: CONCLUSION AND RECOMMENDATIONS 158
6.1. Conclusion on Research Question 1 158
6.2. Conclusion on Research Question 2 158
6.3. Conclusion on Research Question 3 159
6.4. Conclusion to Research Question 4 159
6.5. Recommendations for Policy makers 159
LIST OF REFERENCES 161
APPENDIX 1: LETTER REQUESTING INTERVIEW TIME WITH PARTICIPANTS (INCLUDING CONSENT) 169
APPENDIX 2: SUMMARY CODE BOOK 170

List of Figures

Figure 4.1: Logical Sequence for Generating Evidence from Primary and Secondary Data (Developed for this study) 53
Figure 4.2: Practitioner's Interpretations on the Presence of Mandatory Requirements for IR and SR 61
Figure 4.3: Practitioner's Views on Presence of Penalties upon Failure to Provide Sustainability Reports 65
Figure 4.4: Practitioners' Support for Mandatory Requirements of Sustainability Reporting for JSE Listed Firms 67
Figure 4.5: Sustainability Practitioner's Views on Trends in the Quality of Sustainability Reports (5 to 9-year period) 70
Figure 4.6: Practitioner's Most Quoted SR Rating Agencies & Award Organisers 76
Figure 4.7: Leading JSE Sectors on Quality of Sustainability Reporting-Practitioner's Perspective 80
Figure 4.8: External Drivers for Sustainability Reporting for JSE Listed Firms – Practitioner's Perspective 87
Figure 4.9: Potential Impact of not Producing Sustainability Reports as a JSE Listed Firm 90
Figure 4.10: Commonly Referred to Frameworks for JSE Listed Firms 96
Figure 4.11: Internal Drivers for Sustainability Reporting for JSE Listed Firms – Practitioner's Perspective 98
Figure 4.12: Sustainability Reporting Life Stages for a reporting firm (Outcome of this study) 106
Figure 4.13: Key Determinants of the Quality of Sustainability Reporting from the Practitioner's Experiences 109
Figure 4.14: Presence of Enough Guidelines for Sustainability Reporting 112
Figure 4.15: Assurance Types for JSE Listed Firms 117
Figure 4.16: Critical Paths for Environmental Sustainability Reporting for a Large Firm in South Africa (outcomes of this study) 135

List of Tables

Table 3.1: Semi-structured interview guide 39
Table 4.1: Sample size, data collection activities, and objectives of instruments 51
Table 4.2: Research study main sample participant register 55
Table 4.3: Research study control sample participant register 57
Table 4.4: Research study SOCs practitioner control sample 58
Table 4.5: Practitioners Interpretation on Existence of Mandatory Requirements for Integrated and Sustainability Reporting for JSE Listed Firms 62
Table 4.6: South African Top Performers on the CDP Climate Change List 78
Table 4.7: JSE firms Industrial Classification Benchmark (ICB) 79
Table 4.8: Summary of key findings for Research Question 1 84
Table 4.9: Summary of key findings for Research Question 2 107
Table 4.10: Summary of Key Findings for Research Question 3 115
Table 4.11: Summary of Key Findings for Research Question 4 121
Table 4.12: Comparison of SR Contexts between JSE Listed Firms and Large South African SOCs 126
Table 4.13: Summary of Key Findings from the Control Sample of SOCs 127
Table 4.14: List of Primary Stakeholders of a JSE Listed firm and their Relationship to SR and IR 129
Table 4.15: List of Secondary Stakeholders of a JSE Listed firm and their Relationship to SR and IR 130
Table 4.16: List of Primary Stakeholders of a Large SOC in South Africa and their Relationship to SR and IR 131
Table 4.17: List of Secondary Stakeholders of a South African SOC and their Relationship to SR and IR 132
Table 5.1: Summary of Key Findings for Research Question 1 and the Contribution to Knowledge 137
Table 5.2: Summary of Key Findings for Research Question 2 and the contribution to knowledge 142
Table 5.3: Summary of Key Findings for Research Question 3 and the contribution to knowledge 146
Table 5.4: Summary of Key Findings for Research Question 4 and the contribution to knowledge 149
Table 5.5: Summary of Key Findings from the Control Sample of SOCs and contribution to knowledge 152

ABBREVIATIONS

ASR	Asian Sustainability Reporting
CAM	Combined Assurance Model
CDP	Carbon Disclosure Project
CSI	Corporate Social Investment
CSR	Corporate Social Responsibility
DJSI	Dow Jones Sustainability Index
DPE	Department of Public Enterprises
DTI	Department of Trade and Industry of South Africa
EIRIS	Ethical Investment Research Services
EMAS	Eco-Management and Audit Scheme of European Union
ESG	Environmental, Social and Governance
EU	European Union
FASBI	Financial Accounting Standards Board Interpretations
FSB	Financial Services Board
FTSE	Financial Times Stock Exchange
GHG	Green House Gases
GRI	Global Reporting Initiative
ICB	Industry classification Benchmark
ICMM	International Council of Mining & Metals
IFC	International Finance Corporation
IIRC	International Integrated Reporting Council
IoDSA	Institute of Directors in Southern Africa

IRAS	Integrated Reporting Assurance Services
IRC	Integrated Reporting Council of South Africa
ISO	International Organization for Standardization
IR	Integrated Reporting
IRC	Integrated Reporting Council of South Africa
JSE	Johannesburg Stock Exchange
KPI	Key Performance Indicator
MPRDA	Mineral and Petroleum Resources Development Act (28) of 2002
NBI	National Business Initiative
NDP	National Development Plan
NEMA	National Environmental Management Act (107) of 1998
NGO	Non-Government Organisation
OECD	Organisation for Economic Corporation and Development
PAIA	Promotion of Access to Information Act (2) of 2000
PFMA	Public Finance Management Act (1) of 1999
RSA	Republic of South Africa
SAA	South African Airways
SASB	Sustainability Accounting Standards Board of the USA
SEC	Securities and Exchange Commission in the USA
SER	Social and Environmental Accounting and Reporting
SD	Sustainable Development
SOC	State Owned Company
SR	Sustainability Reporting
SRI	Sustainability Reporting Index

SRTs	Sustainability Reporting Tools
TBL	Triple Bottom Line
UK	United Kingdom
UN	United Nations
UNEP	United Nations Environment Programme
USA	United States of America
WBCSB	World Business Council for Sustainable Development
WCED	World Commission on Environment and Development
WRI	World Research Institute

Summary and Outline of Chapters

The thesis includes an Introduction, Literature Review, Methodology, Findings, Discussion and Conclusion & Recommendation chapters. The Introduction Chapter provides the background and evolution of both sustainability reporting and integrated reporting. Chapter 1 also includes the problem statement and presents the main challenges with the quality of sustainability reports. The research questions, objectives, delimitations of the study, theorisation of sustainability reporting, legislative context, and assumptions of the study are then provided. The definition of key terms and the significance of the study forms part of the conclusion for Chapter 1. Chapter 2 is a critical review of the literature on both sustainability reporting and integrated reporting. The literature review primarily covers leading research articles over a twenty-year period from 1998 to 2018. A review of theoretical frameworks for this field of research is provided, including shareholder, legitimacy, voluntary disclosure, institutional, accountability, agency and stakeholder theories. The gap in knowledge is then revealed, which requires further research on the real drivers of sustainability reporting for South African firms using stakeholder theory as the theoretical lens for the study. Chapter 3 takes the form of a detailed methodological approach for the qualitative study. Chapter 4 presents the findings of the study. The discussions of the findings are outlined in Chapter 5 and the thesis ends with Conclusions and Recommendations in Chapter 6.

CHAPTER 1: INTRODUCTION

This study contributes knowledge towards the ever-growing research field of sustainability reporting (SR). Sustainability reporting is the integration of the environmental, social and economic aspects of an organisation in its communication with stakeholders as part of integrated reporting (IR). The aim of the study was to determine the quality of sustainability reporting for Johannesburg Stock Exchange (JSE) listed firms from the perceptive of sustainability practitioners. The study also sought to determine the drivers for sustainability reporting and establish the main determinants of the quality of sustainability reports.

A sustainability report is rated to be of an acceptable quality when the report makes it possible for comparisons to be drawn on the sustainability performance of an organisation over time and between different organisations. Reports of good quality also enable stakeholders to make sound decisions from the reported information. The quality of reporting needs to be placed within the context of drivers of reporting and several studies have been done in other parts of the globe to understand the drivers of sustainability reporting (Adams, 2015; Cormier, Magnan, & Van Velthoven, 2005; Martin & Hadley, 2008).

This study was placed within the broad framework of IR as proposed by the International Integrated Reporting Council (IIRC), which seeks to promote integrated thinking by organisations across the world (IIRC, 2013). The theoretical lens for the study is stakeholder theory.

This introductory chapter starts by providing the background to both sustainability and integrated reporting as it relates to corporate reporting. This is then followed by background to the research problem that paves way for the problem statement. After the problem statement, the four research questions and the respective research objectives are provided. An overview of the JSE is also provided since the study is focused on JSE listed firms. This is then followed by a summary of the South African sustainability legislative context. Since the study was undertaken using stakeholder theory, a brief discussion on stakeholder theory and its key assumptions is also provided. The definitions of key terms are given towards the end of the chapter. The chapter's conclusion also provides the significance of study.

1.1. Background on Sustainability Reporting

Sustainability reporting developed from the fast-developing concept of Sustainable Development (SD). There are many definitions of sustainable development in the academic literature, but the most widely accepted of these is proposed in a report commonly called the Brundtland Report (Our Common Future) by the World Commission on Environment and Development (WCED). In Our Common Future, sustainable development is defined as "Development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED, 1987: p. 15). As the Brundtland Report points out, SD is not something fixed, but rather it is a process of change that takes place in the activities and operations of organisations to match the needs of both the present and future generations (Moneva, Archel, & Correa, 2006).

The most plausible justification for SR is stakeholder pressure and other coercive pressures that are placed upon organisations. SR is primarily used as a communication tool that organisations use to make contact with their wider stakeholders (Hewapathirana, 2014). The main objective of sustainability reporting is therefore to advance sustainable development.

Sustainability reporting is a global issue that is developing in organisations of different types and sizes (James, 2015; Szekely & Vom Brocke, 2017). Since 1987, after the Brundtland Report was published, there has been increasing demand for better corporate governance and an increased need for organisations to be accountable towards all stakeholders, the environment, and societies in which organisations operate. Public and private organisations are now increasingly publishing sustainability reports and, more recently, sustainability reports have been integrated with financial reports in a process called "integrated reporting", as proposed by the IIRC. Sustainability initiatives are thus evolving, and this has been an area of research for over two decades, but this area of research has advanced significantly in the last ten years. SR by corporations has become entrenched in organisations across the globe (Bonsón & Bednárová, 2015; Dragu & Tiron-Tudor, 2013; Lozano & Huisingh, 2011).

Sustainability reports must cover qualitative and quantitative information on the sustainability management performance of an organisation (Daub, 2007; Skouloudis, Evangelinos, & Kourmousis, 2010). Financial accounting professionals focusing on short term financial gains and cost cutting, supported by accounting and reporting

requirements that prefer financial information to critical non-financial information, have hindered the progress of the sustainability management of businesses. It is therefore necessary for firms and organisations to make environmental sustainability a key part of their value creation (Adams, 2015).

According to Dragu and Tiron-Tudor (2013), there are three eras in corporate reporting literature: (1) the non-financial reporting era; (2) the sustainability era; and (3) the integrated reporting era. From this perspective, it can be argued that the period of 2001-2006 is the era of non-financial reporting and that the era of sustainability reporting started afterwards, in 2006. Academic literature on integrated reporting effectively became common in 2010 and beyond (Dragu & Tiron-Tudor, 2013). This study was done during the integrated reporting era where the performance of the organisation is reported in one report covering both financial and sustainability information about the organisation. South African large organisations have generally embraced integrated reporting and JSE firms were one of the first to implement integrated reporting (Mmako & Jansen van Rensburg, 2018).

The integrated reports that are published and are available for public perusal are the primary source of information for measuring the performance of listed firms in South Africa. It is on this premise that most recent studies on sustainability have sought to centre their studies on integrated reports, as these reports are considered to be the dependable source of published information on the performance of listed firms in many parts of the globe. The following section therefore provides the background on IR, in which SR is placed with respect to firms on the JSE.

1.2. Background on Integrated Reporting (IR)

According to IIRC (2013, p. 7), "an integrated report is a concise communication about how an organization's strategy, governance, performance and prospects, in the context of its external environment, lead to the creation of value over the short, medium and long term". IR is therefore expected to enhance stewardship in various capitals of an organisation and forge integrated thinking in decision making (IIRC, 2013). Historically, annual reports focussed mainly on financial performance but this has changed as business is now moving towards sustainable business practices (Steyn, 2014). IR can thus be viewed as the solution to the ever growing demands of stakeholders who are looking for the performance of the firm beyond merely its financial information (Bonsón &

Bednárová, 2015; Cozma Ighian, 2015; Dumitru & Jinga, 2015; Fasan & Mio, 2017; James, 2015; Morros, 2016).

Although research on IR has been conducted for some years, 2013 was a key turning point in the process of international pressure on IR because that is when the International Integrated Reporting Framework was completed and issued to the public (IIRC, 2013). The IIRC has been at the forefront of integrated reporting globally (Dragu & Tiron-Tudor, 2013). Before the International Integrated Reporting Framework, there was the Corporate Governance Code (known as King III) of South Africa, published in 2009, whose enforcement became compulsory, starting in 2011 with companies listed on the JSE (Atkins & Maroun, 2015; Chersan, 2015; Steyn, 2014).

As captured in the IIRC statement below, the purpose of IR is:

> To explain to providers of financial capital how an organization creates value over time. An integrated report benefits all stakeholders interested in an organization's ability to create value over time, including employees, customers, suppliers, business partners, local communities, legislators, regulators and policy-makers (IIRC, 2013, p. 4).

For a firm listed on the JSE, an integrated report is the primary means of formally communicating information on the different types of capital managed under an organisation's control with stakeholders (King, 2016; Mansoor & Maroun, 2016). This study focused on SR within the context of IR for South African listed firms.

There is a compelling research problem for understanding the trends in sustainability reporting quality for firms on the JSE. The companies on the JSE are at present mostly providing a suite of integrated reports. This suite includes an integrated report; among other documents this also includes sustainability reports. More details on King Codes of Corporate Governance is provided in the next section.

1.3. Background on King Code of Corporate Governance Principles

King Code of Corporate Governance (King III) was published by the Institute of Directors in Southern Africa (IoDSA) and called on organisations to prepare an integrated report each year which would reflect that strategy, risk, performance and sustainability are inseparable factors and influence each other equally (King, 2009). This

resulted in the founding of the International Reporting Council (IRC) of South Africa, with the purpose to develop a framework for what an integrated report should look like and what information it should include. This IRC framework contributed to the development of the International Framework that was prepared by the IIRC in 2013.

There have been four generations of King reports, namely King I, King II, King III and now King IV. The focus of the current study was primarily located within the King III regime that came into force on the first of March 2010. King III operated on an "apply or explain" basis (King, 2009). This is different from the "comply and explain" basis that King II employed, as the word "apply" appeared less prescriptive (Esser & Delport, 2017).

The release of King IV in April 2017 filled the gap as it references the International Framework and is supported by the same rationale and terminology. It is therefore expected that the practice of integrated reporting in South Africa widened after the release of King IV (King, 2016). The King Codes of Corporate Governance are self-regulatory mechanisms for integrated reporting (Esser & Delport, 2017; Paterson, Alexander; Kotze, 2009).

The JSE is regarded as a forerunner in requiring all listed companies to either produce an integrated report or to explain why they are not doing so. Listed companies in South Africa are pioneers in the world because they were the first to be subjected to a "comply or explain" requirement for integrated reporting as explained in the King Code of Good Governance Principles for South Africa. This was accomplished by a JSE listing requirement, which insisted that all JSE-listed companies were required to publish their integrated reports for financial year-ends commencing on or after 1 March 2010 (Solomon & Maroun, 2012; Steyn, 2014). It is however interesting to observe that, while the JSE listing requirements speak to the application of King Codes, the JSE does not prescribe any specific framework or guideline, for neither IR nor SR (Johannesburg Stock Exchange Limited, 2016).

There are also some trends in the introduction of mandatory requirements for sustainability reporting in some parts of the world. For example, the 2014/95/European Union (EU) Directive is making it mandatory for large EU companies to include sustainability information within their annual reports. In the USA, the Sustainability Accounting Standards Board (SASB) provided compulsory industry guidelines on the

disclosure of Environmental, Social and Governance (ESG) performance information within mandatory Securities and Exchange Commission (SEC) company filings (Truant, Corazza, & Scagnelli, 2017). In Australia, the JORC Code by Australian Mining Development Stage Entities is a further example of the global drive to make corporate reporting mandatory (Ferguson & Pündrich, 2015). The reasons for the trends towards mandatory reporting is not clear but countries have either pursued mandatory or voluntary requirements depending on their own circumstances or their legal framework. This study contributes to understanding whether reporting is indeed compulsory for JSE listed firms.

In the context of the advancement of IR and SR, firms on the JSE have adopted the Global Reporting Initiative (GRI) to guide them in preparing sustainability reports, as described in the section below.

1.4. Global Reporting Initiative

The GRI was initially developed with the purpose of guiding reporting organisations in communicating their contributions towards sustainable development (Adams & Frost, 2008; Brown, de Jong, & Levy, 2009; GRI, 2002). The GRI has changed the approach of organisations by considering sustainability as an element in performance measurement, in the same way that financial reporting is considered part of financial resources. The GRI Guidelines enabled "sustainability reporting" to consider the economic, environmental, and social performance (also known as the "triple bottom line") of organisations. This approach reflects a widely accepted method in sustainability reporting (Brown et al., 2009; Gallego-Alvarez, Isabel; Vicente-Villardon, 2012; Moneva et al., 2006). There have been various versions of the GRI guidelines and the most recent was referred to as G4 and was published in 2013. The GRI guidelines have been developed further and they are now standards since 2016 (GSSB, 2016).

The GRI guidelines provided the much needed framework for sustainability reporting and promoted stakeholder engagement processes that serve as a tool for understanding reasonable expectations of stakeholders (Barone, Ranamagar, & Solomon, 2013; Brown et al., 2009; GRI, 2002; Moneva et al., 2006). The GRI is centred on the role of stakeholders in the development and implementation of sustainability reporting by reporting organisations. The GRI is also one of the commonly used frameworks for sustainability reporting globally (Marimon, Alonso-Almeida, Rodríguez, & Cortez

Alejandro, 2012). GRI guidelines have therefore been regarded as the *de facto* guidelines by South African reporting entities (Stainbank, 2012).

1.5. Background to Research Problem

According to Siew (2015), one of the challenges of the existing sustainability reporting tools (SRT) concerns a lack of standardisation in the methodology used. This creates difficulties in comparing and benchmarking the sustainability performance of organisations. Sustainability reporting and integrated reporting have been widely criticised for being of poor quality as a result of failing to address all material issues relating to the sustainability performance of firms (Comyns, Figge, Hahn, & Barkemeyer, 2013). There is also a challenge in determining aspects that are significant in terms of their impact on the value creation of organisations. This means that materiality must be defined on a sector specific basis (Eccles, Krzus, Rogers, & Serafeim, 2012).

Stakeholders of organisations are increasingly interested in the sustainability performance of firms and are recognising the best performing firms in terms of their sustainability practice. This comparability principle with environmental reporting as per the GRI framework is limited in the literature (Boiral & Henri, 2017). Boiral and Henri (2017, p. 284) thus asks the pressing question: "Is the information on sustainability performance released in the GRI reports of organisations from the same sector of activity really comparable and, if not, for what reason?"

In a previous study by Ioannou and Serafeim (2011) using data from 58 countries, it was shown that after the adoption of mandatory sustainability reporting requirements and regulations, the social responsibility of business leaders increased. The results further showed that mandatory sustainability reporting successfully promoted socially responsible management decisions. While this may be the case, it was also shown that conclusive evidence of increased quality of sustainability reports after the introduction of mandatory requirements continues to be missing in the literature (Ioannou & Serafeim, 2011).

Another study was undertaken by Solomon and Maroun (2012) which analysed the integrated reports of ten major South African companies listed on the JSE in order to assess the impact of the introduction of integrated reporting. The study compared the integrated reports a year before and a year after the introduction of listing requirements. The study showed both positive and negative effects. Social, environmental and ethical

information were reported in a much higher number of sections of the reports for the 2010/11 financial year than those of 2009 (Solomon & Maroun, 2012). That study provided some suggestions, but the quality, assurance and general usefulness of the increased reporting remains inconclusive post-King III requirements.

Another research study was undertaken in South Africa between 2011 and 2013 which examined levels of biodiversity reporting in integrated reports on a sample of South African companies in the mining sector. The results showed that biodiversity disclosures were very limited, despite IR becoming "mandatory" (Mansoor & Maroun, 2016).

The key objective for the current study was to further determine how the introduction of mandatory requirements on reporting contributed to the quality of environmental sustainability reporting among JSE listed companies by using a qualitative research methodology. This study also took advantage of the existence of a much longer period after the introduction of the listing requirements which were effective from March 2010.

As explained earlier, acceptable quality of sustainability reports is when reports make it possible for comparisons to be drawn on the sustainability performance of an organisation over time and between different organisations. Reports of good quality also enable stakeholders to make sound decisions from the reported information.

Another outstanding issue for research is the assurance of integrated reports (Adams, 2015). According to Adams (2015), in the absence of assurance standards which address materiality processes, the reporting will not be satisfactory. Considering the best approaches to the assurance of integrated reports was therefore an objective of this study.

1.6. Research Problem Statement

The value of sustainability reporting depends on the scope, detail, and accuracy of the information provided. The information disclosed in the reports must be comparable over time and between reporting entities for it to be of value to stakeholders (James, 2015; Mynhardt, Makarenko, & Plastun, 2017). Acceptable quality of sustainability reports is when reports make it possible for comparisons to be drawn on the sustainability performance of an organisation over time and between different organisations. Reports of a good quality must enable stakeholders to make sound decisions from the reported information.

A previous study by Atkins and Maroun, (2015) focused on the country's largest institutional investors and how they reacted to the integrated reporting project. Another study by Steyn (2014) focused on the perspectives of company senior executives on the evolving integrated regulatory regimes in South Africa. To date, there has been several research studies exploring the opinions of different stakeholders in the country's first set of integrated reports but there has not yet been a study which consolidates opinions from all the categories of stakeholders and at all levels. There is therefore a need for a study that analyses the perception of a wider group of stakeholders on the quality of integrated reports (Atkins & Maroun, 2015). This study aimed to fill this research gap by undertaking qualitative research into the views of preparers, assurance providers and some users of sustainability reports.

Globally, regulatory authorities assess sustainability reporting to different extents through rules and regulations. Guidelines for such reporting vary significantly across the globe. In Europe, SR is increasingly being regulated (Truant et al., 2017). The interest for some scholars lies in understanding any institutional and regulatory factors within the geographical context of a firm that affects the firm's performance (T. Hahn, Figge, Aragón-Correa, & Sharma, 2017). Some scholars have written about the introduction of mandatory listing requirements for reporting by the Johannesburg Stock Exchange (Ackers & Eccles, 2015; Carels, 2013; Chersan, 2015; Doni, Gasperini, & Pavone, 2016; Rensburg & Botha, 2013). While this is acknowledged, a review of King IV and the JSE listing requirements in section 8.63(a), it is not clear that the JSE requirements are actually mandatory. The question that begs an answer is thus, "Is sustainability reporting and or integrated reporting really mandatory for firms listed on the JSE?"

There have been questions about whether the quality of reporting has improved since 2011, the year that the introduction of listing requirements for integrated reporting of JSE listed firms were introduced. The long-term effects on the quality of reports post the mandatory requirements for integrated reporting are not yet fully confirmed (Du Toit, Van Zyl, & Schütte, 2017). Furthermore, there is a need to determine the real drivers of sustainability reporting for JSE listed firms (Christopher, 2010; Cormier et al., 2005; Kiyanga, Wingard, & Cronje, 2016; Martin & Hadley, 2008). Adams (2015) has also called for further research that may establish the determining factors of sustainability reporting, such as leadership, changes in internal systems, process and decision making.

These debates are taking place while there is a growing trend globally to adopt the Global Reporting Initiative (GRI) guidelines in assisting organisations in providing sustainability reports (Adams & Frost, 2008; Gallego-Alvarez, Isabel; Vicente-Villardon, 2012; GRI, 2002; Moneva et al., 2006). There is also an increase in the adoption of GRI guidelines in South Africa (Stainbank, 2012). After a worldwide exploratory study of GRI adoptions by Marimon et al., (2012), they recommended that future research may need to establish stronger evidence of the role played by the GRI in the development of sustainability reporting.

Apart from understanding the real drivers of sustainability reporting quality and the determinants of quality of reports, there is also a challenge in the assurance of reports. Conventional methods of assurance from professional standards are risk-based and the emphasis is on the accuracy of disclosed information rather than on the quality of the interpretation of the information for the benefit of readers of reports. For this reason, the methods are not exactly appropriate as they take the form of opinion on qualitative information that is largely subjective and also forward looking (Maroun, 2018; Villiers, Rinaldi, & Unerman, 2014). For the most part, the narration of sustainability reports is subjective, making it difficult to evaluate them based on a set criteria, as normally required by conventional professional standards such as the International Standards on Auditing and International Standards on Assurance Engagements (ISAEs) (Atkins & Maroun, 2015; Maroun, 2018). Neither the IIRC nor the King Codes of corporate governance mandate the assurance of an integrated report (Maroun, 2018). Adams (2015) makes a call, for further research to be done on the best practical approaches to assurance of integrated reports. In respond to this call, this study seeks to establish, through qualitative methods, the best practical approach to the assurance of sustainability reporting within the South African context.

1.7. Research Questions

The key research questions that inform this study are:

1. (a) How has the introduction of mandatory requirements on reporting contributed to the quality of sustainability reporting for South African JSE listed companies? (b) Is sustainability reporting and/or integrated reporting really mandatory for firms listed on the JSE?
2. What are the real drivers of sustainability reporting for JSE listed firms?
3. What are the key determining factors that influence the quality of the sustainability reporting of the JSE firms?
4. What are the sustainability reporting assurance mechanisms in South Africa?

1.8. Research Objectives

The objectives of the study are as follows:

1) To determine the sustainability reporting trends, post the mandatory integrated reporting of listed firms in South Africa.
2) To determine the main drivers of sustainability reporting for South African firms.
3) To determine the factors that contribute to sustainability reporting quality differences among listed firms in South Africa.
4) To determine the best option sustainability reporting assurance mechanism for South African listed firms.

The study focused on the firms listed on the main board of the JSE. An overview of the JSE is provided below.

1.9. Overview of JSE

The JSE Ltd ("JSE") is licensed under the Securities Services Act, 2004, and is one of the most reputable stock markets in Africa. It has operated as a trading place of financial products for over 125 years. The JSE has evolved from a traditional floor-based equity trading market to a modern securities exchange with electronic trading, clearing and settlement in equities, trading in derivatives and other associated services. The discovery of gold on the Witwatersrand in the 1890s led to development of a successful mining and financial services sector in South Africa that created a need for a stock exchange; this led to the beginning of the JSE in 1887 (Fourie, 2014; Harrison & Zack, 2012; Masarira, 2014).

The stocks on the JSE are sought after by both local and international investors. The JSE has extensive surveillance capabilities. It is also a major provider of financial information and is therefore a distinguished corporate citizen globally. It holds a respected status as one of the top exchanges in the world in terms of size, which is usually measured by market capitalisation. The first legislation applicable to the operation of exchanges was introduced in 1947. Thereafter, the Stock Exchanges Control Act was enacted in 1963 and the JSE became a member of the World Federation of Exchanges. In January 1999, the new Insider Trading Act was introduced (Masarira, 2014).

JSE firms were one of the first to implement integrated reporting (Mmako & Jansen van Rensburg, 2018). Firms listed on the JSE need to comply with registration requirements and other tax requirements. For firms with operations in South Africa, there are several laws that govern their operations, such as environment legislation. A review of South African legislation shows that sustainability reporting within the context of corporate reporting and integrated reporting is not legislated in South Africa (Paterson & Kotze, 2009). Nonetheless, when studying the corporate sustainability reporting for firms on the JSE, it is crucial to understand the broad South African sustainability disclosure legislative context, as described below.

1.10. South African Sustainability Disclosure Legislative context

South Africa's sustainability legal regime has been evolving quickly in the past two decades in order to respond to the ever growing global and national drive towards sustainable development and also as a result of the transition to the rights that came with democracy in 1994 and through South Africa's democratic Constitution (Paterson & Kotze, 2009). Several key laws to sustainability reporting are therefore discussed below.

a. Company Law

The rise of private commercial entities that are concerned with maximising profit, is regarded in some literature as one of the causes of numerous sustainability challenges facing South Africa. The implication is that the proper regulation of these companies and the impact of their business operations on the sustainability issues such as environment and society at large is a concern to stakeholders. Company law is consequently important in order to adequately ensure companies operate in a more sustainable manner (Paterson & Kotze, 2009).

b. Access to Information

South Africa has adopted a new approach which promotes transparency and accountability when dealing with environmental issues. This new regime originates from the right that every South African citizen was given post-apartheid to access information held by public and private organisations. A right of this nature originates from the concept of management by outsiders and is relevant to both public and private sustainability practitioners, as they are required to promote the environmental rights contained in section 24 of the Constitution of the Republic of South Africa, 1996 (Paterson, Alexander; Kotze, 2009).

Section 32 of the Constitution provides for a right of access to information to both private and public organisations. The Promotion of Access to Information Act (PAIA), was therefore enacted to give effect to this constitutional right. Furthermore, the National Environmental Management Act (NEMA) provides for right of access to environmental information (Paterson, Alexander; Kotze, 2009).

The mechanisms in the above laws enable citizens to access information that is essential in promoting accountability and transparency on sustainability matters. The public and other stakeholders are empowered with information hence they are better placed to make the commercial entities honestly and accurately account for their sustainability performance (Paterson & Kotze, 2009).

c. Disclosure of Information

South Africa's legislation also provides for compulsory public disclosure and reporting requirements relating to emergency environmental and safety incidents. When emergency incidents occur, the responsible person is compelled to report the incident to a wide range of government authorities, stakeholders and other people that may be affected by the incident. These instances of public disclosure are enforced by law and are accordingly compulsory (Paterson & Kotze, 2009).

d. Voluntary Compliance

There are certain environmental rules and regulations with which companies may choose to comply or not. If they choose not to comply with these regulations, no sanction will be brought against them. In terms of legislation, compliance is normally mandatory. Voluntary approaches are an alternative form of compliance measures which are also evolving in South Africa. Examples of such compliance measures include an

organisation's decision to reach energy efficiency targets or reduce pollution beyond what is required by law. Voluntary approaches are therefore a supplementary form of environmental management (Paterson, Alexander; Kotze, 2009).

The key arguments in support of reducing regulation claim that complying with environmental regulations is costly for business, and the accompanying enforcement is viewed as expensive for the State. The perfect situation would be if private players were to conduct themselves with due care for the environment, avoiding the need for regulation by the State. The argument by Paterson and Kotze (2009) is that regulations can prohibit and punish worst practice but cannot secure best practice. Adoption of such a corporate philosophy is premised on the desire to address environmental problems at their source. A key milestone in that direction is the growth of the concept of corporate social responsibility and the subsequent adoption of corporate sustainability indexes (Paterson, & Kotze, 2009).

In South Africa, the FTSE/JSE Responsible Investment Index is a practical example of where such approaches have been put into practice. The growth of these voluntary compliance measures may go some way toward complementing the conventional administrative and criminal measures used by authorities to force private firms into compliance with environmental standards and requirements (Paterson & Kotze, 2009). There is gap in knowledge on the desirability of mandatory requirements and hence there is need to understand the firm level variables that influence the disclosure of their compliance with these regulations.

There are more laws dealing with sustainability in South Africa and some additional examples include:

- Occupational Health and Safety Act (85) of 1993;
- Mine Health and Safety Act (29) of 1996;
- Labour Relations Act (66) of 1995;
- Basic Conditions of Unemployment Act (75) of 1997;
- National Water Act (36) of 1998;
- Employment Equity Act (55) of 1998;
- Skills Development Act (97) of 1998;

- National Environmental Management Act (107) of 1998; and
- Broad-based Black Economic Empowerment Act (53) of 2003.

1.11. Theorising Sustainability Reporting

The most commonly referred to theories within the field of SR include shareholder theory, voluntary disclosure theory, agency theory, institutional theory, accountability theory, and stakeholder theory. This study made use of the lenses provided by stakeholder theory.

Stakeholder theory postulates that managers of organisations have a moral obligation to consider and appropriately balance the interests of stakeholders (Freeman, 1984; Hill & Jones, 1992). It holds that all stakeholders have fundamental value, and argues that no stakeholder must be given priority over other stakeholders; nor should any shareholder be treated in a special way compared to other stakeholders (Boatright, 2006). According to this theory, the company has to report all its sustainability matters in order to maintain a sustainable relationship with its stakeholders (Nobanee & Ellili, 2015).

Christopher (2010) also argued that the influencing forces impacting on the governance processes of companies are indirectly caused by the changing environment in which companies operate. He explained that this was partly due to increased stakeholder interest in the company, which extend beyond shareholders to also other stakeholders. It is therefore necessary to recognise the interest of the stakeholders and appropriately address them.

According to Waddock, Bodwell, & B. Graves, (2002) state that there are primary stakeholders, such as employees and customers, who are crucial to the survival of the organisation (Waddock et al., 2002). Besides the primary stakeholders, Waddock et al., (2002) further identified the increasing importance of non-government organisations (NGOs), activists, communities and governments as secondary stakeholders in ensuring a firm's success. These secondary stakeholders arise out of societal issues that exist in the country in which they operate, such as environmental concerns. Luoma, Patrice, Goodstein (1999) also cited in Christopher (2010) found that organisations were under increased pressure to include a much wider stakeholder base in their organisational processes.

The recognition of the broad contractual obligations of stakeholders and their management thereof justifies the use of the stakeholder theory in the study of the sustainability reporting of organisations (Donaldson & Preston, 1995; Freeman, 1994). In this context, it is argued that stakeholder theory is integral to corporate performance because it provides the basis for managers to understand the various needs of the broader stakeholders and reconcile this with the other purposes of the organisation, thus maximising stakeholder value (Christopher, 2010). The stakeholder theory therefore embraces the idea that organisations ought to meaningfully contribute to the society in which they operate (Omran & Ramdhony, 2015).

In a study by Omran and Ramdhony (2015) on extensive critical reviews of the theoretical perspectives applied in corporate social responsibility disclosure literature, it was found that legitimacy theory appeared more suitable for organisations working in developed countries, while the stakeholder theory appeared to be more suitable for organisations in developing countries. The reason for this was that an organisation can easily manage its stakeholders in a developing country; there is also less pressure to comply with legislation in the developing world (Omran & Ramdhony, 2015).

Stakeholder theory addresses an important dimension of the wider influencing forces of an organisation. The theory also recognises that some organisations have a broad range of stakeholders. The magnitude of the influences by stakeholders on organisations is growing because of the increasing interest and value that is placed on the sustainability performance of organisations by stakeholders (Christopher, 2010; Sila & Cek, 2017).

It is for these reasons that this study made use of the stakeholder theory, the key assumptions of which are outlined in the following section that lists all assumptions of this study.

1.12. Assumptions of the study

The assumptions of this study included:

1. There are mandatory requirements for IR and SR for firms on the JSE. Some scholars have written about the introduction of mandatory listing requirement for reporting by the Johannesburg Stock Exchange and this is regarded as such by many researchers and practitioners (Ackers & Eccles, 2015; Carels, 2013; Chersan, 2015; Doni et al., 2016; Rensburg & Botha, 2013).

2. Companies listed at the JSE have an objective to create value for several stakeholders that are either contracted by the firm or have some association with the firm (Freeman, 1984).
3. There is a need for companies to report adequate sustainability information to meet the needs of all the stakeholders (Smith, 2014).
4. Companies on the JSE have a desire to improve the quality of sustainability reporting to stakeholders.
5. Stakeholders can influence the organisation's decisions and strategies (Harmoni, 2013).
6. Stakeholder support is crucial to the long-term survival of organisations and therefore organisations need to align their activities to meet stakeholder needs (Gray et al. 1995).
7. The management of organisations is significant as it plays a vital part in coordinating and managing relationships with all the stakeholders (Freeman, 1984; Hill & Jones, 1992).
8. Stakeholder expectations are a critical factor in the development of sustainability reporting (Wang, 2017).
9. Organisations ought to play an active role in the society in which they operate (Omran & Ramdhony, 2015).

1.13. Delimitations of the study

The study was limited to sustainability reporting for JSE listed firms. South Africa's JSE has taken a leading role in the drive for integrated reporting (Eccles & Serafeim, 2011; Rensburg & Botha, 2013; Solomon & Maroun, 2012). The study focused on perceptions of sustainability practitioners that were involved with sustainability reporting of JSE firms for the period between 2009 and 2011. The year 2009 was selected because the JSE listing requirements for integrated reporting commenced in 2011. In this study, the focus was to gain rich insights from sustainability practitioners involved in the sustainability reporting value chain of JSE listed firms. This included (i) report preparers, (ii) report assurance providers, (iii) report users and (iv) report critical reviewers. This study focused on understanding the relationships of the organisations with its primary and

secondary stakeholders as provided in the traditional Stakeholder theory (Freeman, 1984). There are relationships between the individual stakeholders of an organisation. There are also trisector partnerships between stakeholders of an organisation (Louw & Venter, 2013). These relationships between stakeholders and the trisector partnerships of an organisations were not covered for this current study.

1.14. Definition of Key Terms

The terms that are critical for the study are the following:

1. There are many definitions of sustainable development in the academic literature, but the most widely accepted is that proposed by Brundtland, et al. (1987, p. 15), who wrote that sustainable development is "Development that meets the needs of the present without compromising the ability of future generations to meet their own needs".
2. Closely linked to the definition of Sustainable Development is "sustainability reporting" (SR) (Mynhardt et al., 2017). SR therefore refers to the communication of the social, environmental and governance issues of an organisation. In SR, the terms that are commonly used are:
    - Sustainability reports;
    - Non-Financial reports;
    - Environmental, Social & Governance (ESG) reports;
    - Corporate citizenship reports;
    - Social responsibility reports;
    - Corporate responsibility reports; and
    - Sustainable development reports.

    The terms above are all generally used interchangeably, but this study uses the term "sustainability reports" to refer to all the above-mentioned reports, which within the context of JSE listed firms, are all part of integrated reports. Sustainability reports are part of what the industry refers to as a "suite of reports".
3. An integrated report is a concise report detailing how an organisation's strategy, governance, performance and prospects in the context of its external environment lead to the creation of value over the short, medium and long term. Integrated reporting is expected to enhance accountability and stewardship for capitals and foster consideration of sustainability aspects, strategic objectives, management

reporting, analysis and decision making (IIRC, 2013). Firms listed on the JSE are required to prepare and publish integrated reports at the end of each financial year. In the case of South Africa, it is assumed that integrated reports include sustainability information and/or will have an annexure that provides the sustainability reports.

4. Sustainability leadership refers to inspiring and supporting action that contributes towards achieving the goals of sustainable development (Visser & Courtice, 2011).
5. Best practice according to the Merriam-Webster Dictionary is "a procedure that has been shown by research and experience to produce optimal results and that is established or proposed as a standard suitable for widespread adoption" (Merriam-Webster Disctionary, 2018).
6. A stakeholder is a group or individual who can affect or can be affected by the achievement of the organisation's objectives (Freeman 1984).
7. The term large organisation is used broadly in this report to include any organisation on the main board on the JSE and large State-owned companies with a footprint across the whole country.

1.15. Conclusion & Significance of Study

The purpose of this chapter was to present the gap in knowledge that this project seeks to fill and to elucidate the study's research problem. The determination of trends in the quality of sustainability reporting and the need for greater understanding of the drivers of sustainability reporting for JSE listed firms, emerged as the key research questions that inform the study's focus. The gap in knowledge and the need to contribute knowledge to the growing field of research on sustainability reporting justified the researcher's adoption of the stakeholder theory as the lens for this study. The public, policy makers, researchers and various stakeholders drives benefit from this study.

CHAPTER 2: LITERATURE REVIEW

This chapter provides an outcome of a review of the literature on sustainability reporting with a focus on the period between 1998 and 2018. This is done in order to understand the evolution of sustainability reporting and its current issues, as well as to identify the gaps in knowledge that exist within the field of sustainability reporting. The starting point is a review of the concept on sustainability reporting. This is followed by an assessment of the issues on the quality of sustainability reporting both globally and specifically to the South Africa context. In that context, sustainability reporting tools currently in use globally are discussed. The chapter then unpacks the drivers of sustainability reporting in general before looking more closely at specific drivers such as the role of stakeholders and that of leadership in sustainability reporting. Assurance of sustainability reports is an emerging issue and is thus covered along with concept of best practice in sustainability reporting. A conclusion is then provided at the end of this chapter.

2.1. Concept of sustainability reporting

Since 1987, after the introduction of the Brundtland Report, there has been increasing demand for better corporate governance and an increased need for organisations to be accountable towards all stakeholders, the environment and the societies in which they operate. Public and private organisations now frequently publish sustainability reports and more recently sustainability reports have been integrated with financial reports in a process called integrated reporting as proposed by the IIRC. Sustainability initiatives are evolving, and this has been an area of research for over two decades, but this research area has advanced significantly in the last ten years. Sustainability reporting by corporations has become entrenched in organisations across the globe (Bonsón & Bednárová, 2015; Dragu & Tiron-Tudor, 2013; Lozano & Huisingh, 2011).

2.2. Quality of sustainability reporting

According to Siew (2015), the main challenges with the current sustainability tools is the lack of standardisation in terms of the criteria and methodology used by organisations. This creates difficulties in comparing and benchmarking the sustainability performance of organisations. Sustainability reporting and integrated reporting have on many occasions been criticised for being of poor quality because these two types of reporting fail to address all material issues relating to the sustainability performance of organisations (Comyns et al., 2013). There is therefore a difficulty in determining aspects

that are significant in terms of their impact on the value creation of corporations, and it is argued that materiality must be defined on a sector specific basis (Eccles et al., 2012).

In a study carried out with different Social Responsible Investment (SRI) practitioners in Canada, it was found that the practitioners viewed sustainability reports as an impression management strategy used by companies to highlight the positive aspects of their sustainability performance and to obscure negative aspects of their businesses (Diouf & Boiral, 2017). Another recent study based on empirical analysis of the sustainability reports of Italian water utilities provided interesting insights into the quality of reporting. The results showed a low level of disclosure on the sustainability indicators of GRI initiatives and other frameworks. Most companies tend to disclose only qualitative information and omit some material aspects of the industry. The findings of that study indicate that sustainability reporting is mainly considered to be a communication tool, and not a tool for performance measurement (Cantele, Tsalis, & Nikolaou, 2018).

The next section provides some examples on trends of report quality in some parts of the world.

2.3. Integrated and Sustainability reporting quality trends

A research by the Centre for Sustainability and Excellence provided insights on the trends regarding Sustainability reporting by companies that are based in North America. The research analysed 551 unique sustainability reports for the 2015-2016 reporting period, published by companies and organisations in U.S.A. and Canada (CSE, 2017). The report shows that there are sectors in North America that stand out for their sustainability reporting. Just as an example, in the U.S.A, the most active sector is the energy and energy utilities sector and in Canada the most active sector is the mining sector. According to the same report, there is a visible trend of listed companies to publish sustainability reports in order to be transparent about their sustainability performance (CSE, 2017). Another study in Brazil for firms listed on the Corporate Sustainability Index also showed that the quality of reporting was improving between 2008 and 2014 but scores were low (Ching, Gerab, & Toste, 2017).

According to an EY Awards report of 2016 targeting South African organisations, it was reported that the integrated reports of those companies that take integrated reporting seriously were continually improving whilst the integrated reports of those companies

that do not, are showing very little improvement (EY, 2016). The same survey reported improvements in the quality of the integrated reports over a five-year period to 2015.

The next section provides some of the sustainability reporting tools used across the globe.

2.4. Sustainability reporting tools

SRTs can be divided into three categories, namely frameworks (principles and initiatives), standards, and ratings together with indices (Siew, 2015). Globally, there have been many efforts made to determine indicators that may be used to measure sustainability. The World Resources Institute's (WRI) project for developing and applying performance indicators of unsustainable business practices is a key example of earlier efforts to measure sustainability (Gray, 2010).

There are other assessments that reviewed country level corporate sustainability reports. These scoring assessments provided critical knowledge on sustainability reporting; however, they have focused primarily either on state-of-the-art reports prepared by organisations with rather extensive skills on countries where the sustainability management has widely been institutionalised in the business sector (Skouloudis *et al.,* 2010).

Below is a non-exhaustive list of some of the commonly referred to sustainability reporting tools in the literature.

a. Global Reporting Initiative

According to Brown , de Jong and Levy, (2009), GRI has been largely a success when measured by the rate of uptake, comprehensiveness, visibility, and prestige. The success was due to both the timing, tactics and skills of its founders. The main goal of the initiative was to integrate the reporting systems used at the time. GRI's foundational model was the financial reporting system (FASBI), which is well established especially in the USA. The GRI is a flexible model and thus attracted a wide stakeholder base (Brown *et al.*, 2009). This has led the GRI to publish guidelines in various versions that were used by many public and private organisations in many parts of the world (Brown et al., 2009; Farneti & Guthrie, 2009).

There is a growing trend globally to adopt the GRI guidelines in assisting organisations to provide sustainability reports (Adams & Frost, 2008; Gallego-Alvarez, Isabel; Vicente-Villardon, 2012; GRI, 2002; Moneva et al., 2006). There is also an increase in

the adoption of GRI guidelines in South Africa (Stainbank, 2012). After a worldwide exploratory study of GRI adoptions by Marimon et al., (2012), the authors recommended that future studies need to establish stronger evidence of the role played by the GRI in the development of sustainability reporting.

The GRI also provided the much needed framework for sustainability reporting and promotes stakeholder engagement processes that serve as a tool for understanding reasonable expectations of stakeholders (Barone et al., 2013; GRI, 2002; Moneva et al., 2006). The GRI guidelines have since been developed further and became standards in the year 2016 (GSSB, 2016).

b. SIGMA project

The SIGMA Management Framework outlines a four-phase cycle to manage sustainability issues within organisational processes. There is a toolkit that provides a range of practical tools and guidelines that organisations can use to assist them in their management of sustainability matters, such as a business case tool, a performance review tool, a process for stakeholder engagement and a sustainability scorecard (Sigma, 2008).

c. The Global Compact

The United Nation's (UN) Global Compact promotes ten principles across areas such as human rights, labour, environment and anti-corruption. It seeks the co-operation of organisations across the globe to entrench these principles within their areas of operation. Principles 7 to 9 relate to environmental matters as follows:

- Principle 7: Organisations should support a precautionary approach to environmental challenges.
- Principle 8: Organisations should undertake initiatives to promote greater environmental sustainability.
- Principle 9: Organisations should encourage development and distribution of environmentally friendly technologies (Kesharwani & Ravipati, 2015; Siew, 2015).

d. World Business Council for Sustainable Development

The World Business Council for Sustainable Development (WBCSD) is composed of the world's leading companies across a wide range of sectors. It provides a variety of tools to support the advancement of sustainability into business strategy through initiatives that

include the GHG Protocol and the WBCSD Measuring Framework. The WBCSB produces frameworks that cover various aspects of sustainability management (IFC, 2008; Siew, 2015).

e. Standards

There are various standards that provide guidelines on best practices in environmental management, such as ISO14001 and EMAS. ISO14001: 2004 is a standard on environmental management, while EMAS encourages organisations to improve their environmental performance (Siew, 2015). The two standards are widely adopted by many organisations, but ISO14001 is the most commonly adopted standard in South Africa.

f. Ratings and indices

There are several rating tools on the global market which attempt to measure environmental sustainability. Some examples include EIRIS, FTSE/JSE Responsible Investment Index, Asian Sustainability Reporting (ASR), Bloomberg ESG disclosure scores and many others (Bonsón & Bednárová, 2015; Siew, 2015).

g. MultiCapital Scorecard

The MultiCapital Scorecard is a more recent and *context-based* integrated measurement, management and reporting system. It is an open-source methodology which consists of a structured, quantitative measurement and reporting system that is based on the Triple Bottom Line approach. The MultiCapital Scorecard is also based on the understanding that the sustainability performance of an organisation must be linked to an organisation's impact on vital capitals in relation to organisation-specific norms or standards. Sustainability management must therefore be centred on managing impacts on vital capitals (McElroy & Thomas, 2015).

h. Other Sustainability Reporting Tools

There are also many other Sustainability Reporting Tools, such as:

- ISO 26000;
- AA 1000;
- Carbon Disclosure Project (CDP);
- IIRC Framework;

- Human Rights Reporting and Assurance Frameworks Initiative;
- Sustainability Accounting Standards Board (SASB);
- The Sustainable Development Goals;
- UNEP Finance Initiative;
- Climate Disclosure Standards Board (CDSB);
- European Commission's Guidelines on Non-Financial Reporting; and
- International Finance Corporation.

2.5. Drivers of sustainability reporting

Adams (2015) raises the need for further research to establish the drivers for sustainability reporting. There have been some studies seeking to understand the drivers of sustainability reporting, but their findings have not been conclusive. The results of a study done by Cormier et al., (2005) seeking to determine drivers for environmental disclosures suggested that environmental disclosure is driven by more than one force. In another separate study that focused on motivations for corporate environmental non-reporting of UK FTSE 350 companies, the results showed that it is improbable that one motivation drives sustainability reporting (Martin & Hadley, 2008). Kolk (2004) also found that drivers for reporting are various and can be categorised into economic, business, stakeholder dialogue and the benchmarking of performance.

Another previous research study also explored the influence of societal, political and regulatory characteristics and developments on the quality of sustainability reporting in Norway. The study assessed both mandatory reporting under the Norwegian laws, and voluntary reporting in financial and non-financial reports, by analysing the 100 largest companies in Norway. The results revealed that only 10% of the companies complied with the legal requirements on environmental reporting. Most firms also reported unsatisfactorily on non-financial issues in the voluntary disclosures assessed. Among other reasons, the poor reporting was attributed to an apparent lack of political and social drivers for sustainability reporting in that country (Vormedal & Ruud, 2009). Another study by Dragu and Tiron-Tudor (2013) found that the drivers of voluntary adoption of reporting were political, cultural and economic.

An article by Hahn and Kühnen (2013) reviewing the literature on sustainability reporting over a three year period showed that there are both internal and external drivers of sustainability reporting. The internal drivers included issues such as size, financial

performance, sustainability performance and the ownership structure of the company. The external drivers included aspects such as country of origin and legal requirements (Hahn & Kühnen, 2013). According to Hahn and Kühnen, (2013) there is need to shift from overreliance on content analysis of published documents towards more exploratory approaches such as interviews and other qualitative research methods.

More recently, Dienes, Dominik, Sassen, Remmer and Fischer (2016) reviewed previous studies to determine the drivers of sustainability reporting using exploratory research methodology. Their study found that firm size, media visibility and ownership structure are the most important drivers of sustainability reporting.

Some of the specific drivers are covered below.

2.6. Role of Stakeholders in Sustainability Reporting

King Codes of Institute of Directors Southern Africa (IoDSA) promotes the inclusive stakeholder value approach; hence a company must act as a responsible citizen in order to be sustainable (King, 2009). Operating sustainably means considering social, environmental and economic aspects together within the broader triple bottom line approach. Based on these self-regulatory requirements, the implication is that directors of companies must make decisions in the best interests of the company, even if the decision may, in the short-term, lead to the detriment of the shareholders' interests (Esser & Delport, 2017; King, 2009). King IV, which became effective on, 1 April 2017, continues to promote a stakeholder-inclusive approach. Part 5.5. of King IV specifically deals with stakeholder relationships. Furthermore, Principle 16 provides that the governing body (the board) ought to adopt a stakeholder-inclusive approach in order to balance the interests of material stakeholders in the best interests of the organisation (Esser & Delport, 2017; King, 2009).

Esser and Delport (2017) are also of the view that stakeholders have substantial protection in the Companies Act of South Africa. Some provisions in section 7 were drafted with a broader purpose than shareholders profit maximisation. The establishment of the social and ethics committee provides stakeholders with sound legal standing as their interests are protected in terms of the law (Esser & Delport, 2017). Both King III, and now King IV, are still self-regulatory mechanisms and they promote a stakeholder inclusive approach (Esser & Delport, 2017; Paterson & Kotze, 2009). The Social and

Ethics Committee was created to protect the interests of stakeholders in the context of company law in South Africa.

The IIRC Framework provides that a reporting organisation should give an insight into the nature and quality of the organization's relationships with its key stakeholders. This should include how and to what extent the organisation takes into account and responds to their legitimate needs and interests of its stakeholders (IIRC, 2013). In the same light, the GRI guidelines for sustainability reporting are also centred on a stakeholder driven approach (GRI, 2002). Now and more recently, the GRI standards have a principle focused on stakeholders and therefore an organisation reporting in terms of the GRI standard ought to identify its stakeholders and explain how it has responded to their reasonable expectations and interests. The GRI further defines stakeholders as following:

> "Stakeholders are thus defined as entities or individuals that can reasonably be expected to be significantly affected by the reporting organisation's activities, products, or services" (GSSB, 2016).

Stakeholder inclusiveness is thus a common principle in the IIRC framework, GRI standards and King IV codes.

A study by Hahn and Kühnen (2013) mentioned earlier also suggested that there is a need for future studies to understand stakeholder perceptions and investigate whether the trend towards integrated reporting actually satisfies stakeholders' information requirements.

The role of leadership in SR is another driver of sustainability reporting and is provided below.

2.7. Role of Leadership in Sustainability Reporting

Kets de Vries et al., (2009) provide the Anglo-Saxon etymological basis of the word "lead", which originates form "*laed"*, meaning path or road. A leader is therefore someone who shows fellow travellers the way of travelling ahead. Yukl's (2001) definition of leadership is that of a process of influence. With this definition, leadership is broader than management. Influence can come from stakeholders inside and outside the firm and may be a system of behaviour; hence the meaning of leadership moves merely being a relationship to the concept of leadership as a social process that contains complex relationships (Barker, 2001). According to Visser and Courtice (2011: p. 2), "A

sustainability leader is someone who inspires and supports action towards a better world".

The King IV report places emphasis on the ethical and effective leadership in corporate governance and defines corporate governance in terms of these two concepts. The report also indicates that the Management body which provides overal leadership to the organisation has among others the following functions:

- Provision of strategic direction of the organisation;
- Approval of policy and planning;
- Overseeing and monitoring implementation and execution by management; and
- Ensuring accountability for organisational performance by means of, among others, reporting and disclosure (King, 2016).

It thus means the senior leadership of an organisation has a key contribution to make in sustainability reporting.

In an Australian case study paper, it was found that one of the impediments to sustainability reporting was a lack of experience and knowledge by managers involved in the process of sustainability reporting. The managers lacked understanding as to what constitutes "best practice" in sustainability reporting (Adams & McNicholas, 2007). The next section therefore provides literature on best practice in sustainability reporting.

2.8. Best Practice in Sustainability and Integrated Reporting

The Merriam-Webster dictionary defines best practice as "a procedure that has been shown by research and experience to produce optimal results and that is established or proposed as a standard suitable for widespread adoption" (Merriam-Webster, 2018). The academic literature provides little definition of "best practice" in the field of integrated reporting or sustainability. However, the term has been scarsely used in some professional reports (ACCA, 2017; UFI, 2017) and also in a book by Epstein and Buhovac (2009). There is a gap in academic literature on the definition of best practice for both sustainability and integrated reporting.

There is a common practice in some organisations to benchmark their sustainability performance according to the averages of their sector and hence different types of benchmarking have emerged for both internal and external purposes (Kolk, 2004). Benchmarking is closely related to the increasing effort by reporting organisations to

follow industry "best practice". Sustainability reporting has also been referred to as business practice of companies in Croatia (Dubravka, 2017).

The next section covers the emerging issues on the assurance of sustainability reports.

2.9. Assurance in Sustainability Reporting

Conventional methods of assurance of professional standards are risk-based and the emphasis is on the accuracy of disclosed information rather than on the quality of the interpretation of the information for the benefit of readers of reports. For this reason, the methods are not exactly appropriate for expressing an opinion on qualitative information that is largely subjective and also forward looking (Maroun, 2018). The sustainability reports have information that is subjective and thus make it difficult for auditors to apply auditing methods that are normally applicable in conventional professional standards, such as International Standards on Auditing (Atkins & Maroun, 2015; Maroun, 2018).

Maroun, (2018) through an exploratory study, identified elements of an interpretive assurance model that focuses on providing assurance of the interpretation and analysis of information provided in an integrated report, rather than on the background data provided. In the South African context, an auditor needs to express an opinion on a client's financial statements, which are often included as part of an integrated report. In this process, the auditor is only required to read the rest of the integrated report in order to identify discrepancies with the financial statement (IAASB, 2009). Neither the IRC framework nor the King Code mandate assurance of sustainability reports. The reliability of information provided to stakeholders is affected by robust internal control, stakeholder engagement, internal audit, and independent assurance (IIRC, 2013).

In a worldwide analysis of sustainability reports by Kolk (2004), one third of all reports was reported to have been checked by third parties and 65% of these verifications were carried out by the major accountancy firms, approximately 20% by technical firms, 10% by certification bodies, and less than 10% by others (including NGOs). The verification gives some kind of assurance about the reliability of the sustainability reports despite the fact that generally accepted standards for sustainability reporting are still lacking (Kolk, 2004). Assurance of sustainability reports are normally performed in accordance with ISAEs (issued by the IAASB) or AA1000AS (issued by AccountAbility) (Ackers & Eccles, 2015; Maroun, 2018).

A study by Damen (2016) suggests that higher quality sustainability assurance is used as a response to high stakeholder pressures companies face due to sustainability matters. The next section provides a description of theories commonly used in studies of sustainability reporting.

2.10. Theories for Integrated and Sustainability Reporting

Sustainability reporting and integrated reporting have been explained using various theories. Based on the literature review, the most commonly referred theories are listed and described below.

a. Shareholder Theory

It is regarded that managers of organisations have a responsibility to shareholders to govern with a purpose and hence they need goals (Friedman, 1970). Maximising profitability is the most single important goal for the managers (Sundaram, Anant K; Inkpen, 2004). The Shareholder theory argues that any engagement in social activities is outside of the theoretical scope of a company (Friedman, 1970). According to Friedman (1970), shareholder theory does not ignore sustainability completely, but rather advocates for shareholders' profit maximisation within the confines of the law. The shareholders are one of the stakeholders of an organisation but there are many other stakeholders with a vested interest in the performance of the organisation. The Shareholder theory is therefore not a suitable lens for this thesis.

b. Legitimacy Theory

The Legitimacy theory focuses on various strategies managers may adopt to remain legitimate (O'Donovan, 2002). The legitimacy perspective is largely viewed as a management centred approach (Comyns *et al.,* 2013). Sustainability reporting appears as a symbolic action and may not be an accurate reflection of an organisation's performance but may be used to portray a desired image for purposes of managing public perceptions (Gallego-lvarez and Vicente-Villard, 2012). The legitimacy theory also assumes an implied contract between the organisation and the society in which it is based. In order to prove the accomplishment of its part in the contract and compliance with the value system of the society, the company must therefore report its sustainability performance to society (Nobanee & Ellili, 2015).

c. Voluntary Disclosure Theory

The Voluntary disclosure theory anticipates a positive association between environmental sustainability performance and voluntary environmental disclosures. Clarkson et al., (2011) argue that firms with higher environmental performance have more incentives to communicate environmental disclosures than others. Clarkson et al., (2011) studied how the amount and type of environmental disclosure was related to environmental performance of a sampled group of Australian firms over a period. The authors found a positive relationship between environmental sustainability performances measured by the amount of emissions and the environmental disclosures the organisation. This current study assumes that there are mandatory requirements for reporting for firms on the JSE. The Voluntary Disclosure Theory is therefore inappropriate for the current research.

d. Institutional Theory

The Institutional theory assumes that organisations operate in settings containing institutions that impose expectations on them (Dragu & Tiron-Tudor, 2013; Roe, 2004). A study done to examine the effect of the legal system on the embracement of integrated reporting was undertaken by Frías-Aceituno et al., (2013) on a large sample of international companies for a period of three years. The study showed the influence of the legal system on the uptake of integrated reporting. The results also showed that companies located in civil countries, where levels of law and order are high, provide a wider range of reports to stakeholders, thus allowing better decision-making by the organisation's different stakeholders.

Based on these findings, two policy recommendations were proposed: (i) it may be necessary to institute national laws to promote and guarantee transparency, and (ii) managers must be able to decide on the appropriate disclosure practices within the confines of their own legal environment in order to make sound business decisions (Frías-Aceituno et al., 2013). The civil law system is more stakeholder based than common law and views an organisation as self-governing. The common law legal system is focused on protecting the interest of shareholders (Frías-Aceituno et al., 2013). The Institutional theory therefore assumes rules are necessary to promote sustainability reporting.

e. Accountability Theory

Closely related to the institutional theory, the accountability perspective views sustainability reporting as the duty of organisations, which are required to provide an account of their activities, even if it is not in the best interest of the organisation (Comyns et al., 2013; Rob Gray, 2001; Rob Gray et al., 2008). The Accountability theory is based on the rights of stakeholders who need information (R. Gray, Kouhy, & Laver, 1995). The accountability perspective recognises the gap between what companies are reporting and what is required by the stakeholders. The theory also critiques the quality of sustainability reports. The accountability perspective therefore challenges the idea of voluntary reporting that characterises sustainability reporting in many parts of the world and does not create standardisation in reporting and hence raises the desirability of regulations (Rob Gray, 2001). The Accountability theory therefore points to the need for organisations to identify what they are responsible for and then make available that information to their stakeholders (Rob Gray et al., 2008). Furthermore, according to Lamberton (2005), corporate accountability describes the obligation that an organisation has to explain its performance to others.

f. Agency Theory

The early proponents of agency theory (Berle, Adolf A; Means, 1932; Jensen & Meckling, 1976) suggested that there was a logical relationship between the main players of an organisation, the management body and senior management. The Agency theory, which has its roots in field of economics, assumes that the interests of shareholders (principal) and management (agents) were at odds and that those interests need to be realigned. The process of realignment had a cost attached to it and these costs were referred to as agency costs. Much of those costs were attributed to the control and monitoring activities of the governing bodies of organisations (Berle, Adolf A; Means, 1932).

The Agency theory, although commonly used as an underpinning theory in the studies on governance within financial reporting, became an attractive proposition as a basis for environmental sustainability studies (Eisenhardt & Eisenhardt, 1989). The Agency theory's view is that an organisation is a nexus of contracts between various economic agents, who act opportunistically within efficient markets. However, the theory's focus on financial attention among agents who trade in information exchange efficient markets,

does limit the scope of relevant environmental sustainability reporting, as well as its intended purpose (Cormier et al., 2005).

g. Stakeholder Theory

The Stakeholder theory postulates that managers of organisations have a moral responsibility to appropriately balance the interests of various stakeholders of the organisation (Freeman, 1984). The Normative stakeholder perspective is the "fundamental basis" of stakeholder theory (Donaldson & Preston, 1995). The theory also assumes that all stakeholders have essential value and no stakeholder has a priority of interests over other stakeholders and it is therefore not justified to treat shareholders preferentially (Boatright, 2006). According to this theory, the organisation must report all its sustainability matters to maintain a sustainable relationship with its stakeholders (Nobanee & Ellili, 2015).

There is distinction between primary and secondary stakeholders of an organisation (M. E. Clarkson, 1995). Primary stakeholders are those without whose continuing participation the organisation cannot survive. The high level of interdependence between the organisation and its various stakeholders (shareholders, investors, employees, customers and suppliers) is essential for the organisation's existence. The secondary stakeholders are those who are not involved in business transactions with the organisation and are therefore not crucial for its survival. Clarkson also mentions that due to the evolving organisations' activities, managers ought to focus on the concerns of both primary and secondary stakeholders (Clarkson, 1995).

Evans and Freeman (1993) categorise stakeholders as being narrow or broad, where the selection into each category is based on the extent to which stakeholders are affected by the organisations' activities and operations. Narrow stakeholders (affected the most) usually include shareholders, management, employees, suppliers and customers that are dependent on the organisation's output. Wider stakeholders (affected less) may typically include government, less-dependent customers, the broader community (as opposed to the local community) and other outlying groups (Evans & Freeman, 1993).

The Stakeholder theory is centred on the need for creating value for all stakeholders of an organisation (Eccleis et al 2010), hence the theory is particularly relevant within the integrated reporting space. Organisations rely on sustainability reporting as a channel to meet the information demands of a diverse set of stakeholders, such as employees,

customers, suppliers, creditors, advocate groups, and public authorities, who all pursue different sustainability management interests (Hahn & Kühnen, 2013) and in the process determine the success of the organisation.

The GRI guidelines (now standards) provided the much needed framework for sustainability reporting and promoted stakeholder engagement processes that serve as a tool for understanding reasonable expectations of stakeholders (Barone et al., 2013; Brown et al., 2009; GRI, 2002; Moneva et al., 2006). The same GRI guidelines are centred on the role of stakeholders in the development and implementation of sustainability reporting by reporting organisations. The GRI is one of the commonly used frameworks for sustainability reporting globally (Marimon et al., 2012). GRI guidelines have therefore been regarded as the *de facto* guidelines by South African sustainability reporting entities. It is within this background that the stakeholder theory was adopted as the lens for this study focusing on quality of sustainability reporting.

2.11. Conclusion on Literature Review

In conclusion, this Chapter provided the background on major issues that stemmed from the literature review. Firstly, the concept of sustainability and its evolution was exposed. The review in literature also showed some previous research on the drivers of sustainability reporting, but the drivers appear to be different for many situations, possibly because of the differences in context. The need for a better understanding of the drivers of sustainability reporting, need to understand the determinants of quality of sustainability reports, and challenges in assurance of sustainability reports were the major gaps that emerged from the literature review. The gap in knowledge and the perceived stakeholder inclusiveness of the GRI and IRC framework in sustainability reporting justified the adoption of stakeholder theory as the lens for this study.

CHAPTER 3: METHODOLOGY

3.1. Introduction and Epistemology

This Chapter deals with the more practical issues of choosing and justifying appropriate research strategies to answer the project's research questions. It also outlines the instruments that were used to generate and analyse data to achieve the underlying objectives introduced in Chapter 1. The first section includes the purpose of the study, followed by description of the unit of analysis. A recap of the research questions of the study is then offered. The first section ends with the epistemology. The second section provides the research approach. This is then followed by details of the research methods in the third section dealing with research instruments. Data analysis is provided in the fourth section before validity and reliability issues are outlined in section 3.5. Ethical considerations are covered in section 3.6 before a conclusion is provided for this methodology chapter.

3.1.1 Purpose of Study

The overall purpose of this study is to assess the trends in quality of environmental sustainability reports for listed firms and determine the drivers for sustainability reporting in South Africa through capturing the perceptions of sustainability practitioners.

3.1.2 Unit of Analysis

According to Neuman (2014), a unit of analysis is the unit, case, or part of social life that is under consideration. Cooper and Chandler (2008) define the unit of analysis as the level at which the research is performed and which objects are researched. In this study, the unit of analysis is perceptions of sustainability practitioners regarding the quality of sustainability reports of the JSE listed firms.

3.1.3 Research Questions

As described in Chapter 1, the research questions that inform this project include:

1) How has the introduction of mandatory requirements on reporting contributed to the quality of sustainability reporting for South African JSE listed companies? (b) Is sustainability reporting and or integrated reporting really mandatory for firms listed of the JSE?
2) What are the real drivers of sustainability reporting for JSE listed firms?

3) What are the key determining factors that influence the quality of the sustainability reporting of the JSE firms?
4) What are the sustainability reporting assurance mechanisms in South Africa?

3.1.4 Epistemology

Epistemology is concerned with the question of what constitutes knowledge and how knowledge is constructed (Creswell, 2007). As explained by Creswell (2007), there are two main epistemological positions: positivism and interpretivism. Positivists take a view that knowledge can be constructed from observable social reality in such a manner that allows the generalisability of findings (Creswell, 2007). Remenyi, Williams, Money and Swartz (1998) explain that positivists use highly structured data collected using survey instruments and analyse data using statistical techniques in order to generate new knowledge. Interpretivists on the other hand are of the view that constructing knowledge using structured approaches may oversimplify reality, which is often complex; thus, rich insights from this complex reality may be lost using structured approaches to collecting data (Creswell, 2007; Remenyi et al, 1998). Interpretivists advocate for the construction of knowledge from the perspective of research subjects, in a manner that taps into the deep insights of each research participant (Creswell, 2007). This study used qualitative (interpretivism) methods to construct knowledge.

3.2. Research approach

As outlined in the Literature Review, Hahn and Kühnen (2013) wrote about the need for future studies on sustainability reporting to focus on understanding the stakeholder perceptions on trends for integrated reporting. They argue that what is needed is an understanding of whether integrated reporting actually satisfies stakeholders' informational requirements. Furthermore, Hahn and Kühnen (2013) raised the need for a shift from over reliance on the content analysis of published documents towards more exploratory approaches, such as interviews, surveys, and experimental studies.

Taking its lead from these scholars, this study used qualitative research methods to make its findings. The project employed (i) semi-structured interviews with the preparers, assurance providers, users (key stakeholders) and critical reviewers of reports with the aim to understand the research questions; and (ii) review of secondary data from third party rating organisations.

3.3. Research Methods

Creswell (2003) argues that the choice of methods depends on whether the intention is to predetermine the type of data to be collected in advance of the study or to allow for data to emerge from participants in the project. The study into the current quality of sustainability reporting, motivation for reporting, determinants of report quality and the search for existing assurance mechanism justified a qualitative approach as it was centred on generating empirical evidence provided by the preparers, assurance providers, users and critical reviewers of sustainability reports. Qualitative trend analysis using readily available secondary data of results of scoring from reputable third-party rating agencies such as CDP (formerly Carbon Disclosure Project) and Nkonki, was used to validate the empirical evidence.

The details of the qualitative methods of the study are provided below.

3.3.1 Semi-structured Interviews

Semi-structured interviews were conducted to ascertain the views of participants in relation to all the four research questions of the project. The participants were (i) preparers of the sustainability reports, (ii) sustainability report assurance providers, (iii) sustainability report users, and (iv) sustainability report critical reviewers. The critical reviewers were selected from advocacy groups, officials of professional bodies, academics and the investor community. The semi-structured interviews allowed the researcher to gain control of the process and the sequencing of questioning (J. W. Creswell, 2007). In addition, the semi-structured interviews were useful for the clarification of responses and for allowing deeper exploration of the issues.

a. Population and Sample

The JSE is one of the top twenty exchanges in the world on market capitalisation. There are over 200 companies listed on the Main Board of the JSE. Approximately 20 percent of the Main Board companies are dual listed. There is also an alternate exchange composed of smaller companies, but the current study focused on the main board. The population for this study is the pool of sustainability practitioners with experience in sustainability reporting for JSE listed firms.

Sampling for the semi-structured interviews was randomly done until saturation that targeted sustainability practitioners with experience in the sustainability reporting "value chain" of JSE listed firms. The practitioners were arranged into four categories: (i) report

preparers, (ii) report assurance providers, (iii) report users and (iv) report critical reviewers with experience from both the Environmentally Critical and Environmental Non-Critical sectors of the JSE. There was also a control sample which included other practitioners with special interests in sustainability reporting in order to include their views on reporting from a totally different angle. The control sample included practitioners with experience in State owned companies (SOCs), private companies, regulators and investors. Semi-structured interviews were conducted with 30 participants (sample) and 7 participants (control sample).

b. Interview Protocol

The instrument used for qualitative research was semi-structured interviews. Slocum et al (1995) describe interviews as face to face discussions involving an interviewer and interviewee for the purpose of gathering detailed information on particular societal issues. An interview allowed the researcher to establish the extent to which companies have selected their material environmental issues for reporting. Interviews carried out on a face to face basis over a period of approximately one hour provided the researcher with a detailed understanding of the reasons behind important issues. The aim of the semi-structured interviews was to explore the reasons underlying a problem or practice in a target group and to gather ideas and information on these practices and issues.

The semi-structured interviews meant that the interviewees were afforded an opportunity to express themselves without restrictions. They could speak freely, even if the interviewer managed the interviews to ensure that the questions listed in the interview guide were adequately covered. The job title, grading, and roles of interviewees were captured. The interviews were transcribed and checked for accuracy by the researcher. The researcher coded the transcripts and issues of relevance were identified and classified. An independent coder also reviewed the codes and discussions and adjustments were made where necessary.

The interviews' aim was to capture the motivation and reasons for reporting selected environmental sustainability themes or aspects. The participants could speak freely. Data was collected until data saturation was attained; that was done when there was no new information and themes were repeated (Poggenpoel, 2000).

Table 3.1 illustrates the semi-structured interview guide that was used for this study.

Table 3.1: Semi-structured interview guide

Research Question	Interview Questions	Source (Reference)
	a. What are your views about the need to improve the use of quantitative criteria in sustainability reporting?	Adapted from Daub (2007) and Escrig-Omedo (2010)
	b. What is the value of non-financial information on reporting performance of the firm?	Adapted from Adams (2015), and James 2015
	c. How do you rate the quality of current sustainability reports of JSE listed firms as compared to those produced five to nine years ago?	Adapted from Hahn and Kuhmen (2013)
	d. How do you rate the quality of your sustainability reports among your peers on the JSE?	Adapted from Hahn and Kuhmen (2013)
	e. In your view, is it necessary to make it mandatory for listed firms to report on all material sustainability issues? How can that be possible?	Adapted from Paterson, Alexander; Kotze (2009)
	f. Does failure to report material sustainability issues attract any penalties to your firm?	Adapted from Paterson, Alexander; Kotze (2009)

2. What are the main drivers for quality of sustainability reports on the JSE?	a. What are the key drivers/motivations for providing integrated reports and sustainability reports for firms on the JSE?	Cormier et al., (2005) Martin and Hadley, (2008)
	b. What are the contributing factors for the quality of reports for JSE listed firms?	Cormier et al., (2005) Martin and Hadley, (2008)
	a. What are the factors that determine the quality of the reports?	Adapted from Adams (2015), and James 2015
	b. In your view, are current integrated reports adequately including all material issues on sustainability relevant to your sector?	Adapted from Adams (2015)
	c. What mainly influences your selection on what to report while preparing sustainability reports for integrated reports?	Adapted from Paterson, Alexander; Kotze (2009)

	d. What is the source of gaps in reporting of sustainability?	James (2015)
	e. What constitute materiality for environmental sustainability?	Comyns *et al*., (2013)
	f. Are there enough guidelines when reporting environmental issues?	Adapted from Hahn and Kuhmen (2013)
	g. To enhance standardisation, what should a framework for sustainability include?	Adapted from Hahn and Kuhmen (2013)
	h. In your view, if it was not yourself preparing the reports, would a different person be employed for the reporting in your organisation have included the same issues?	Adapted from Adams (2015)

4. What are the sustainability reporting assurance mechanisms in South Africa?	a. How do you provide for assurance in your sustainability reporting? b. How are your peer firms on the JSE providing for assurance mechanism for sustainability?	Adams (2015)

c. Principals Followed During the Interviews

The following principles guided the semi-structured interviews:

(i) Objectivity: This implies the use of bracketing (Hamill & Sinclair, 2010) by placing knowledge and predetermined ideas about the experience between brackets, and instead focus awareness and energy on the experience of participants and the research process (called intuiting).

(ii) Bracketing implies that the researcher willingly put aside what is known about the experience that is studied to achieve an open context and to facilitate "seeing" all the sides of the issues and then develop new knowledge.

(iii) Intuiting is the process of actually "looking at" the phenomenon and developing an understanding into the phenomenon (Burns & Grove, 1987). It requires attentiveness to and complete engagement of the experience that is studied (De Vos & Fouche, 1998).

The way in which participants view the researcher is of fundamental importance. Where the researcher is viewed as a stranger, the outcome of the research may be affected. For this reason, prolonged engagement improves the reliability of qualitative research. Hamill and Sinclair (2010) recommend that bracketing should be applied throughout the research process, and not only at the data collection and analysis stages.

The researcher tried to be objective in the research. He endeavoured not to be influenced by his perceptions and impressions which could have resulted in biases. Many qualitative researchers believe that there is not necessarily a single, ultimate truth to be discovered; rather, there are multiple perspectives held by different individuals, each with equal

validity. The goal of qualitative research is therefore to discover these multiple perspectives (Hirschman, 1986). The researcher objectively aimed to maximise his chances of discovering a valid perspective on the issue of the quality of environmental reporting among South African listed firms.

In qualitative research, the researcher is the primary data collection instrument (Creswell, 2003). The researcher must uphold objectivity and be self-reflective and this was done through keeping observational notes (Creswell, 2003). Thus, the researcher kept notes on his thinking, feelings, experiences and perceptions throughout the research process, while observational notes were made of the participant's non-verbal signs, the dynamics and process between participants of the semi-structured interviews and the researcher.

The next section provides details on the details of the second research method of reviewing outcomes from third party rating agencies.

3.3.2 Review of Third-Party Rating Agencies Reports (Secondary Data)

To validate findings from the semi-structured interviews, a qualitative analysis of secondary data from third party agencies was undertaken. There are several reputable institutions involved in scoring various sustainability reports of JSE listed firms. The researcher relied on such information and compared this with empirical data from interviews. The main source of secondary data in measuring trends in the quality of reporting was taken from the CDP, formerly known as the Carbon Disclosure Project. Information on the CDP for South Africa is publicly available and tracks reporting trends over a period 5 years. There is also fair representation of JSE firms that are participating in the CDP and in the process their submissions are being rated in comparison to other firms in various sectors in the country and globally (CDP, 2017).

3.4. Analysis of Data

The researcher reviewed the information, probed and then summarised the main themes that emerged from the qualitative research (Burns & Grove, 1987). Recorded semi-structured interviews were transcribed verbatim and analysed using a descriptive analysis technique called Tesch's coding (Creswell, 2007). The data analysis process described by Maritz et al., (2009) was used as a framework for analysing the data collected from the semi-structured interviews. The researcher read through the transcript and identified the main themes and recorded these ideas on margins of the transcripts. After all the main themes were identified, the themes were grouped into categories that reflect their

meaning. The most descriptive wording was chosen that represented the categories. The procedure was used to identify overarching terms, which were then defined and categorised accordingly.

A set of clean data was provided to an independent coder with experience in qualitative data analysis to do the coding of the same transcripts. Thereafter, a meeting was held between the researcher and the independent coder to discuss and find consensus on the coding of the data. A codebook from the inductive coding process is provided in Appendix 2.

Denzin and Lincoln (1994) recommend that the qualitative researcher uses inductive analysis, which means that themes come from the data collected by the researcher and hence not imposed prior to data collection.

According to Collins and Hussey (2003), data analysis in qualitative research has four major challenges, namely:

(i) Reducing the data: Phenomenological research generates a lot of data through field notes, documents, and transcripts of interviews. The challenge is how to condense it into manageable information. One solution can be to use codes to summarise the data. This study used codes to reduce the data into manageable information.

(ii) Structuring the data: The way the data is collected may not be suitable for analysis. To address this challenge, this study used the theoretical framework developed in the Literature Review section. The collected data was then fitted into the assumption of the theory. The theory was tested against the emerging data.

(iii) Anticipatory data reduction: This can happen when the researcher has developed a theoretical framework which directs some data to be ignored. Anticipatory data reduction is discouraged in phenomenological studies as it limits a deep understanding of the issues. In this study, anticipatory data reduction was not used.

(iv) Detextualising the data: Most data in phenomenological studies is recorded in transcripts with a huge amount text. This makes analysis and presentation to different readers a challenge. In this study, the data was presented in the form of graphs and short quotations for presentation purposes.

The data analysis for this study was aware of these challenges and utilised the practical solutions proposed for each of them as outlined above. These solutions follow the suggestions provided by Collis and Hussey (2003).

3.5. Validity and Reliability

Different methods have different strengths and weaknesses. This project employed qualitative analysis methods. The semi-structured interviews were done with five groups of people that included (i) sustainability reports preparers (ii) sustainability reports assurance providers, (iii) sustainability reports users such as investors and (iv) sustainability report critical reviewers who were typically academics and other practitioners from standards organisations and NGOs. The study therefore captured the perspectives of different groups and hence allowed for confirmation on the evidence emerging from the different categories of interviewees. Furthermore, a control sample of practitioners who are not in the JSE systems were also interviewed to cross-reference the findings of the study.

To ensure credibility, Coughlan and Cronin (2007) recommend that the most common criteria used to evaluate qualitative research studies are credibility, dependability, transferability and confirmability.

- Credibility refers to the consistency between the participant's views and the researcher's interpretation of the views. Koch (2006) states that credibility may be improved by the researcher describing and interpreting his/her experiences during the research. This requires the researcher to keep field notes as a record of reflection and learning. Another strategy is to consult with participants and allow them to read and provide feedback on the findings. Credibility is also enhanced by prolonged engagement with participants as well as observation.
- Dependability (auditability) may be attained through the researcher giving the reader sufficient information on the research process and steps to ensure that other researchers, who may undertake the research at a later stage, will arrive at the similar or comparable conclusions. This will ensure that the research be regarded as dependable.
- Transferability (fittingness) refers to whether findings can be applied outside the context of the study.

- Confirmability requires the researcher to prove the logic of arriving at the conclusions and interpretations reached (Coughlan, Ryan F;Cronin, 2007).

3.6. Ethical Considerations

The ethical issues were considered in all stages of the study. Overall, the objective was to undertake a research in an ethically sound manner. The confidentiality of participants was critical and permission to involve human subjects was obtained from the UNISA Ethics committee before data collection commenced.

Primary data was captured through the semi-structured interviews sustainability practitioners. Participation in the research project was not expected to result in any significant form of harm or discomfort to the participants. The targeted participants for the semi-structured interviews were senior professionals and largely management who did not require special indemnity or consent.

A letter (Appendix 1) seeking consent from the participants to participate in the study was sent out to all participants. The letter specifically requested permission and time to undertake the interview with that person. The letters also provided details and objectives of the study.

The identity of the participants was regarded as confidential and was not published in this thesis as this was coded. The participants for this study were preparers, assurance providers and critical reviewers of integrated reports and hence highly educated people who were able to give consent for participating in the study.

The ethical clearance was sought from the relevant committees of UNISA.

3.7. Conclusion for Research Methodology

As illustrated in the first part of this Chapter, this study takes the form of a qualitative inquiry to provide a rich description and fruitful explanation of trends of and motivations for the quality of sustainability reporting of JSE listed firms post the introduction of mandatory requirements for integrated reporting for firms on the JSE. The qualitative study was conducted using semi-structured interviews with sustainability practitioners with experience in sustainability reporting of JSE listed firms. Supplementary evidence was gathered by a review of secondary data from third-party rating agencies.

Previous studies to address the research questions were primarily based on quantitative research methodologies centred on scoring the disclosure of sustainability aspects and

primarily using the GRI indicators (Mansoor & Maroun, 2016; Mashile, 2015; Solomon & Maroun, 2012). This study adopted a qualitative method and this enabled rich insights to be gained into the issues from the view of the hands-on sustainability practitioners. To collect objective findings, the study targeted a broad range of practitioners including report preparers, report assurance providers, report users and report critical reviewers.

CHAPTER 4: FINDINGS

4.1. Introduction

This Chapter presents the findings from semi-structured interviews, and the critical review of results from third party rating agencies. Data from the two research methods were then compared and analysed under each research question. The emerging themes and inferences that are outlined in this chapter reflect the concepts as they emerged from the collected data and are detailed in the form of research findings under each research question. All existing, advanced and new knowledge gained from the data analysis were compared and evaluated with the literature, along with the critical insights and conclusions presented in Chapter 5.

4.2. Final Sampling Procedure

The aim was to interview sustainability practitioners with experience in the sustainability reporting value chain of JSE listed firms. The practitioners were categorised into four including: (i) report preparers, (ii) report assurance providers, (iii) report users and (iv) report critical reviewers with experience with firms on the JSE. There was also a control sample in order to capture views on reporting from a totally different angle. The control group included other practitioners with special interests in sustainability reporting. This also included practitioners with experience in State owned companies (SOCs), private companies, regulators and investors.

To get in contact with the target participants, the researcher made use of various networks such as the LinkedIn professional network platform (https://www.linkedin.com), academic contacts. The researcher also made contact with the various listed firms by email or telephone to ask for the contact details of the sustainability practitioners. LinkedIn was particularly helpful because it allowed the researcher to search for practitioners by using search words such as 'Sustainability reporting in South Africa' and narrow the search by sectors and companies. LinkedIn also showed the previous companies that the participants have worked for and their level of education. It was therefore possible to target those participants that were most able to provide the required insights for this qualitative study. The recommendations and endorsements from their professional network were also available on LinkedIn and these recommendations also assisted in the selection process of participants. This was a time-consuming exercise but worthwhile because the participants had to first agree to join your network and then

thereafter the researcher engaged them about the research. This was then followed by requesting for the participant's own consent in taking part in the study.

The advantage of LinkedIn was that after the participant agreed to join the researcher's professional network, they were able see people in their own network and thus able to understand the researcher's professional background. This helped put the participants at ease as they engaged and participated in the research. This also helped to reduce the degree to which the researcher was regarded as a stranger. The target participants were generally professionals with over five years' experience in sustainability reporting at JSE listed firms. In most cases, these would be senior professionals, middle managers, senior managers and executives of listed firms, auditing firms and users of sustainability reports such as large investment houses. This group of participants also included critical reviewers of sustainability reports working for professional bodies and academic institutions. Apart from being professionals and having generally high qualifications, the participants were generally close to the decision making body of their organisation. Hence, as soon as they became convinced to participate in the study, it was also easier for them to create time to be involved.

The disadvantage of LinkedIn is that, besides being a time-consuming process, some people sometimes use it as a personal branding tool while other people overstate their accomplishments. The researcher observed, however, that the target sample was generally honest about their experience and qualifications. The researcher already had a large professional network on Linkedin within the sustainability field of South Africa after having worked for 13 years in the sector. The researcher is also a graduate of a local academic institution, which made it easier to crosscheck the experiences and professional backgrounds of the participants. At the beginning of each interview, the researcher also took a few minutes to verify and check the experiences of the participants. This was done after the researcher provided a brief self-introduction and explained the conditions of consent.

Another issue with the interviews was that some participants who are preparers of reports by default, were initially inclined to showcase their good sustainability reporting performance both at the level of their organisation and sometimes by extension of their own achievements. The researcher adopted four techniques to manage this issue. The first was to apply the principles of undertaking interviews, such as objectivity, bracketing

and intuiting as already described in section 3.3.1(c). The second technique was that the researcher took time to explain the objectives of the study beyond what was written on the informed consent sheet. The third technique that the researcher employed was to emphasise the confidentiality of the study and that the identity of the firms and participants would not be disclosed.

The final technique in addressing the challenge above centred on proper selection of the target participants. The selected participants were generally practitioners with experience exceeding five years, sometimes having over 15 years' experience in sustainability of listed firms. In this case, the participants would have worked or provided services to more than one company. In this situation, they would be inclined to be more objective in their experiences of different companies and also across different sectors. The interviews with assurance providers were particularly helpful as, by the nature of their job, they provide services for different companies across various sectors and were thus able to provide unique insights into comparisons between sectors and even between companies in the same sector. The four techniques above assisted in curbing the tendency of participants to market their work and hence increased the participant's objectivity.

Table 4.1 shows the final sample size with instruments, data type, number of participants and objectives of the instrument/activity.

Table 4.1: Sample size, data collection activities, and objectives of instruments

	Instrument/Activity	Data type	Number of Participants	Objective of Instrument/Activity
1.	Semi-structured interviews with Preparers of Reports from Critical and Non-Critical sectors (report preparers)	Primary data	16	Capture preparers views, experiences and perspectives
2.	Semi-structured interviews with Auditors and Assurance providers (report users)	Primary data	5	Capture report assurance providers views, experiences and perspectives
3.	Semi-structured interviews with researchers, NGOs, investors and professional bodies (Critical reviewers)	Primary data	9	Capture views, experiences and perspectives of users and critical users of reports
4.	Semi-structured interviews with preparers and users of reports from control sample (Non-listed Private Regulators, Investors and State-owned)	Primary data (Control sample)	5	Capture reports preparers views for non-listed firms i.e. control sample
5.	Data analysis from semi-structured interviews	Thematic analysis of primary data	N/A	Determine trends, emerging themes and theory
6.	Researcher's review of results of third-party rating agencies	Thematic analysis of secondary data	N/A	Validate findings from primary evidence
7.	Compare evidence from primary data and secondary data	Primary and secondary data	N/A	Building theory

The only challenge with data collection was that the interviews were scheduled to be completed in two months from February to March 2018. This period coincided with the busiest period for sustainability practitioners in South Africa, since the financial years of most of the sampled firms end during that period. The integrated reports and by extension the sustainability reports are also due to stakeholders at that time. The professionals involved in the integrated reporting are generally busy during that time of the year with reviewing integrated reports and some are involved in materiality workshops for determining key performance indicators to include in the integrated reports. The lead time to secure a meeting was approximately four weeks because of the generally busy period in which the interviews were done. It therefore took close to five months to complete the 30 interviews and the additional seven control sample interviews. The interviews, all went smoothly.

4.3. Process for building evidence

Qualitative design must demonstrate an interactive, dynamic, and emergent character in which the objectives, strategies, analysis, and validity are knit together in the process of the study (Hammersley & Atkinson, 1995; Maxwell, 1996). The research instruments used and their objectives for this study in the process of building the theory are hypothetically illustrated in Figure 4.1.

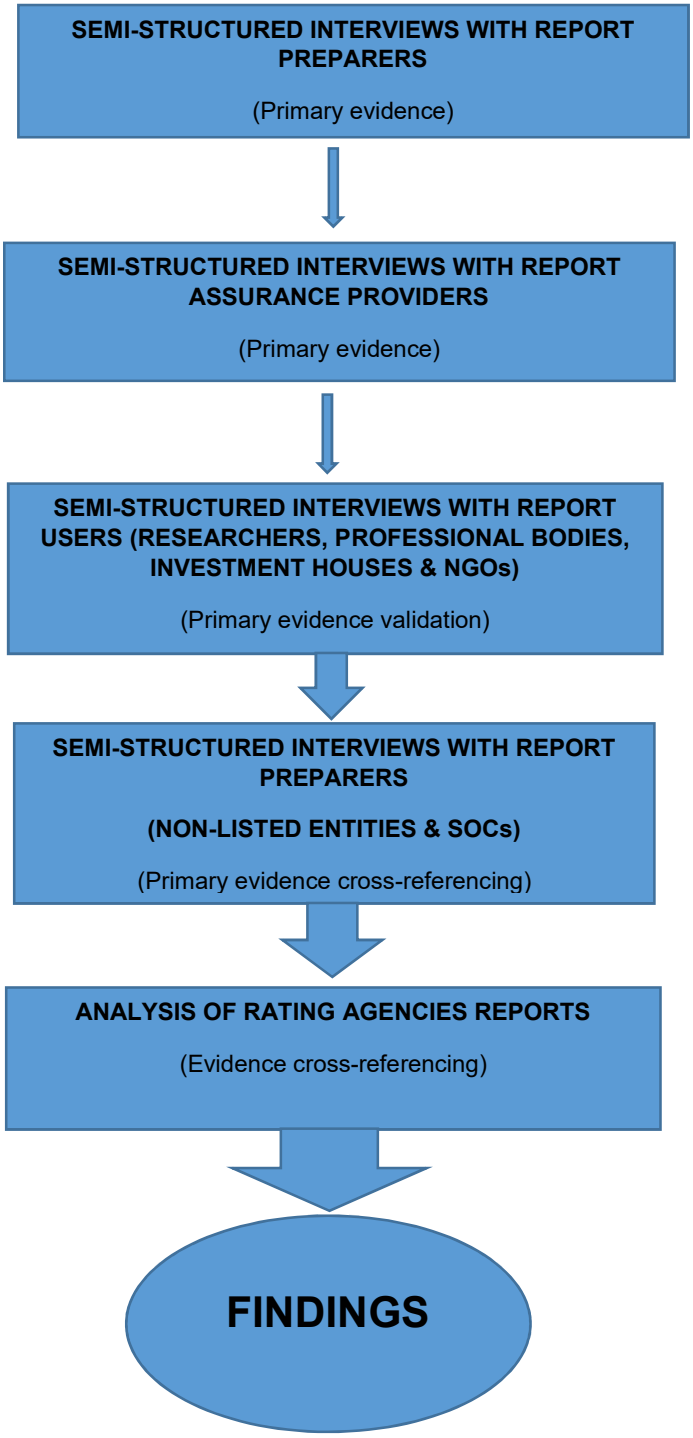

Figure 4.1: Logical Sequence for Generating Evidence from Primary and Secondary Data (Developed for this study)

4.4. Research Study Sample Description

1) Participants for semi-structured interviews (key participants)

Semi-structured interviews were conducted with 30 participants (sample) and seven participants (control sample), which included the participants under the following categories:

(i) Sustainability report preparers from environmentally critical and non-critical sectors of JSE listed firms. These included sustainability practitioners with recent experience in the preparation or review of sustainability reports (16 participants).

(ii) Sustainability report assurance providers across all sectors of the JSE. These included sustainability practitioners with recent experience in providing assurance services to JSE listed firms, specifically on sustainability reporting (5 participants).

(iii) Sustainability report users or specialists involved in research, investments, advocacy, and professional bodies with a focus on sustainability reporting for JSE listed firms (9 participants).

(iv) Over and above the sample of 30, there was also a control sample which included practitioners with experience and/or of knowledge of sustainability reporting for non-listed entities, State Owned Companies, Listed Private Companies outside South Africa but in Southern Africa as well as regulators (7 participants).

Table 4.2 provides a register of all the participants for the main sample of the semi-structured interviews. As the study research questions dealt with determining the trends in reporting quality, it was necessary to have a sample that included report preparers, sustainability reports assurance providers, report users and other critical reviewers to confirm, validate, and cross-reference the evidence from this qualitative research. The various categories of sustainability practitioners were expected to have different perspectives on the issues under investigation, depending on their needs and/or interests.

Table 4.2: Research study main sample participant register

Participant Identity	Recent Sector experience	Most recent Organisation Affiliation	Most Recent Responsibility	Professional Background	No. of years in sustainability reporting
Participant 1	Resources	RSA primary listed company	Review sustainability reports	Environment and Safety	+15 years
Participant 2	Resources	RSA primary listed company	Compile sustainability reports	Environment & Safety	+15 years
Participant 3	Resources	RSA primary listed company	Sustainability Manager	Sustainability	+15 years
Participant 4	Energy	RSA primary listed company	Environmental Reporting	Chemical Engineering	+15 years
Participant 5	Resources	RSA secondary listed company	Sustainability Specialist	Environment & Safety	+10 years
Participant 6	Resources	RSA primary listed company	Sustainability reporting	Environment	+10 years
Participant 7	Finance & Insurance	RSA primary listed company	Sustainability reporting	Social	+10 years
Participant 8	ICT	RSA primary listed company	Sustainability reporting	Environment	+10 years
Participant 9	Finance & Insurance	RSA primary listed company	Sustainability Specialist	Environment	3 years
Participant 10	Bank	RSA primary listed company	Sustainability manager	Environment	+5 years
Participant 11	Bank	RSA primary listed company	Sustainability Management & Reporting	Environment	+10 years
Participant 12	Retailer	RSA listed company	Sustainability Reporting & Management	Environment	+10 years
Participant 13	Bank	RSA listed medium sized bank	Sustainability Specialist	Environment	+5 years
Participant 14	Bank	RSA primary listed company	Sustainability Management	Environment	+10 years
Participant 15	Bank, Asset manager	RSA primary listed company	Sustainability Management	Environment	+5 years

Participant 16	Bank, Consultant	RSA primary listed company	Sustainability reporting	Environment	+5 years
Participant 17	Auditing	Big Auditing firm	Sustainability reporting assurance	Environment	+10 years
Participant 18	Auditing	Big Auditing firm	Sustainability & Climate change	Environment	+15 years
Participant 19	Auditing	Medium sized firm	Sustainability reporting assurance	Accounting	5 years
Participant 20	Auditing	Medium sized firm	Sustainability reporting assurance.	Accounting	+10 years
Participant 21	Data Management	SME	Sustainability Reporting Data management	Systems management	+5 years
Participant 22	Professional Body	Medium sized	Integrated reporting	Engineering	+15 years
Participant 23	University	Leading South African University	Integrated and Sustainability reporting	Accounting	+10 years
Participant 24	University	Leading South African University	Integrated reporting	Environment	+15 years
Participant 25	NGO	Advocacy	Sustainability reporting research	Law	+10 years
Participant 26	Professional Body	Medium sized	Review of Sustainability reports	Earth Science	+10 years
Participant 27	Institutional Investment house	Large	Review of Sustainability reports	Environment	+15 years
Participant 28	Financing House	Large	Review and Prepare reports	Environment	+10 years
Participant 29	Global Standards Body	Large	Standards Development	Environment	+15 years
Participant 30	Private Company-Global (Non-listed)	Engineering Consulting firm	Integrated & Sustainability reporting	Environment	+10 years

The study was primarily based on participants listed in Table 4.2 and hence the analysis was based on this main sample. The participants had approximately five to fifteen years of experience in integrated and sustainability reporting of JSE listed firms. Column 2 in Table 4.2 above shows the practitioner's most recent sector affiliation only, but in most

cases, the practitioners would have had previous sustainability experiences in other sectors.

Table 4.3 presents the control sample of practitioners with experiences in state-owned companies, regulators, investment houses and a listed company outside South Africa.

Table 4.3: Research study control sample participant register

Participant Identity	Sector background	Most recent Organisation Affiliation	Most Recent Responsibility	Professional Background	No. of years in sustainability reporting
Participant 31	State Owned Company	RSA State Owned Company	Sustainability reporting	Environment	+10 years
Participant 32	State Owned Company	RSA large State Owned Company	Sustainability reporting	Environment	+10 years
Participant 33	Listed firm outside RSA	Bank	Integrated reporting	Accounting & Finance	+10 years
Participant 34	Investment House	Large	Review projects for funding	Accounting	+10 years
Participant 35	Regulatory	Regulatory	Environmental Compliance	Environment	+15 years
Participant 36	State Owned Company	RSA large State Owned Company	Sustainability Reporting	Environmental	+5 years
Participant 37	State Owned Company	RSA large State Owned Company	Sustainability Management	Environmental	+15 years

Where evidence was drawn from the control sample above (Table 4.3), this was clearly specified. The control sample also had a subset, which included four practitioners who had experience in SOCs together with four assurance providers in Table 4.2 with experience in SOCs. The total number of participants included in analysis of SOCs was therefore eight, as listed in Table 4.4.

Table 4.4: Research study SOCs practitioner control sample

Participant Identity	Sector background	Most recent Organisation Affiliation	Most Recent Responsibility	Professional Background	No. of years in sustainability reporting
Participant 31	State Owned Company	RSA State-owned Company	Sustainability reporting	Environment	+10 years
Participant 32	State Owned Company	RSA large State Owned Company	Sustainability reporting	Environment	+10 years
Participant 36	State Owned Company	RSA large State-Owned Company	Sustainability Reporting	Environmental	+5 years
Participant 37	State Owned Company	RSA large State Owned Company	Sustainability Management	Environmental	+15 years
Participant 17	Auditing	Big Auditing firm	Sustainability reporting assurance	Environment	+10 years
Participant 18	Auditing	Big Auditing firm	Sustainability & Climate change	Environment	+15 years
Participant 19	Auditing	Medium sized firm	Sustainability reporting assurance	Accounting	5 years
Participant 20	Auditing	Medium sized firm	Sustainability reporting assurance.	Accounting	+10 years

The findings from both primary and secondary data are provided under each research question in chronological order in sections 4.5 to 4.8. Section 4.9 to 4.13 provides summary of findings from control sample of SOCs. Section 4.14 provides details of stakeholders of JSE listed firms and SOCs.

4.5. Findings for Research Question 1

(a) How has the introduction of mandatory requirements on reporting contributed to the quality of sustainability reporting for South African listed companies? (b) Is sustainability reporting and or integrated reporting really mandatory for firms listed on the JSE?

4.5.1 Defining Quality of Sustainability Reports

Since report quality has different meanings for different people, there is a need to provide a working definition for quality of sustainability reports based on what emerged from the study. In defining report quality, two key themes emerged from the semi-structured

interviews. The first was that any definition of quality should be generally anchored on established reporting frameworks and guidelines. The second theme from the interviews was that quality must be based on meeting the needs of stakeholders. The first definition is summarised in an argument from a seasoned sustainability assurance provider as follows:

> Quality of reporting content is ordinarily linked to application of an acknowledged or established reporting framework that has either regulatory or public/user endorsement. Such frameworks ordinarily are designed with quality reporting in mind and will set out the quality attributes that the framework upholds (Interview: Participant 17).

Based on the findings of the study, the GRI guidelines for sustainability reporting are the most commonly used among South African listed firms as shown in Section 4.6.1 (h) under external drivers of integrated reporting. The GRI guidelines provide the principles for defining report quality in the following manner:

> Decisions related to the process of preparing information in a report should be consistent with these Principles. All of these Principles are fundamental to achieving transparency. The quality of the information is important to enable stakeholders to make sound and reasonable assessments of performance and take appropriate actions.
>
> The Principles are:
>
> - Balance
> - Comparability
> - Accuracy
> - Timeliness
> - Clarity
> - Reliability (GRI G4 Guideline, 2013).

Measuring disclosure is in many instances beneficial for measuring the amount of information provided and not necessarily the quality of the report. A good quality report is the one that meets the user's information requirements within the scope of reporting entities and their operations. According to one participant,

> This study, if you want to really assess or help improve companies and what they do, find a way to really assess quality of reports by how it is linked to the business and not disclosure. Qualitative report is that link to business strategy and risk. We keep on ticking on disclosure by measuring disclosure. Look at how reported information is linked to strategy and risk. This will achieve the improvement (Interview: Participant 18).

The comment above shows that quality of reports can only be measured qualitatively as that is the only way linkages between strategy and other qualitative issues can be made. The general approach in previous studies of measuring quality was achieved by measuring the amount of disclosure of sustainability aspects (Mashile, 2015; Solomon & Maroun, 2012). Although this method provides a good indication, it is not adequate when trying to assess report quality. This reveals that the amount of environmental disclosure is not synonymous with high quality of environmental sustainability reporting. In order to address the research questions, there was a need to get a clearer interpretation of the listing requirements for integrated reporting for firms on the JSE, this is detailed below.

4.5.2 Interpretation of Listing Requirements

A key assumption made in previous studies and that also informed this study was that there are mandatory listing requirements for IR and SR for firms listed on the JSE (Ackers & Eccles, 2015; Carels, 2013; Chersan, 2015; Doni et al., 2016; Rensburg & Botha, 2013). This study showed that there are mixed interpretations on whether the listing requirements are really mandatory or not. There is an almost even split of practitioners' views between those that interpret the listing requirements as mandatory (43%) and those that see no mandatory requirements (57%). Figure 4.2 illustrates the proportional differences in interpretations between participants.

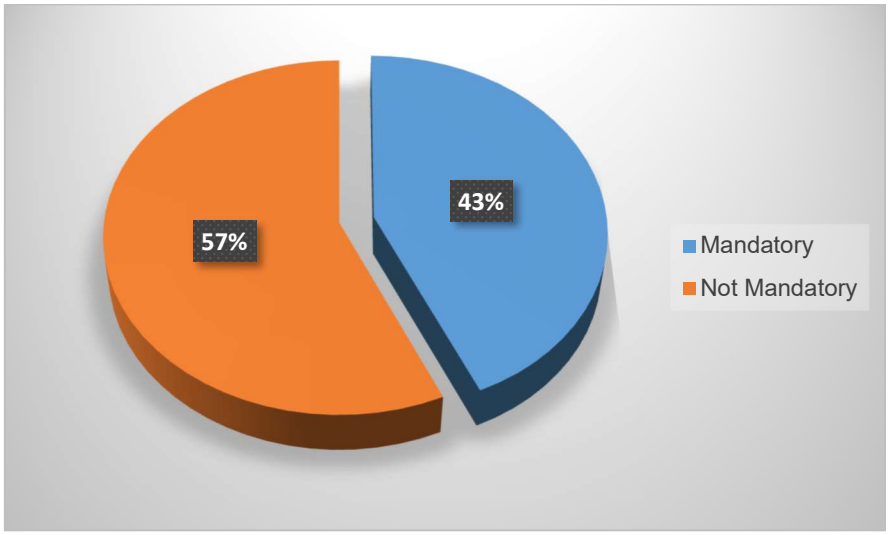

Figure 4.2: Practitioner's Interpretations on the Presence of Mandatory Requirements for IR and SR

To provide a better context for the interpretation, the roles of the JSE are clarified. The JSE is supervised by the Financial Services Board (FSB) and is the frontline regulator for listed companies, setting listings requirements and enforcing trading rules. The JSE sets the rules and procedures that govern companies listed on the JSE. The JSE Listing Requirements apply to new listings and regulate the corporate actions and continuing obligations of all currently listed companies, including issuers of specialist securities. They have an additional goal of ensuring that the business of the JSE is carried out with due regard to public interest (Harrison & Zack, 2012; Johannesburg Stock Exchange Limited, 2016; Masarira, 2014).

Table 4.5 provides excerpts from interviews illustrating the differences in interpretation by practitioners of the listing requirements. The left column presents quotations from participants that think there are indeed mandatory requirements for IR and SR for the JSE and the right column shows the opposing views.

Table 4.5: Practitioners Interpretation on Existence of Mandatory Requirements for Integrated and Sustainability Reporting for JSE Listed Firms

Views on existence of mandatory requirements	Views on non-existence of mandatory requirements
"Being a JSE listed requirement, you are supposed to subscribe to King IV code and being a responsible and transparent organisation, it is mandatory to report as a JSE listed company". (Interview: Participant 11)	"I don't think there are any mandatory requirements for reporting. GRI, the IIRC framework and the requirements of King III and King IV, the Carbon Disclosure project, all of those there are not statutory". (Interview: Participant 23)
"Yes, it is mandatory coming from King IV. On the boards that I seat on, there is no room for explanation. As board members' fiducial responsibility, we have to make sure that companies comply. It has become a standard for companies to provide integrated reports. King IV applies to all businesses". (Interview: Participant 20)	"Speaking to the JSE, they don't say its mandatory. In a way its mandatory, but the term that they prefer is that it's a listing requirement. The general understanding is that its mandatory, but because of the *proviso* that you can explain then it removes that mandatory requirement. It's a listing requirement where companies are encouraged to report". (Interview: Participant 29
"IR is mandatory for listed firms, I know it is, this is from King Code. The mandatory requirements do not have a link to the quality of reporting. The link is in forcing those firms to produce those reports. (Participant 28)	"It's not mandatory. You either apply and explain, so you can explain why you can't produce reports, but you have to have a good reason. You just look bad if you don't provide reports". (Interview: Participant 14)
"It becomes mandatory because you have to report on King IV basis. You have to apply and explain how you have applied. The quality is not mandatory". (Interview: Participant 12)	"I don't think it's mandatory. Everybody does it, you will be seen to be behind the time if you don't do an integrated report or sustainability report. It's now business norm in South Africa, but that does not mean its mandatory". (Interview: Participant 25)

Table 4.5 above clearly shows a real debate among practitioners regarding the existence of mandatory requirements for reporting by JSE listed firms. The author's view is that the interpretation differences emanates from the differences in understanding of the word "mandatory" between the legal and the practical meaning of the word.

The listing requirements are not explicitly mandatory in requiring firms to provide integrated reports and sustainability reports. There is also nothing in the Companies Act that compels a company to comply with IRC framework. The JSE requirements require firms to apply and explain King IV (Johannesburg Stock Exchange Limited, 2016). King IV recommends all organisations of any type to produce integrated reports and this has therefore become best practice in South Africa. The King Code of Governance of South Africa is a voluntary attempt by South African organisations to enhance broader stakeholder accountability (King, 2016). Since 2011, there has been a perception that integrated reporting and, by extension sustainability reporting, is mandatory for firms listed on the JSE, but after analysing the arguments of the practitioners and doing a desktop review, the researcher came to the conclusion that despite public perception on the existence of mandatory reporting requirements, there are actually no such mandatory requirements in the true sense of the meaning, as explained below.

The JSE listing requirement regulation 8.63(a) states:

> In addition to complying with IFRS, Section 30 of the Act and paragraph 3.84 of the Listings Requirements, issuers are required to disclose the following information in the annual report (in the case of paragraph 8.63(a), (l) and (q)), and in the annual financial statements (in the case of paragraph 8.63(b)–(k), (m)–(o)):
>
> (a) in respect of its application of the King Code:
> (i) and the implementation of the King Code through the application of the King Code disclosure and application regime (Johannesburg Stock Exchange Limited, 2016).

The JSE therefore requires the application of King Code of Corporate Governance, but the King Codes are a self-regulatory mechanism (Esser & Delport, 2017; King, 2009; Paterson & Kotze, 2009). The JSE listing requirements clarify the mandatory requirements and the voluntary nature of King Code in section 3.84 that deals specifically to Corporate Governance, which states:

> In addition to complying with paragraph 8.63(a), issuers must implement the following specific corporate governance practices and must disclose compliance therewith in their annual reports. (The effect of incorporating certain practices from the King Code in the Listings Requirements is to make their implementation

mandatory, this is notwithstanding the fact that application of the corporate governance practices in the King Code is generally voluntary) (Johannesburg Stock Exchange Limited, 2016).

King IV also sets out 17 overarching governance principles and under each principle are "recommended practices", which are suggested mechanisms for attaining the principles (King, 2016). As was the situation under King III (King, 2009), listed companies cannot choose to ignore King IV's principles. The disclosure regime applicable to the implementation of the principles and practices of King IV differs from King III. King IV amends the disclosure regime from "apply or explain" to "apply and explain" (King, 2016). According to the Cambridge Dictionary, mandatory is defined as “something that is mandatory must be done or is demanded by law” (Cambridge Dictionary, 2018).

King Code is voluntary in nature; however, the JSE requires all JSE listed firms to apply all King IV principles and explain how they applied the King Code. The practical implication of this is that a listed firm must have a good reason for not applying King IV as this, as well as IR and SR, have become business best practice for listed firms on the JSE.

All preparers interviewed in this study were producing integrated reports and all were producing some form of sustainability information as part of the integrated reports. The listing requirements are not explicit in explaining if sustainability reports are mandatory. There is however an implied meaning since integrated reporting is recommended under King IV and integrated reporting, by its definition, ought to include sustainability information. The JSE listing requirements do not directly prescribe integrated reporting but do so indirectly by making companies follow the King codes of Good Corporate Governance. King IV has taken a less prescriptive approach based on an “apply and explain basis” (King, 2016) and in the process promotes this as best practice.

This was also confirmed by to a practitioner who was part of the control sample and had previous experience in government. According to this participant, “Sustainability reporting is not regulated by government, there is no requirement that listed companies must submit sustainability reports to government” (Interview: Participant 35).

From various interpretations, it is evident that IR and SR are still not explicitly mandatory based on the mixed interpretations by hands-on sustainability practitioners. Furthermore,

there are no penalties for not providing such reports, based on what is prescribed in the listing requirements (JSE listing requirement, 2017). Of the 30 participants who participated in the semi-structured interviews, not one was aware of any penalties that arise from not providing sustainability and or integrated reports.

This is further confirmed by the absence of enforcement and penalties for IR and SR at the JSE. The practitioner's views on existence of penalties is graphically illustrated in Figure 4.3 below.

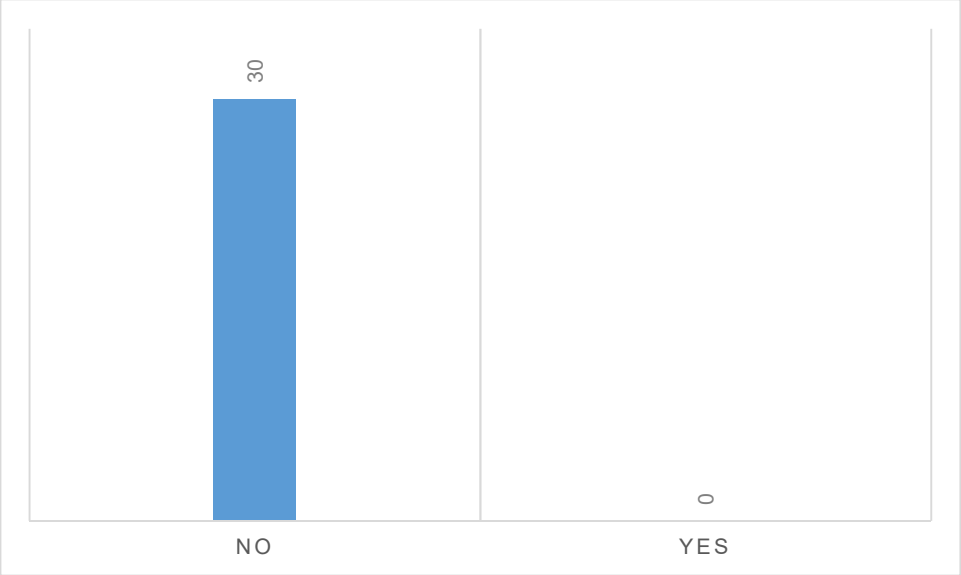

Figure 4.3: Practitioner's Views on Presence of Penalties upon Failure to Provide Sustainability Reports

Similar to the JSE listing requirements, all the participants in the control sample from SOCs mentioned the "Shareholder compact". Each year, SOCs in consultation with the shareholder (the Minister of Public Enterprises), agree on their performance objectives, indicators, as well as its annual targets in line with the Public Finance Management Act (1999). The trend is that certain key performance indicators are better communicated in an integrated or sustainability report. King Codes and the integrated reporting is widely regarded as best practice and hence SOCs provide integrated reports. This is described in detail under the findings from the control sample (Section 4.9). The shareholders compact is an equivalent mechanism that is promoting IR in SOCs in the same way as JSE listing requirements on application of King Codes.

Based on the explanation above, the researcher concludes that there are listing requirements that earnestly promote IR and SR to firms listed on the JSE, but those

requirements are not mandatory because they are not explicitly prescribed as such in the listing requirements and there is no enforcement mechanism available to make them mandatory. Furthermore, and more importantly, the application of what constitutes integrated reporting is subject to different interpretations as the listing requirements do not prescribe the IIRC framework as such. It is, however, very clear from the semi-structured interviews and desktop review that there is no formal mechanism at the time of the study that regulated the quality of the reports. Nonetheless, based on what emerged in this study, IR in line with the IIRC Framework and the SR in terms of the GRI is now business best practice for JSE listed firms (as explained in detail in Sections 4.6 and 4.7).

Some scholars have written about the introduction of mandatory listing requirements for reporting by the JSE and regard these requirements as mandatory (Ackers & Eccles, 2015; Carels, 2013; Chersan, 2015; Doni et al., 2016; Rensburg & Botha, 2013). The findings of this study therefore contradict this assumption and adds that listing requirements are not explicitly mandatory but indeed the listing requirements promote IR and SR.

After unpacking the implied meaning of the listing requirements, the next task was to understand the practitioners' views on the desirability of mandatory requirements for IR and SR.

4.5.3 Support for Mandatory Requirements for Reporting

The study showed that there was almost an even split in numbers between sampled practitioners that support mandatory requirements for reporting and those that are against mandatory requirements for reporting. This is illustrated below in Figure 4.4.

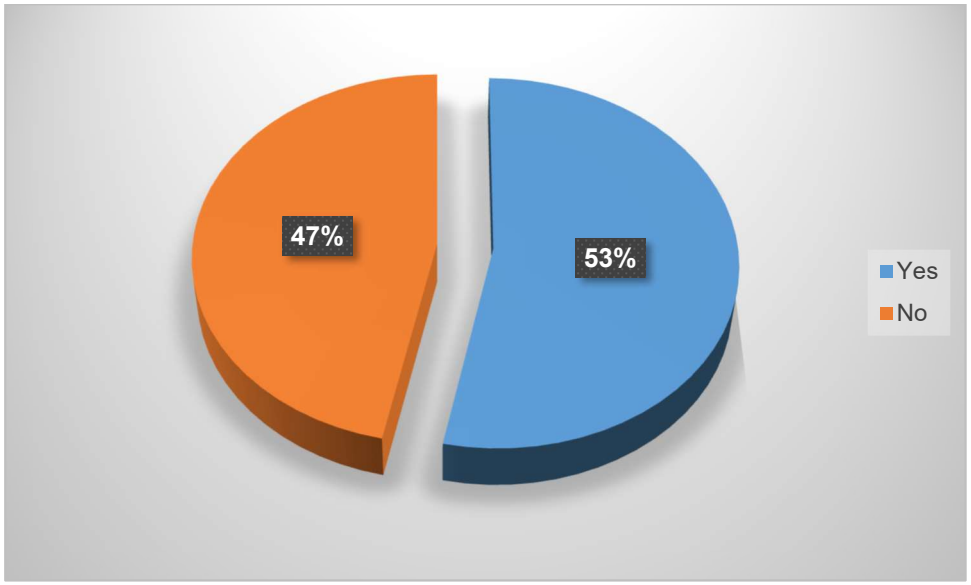

Figure 4.4: Practitioners' Support for Mandatory Requirements of Sustainability Reporting for JSE Listed Firms

There are mixed views on the desirability of mandatory requirements for IR and SR based on what emerged from this study. To illustrate this difference in opinion, a participant who was a critical reviewer of integrated reports was sceptical about introducing mandatory requirements for reporting. This is explained in more detail below:

> The problem is that, it is not easy to regulate because it is subjective. You need to explain the interconnection between the six capitals. The IR process must explain the interconnection. So, a company that produces a diagram and explain the six capitals and explain about each one of them, technically they have explained the interconnection. At what point is the interconnection good or bad? At what point is the interconnection really interconnected or not interconnected? That becomes so subjective. I don't think we could have a court of law say at this stage this is the line, everything on the left is acceptable and everything on the right is not acceptable. I just don't think you can do that as it's subjective (Interview: Participant 23).

In contrast to the views of the critical reviewer above, Participant 10, who is a report preparer from the banking sector, supported mandatory requirements but with limits:

"Mandatory requirements are necessary but with limits. The mandatory must be based on criteria, for example sector or size of firms. There must be a qualified criterion for mandatory requirements" (Interview: Participant 10).

The general trend from the interviews was that most of the participants who interpreted the listing requirements as mandatory were generally in support of mandatory requirements. Furthermore, according to Participant 1, "First prize is always voluntary but for consistency, mandatory requirements are required, but over prescription is not necessary" (Interview: Participant 1).

Another participant expressed their displeasure at the mandatory requirement for reporting: "It is not necessary, I am actually against making it mandatory. The listed companies have been reporting for a long time. The quality is a different issue. Beyond the listed companies, there is a gap. Companies that are big enough must also report and provide ESG" (Interview: Participant 16).

In agreement with Participant 16 above, a participant in the assurance category held the view that there are enough market forces to adequately push for better quality reports:

> The consideration of whether there ought to be mandatory environmental performance reporting requirements for JSE listed firms depends on whether the view is held that the current approach of opting to use recognised frameworks for reporting such information is ineffective or is not inducing an appropriate level or supply of relevant information on environmental performance for use by capital market investors. However, the market mechanism is available to reward reporters that report adequately and to punish (by withholding investment capital) those who do not report adequately or well. Ordinarily, one would want to encourage the application of the market mechanism in the first instance before resorting to additional regulation on this subject. Accordingly, to improve the quality of reporting of sustainability information, the key actors to induce better quality reporting should be the investor community who hold the real power to change the

quality of environmental reporting by JSE listed firms through access to capital (Interview: Participant 17).

From the study, it is clear that there are mixed feelings on the desirability of mandatory requirements for reporting. While it is clear that the quality of reports is not formally regulated, there are some market mechanisms in place for regulating quality of reports. Participants expressed some mixed views on the desirability of mandatory requirements for reporting, but there were more practitioners not in support of mandatory requirements than those in favour.

To address the research question, there was a need to understand the practitioner's perceptions on the quality of reports for the firms with which they are affiliated and provide a trend analysis. The next section provides the trend analysis on the quality of sustainability reports for firms on the JSE from the perspective of sustainability practitioners.

4.5.4 Reporting Quality Trend Analysis

The practitioners gave their perspective on the quality of sustainability reporting for JSE listed firms. As provided in Table 4.2, the number of years in sustainability reporting of the participants ranged between five to over 15 years' experience; hence most of the practitioners were able to provide their views on the trend in the quality of reports. Over and above the evidence from practitioners, the results from third party rating agencies were also used to assess any trends in report quality over a five-to-nine-year period.

a. Reporting Quality Trend Analysis (Primary evidence)

Practitioners on the JSE generally shared the view that the quality of sustainability reporting improved over the period between 2009 and 2017. This was also the view of the preparers, assurance providers and users of the reports. This view was also generally shared by practitioners across both the Critical and Non-critical Environmental sectors on the JSE and this is summarised in Figure 4.5.

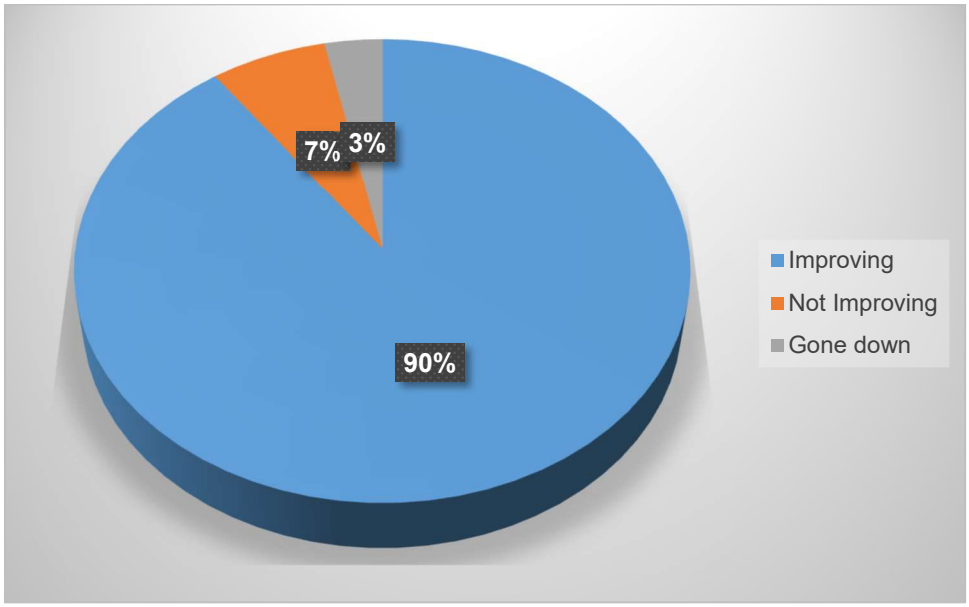

Figure 4.5: Sustainability Practitioner's Views on Trends in the Quality of Sustainability Reports (5 to 9-year period)

A report preparer from the resources sector made the following comment about the trend in quality of the reports:

> Even if I look at our reporting, when I started 9 years and now, the quality and quantity of our disclosure has improved. This is also the finding of Integrated Reporting Assurance Services (IRAS). They take all the sustainability reports of all JSE listed companies and assess them against a set of indicators. This has been done for four years. Basing on that, I can say companies are improving (Interview: Participant 5).

IRAS is a small boutique firm based in South Africa. They employ an index using GRI indicators and assess different companies which gives them a performance result and rank along with other players on sustainability disclosure.

Another report preparer from a large banking institution on the JSE made a similar comment:

> Since I joined the bank 6 years ago, reporting was in its infancy with low metrics and low targets. This did not stop us from setting high targets of becoming more efficient. When we started with sustainability reporting into the CDP and DJSI, we

> scored very low, but we used that information and feedback to inform improvement in our operations. Since the years, our reporting is very highly remarked (Interview: Participant 11).

There are two findings to be made from these quotations. The first is that 16 out of the 16 report preparers interviewed all indicated that the quality of reporting has improved significantly in the last five to nine years. The second finding is that there was no immediate mention of any link between improved quality and the JSE listing requirements. This therefore confirms that the report preparer's primary reasons for reporting are not the listing requirements but an interplay of several drivers.

The view of the preparers on improvements in quality of reports since 2010 is similar to the views of the sustainability assurance providers. Five out of five of the assurance providers interviewed also shared the same view with preparers that the quality of the reporting improved over a period of five to nine years. An assurance provider with over 15 years' experience across all sectors on the JSE made the following qualifying comment:

> Without having access to objectively measurable information about the quality of sustainability reporting of JSE listed firms or any improvement or deterioration thereof, my perception is that it has improved greatly. This is largely attributable to the advent and adoption of integrated reporting in South Africa for JSE listed firms and application of the IR Framework as a globally acknowledged best-practice approach or framework to guide the content of and approach to reporting sustainability information (Interview: Participant 17).

Interestingly, the above participant is the only one of all the participants who immediately linked the improvement in quality to the adoption of the IR Framework, despite others raising the same issue during the discussions which specifically addressed the determinants of sustainability reporting (covered under section 4.7). It was observed that the same participant hinted the role played by IR as the best practice and not as mandatory requirement. This same participant's view is that the listing requirements for applying King Code on reporting are not mandatory.

While the participant acknowledges the value of adopting King Code and the implied need for firms to provide reports, they also think it is not necessary to make sustainability reporting mandatory. The second finding from this highly experienced sustainability assurance provider is in reference to integrated reporting as a best practice approach. There is evidence based on this perception of sustainability practitioners that integrated reporting is regarded as best practice.

Another assurance provider who has experience in auditing sustainability reports shares a similar view, although they see differences in quality between different reporting companies, as expressed below:

> I have been in the field since 2002, there is a lot more companies reporting, but the increase has been a lot of compliance approach. In one respect, it has improved and the other it has not. The quality of reporting has improved for a certain core group of reporters and the reasons primarily because they are getting better at doing that. The number of companies that are reporting have increased. Those minorities that have increased on quality have improved because they have been long in it and are improving with time, but they are in the minority (Interview: Participant 18).

This confirms the view that report quality is improving but this may differ between firms. The meaning of compliance above refers to compliance with the core elements of the framework and guidelines and not listing or legal requirements because this participant indicated clearly that there are no mandatory IR and SR requirements for JSE listed entities. The idea that some companies are doing better because they have been doing preparing reports for a long time and have therefore learnt from previous mistakes is an interesting revelation that needs more attention. The drivers of sustainability reporting and the determinants of quality of reports are covered in sections 4.6 and 4.7 respectively. The agreement between the report preparers and report assurance providers who are both closely involved in the development process of reports is a clear confirmation of existence of genuine efforts to improve the quality of reports among JSE listed firms. However, the quality of reports is best measured by the users of the reports as explained hereunder.

The third category of practitioners were the report users. The users had similar views to the preparers and assurance providers. A typical comment that was made on the quality of reports is summarised by Participant 12, who argued that report quality "improved in the past few years. A lot of listed companies have done very well with Carbon Disclosure Project. You can see that thread into sustainability and there is a direct correlation" (Interview: Participant 12). The view that the quality of reports has improved was therefore shared by the users. There is a consensus, then, on the marked improvement in quality of reporting amongst the preparers, assurance providers and users of the reports.

There was however another category of practitioners, named critical reviewers. This group included academics, researchers and NGOs. In this group, there were mixed opinions on the trends in quality of reporting. While some of the participants in this category observed the improvement in quality of reporting, there was criticism in other respects. The first criticism raised by two participants was that the introduction of integrated reporting has resulted in loss of the detail that was previously being included in sustainability reports. The second type of criticism related to the omission of certain specific environmental issues in some sectors; for example, rehabilitation was not being reported adequately by mining houses. The third criticism was that some sectors were not reporting on their core business, a typical example being the banks that were not reporting the environmental impacts that result from their lending activities. The finding is thus that there is room for improvement on the quality of IR and SR among listed firms.

To provide an illustration on the criticisms above, a participant, who is in the academic fraternity and critical about the adoption of integrated reporting in general, made the following comment:

> In 2006/2007, South African companies were disclosing huge amounts of information. One of the critiques in some cases was that it was too much. The Integrated Reporting process which has shifted from sustainability to financial materiality has meant that most information is no longer presented which might have been relevant from a sustainability perceptive. There has been a reduction in quality between 2006 and today. There has been a shift with the coming of the IRC framework. It assumes the important stakeholders are shareholders…This means

> we are back to Friedman's business of business. If you go and read on IRC, it's a contested literature, as they are very critical of the erosion of sustainability from integrated reporting (Interview: Participant 24).

The above comments, while clearly confirming the debates in the literature, were not exactly based on a recent review of sustainability reports as the participant claimed to have not been reviewing reports for the past five years. The comments, however, assisted the researcher in referring back to the literature on the important issues raised. Indeed, integrated reporting has been evolving and this came with its own set of challenges as preparers were learning how to produce an integrated report for the first time. According to a global review paper published by ACCA in 2017, the evolution from the previous reporting to integrated reporting that summarises the organisation's multi-capital value creation will take time (ACCA, 2017).

A participant from an environmental advocacy organisation focused on specific issues that are being omitted by the resources sector:

> We assessed the environmental reports of 30 companies for a period of 8 years and we made findings and recommendations and last was in 2016. We found that there are big disconnect between environmental law and the way that reporting is done. For example, the biggest finding was, companies report that they report on financial penalties for non-compliance to environmental laws during the course of the year. If you look at any of the South African reports, they will tell we received no significant penalties for breaches of environmental laws. You never find a single one of them tell you that you can't get fines as that's not the way environmental laws work in South Africa. The Department of Environmental Affairs can't fine if you break the law. They can give you a directive, they can tell you to fix the problem. At the end of the day, they can prosecute you criminally, but you can imagine how effective that is. So, the bottom line is, it doesn't matter how bad your

violation of environmental law in South Africa is, you won't get a fine (Interview: Participant 25).

While there is clearly criticism from critical researchers, there remains an underlying acknowledgement that better reporting exists. This was the view of most participants, excluding 2 participants out of the 30 who did not share this view. The critical reviewers generally raised the need for reporters to be more transparent.

Another participant from the same category made a comment on the need for firms to go beyond merely providing good reports in order to embrace integrating thinking more generally. One participant was quoted as saying, "There are some improvements in quality of reporting. Non-financial information is valuable. My issue is that people have been focusing on reporting. There is integrated reporting but there is not enough integrated thinking that contributes to performance" (Interview: Participant 26).

The evidence that came from the semi-structured interviews clearly shows that, in general, the quality of reporting for JSE listed firms has significantly improved in the last five to nine years. This finding is similar to a recent study for Brazilian firms listed on the Corporate Sustainability Index. The study employed a descriptive analysis that showed that the quality of reporting improved between 2008 and 2014 but scores were still low (Ching et al., 2017). Supplementary evidence is provided from secondary sources in the next section.

b. Quality Trend Analysis from Supplementary Secondary Sources

There are several rating agencies on the global market which attempt to measure sustainability. Examples include EIRIS, FTSE4Good, Asian Sustainability Reporting (ASR), Bloomberg ESG disclosure scores and many others (Bonsón & Bednárová, 2015; Siew, 2015). They do this periodically for various purposes, but their main objective is to provide information to investors. The most commonly referred to rating agencies by participants are the FTSE4Good and the CDP (see Figure 4.6).

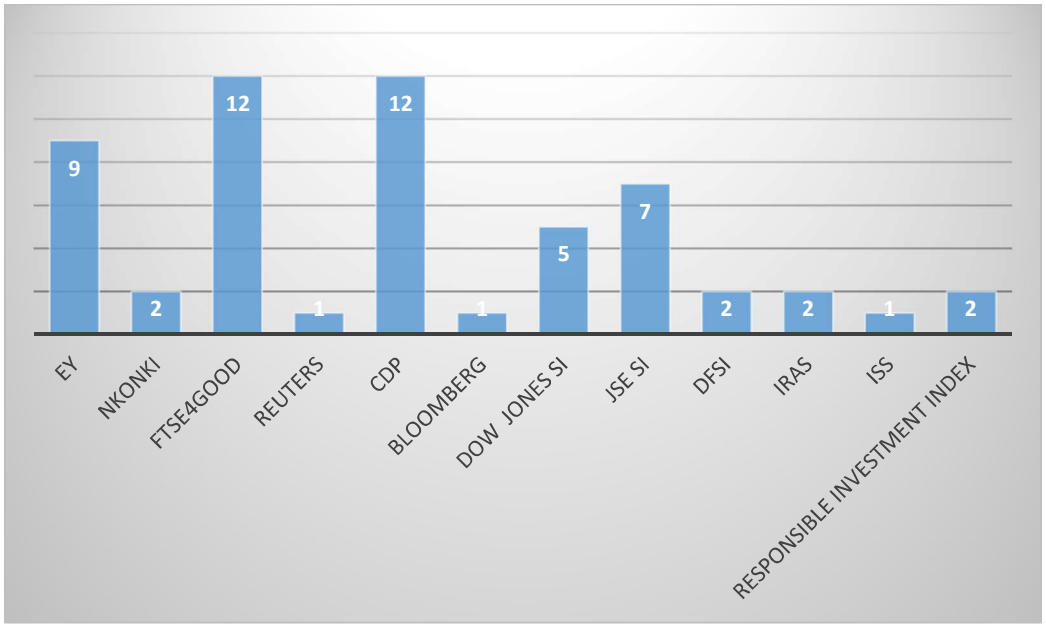

Figure 4.6: Practitioner's Most Quoted SR Rating Agencies & Award Organisers

The FTSE4Good is now in partnership with the JSE, although the participants to this study did not refer to that change. EY was mentioned with reference to an annual integrated reporting award ceremony that EY is hosting and organising. There were also other rating agencies, such as Reuters, DFSI, IRAS and ISS that participants mentioned.

The main source of secondary data in measuring trends in the quality of reporting was taken from the CDP, formerly known as the Carbon Disclosure Project. Information on the CDP for South Africa is publicly available and tracks reporting trends over a period 5 years. There is also fair representation of JSE firms that are participating in the CDP and in the process their submissions are being rated in comparison to other firms in various sectors in the country and globally (CDP, 2017). The CDP uses a methodology and a scoring method that is widely accepted across many firms globally. It is within this context that the study draws from many years of experience of scoring done by the CDP and this provides key evidence for addressing the research question of this project. Unfortunately due to limited data, the secondary data is not for the entire period of nine years but sufficient in providing evidence on trends in quality of reporting.

The CDP Climate Change South African data analysis and reporting tools are available on the CDP website. The NBI, CDP's local partner in South Africa, has traditionally used a sample of the top 100 companies by market capitalisation on the JSE (JSE 100). It is

observed that in 2017 a change was made to the sampling methodology and care was applied in making comparisons across reporting years. This change was introduced by including heavy emitters in the sample (this was done to assist in tracking performance against the Paris Agreement) and the introduction of a disclosure fee due from companies responding to CDP. A large group of companies were also included in the JSE 100 sample who had chosen to respond voluntarily (CDP, 2017).

CDP provides a single score that assesses progress towards environmental stewardship as reported by a company's CDP response. The score assesses the level of detail and comprehensiveness of the content. The score further assesses the company's awareness of climate change issues, management methods and the progress the company has made towards taking action on climate change. Performance is rated in bands from A to D, with A being the highest band and D the lowest. CDP strengthened their scoring criteria in 2017 to allow for comparability over time. The responding companies that achieved over 80% in the leadership score receive the band A rating and they are classified in the Climate A List. This prestigious list is a record of the planet's top performing companies and spans all of the samples globally (CDP, 2017).

The South African organisations performance scores for 2017 remained extremely positive, like in previous years. There is, however, a drop in the companies scoring an A, which have gone down from 37% in 2016 to 28% in the JSE 100 sample and 20% in the full sample. This decrease is partially explained by a strengthening of the CDP scoring criteria in 2017 (CDP, 2017). The majority of companies however score a B (45% in the JSE sample and 41% in the full sample). The rest of the sample score a C with only 1% of the JSE 100 sample scoring a D and 6% of the full sample scoring a D. This aggregation towards the top is a positive reflection of South African companies (CDP, 2017). Table 4.6 shows the top South African firms that made it to the top of the CDP Climate Change list.

Table 4.6: South African Top Performers on the CDP Climate Change List

Company Name	Sector	2017 Performance	2016 Performance	2015 Performance	2014 Performance	2013 Performance
Capital & Counties Properties	Financials	A	B	B	B	C
Harmony Gold Mining Company	Energy & Materials	A	A	A	A	A
Nedbank Limited	Financials	A	A	A	A-	B

Source: SA edition, Climate change report, CDP (2017)

According to the CDP, a total of 92 South African companies are providing climate data to CDP. This data is also amongst the most complete in the world, with 100% of responding companies disclosing scope 1 and 2 data, while 91% disclose two or more scope 3 categories (CDP, 2017). CDP results show a positive trend in reporting over a five-year period. The results from supplementary secondary sources confirm the findings of the sustainability practitioners as described in the previous section (CDP, 2017).

Rating has also been done by a local auditing firm called Nkonki. The results also show improvement over a five-year period (Nkonki, 2016b). A comparison of both primary evidence and the outcome from the CDP confirms the trend that the quality of reporting has been improving for JSE listed firms. The next section takes the form of a sectoral comparison on the quality of reporting basing on primary evidence and supplementary secondary sources.

4.5.5 Sectoral Analysis on Quality of Reports

There are 19 super sectors on the JSE as per the Industry Classification Benchmark (ICB), which came into effect on 30 November 2009. Table 4.7 provides a list of the sectors used in the study for comparison purposes.

Table 4.7: JSE firms Industrial Classification Benchmark (ICB)

	Sector	Code
1.	Oil & Gas	0500
2.	Chemical	1300
3.	Basic Resources	1700
4.	Construction & Materials	2300
5.	Industrial Goods and Services	2700
6.	Automobile & Parts	3300
7.	Food and Beverages	3500
8.	Personal and Household Goods	3700
9.	Healthcare	4500
10.	Retail	5300
11.	Media	5500
12.	Travel & Leisure	5700
13.	Telecommunication	6500
14.	Utilities	7500
15.	Banks	8300
16.	Insurance	8500
17.	Real Estate	8600
18.	Financial services	8700
19.	Technology	9500

Source: JSE, 2016

a. Evidence on Sectoral Analysis from the Interviews

Practitioners were requested in the 30 semi-structured interviews to compare reports with those of their peer organisations in the same sector and also those outside their sectors. According to the outcomes of the semi-structured interviews, the quality of sustainability reports differs between the various sectors on the JSE. While there are 19 sectors on the JSE, based on the responses from the study emanating from the structure of the question, the sectors that were mentioned were frequently mentioned included the resources (mining), financial (banks), manufacturing and retail sector.

The resources sector is regarded as the sector producing the best quality reports. This sector includes the leading mining companies and other environmentally high impact

resource-based companies. After the mining sector, the banking sector is viewed as starting to produce good reports. The industrial goods & services sector, which participants call the manufacturing sector, is rated third highest although with a low score.

Figure 4.7 is a graphic representation of the ranking of report quality between the sectors on the JSE.

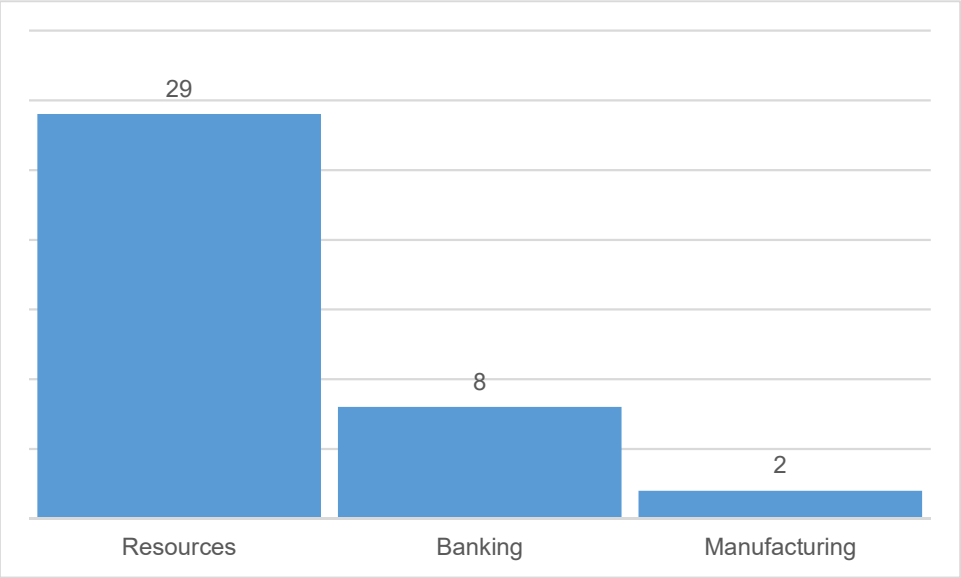

Figure 4.7: Leading JSE Sectors on Quality of Sustainability Reporting-Practitioner's Perspective

It also emerged that even in other sectors that were not leading, there are one or two firms that produce good reports. In summary, the resources and banking sectors are leading the sustainability reporting on the JSE as per the views of practitioners across different sectors inclusive of preparers, assurance providers, users, and critical reviewers of reports. It was, however, observed that the discussions on sector analysis were more detailed during interviews with assurance providers as these participants are regularly exposed to various sectors during their auditing of firms.

A participant from the mining sector made the following comment on sectoral differences in reporting:

> From a sustainability point of view, the resources sector reports better because it is under the microscope. It has real issues in terms of impact and social expectations, social contract and real issues in terms of regulatory attention, unlike other sectors.

> In return, the resources sector provides more information in terms of reporting (Interview: Participant 1).

The comments above provide some insight into the possible connection that exits between the quality of reporting and the sensitivity of the sector. Another participant from the banking sector indicated that this sector was producing good reports as compared to other sectors, but they acknowledged the higher quality of reporting by the resources sector and explained this as follows:

> The banking sector is up there in terms of reporting. There is a lot of attention on the banks and hence you need to be good at communicating. We are right among the top. The bank is comparable to the resources sector. We just attended an international meeting of 25 international banks, no one was doing the type of reporting we are doing (Interview: Participant 10).

The view that the resources sector and banking were the best reporting firms was confirmed by a participant from the retail sector with previous experience working in the banking sector and as an assurance provider. The comments this participant made were: "I tend to find that the financial services and resources companies do better. It's because the two sectors are highly regulated. There is the Mining Charter. The resources have a high impact, then it is expectations. The banking sector is very regulated, they have the Banking Charter" (Interview: Participant 12).

The higher reporting standards by the resources sector was also explained in a different manner by a participant from the insurance sector:

> The high impact sectors must be better at reporting more comprehensively because they have more impact. If you release your acid mine drainage into the river that will affect the communities downstream. Imagine, a company in the middle of town like an insurance company, releasing their sewage into a sewage system that they are paying for and have no impact on the river. There has however been a push to all industries because of environmental disasters (Interview: Participant 9).

Elaborating on the above and to summarise the strong position of the resource sector in the sustainability reporting arena, a participant who is an assurance provider with significant exposure to most of the sectors on the JSE made the following comment on the sectoral differences in reporting:

> The resource sector is one of the earlier adopters and hence the sector is very good. They started on environmental reporting earlier because of their massive environmental impact. The mining sector is very good and strong. The banks are very strong these days. The banks were late adopters, but they are doing well now and hence have caught up. The retailers, there is one or two pockets of excellence, but retailers are not hugely strong in this space. The manufacturing sector it is the same as retailers, they are lagging. The construction sector does basic reporting, they are never up there (Interview: Participant 18).

The concept of the sustainability reporting journey is also clearly illustrated by the above highly experienced SR assurance provider. The resources sector is therefore regarded as an early adopter of reporting. Finally, a participant who is a critical reviewer of sustainability report argued that,

> Back in 2006, there were sectors which were very good. We looked at top 40, we had resources sector that is the mining, they were generally very good at reporting. You had middle tier which were financial services which were nowhere on environmental reporting. Every sector had an exception…In the last ten years there has been a compression. Banks have definitely caught up with the resources sector (Interview: Participant 24).

This comment shows that the earlier finding that the listing requirements cannot be solely responsible for improved quality of reporting because good reporting by many listed companies predates the commonly referred to JSE listing requirements for integrated reporting. This means that there are more influential drivers of reporting than the listing requirements.

Overall, five themes emerged in the investigation into sectoral differences in report quality. Firstly, the leading firms in producing better quality environmental sustainability reports are the resources, banking and the industry goods sectors in that order. Secondly, in the other sectors, there are normally exceptional individual good reports that stand out; this is particularly true of the retail sector. Thirdly, there is a consensus among practitioners that the high environmental impact sectors such as mining tend to produce good reports. Fourthly, there is a trend that suggests that the resources and banking sectors are leading in reporting quality partly because the two sectors are the most regulated in general. Finally, the quality of a firm's reports is related to the length of time an organisation or sector has been reporting. The resources sectors were early adopters of sustainability reporting; hence they have the experience in reporting. It was evident that reporting is like a journey. It was for this reason that the researcher coined a term for this journey, called "sustainability reporting life stages".

b. Evidence from Supplementary Data of Sectoral Analysis

Evidence on sectoral differences in quality emerging from the thematic analysis of interviews with sustainability practitioners was cross-referenced with evidence from a review of the results of longitudinal third-party rating agencies and the CDP.

The CDP recognised three companies responding in South Africa who are listed on the global A List. A company in the resources sector was recognised as making the A List in 2017, five years in a row. Another large banking institution made it onto the List three years in a row and four in total. There was also a company in the properties sector that made it onto the A List (CDP, 2017).

The findings also agree with local ratings by Nkonki, an auditing firm whose head office is in Johannesburg. Nkonki's ratings show a high number of resources and financial institutions in the top 10 (Nkonki, 2016b).

The results from ratings by third parties also confirm the outcome from the interviews that the resources and banking sectors are leaders in sustainability reporting.

4.5.6 Summary of Findings for Research Question 1

Table 4.8 below is a summary of all the key findings pertaining to this research question.

Table 4.8: Summary of key findings for Research Question 1

	Findings of the study	**Section**	**Source of Evidence (Pri/Sec)**	**Confirmed by Control sample (Yes/No**
1.	Amount of environmental disclosure is not synonymous with quality of sustainability reporting	4.5.1	Primary	No
2.	There are mixed interpretations on whether the JSE listing requirements are mandatory or not	4.5.2	Primary	Yes
3.	IR and SR are not explicitly mandatory for firms listed on the JSE	4.5.2	Primary & Secondary	Yes
4.	IR and SR are now business best practice for South Africa listed firms and SOCs	4.5.2	Primary	Yes
5.	There are listing requirements that promote IR and SR on the JSE	4.5.2	Primary & Secondary	Yes
6.	There are shareholder compacts (performance indicators agreed between shareholder and organisation) that promote IR and SR for some SOCs in South Africa and these are almost equivalent to listing requirements at JSE	4.5.2	Primary & Secondary	Yes
7.	There are mixed views on desirability of mandatory requirements for SR and IR	4.5.3	Primary	Yes
8.	There are existing market forces adequate to promoting better SR report quality	4.5.3	Primary	Yes
9.	Quality of IR and SR is not formally regulated for JSE listed firms	4.5.2	Primary	Yes
10.	There are no enforcement mechanisms and penalties for IR and SR for JSE listed firms	4.5.2	Primary	Yes

11.	Quality of reporting for JSE listed firms has improved in the last five to nine years but this cannot be solely attributed to listing requirements	4.5.4	Primary & Secondary	Yes
12.	Report preparers do not connect improved SR quality with listing requirements	4.5.4	Primary	Yes
13.	There is room for improvement in SR quality for JSE listed firms	4.5.4	Primary & Secondary	Yes
14.	There is need for more transparency of SR of listed firms	4.5.4	Primary	Yes
15.	There are sectoral differences in quality of SR for JSE listed firms	4.5.5P	Primary & Secondary	Yes
16.	In general, the best performing sectors are resources, banks and industrial goods sector. There are exceptional reporters in other sectors	4.5.5	Primary & Secondary	Yes

The next section captures the findings for research question 2 on drivers of sustainability reporting.

4.6. Findings for Research Question 2

What are the real drivers for sustainability reporting for JSE listed firms?

The thematic analysis from the semi-structured interviews revealed that the practitioners provided more than one motivation as to why JSE listed firms are providing sustainability reports. A closer analysis further revealed that the motivations for reporting and the quality thereof were either externally or internally driven. For that reason, the study categorised the motivations into two categories to analyse the issues better. In summary, there were approximately 113 times where codes on motivations (drivers) were provided; these were categorised as external drivers. Internal drivers were coded a total of 46 times. Just as an example, if the motivation came from a legal requirement, then it was regarded as an external driver. If the motivation for reporting was executive leadership commitment, then it was categorised as an internal motivation. The external and internal drivers of reporting are provided in detail below.

4.6.1 External Drivers for Reporting

Figure 4.8 illustrates that the number of external drivers that were broadly defined was fourteen in total. The most important reason given for providing the reports was stakeholder expectations. This finding was confirmed in majority of sectors on the JSE. The most significant external drivers for reporting were stakeholder expectations. Other than stakeholder expectations, the other significant external drivers included listing requirements, legal requirements, competition among reporting firms and pressure from investors.

Figure 4.8: External Drivers for Sustainability Reporting for JSE Listed Firms – Practitioner's Perspective

It is evident from the outcomes of the interviews with sustainability practitioners that there are many forces at play in both motivating sustainability reporting and the quality thereof for JSE listed firms. From the graph presented in Figure 4.8, it is clear that stakeholder expectation constitutes the "lion's share" of the external drivers of reporting for the JSE listed firms. A similar finding was made on the control sample of SOCs, which is provided in section 4.8.

A closer analysis of Figure 4.8, with particular reference to coding, reveals that other categories such as shareholders, investors, legal requirements can also point to the value placed on stakeholders if the real definition of stakeholders is applied in terms of King IV ((King, 2009).

There were many other drivers for reporting besides stakeholder expectations. Just as an illustration, the response from Participant 3 provided a range of internal and external drivers of reporting, as quoted below:

> The improvement in quality of reporting is a blend of many factors. It started of being **compliance**. We thought we were doing well in terms of JSE ratings such as FSTE4Good, then realised we had some gaps and then the focus was on **best practice**. We realised best practice is there, and we are over here, so what we reported always satisfied compliance. The JSE listing requirements tell us we need to apply King IV matters, we need to talk about environmental issues, we need to talk about mineral reserves, governance and many other things. There is compliance level and best practice (Interview: Participant 3).

It was evident that the majority of the participants provided many reasons why they were providing sustainability reports. The comment above reveals two themes that continuously emerged in the interviews. The first being that reporting is a journey, which brings challenges, learning curves, adjustments and advancements in a reporting organisation over a period of time. Participant 3 is senior executive responsible for cross-functional sustainability management for a leading South African resources-based firm with some global presence. The second theme that emerged was in reference to the best practice. The question that came up was thus, what is the best practice in sustainability reporting? A search in the academic literature does not fully elaborate on this hidden but very real concept of best practice in sustainability reporting.

In keeping track of the research question on drivers of sustainability reporting, as it emerged from the semi-structured interviews, the main external drivers of reporting are provided hereunder.

a. Stakeholders Demands

Stakeholder's expectations are the main driver for sustainability reporting among firms on the JSE.

In analysing stakeholder issues, it was critical to have a firm definition of the term "stakeholder". King IV defines stakeholders as:

> Those groups or individuals that can reasonably be expected to be significantly affected by an organisations business activities outputs or outcomes, or whose

> actions can reasonably be expected to significantly affect the ability of the organisation to create value over time. "Internal stakeholders" are directly affiliated with the organisation and include its governing body, management, employees and shareholders. "External stakeholders" could include unions, civil society organisations, government, customers and consumers (King IV, 2016, p. 17).

While King IV has become the business norm in South Africa, it became clear during the interviews that, in the back of their minds, the practitioners know the broad definition of stakeholders in terms of King IV. However, in many cases the term stakeholder was used by many participants to refer to external stakeholders only. This was easily observable because in most instances participants would mention stakeholders and then in the same sentence also talk of shareholders, the board, employees, investors and others as if the latter were not stakeholders. This is the reason why stakeholders were categorised under external drivers because normally the term was used with reference to external stakeholders.

Here is a typical example from the interviews that explains the above situation, where participants applied a narrower meaning to the term stakeholder: "For the financial sector, stakeholder pressures are low on environmental issues. We only have two NGOs following our sustainability. Shareholders are interested, investors a little and employees a little interested" (Interview: Participant 14). There were also instances where the definition of stakeholder was used in its King IV meaning. For example, "There is an element of stakeholder pressure both internally and externally. Internally you want to be able to make better decisions so that you know what is happening in the business. Externally you want to be able to build trust with the stakeholders" (Interview: Participant 9).

This process of coding the implied meaning of stakeholders required a lot of time, but that distinction was achievable through reading and re-reading the transcripts. The study shows that, for JSE listed firms, stakeholder expectation is a key motivator for firms to provide sustainability reports. This is true in both instances, either when the narrower definition of stakeholder is used and when the broader definition is used.

A closer analysis on the motivations of external drivers for reporting provides further hints on another source of "mandatory" requirement for reporting. According to a participant from the resources sector, the mandatory requirements emanate from stakeholder expectations:

> However, you can't avoid sustainability because of potential reputational impact. Every year, FSTE4Good, International Responsible Mining (IRM), and other rating agencies rate us and that makes it important and you absolutely have to report on sustainability. It's therefore reputation management but by default it becomes mandatory. You realise if you don't do it you have a problem in terms of reputation (Interview: Participant 3).

While all the participants confirmed that there were no penalties for not producing the reports, most participants hinted on the negative consequences of not producing the reports (Figure 4.9).

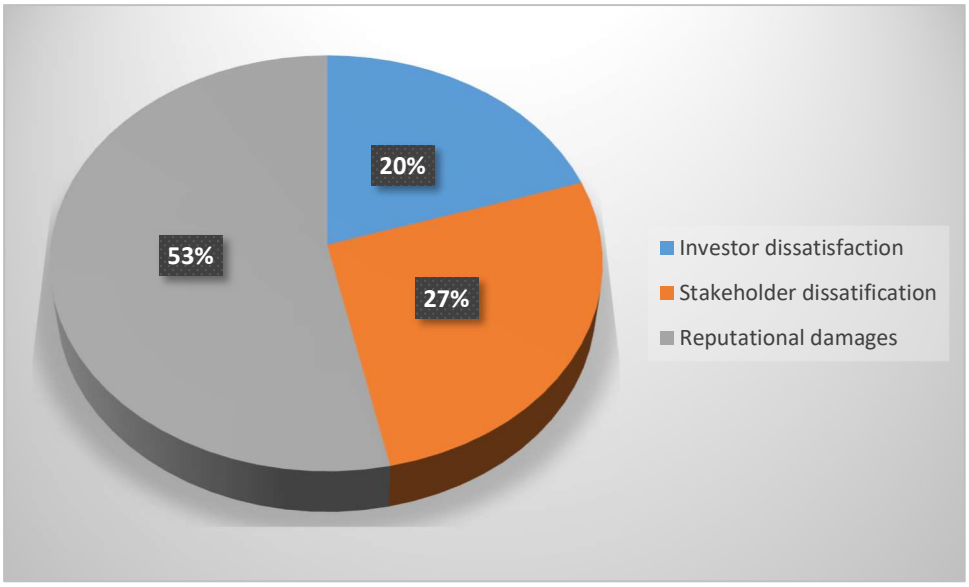

Figure 4.9: Potential Impact of not Producing Sustainability Reports as a JSE Listed Firm

It is evident that huge pressure is placed on listed firms to report because of stakeholder expectations. A closer analysis of the comments from preparers reveals that the demands

are so high that reporting can be interpreted as being compulsory. Stakeholders have a significant role to play in the IR and SR context of JSE listed firms and also in the context of large SOCs, as shown in Section 4.9.

It is clear from the primary and secondary data that the requirements are sometimes perceived as mandatory but in fact they are not explicitly mandatory. While the reporting is not mandatory in the real meaning, the high stakeholder demands imply that it is to a large degree mandatory in a practical sense. This partly explains why the requirements are sometimes perceived as being mandatory by some practitioners.

Besides stakeholder expectation, there are many other drivers of sustainability reporting, such as listing requirements, legal requirements, competition and pressure from investors, as explained in the following sections.

b. Listing Requirements

The JSE Listing Requirements set out the rules and procedures that govern companies listed on the JSE. The JSE Listing Requirements apply to new listings and regulate the corporate actions and continuing obligations of all currently listed companies. They have an additional goal of ensuring that the business of the JSE is carried out with due regard of the public interest.

The listing requirements are therefore critical as far as promoting the adoption of King Codes of Good Governance. Some sectors, such as mining, produced detailed reports before the listing requirements were even introduced. The listing requirements thus contributed immensely by creating an expectation for firms to report, possibly even for new firms on the JSE that were late adopters for IR. Listing requirements were the second most frequently mentioned external driver for reporting by practitioners after stakeholder expectations. A comment from Participant 27 from a large South African institutional investor illustrates this: "Integrated reporting is not common in non-listed firms. Firms will only do the bare minimum in terms of reporting. It is by design because if you want to be a listed firm, there are requirements that you need to fulfil" (Interview: Participant 27).

It was also interesting to find that some firms operating outside South Africa follow King IV. A participant who was part of the control sample and who has experience in integrated reporting for a listed firm in a neighbouring country (Botswana) explained:

> We follow JSE requirements when on the Botswana Stock exchange. This is because the Botswana Stock exchange requires the information. The Botswana stock exchange follows almost what happens on the JSE. We follow what is best practice. They recommend the use of King code of good governance (interview: Participant 33).

The above shows that the King IV Code of Corporate Governance, while not statutory, is regarded as the "Best practice" for reporting in South Africa and in other jurisdictions outside of the country.

The listing requirements on integrated reporting alone cannot explain the improvement in reporting quality. The following section therefore specifically deals with drivers that are classified as legal requirements, which were the third most important driver of sustainability reporting for JSE listed firms.

c. Legal Requirements

South Africa's environmental legal regime has been fast evolving in the past two decades to respond to the ever growing global and national drive towards sustainable development. The study showed that the legal requirements have an indirect influence in pushing firms to provide sustainability and integrated reports because the laws have specific demands for reporting in compliance with South African law. The law does not require corporate sustainability reports, but it is convenient for firms to provide certain information of a legal nature to the stakeholders through integrated reports. Integrated reporting is probably the best option for companies operating in highly regulated industries to communicate their compliance with the laws of the country. Furthermore, government authorities are also a key stakeholder for most companies.

A participant who is from the resources sector explained the pressure from legal requirements as follows:

> For us it's legislation, for example licences, now carbon tax coming on in the near future, Department of Mineral Resources requirements and others. Just a couple of years ago, in one year there were 52 changes in legislation that had an impact on us (Interview: Participant 4).

As described in the previous section on sectoral analysis of reporting, one of the reasons for relatively better reporting in the resources and banking sector is due to regulations. Another participant from the retail sector, but with previous experience in the financial services and assurance, explained the importance of legal requirements:

> I tend to find that the financial services and resources companies do better. It's because the two sectors are highly regulated. There is the Mining Charter. The resources have a high impact, then it is expectations. The banking sector is very regulated, they have the Banking Charter (Interview: Participant 12).

Participant 6 from the resources sector also confirmed the pressure from legal requirements by stating that, "We need to adhere to all legislative and other requirements. We therefore want to highlight our compliance to legislation" (Interview: Participant 6). It is therefore evident that reporting entities view the suit of integrated reporting documents as the best avenue for communicating their compliance with regulations to stakeholders.

There are many legal requirements for mining companies based on their operations, such as the Social Labour Plans and Mining Charter, both of which emanate from the Mineral and Petroleum Resources Development Act (28) of 2002. In other sectors, the material impact on the environment is not that high. The other sectors struggle to report because they do not have operational compliance issues as much as the mining sector. Evidence from the interviews with practitioners, along with the information gleaned from the literature review, shows that some of the reported issues are mandatory as stipulated in legislation while others are not legislated (Paterson, Alexander; Kotze, 2009).

The Department of Mineral Resources requires mining firms to report on progress on the mining charter, compliance to Social & Labour Plans and other issues. In many instances, those legislated aspects then find expression in the sustainability and integrated reports. It is convenient and more efficient for the companies to use the integrated report as a primary means of engaging with all stakeholders. This study finds that there are certain legislative requirements in high impact sectors, which have a strong indirect influence on IR and SR for firms listed on the JSE.

d. Competition

Competition is driven by the intrinsic desire to out compete others, which is the nature of capitalism. Competition was raised frequently by practitioners as a key driver for reporting. This is described clearly by Participant 1, who is from the resources sector: "The sector probably has leaders and followers and we were amongst the leaders. Overall, people tend to look at the listed companies as a universe, we have done well compared to all listed companies. We have done well within the resources group".

Participant 2, also from the resources sector, reiterated the prevalence of competition in the resources sector: "Our sustainability reports have won awards year on year. There has been a good improvement in the last five years".

Nearly 83% participants mentioned the role of third-party rating agencies, such as FSTE4Good, Dow Jones Sustainability Index or awards being organised as motivators for reporting. Based on primary evidence and supplementary data sources, the study found that competition is a key driver for reporting amongst firms listed on the JSE.

e. Investor Pressure

The investor's interests and their information requirements over time influences the integrated reporting space. This was explained by participants that suggested that, while there were no penalties directly for not producing reports, there were possible ramifications for not reporting, such as jeopardised relations with investors. According to another participant, failure to provide reports could lead to financial consequences:

> There is no fine for not reporting but there are reputation penalties, which down the line become an economic sanction because, for example, if your reporting on environment is weak, this will show in the ratings of big rating agencies at the JSE and this will be considered by large investment corporations such as pension funds. The rating agencies analyse the performance of firms and sell the information to investors, hence environmental performance has a long-term impact on share price (Interview: Participant 3).

Firms on the JSE have investors from many parts of the globe. IR means that firms have an opportunity to present to investors and other stakeholders the organisation's long-term

prospects as well showcase its vision and performance (Couldridge, 2014). Pressure from investors have an influence in SR and IR for firms on the JSE based on primary and secondary data sources.

f. Risk & Opportunity

The risk and opportunities associated with sustainability reporting also have an influence on the evolution of the sustainability reporting for firms on the JSE. This was explained by Participant 21, who said that, "The mining and minerals sector has greater risk, therefore they have more reporting". The risk and opportunities associated with sustainability are not limited to the resources sector; they exist across the board. A participant from a large bank explained this:

> To the opportunities side of things, it has been a total shift, we have an entire team of 12 people looking at renewable energy. They look at renewable energy projects because it's a commercial opportunity. We were a little slower on uptake than other sectors (interview: Participant 14).

In some cases, opportunities come out as business imperatives, such as energy saving programmes that become successful, and the firm chooses to communicate such business efficiencies to its stakeholders via the integrated report.

g. Shareholders

It appears shareholders have a minimum role in influencing reporting within the South African listed space. Participant 22 said, for example, that "There is not much shareholder activism in the country". There is, however, a growing trend that suggests some shareholders are influencing some of these issues primarily through their board representation as it emerged in discussions with participants.

h. Role of Reporting Frameworks and Guidelines

The most commonly referred to frameworks and guidelines for reporting by practitioners interviewed are GRI, IRC framework, CDP and a range of other UN frameworks (see Figure 4.10).

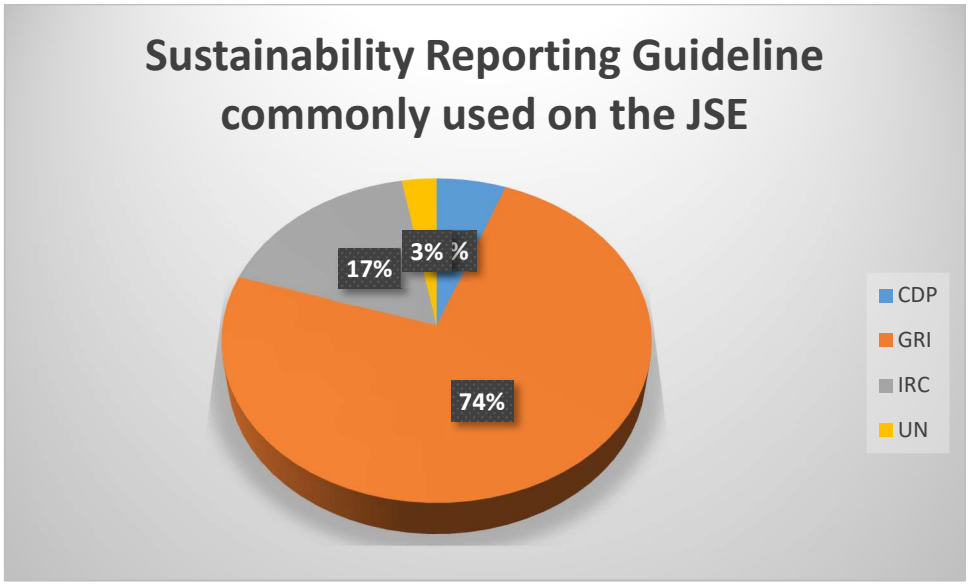

Figure 4.10: Commonly Referred to Frameworks for JSE Listed Firms

The GRI is the *de facto* reporting guideline for sustainability reporting for firms on the JSE. The other commonly referred to framework is that of the International Integrated Reporting Council (IIRC). The IIRC is a global coalition of regulators, investors, companies, standard setters, the accounting profession and NGOs. Together, this coalition shares the view that communication about value creation should be the next step in the evolution of corporate reporting. The International Framework has been developed to meet this need and provide a foundation for the future of reporting.

The guidelines have made a great contribution in shaping the integrated reporting space for JSE listed firms as these provided the foundation and tools needed for organisations to start reporting. When asked if there were enough guidelines for reporting, nearly all participants expressed satisfaction with the frameworks and guidelines available on the market. According to Participant 10, "There are enough guidelines. There is the GRI and IIRC framework". This was reiterated by Participant 1, who expressed that "GRI is probably the most universal form of reporting, the others tend to be issues specific". These comments were the general views of the practitioners.

i. Role of Rating Agencies

Rating agencies have an impact on the sustainability reporting space. According to Participant 1, "One would be chasing CDP, JSE SIR, FSTE4Good, Dow Jones Index, Sustainable Development Goals and also these call for sustainability, however there are now universal".

I. FSTE4Good

Apart from the CDP described earlier, another highly referred to third party rating agency on the JSE is FTSE4Good. They produce reports on sustainability performance by JSE listed firms which are used by investors. FTSE4Good and the JSE Sustainability index are now in collaboration and, together with CDP, are the two rating entities that have a large bearing on entities on the JSE. It is the goal of most firms to be viewed in a good light. This leads to the consistent improvement of report quality.

It is clear from evidence emerging from the primary and secondary data that the rating agencies are active on the JSE and that the preparers pay attention to what they are looking for. This means that reporting firms develop their reporting to meet the information requirements of global rating agencies.

Referring to the trend in and motivation for quality in reporting, Participant 3 explained that "I think it has gone up by a factor of 4. This is because we use the GRI and we are far more aware of what to disclose because the FSE4Good would come and point out on areas not disclosed for example on waste, biodiversity, policy".

II. CDP

Most of the firms participate in the CDP, meaning that their submissions are being rated in comparison to other firms in various sectors. According to a participant, the CDP has contributed to quality of reporting:

> The CDP is the biggest driver across all sectors. The CDP does not only force you to calculate your carbon footprint, but you have to explain how you are actively involved in reducing the carbon footprint. CDP is requested by investors. It's voluntary but has a reputational impact. It's however compulsory for top 100 JSE firms. CDP is a driver because you have the data; hence you can report on the data (Interview: Participant 13).

The study showed that apart from the external drivers mentioned above, there are also several other motivations for reporting that are internally driven.

4.6.2 Internal Drivers for Reporting

The internal drivers for SR can be viewed as critical success factors for improved quality in sustainability reporting. Figure 4.11 is a graphic illustration of the key internal drivers of reporting based on the views of sustainability practitioners on the JSE.

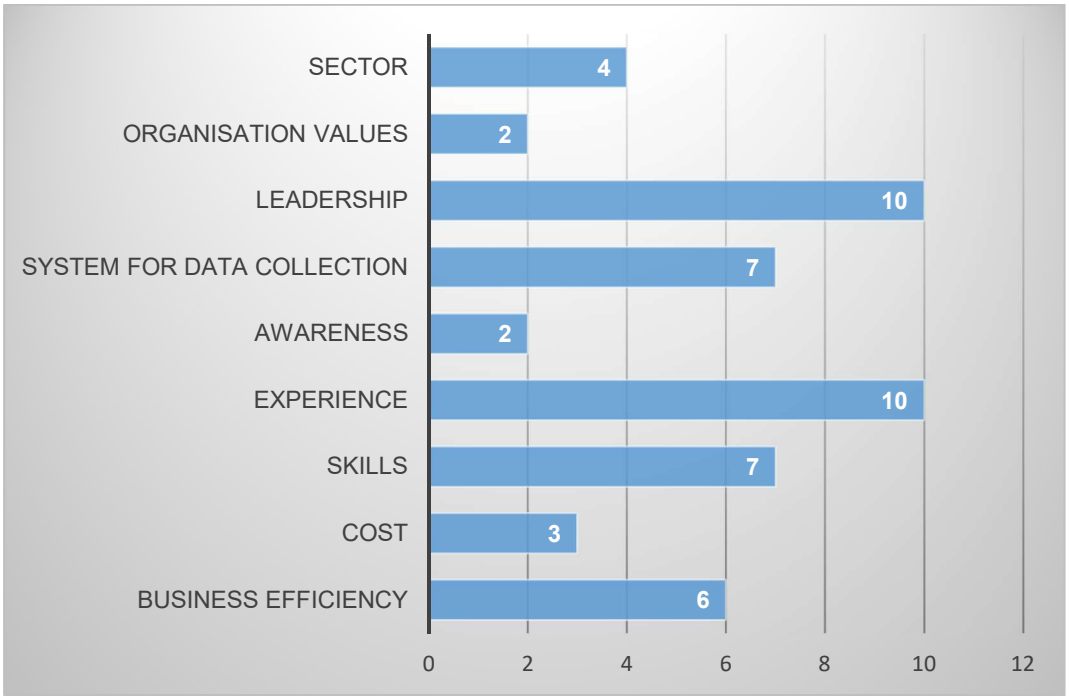

Figure 4.11: Internal Drivers for Sustainability Reporting for JSE Listed Firms – Practitioner's Perspective

The most critical internal drivers for reporting were leadership, the organisation's experience in reporting, data collection systems, skills for sustainability management and reporting, and the business imperatives linked to a need for more environmentally sustainable operations.

a. Role of Leadership in Sustainability

The role of leadership is the most critical internal driver of sustainability reporting for any reporting organisation. A closer analysis of the internal drivers showed that even other drivers, such as the values of an organisation, are an attribute of leadership.

I. Evidence from Sustainability Practitioners

A participant from the resources sector was clear on the role of leadership within the sustainability arena: "My role as an executive was to assure the Board that we had

adequate and credible assurance for the sustainability system. I would report through a board committee and give sufficient confidence to the board" (Interview: Participant 1).

Another participant from a high performing resource firm made an almost similar comment but regarding the actual allocation of specific management responsibilities in order to achieve positive results within the sustainability field:

> My position was newly created in 2011 and was the first position in the organisation for cross functions on the company on sustainability matters. I report to the executive, so I am one level below the executive. Before I joined, the sustainability manager was at a lower grading than now. They created my position to look at cross functionality. There has been more awareness at the top hence there is a push down and feeding up from the bottom. My position helped to put things into motion (Interview: Participant 3).

According to Participant 22, "The commitment depends on the Board and CEO". There was clear evidence, then, that the organisation's leadership plays a pivotal role within the sustainability reporting arena.

II. Supplementary Evidence from a Third-Party (CDP)

Besides from what emerged from the interviews with practitioners, the CDP, which provides the Climate Change Report for South Africa, raised an observation on leadership within the South African firms. The CDP explained that the strong scoring of the CDP by South African firms can be explained by world-leading performance in governance and by the leadership of South African participating organisations:

> It is a long held NBI belief that strong governance drives strong performance and 99% of responding companies have board-level oversight on climate change. 97% integrate climate change into risk management and 100% integrate climate change into strategy. 87% of South African responders' report that they have incentives in place to drive climate performance (CDP, 2017, p. 6).

b. Organisation Experience

As will be explained in greater detail later, reporting is a journey which takes time. More experienced firms tend to have more experience with the process and thus produce better reports. According to a participant, experience is very critical within the reporting space:

> The quality of reporting has improved for a certain core group of reporters and the reasons are primarily because they are getting better at doing that. The number of companies that are reporting have increased. Those minorities have increased, and quality has improved because they have been long in it and are improving with time, but they are in the minority (Interview: Participant 18).

c. Data Collection System

Linked to an organisation's experience and personnel skills and cost is the availability of a data collection system. To produce good reports, reporting entities ought to have systems in place to collect the data from which to generate the required information for reporting. This was clearly explained by a participant in an interview:

> It's often difficult for companies to collect the data. For example, when you want to report on Greenhouse gas emissions, how do you actually measure your total greenhouse gas emissions? How do you record that data? Very often there are no systems for doing so (Interview: Participant 23).

In order to deal with such a situation, a large South African bank has invested in creating the technology needed to develop a system for data collection:

> We have investigated in our reporting through systems and technology to optimise our reporting. Whereas another organisation might have five people looking at sustainability reporting, we have one or two people. We have optimised that based on the system. These systems have been externally reviewed and assured. The reporting and accuracy coming out of these systems are much better than if it was

> people driven. We have an environmental management system that is internet based and users across our operations across the continent can input their consumption data. That consumption data is reported and verified internally and externally with assurance. After assurance is done, we do random sampling. Where others are using excel reports to develop their reports we are using a system driven approach that allows us to focus. The system was developed by an international company designed for our operations in Africa (Interview: Participant 11).

The data collection system is thus critical and there are two issues raised by participants related to data collection systems, the first being a need for a combination of both quantitative and qualitative information in order to bring credibility to the sustainability reporting space. The second concerns the absence of reporting mechanisms needed to measure the impact of lending by banks.

I. Quantitative Versus Qualitative Data?

The use of both quantitative and qualitative information in sustainability reporting is essential. According to a participant:

> In general, the quantitative is only as good as the context given. The quantitative is an output of a story or a KPI or risk indicator. The context around that number is much more important. The number is a good indicator, but if you don't have the qualitative information to support the quantitative, it can almost become irrelevant. There has to be hand in hand of quantitative and qualitative information (Interview: Participant 14).

The need for a combination of quantitative and qualitative information was raised by all participants in the study. Sometimes there was an over emphasis of the one over the other. Thus, there is need for linkages to be created between the two: sustainability reports must contain qualitative and quantitative information on how the company has managed to improve its economic, environmental and social effectiveness and efficiency in the

reporting period and integrate these in a sustainability management system (Daub, 2007; Skouloudis, Evangelinos & Kourmousis, 2010).

II. Banks Reporting on Lending Activities

The interviews revealed that the banking sector is at present not sufficiently reporting on the environmental impact of their lending. Participant 13, who works in the financial services sector, explained the situation in the following manner: "Our business is to sell money, and when we sell money, we need a place to sell money. The banks are not reporting on the environmental impacts of projects that they are funding. This is not a deliberate omission but it's very difficult to get the data from people that you fund" (Interview: Participant 13).

d. Skills and Resources

For sustainability reporting to succeed, there is a corresponding need for the skills and manpower to support the process. This has significantly improved in JSE listed firms, as in most environmental critical sectors and in all banking institutions on the JSE there are full-time employees involved in sustainability functions and, in some cases, there is a person who is responsible for sustainability reporting. According to Participant 10, who has experience with the financial services sector, "The growing skills and teams that are directed at sustainability, it never happened before. Now you have a dedicated sustainability department" (Interview: Participant 10).

e. Business Efficiency

The study showed that many organisations are embracing sustainability reporting as a tool for providing a means of identifying the internal opportunities of making their business operations more efficiently and, in some cases, save the organisation money. Participant 11 explained this as follows: "We drive investment into our operations to make it more efficient, and we need to be investing in our operations. When we invest in our offices, we want it to be as resource efficient as possible".

4.6.3 Sustainability Reporting Life Stages

In the process of determining the trends in reporting and the actual drivers for improved quality in reporting, the cross-cutting theme that emerged is that different organisations are in different stages of their reporting journey. This was best captured by Participant 29, who is a critical reviewer of reports:

> In general, we normally say that reporting is a journey. Even those companies that have been reporting for 15 years, there is still something that they can improve on. There are those that are starting to report and those that have gained experience in terms of applying the framework. Also experience on how to engage stakeholders and improvement in systems for data collection, improvements in validation and having the reports assured. Depending on where they are in terms of sustainability reporting journey, you find different levels of quality of reporting (Participant 29).

This issue was further described by Participant 10, who said that, "We now know to report better. People get to learn with time. They learnt to be better just like anything else".

The stages in the reporting life of an organisation can be viewed in terms of "early adopters" and "late adopters" of integrated reporting. The resources sector in South Africa were early adopters, and the history of reporting in that sector predates any recommendations for reporting such as King III came into place. This is explained by a participant with over 15 years' experience as an assurance provider with large auditing firms:

> The resource sector is one of the early adopters and hence very good. They started on environmental reporting earlier because of their massive environmental impact. The mining sector is very good and strong. The banks are very strong these days. The banks were late adopters, but they are doing well now and hence have caught up (Participant 18).

Another participant from the banking sector described the situation in an almost similar manner:

> Since I joined the bank 6 years ago, reporting was in its infancy, there were low metrics and low targets, but this did not stop us from setting high targets of

> becoming more efficient. When we started with sustainability reporting into the CDP and DJSI, we scored very low, but we used that information and feedback to inform improvement in our operations. Since then, our reporting is very highly remarked (Interviews: Participant 11).

Participant 16 shared the same view: "So I think, compared to other countries, we are more mature. We still have areas to improve such as providing the context, but comparatively we are doing well. There has been a huge improvement, but we still have a long way to go but quality has improved".

Another participant in the resources sector provided an account of their reporting journey:

> We thought we were doing well in terms of JSE ratings, FTSE4Good then realised we had some gaps and then the focus was on best practice. We realised best practice is there, and we are over here, so what we reported always satisfied compliance. The JSE listing requirements tell us we need to say about certain King IV matters, we need to talk about environmental issues, we need to talk about mineral reserves, governance and many other things. There is compliance level and best practice level above (Interview: Participant 3).

Participant 23 summarised the reporting process in this manner:

> Well, people get better in doing things the longer they do it, so there has been a learning curve. People that believe that IR is a good idea, they look at it the first year, they struggle to prepare in the first report. Once they have prepared the first report, they now know, what they were able to report. Then they go and find what system they need to collect the data. Once they collect the data, they prepare a better report the second time, hence you see this marginal improvement taking place from year to year (Interview: Participant 23).

Evidence emerging from the interviews revealed that organisations that choose to be involved in sustainability reporting, when they begin, undergo a real journey of reporting. Hence, various organisations are at different stages depending on when and how they commenced their reporting journey. The researcher therefore coined this process "sustainability reporting life stages" (Figure 4.12).

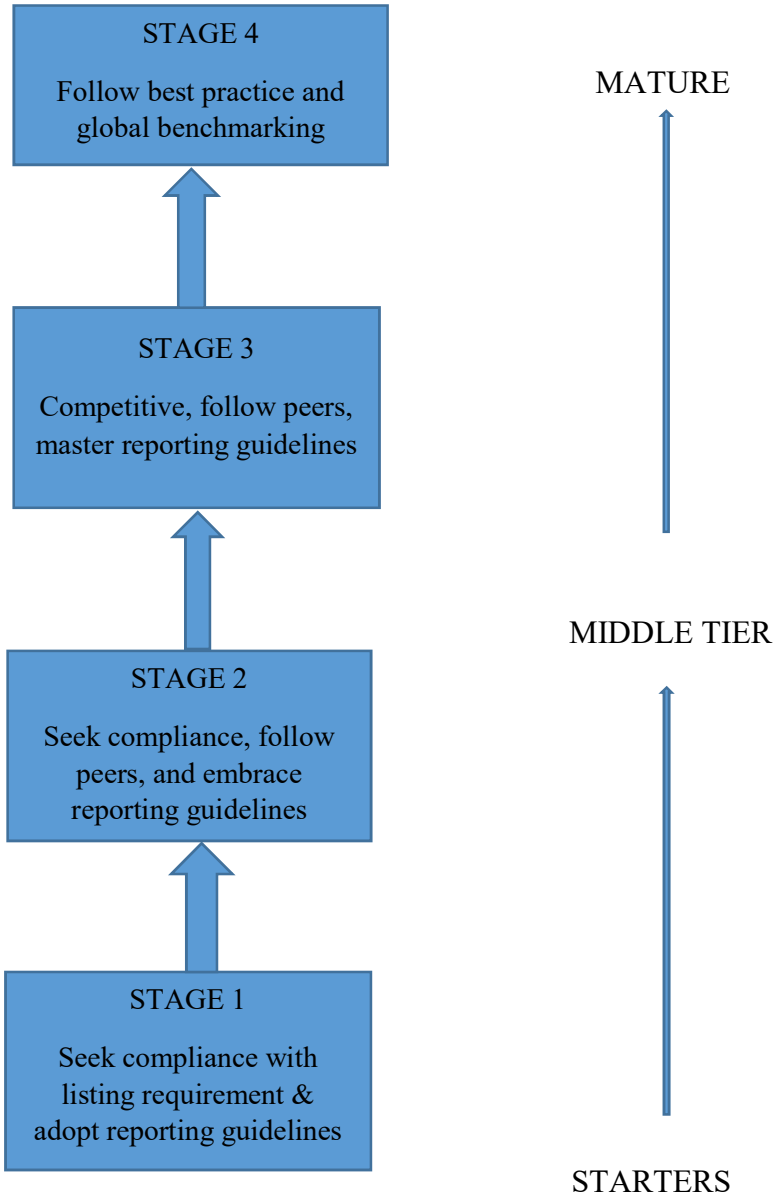

Figure 4.12: Sustainability Reporting Life Stages for a reporting firm (Outcome of this study)

4.6.4 Summary of Findings for Research Question 2

Table 4.9 below is the summary of the key findings under Research Question 2.

Table 4.9: Summary of key findings for Research Question 2

	Summary of Findings	**Section**	**Source of Evidence (Pri/Sec)**	**Confirmed by Control sample (Yes/No)**
1	There are many forces at play in pushing SR for JSE listed firms	4.6	Primary	Yes
2.	There are external and internal drivers of reporting	4.6.1	Primary	Yes
3.	Stakeholders expectations is the most significant external driver of reporting for JSE listed firms	4.6.1(a)	Primary	Yes
4.	Stakeholder demands are partly creating the perceptions that SR and IR are mandatory	4.6.1(a)	Primary	Yes
5.	King Codes for Corporate Governance of IoDSA is regarded as best practice by JSE listed firms	4.6.1(b)	Primary	Yes
6.	Legislative requirements for the operations of high impact sectors such as resources have a strong indirect influence on IR and SR	4.6.1(c)	Primary	Yes
7.	Competition for good IR and SR is both an internal and external driver of SR and IR for JSE listed firms	4.6.1 (d)	Primary & Secondary	Yes
8.	Pressure from investors have an influence on IR and SR for JSE listed firms	4.6.1(e)	Primary	Yes
9.	Risks and Opportunities have an influence on SR and IR for JSE listed firms	4.6.1(f)	Primary	Yes

10.	Shareholder influence has a minimum influence on JSE listed firms. The shareholders have more influence on SOCs through the Shareholders compact	4.6.1 9(g)	Primary	Yes
11.	Reporting frameworks of GRI, IIRC and CDP play a critical role in IR and SR for JSE listed firms	4.6.1(h)	Primary	Yes
12.	Third party rating agencies play a significant role in SR and IR for JSE listed firms	4.6.1(i)	Primary	Yes
13.	The internal drives for SR reporting can be regarded as the critical success factors for SR reporting	4.6.2	Primary	Yes
14.	Leadership is the most significant internal driver of SR for JSE listed firms	4.6.2(a)	Primary & Secondary	Yes
15.	Organisation's reporting experience is an internal driver of SR for JSE listed firms	4.6.2(b)	Primary	Yes
16.	The capacity for data collection is an internal driver of SR for JSE listed firms	4.6.2(c)	Primary	Yes
17.	The use of both quantitative and qualitative data is crucial for SR	4.6.2(c)(i)	Primary	Yes
18.	Banks are not reporting the impacting of their lending activities due to absence of tools for measuring that third-party impact	4.6.2(c)(ii)	Primary & Secondary	Yes

The next section provides findings for Research Question 3 on determinants of SR quality.

4.7. Findings for Research Question 3

What are the key determining factors for the quality of sustainability reporting of JSE listed firms?

The study revealed that there are many determinants of quality in the sustainability reporting fraternity of JSE listed firms, as illustrated in Figure 4.13. The emerging determinants are generally principles emanating from both the GRI and the IIRC frameworks. This further confirms that the two frameworks are entrenched in the integrated reporting arena of South African firms (see Section 4.6 on Research question 2).

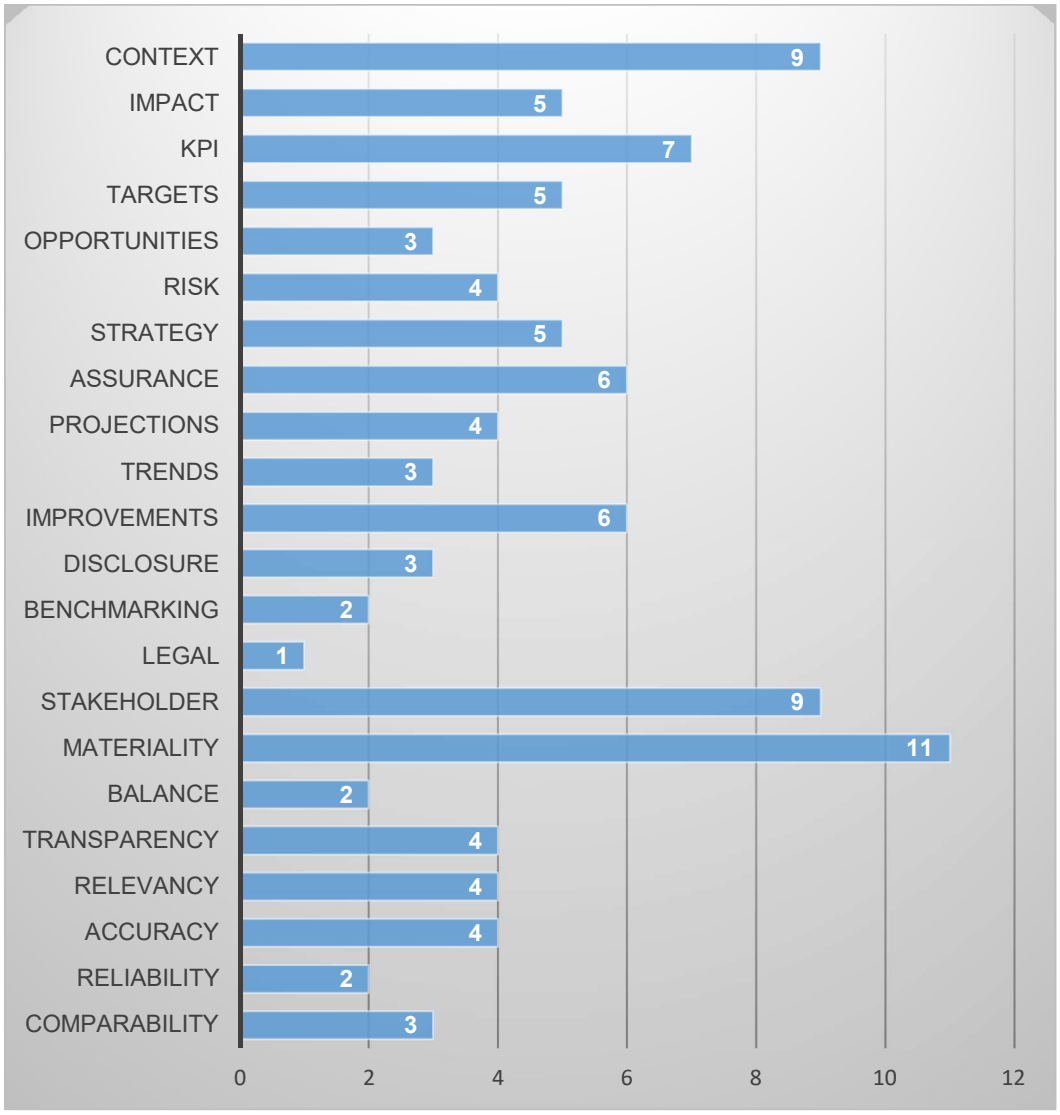

Figure 4.13: Key Determinants of the Quality of Sustainability Reporting from the Practitioner's Experiences

The study revealed the five most referred to determining factors that influence the quality of sustainability reports. These included materiality to stakeholders, stakeholder involvement, context of reporting organisation, Key Performance Indicator measurements, assurance of the reports and indication of improvements. An analysis of the determinants shows that GRI and IRC frameworks are rooted in the minds of practitioners as many determinants, such as relevancy, accuracy, reliability, comparability, balance, strategy, risks, emanate from the two frameworks. This shows that practitioners are measuring quality using the lens of the IIRC framework and the GRI. The main determinants and the GRI are described below as they emerged in the study.

4.7.1 Materiality to Stakeholder

The most significant finding was that the key theme in the investigations on the determinants of report quality was the materiality of the information provided to stakeholders:

> Materiality is the key in terms of what issues are strategic, what are the issues to the key risks, what are the topical issues to stakeholders and that have negative and positive reputational impact. So, materiality is informed by stakeholder and regulatory requirements (Interview: Participant 1).

Furthermore, Participant 2 provided a working definition of materiality: "Material information is any information which is capable of making a difference to the conclusions drawn by stakeholders when receiving the information". Materiality was a topical issue among practitioners in all the categories of preparers, assurance providers, users and critical reviewers, thus confirming its significance within the IR and SR for JSE listed firms.

4.7.2 Stakeholder Involvement

The need for stakeholder involvement was a key theme in the majority of the issues raised by the participants. According to Participant 22, who is a reviewer of sustainability reports, "good reports ought to demonstrate engagement with stakeholders".

4.7.3 Context of the Reporting Organisation

The context of an organisation is regarded as valuable in the determination of quality of reports. This is related to issues such as the sector of the reporting entity and the story behind the sustainability characteristics of the reporting entity. According to Participant 26, who is a critical reviewer of sustainability reports, "it is important for reporting entities to look at the core business of the company and reporting exactly on that". This view was generally shared by most of the participants.

4.7.4 Key Performance Indicators

According to Participant 18, "Key performance indicators and targets will assist in determining quality of reports". A similar view held by another participant, also from the assurance category: "In terms of my case as an assurer, I look at the information, whether the information is consistent, whether the KPIs or performance indicators are measurable. It must be relevant. There are certain KPIs that people will be interested in" (Interview: Participant 19).

4.7.5 Improvements

There is a need for reporting to include a firm's plan for improvement. Participant 20 argued that "The reporting must look at how the report gives their views on how they are going to improve?" Participant 25 also described the need for an indication on improvement in this manner: "I find the most useful sustainability reports are the ones that have this year's results and also the results of the last few years on the same matrix".

4.7.6 GRI Principles

The entrenchment of the GRI guidelines cannot be overemphasised based on what emerged from the semi-structured interviews with practitioners. There is clarity in the mind of participants on how a good report should look and many of them look at quality through the lenses of the GRI principles. This was explained by Participant 20: "When you look at quality you look at material KPI, for you the most important is you look at materiality and the guidelines".

A practitioner in the resources sector similarly argued that:

> Overall, because of guidance provided to the organisation, for the mining sector there is the adoption of Global Reporting Initiative (GRI) and International Council for Mining and Minerals (ICMM) guidelines. Those bodies provide some guidance

on reporting. There are also voluntary schemes that companies have signed up to, such as CDP. The guidance tends to direct organisations towards material matters (Interview: Participant 1).

All the participants have a strong perception, then, that there are enough guidelines for reporting (see Figure 4.14).

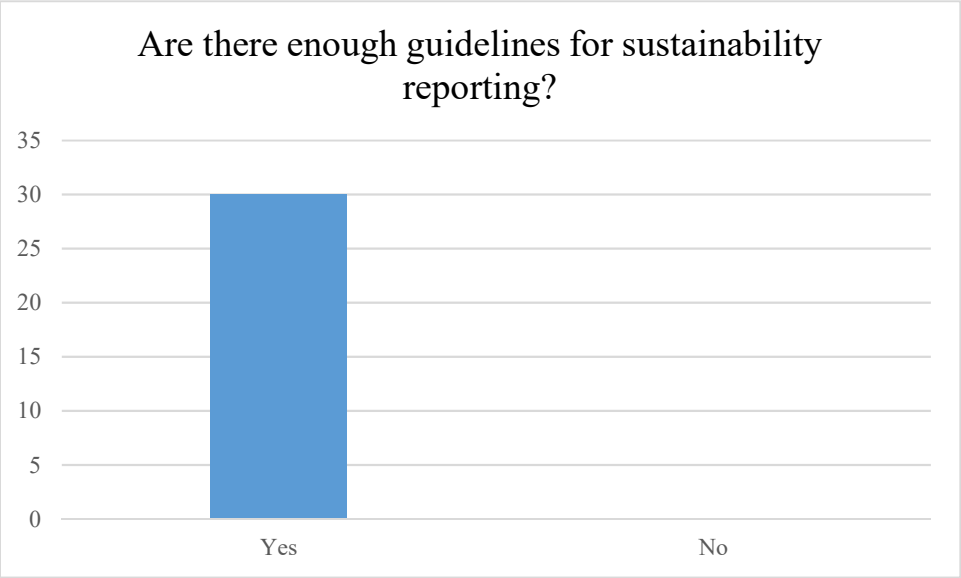

Figure 4.14: Presence of Enough Guidelines for Sustainability Reporting

As explained by Participant 1: "GRI is probably the most universal guideline, the others tend to be issues specific". Based on empirical evidence from this study, the GRI is the *de facto* sustainability reporting guideline for JSE listed firms. At the time of the study, the GRI standards had been launched in South Africa. Reference to the standards by the participants was minimal, most probably because the standards were still new.

The wide adoption of the GRI guidelines is likely the reason why the GRI indicators formed a good percentage of the determinants of sustainability report quality from the practitioner's experiences. The GRI have the following reporting principles:

(i) Principles of defining Report Content

- Stakeholder Inclusiveness
- Sustainability Context
- Materiality
- Completeness

(ii) Principles for defining Report Quality

- Balance
- Comparability
- Accuracy
- Timeliness
- Clarity
- Reliability (GRI, G4 Guideline, 2013).

On the other side, the principles of the IIRC framework are as follows:

(i) Guiding Principles

- Strategic focus and future orientation
- Connectivity of information
- Stakeholder relationships
- Materiality
- Conciseness
- Reliability and completeness
- Consistency and comparability.

(ii) Content elements

- Organisational overview and external environment
- Governance
- Business model
- Risks and opportunities
- Strategy and resource allocation
- Performance
- Outlook
- Basis of preparation and presentation (IIRC, 2013).

From the determinants of quality that arose from the thematic analysis of practitioner's interviews, it is clear that the GRI and IIRC framework have taken root in the South African sustainability reporting space.

4.7.7 Challenges of Transparency and Assurance

The two themes on assurance and transparency also emerged from the interviews. These themes are referred to the GRI and IRC framework but there is limited guidance on these and less research on them in the academic literature.

On transparency, it emerged that some reporters are not as transparent as expected. According to one participant, who has experience as a preparer, user and assurance provider, "The reports are not as transparent and hence not balanced. We are good at telling the good stories, but we don't want to highlight the bad stories" (Interview: Participant 10). This view is similar to findings of a study by Diouf and Boiral, (2017) that revealed that sustainability reports are sometimes used for impression management by some organisations to show the positive aspects of their sustainability performance and to obscure negative outcomes.

In a similar view, another participant noted that "There is always a thought to say, if this information goes on the first page of Sunday Times newspaper, what will be the impact. As a preparer, you almost want to get out the good news and hold back a little on bad news. A reader wants everything" (Interview: Participant 12). Summary of findings for Research Question 3

The Table 4.10 below is a summary of the key findings under the Research Question 3.

Table 4.10: Summary of Key Findings for Research Question 3

	Summary of Findings	Section	Source of Evidence (Pri/Sec)	Confirmed by Control sample (Yes/No)
1.	There are many determinants of SR quality for JSE listed firms	4.7	Primary	Yes
2.	JSE Sustainability practitioners are measuring quality using the lenses of IIRC Framework and GRI	4.7	Primary	Yes
3.	Materiality to stakeholders is the most significant determinant of quality for SR for JSE listed firms	4.7.1	Primary	Yes
4.	Stakeholder engagement is also a determinant of SR quality for JSE listed firms	4.7.2	Primary	Yes
5.	The context of the reporting organisation is a determinant of SR quality	4.7.3	Primary	Yes
6.	Providing a link to key performance indicators is a determinant of SR quality	4.7.4	Primary	Yes
7.	Providing an indication on the improvements on SR is also a determinant of quality	4.7.5	Primary	Yes
8.	GRI and IIRC frameworks have been deeply entrenched in the SR and IR for JSE listed firms	4.7.6	Primary	Yes
9.	There are enough guidelines for SR for JSE listed firms	4.7.6	Primary	Yes
10.	There are challenges in transparency and sustainability report assurance for JSE listed firms	4.7.7	Primary	Yes

11.	There are implementations challenges for IR and SR for some JSE listed firms	4.7	Primary & Secondary	Yes

Assurance of sustainability reports is critical in the sustainability reporting space. This is discussed in more detail under the next section on findings for Research Question 4.

4.8. Findings for Research Question 4

What are the sustainability reporting assurance mechanisms in South Africa?

A key finding of the study confirms that the adoption of external assurance of sustainability reports is best business practice for JSE listed firms and this has been the case for a long time, especially for the early adopters of sustainability reporting such as the resources sector. All the sustainability practitioners who are preparers of reports confirmed some form of assurance of their reports. This assurance is done by auditing firms, who normally undertake the company's financial year end audits. In this regard, the big auditing firms the "big 4" as they are called in South Africa undergo a process of auditing of their sustainability reports. There are also other smaller "boutique" firms that provide assurance services.

4.8.1 Current Types of Assurance

There are various types of sustainability assurance, but external audits by third party auditors are the most common among listed firms on the JSE. Prior to such auditing, firms self-check their reports through internal audits. It was interesting to observe that the resources sector has largely adopted the Combined Assurance Model/Framework (CAM) as a means of ensuring adequate assurance for the system and reporting processes. Figure 4.15 illustrates the various types of assurance.

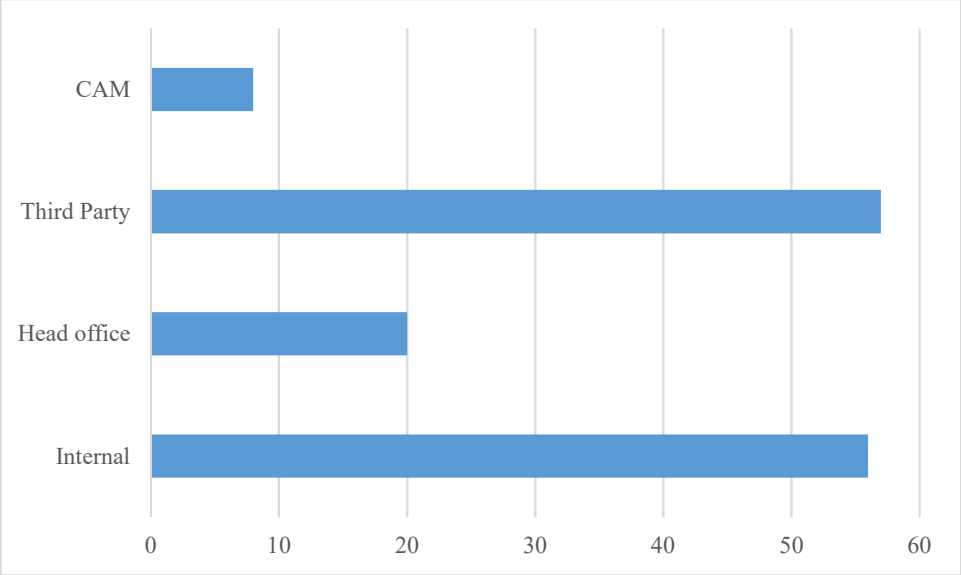

Figure 4.15: Assurance Types for JSE Listed Firms

The most rigorous type of assurance for a JSE listed firm is illustrated below by a participant from the resources sector:

> In my recent corporate role, we developed the Combined Assurance framework to have assurance at three or four levels. The **first level** being internal, and the second independent audits organised by the mother company. It's internal but not within the subsidiary. The third level concerns independent third-party assurance, which is the certification. For example, ISO14001 certification and the associated audits on the reporting itself would have "big 4" accounting firms also **validating** the reporting hence providing additional assurance. So, we would have assurance of the system, assurance for reporting and assurance the management system. The Combined Assurance Framework gave us enough assurance. What it does, it gives a single universal view of what happens at different levels. (Interview: Participant 1).

The similar approach was described by another participant, also from the resources sector:

> We have three **levels of assurance**. Level 1 assurance is where the practitioners act by checking with a manager, such as the Mine Manager, that the information is correct. Level 2 is the corporate sustainability department, who do internal auditing on a mine. This is checking if the mine reported accurate information. This involves checking for proof of documentation that **validates** the number of KPI. Level 3 is for the most material KPIs, where we get PWC to do assurance on our key KPIs. They audit the KPIs with biggest financial impact or reputation impact (Interview: Participant 3).

The common theme in both experiences above is several levels of assurance and validation. This process emerges from the Combined Assurance Model (CAM) and is common within the resources sector of South Africa. The source of CAM is King IV and ICMM. Accordingly, a combined assurance model incorporates and optimises all assurance services and functions. This is done so that, taken as a whole, these models enable an effective control environment, and support the integrity of information used for internal decision-making by management, the governing body and its committees and the integrity of the organisation's external reports (King IV, 2016).

Reference to the CAM was more common in the resources sector than any other sectors. Moreover, the resources sector is regarded as the sector currently producing the highest quality sustainability reports based on the findings of this study (see Research Question 1). The several levels of assurance are, however, still common in various large firms on the JSE. The CAM has become the business norm for firms within the resources sector of South Africa. This was explained by a Participant 4 from the resources sector as follows: "We are using the combined assurance framework. It's the best way of assurance. For a company of our size, they will use similar assurance mechanisms. The big mining companies would most likely have similar assurance processes in place".

4.8.2 Standards for Assurance

Based on the findings of the study, the firms on the JSE are audited based on two different option standards for assurance. Firstly, the "Big 4" use the ISAE3000 as revised. Secondly, smaller "boutique" auditing firms use AA1000 assurance standards. This is summarised by a seasoned assurance provider below:

> Top 100 companies have their sustainable reports assured. They select about 5 to 15 key performance indicators and appoint someone to perform an audit on them, normally the Big 4. We apply auditing standards similar to financial auditing standards. We go through and audit that data. There are a couple of smaller companies that also provide audits. They do an audit but don't follow the same standards. We use ISAE3000. It's an internal standard on auditing. It's for non-financial information. It's an international standard and used globally. The boutique firms use the AA1000 standard. This standard is from a not for profit think tank called Accountability (Interview: Participant 18).

These above mentioned standards are thus similar to what previous South African researchers have reported (Ackers & Eccles, 2015; Maroun, 2018). These standards are industry preferences based on general financial assurances standards used in South Africa.

4.8.3 Role of Assurance in Sustainability Reporting

The study revealed that the assurance of reports is highly regarded by both preparers and users of sustainability reports, in the same manner that integrated reporting has become the business norm for listed firms in South Africa. When asked what a framework for sustainability should include, Participant 2 described that firms need to "Start with a process to identify material issues and include a process for independent assurance providers" (Participant 2).

In the same line of argument, Participant 16 further explained:

> That would depend on how the situation is overseen by the report oversight body and by internal or external assurance mechanisms. An externally assured environmental report will ordinarily include as part of the assurance service providers conclusion contained in the assurance report coverage of the question of whether all material matters (as identified by the entity itself) have been addressed in the report (Interview: Participant 16).

According to Participant 11, "Every year there are outcomes that help us improve for the next year. We take those recommendations and try to optimise our reporting".

There was the overwhelming evidence that emerged from interviews with sustainability practitioners on the critical role that external assurance played in the evolution of sustainability reporting of firms on the JSE.

4.8.4 Challenges of Assurance

While it is now regarded as best practice for listed firms on the JSE, there are several challenges on how the assurance of sustainability reports is currently done. Firstly, as indicated earlier, the firms are being audited based on different standards and this creates challenges in comparability. This was not surprising because King codes are not prescriptive and do not prescribe how non-financial information is assured in terms of process, depth, boundaries, scope, and the even criteria for assurance providers (Ackers & Eccles, 2015).

Secondly, in some instances the auditing is limited to what the reporting organisation wants audited based on a set of criteria that satisfies the governing body and sometimes assuring the figures provided. This was described in simple terms by Participant 18, who said that, "The companies follow what they want audited. It's not compulsory to have an audit on non-financial information. The assurance is done because stakeholders want to know if what they are reading is accurate. At this stage, it's still an issue of confirming the accuracy of figures disclosed. It's progressing and evolving still".

Thirdly, it is the perception of sustainability practitioners that sustainability assurance does not follow the same rigour as that of financial statements, as explained by Participant 10:

> We get assurance with external audits. The assurance is not done with the same rigour as financial statements. Financial statements have been around for a long time. The problem with assurance is that it's very subjective. As the reporting team we can say, can you please assure this number and this number. Assurance policies need to change. The materiality process is not assured. Next year, we want them to assure materiality. The assurance must have recommendations. Now, it's only assuring our numbers (Interview: Participant 10).

Fourthly, auditors are faced with a challenge of auditing qualitative information, which is in most cases subjective. Participant 12 confirmed this: "It's hard to improve because I know the limitations there are in trying to assure something that is qualitative. It will take a lot of resources and time to get it right".

It is evident that firms in the best performing sectors have more confidence in their assurance processes. It is also evident that success and comfort levels of assurance is a result of a two-way process between the auditees and the auditors.

4.8.5 Summary of Findings for Research Question 4

Table 4.1 below is a summary of all key findings under Research Question 4.

Table 4.11: Summary of Key Findings for Research Question 4

	Summary of Findings	**Section**	**Source of Evidence (Pri/Sec)**	**Confirmed by Control sample (Yes/No)**
1	Assurance sustainability reporting is now best practice for JSE listed firms	4.8	Primary	Yes
2.	There are no mandatory requirements for assurance of sustainability reports for JSE listed firms	4.8	Primary	Yes
3.	The most adopted and rigorous form of assurance by best SR performing JSE listed firms is the Combined Assurance Model (CAM) in King Codes of Corporate Governance	4.8.1	Primary	Yes
4.	There are two standards in use by the assurance providers for JSE listed firms that include ISA E3000 and AA1000	4.8.2	Primary	Yes
5.	Sustainability assurance plays a critical role in advancing SR	4.8.3	Primary	Yes
6.	There are comparability challenges due to the adoption of different standards for assurance	4.8.2 & 4.8.4	Primary	Yes

7.	Assurance for some JSE listed firms is sometimes limited to verifying the figures reported and this is not adequate	4.8.3 & 4.8.4	Primary	Yes
8.	There is less rigour for sustainability assurance as compared to financial statements auditing	4.8.4	Primary	Yes
9.	There are challenges in auditing qualitative information due to its subjectivity	4.8.4	Primary	Yes

The next four sections present the findings from the control sample of SOCs, starting from section 4.9 to 4.13.

4.9. Findings for Research Question 1: Control Sample of SOCs

How has the introduction of mandatory requirements on reporting contributed to quality of sustainability reporting for South African listed companies?

The control sample of SOCs was constituted by four preparers with experience in SOCs and four assurance providers. The total number of participants in the sample was eight.

There are no mandatory requirements for the SOCs to provide integrated reports. There is, however, a shareholder compact between some SOCs and the National Department of Public Enterprises (DPE). The DPE holds shares in State Owned Companies on behalf of the public. On an annual basis the shareholder compact includes some KPIs that are better communicated in integrated reports and or sustainability reports. The shareholder compact is not mandatory, but it was mentioned as one of the drivers of SR and IR by all four of the preparers with experience in SOCs. The shareholder compact is therefore a "soft" mechanism used to promote integrated reporting and hence almost serves the same purpose as the JSE listing requirements that also promote integrated reporting by requiring companies to apply the King Codes of Corporate Governance.

The next section illustrates the trend on quality of reporting over the past nine years for SOCs.

4.9.1 Trends in Reporting

a. Evidence from Primary Sources - Interviews

There is a general view that sustainability reporting is improving amongst the large SOCs in South Africa.

According to participant 31, who has experience in sustainability reporting in a SOC, "There are improving with years with years, because of each year there is a lesson learnt and improved controls. This is improving with time". This comment was similar to those made by the four practitioners interviewed from SOCs. Participant 37 argued, for example, that "The quality of reporting has increased in the last 5 to 9 years". The practitioners from SOCs are also of the view that the reports of JSE listed firms are much better than those of SOCs. Participant 31 explained the quality of reporting as follows: "Most of the reports from private companies were more advanced but we are catching up".

b. Supplementary Evidence on Quality Trends in Reporting SOCs from Secondary Sources

This claim by the practitioners is also confirmed by secondary data and specifically from results drawn from an annual rating of integrated reporting by the accounting firm based in Johannesburg called Nkonki. The rating by Nkonki has been ongoing since 2011. There is a divide within the SOCs between those that give attention to and apply the IIRC framework and those that do not. The ones that are applying the IIRC framework continue to develop and there are improvements (Nkonki, 2016a).

The improvement in the quality of reports was also confirmed by an experienced assurance provider from a "Big 4" auditing firm: "The big state-owned companies produce reports. Transnet, SAA, and Eskom they all provide integrated reports. These SOC's produce very good reports. These SOCs also raise capital globally. They raise money from the World Bank" (Source: Participant 18).

4.10. Findings for Research Question 2: Control Sample –SOCs

What are the real drivers for environmental sustainability reporting for SOCs?

There are several drivers of reporting for the SOCs. These drivers can be categorised into external and internal, similarly to the JSE listed firms.

4.10.1 External Drivers for Reporting for SOCs

The external drivers are mainly stakeholder expectations (external), shareholder, legal requirements and investor pressure.

Participant 31, who has recent experience in sustainability reporting in a large SOC, explained that,

> The main motivation is that we do have shareholders who are mostly members of the public, they need to be informed on how we are doing in terms of sustainable development. The other issue is lenders, because we borrow money, so the lenders need to know the social and environmental performance as there are conditions for funding. The production of integrated reports is also on the shareholder compact (Interview: Participant 31).

Participant 32 also described a range of external drivers of engaging in sustainability reporting:

> There is deep relationship across the stakeholders, and you can't prefer the one over the other. All the stakeholders are very important. That's why you must identify all stakeholder. Each of the stakeholders have their own importance. The investor needs to know if you are complying with the law. The investor wants to see if you are making money, and to see if we are able to repay the debt. The sustainability report shows the developmental outcomes of the organisation. As a State-owned company our mandate is to push development, CSI and job creation. The shareholder wants to see how we are contributing to the developmental goals of the nation and that's the Minister of Public Enterprises and government. We have an obligation to contribute towards the NDP. There is a shareholder compact with the Department of Public Enterprises (interview: Participant 32).

Another report preparer with experience with SOCs explained the issue of shareholder compact:

> There is an agreement with shareholders on THE management of KPI. There is no KPI that talks of each of the performance indicator that we report in the IR. Public companies are also regulated by PFMA and King IV refers to integrated reporting. We look at GRI and King IV and other regulated things. The integrated report is a

> report to stakeholders on how we have performed. It is used by investors, shareholders and NGOs. The shareholder expects us to follow best practice and best practice is integrated reporting. It's therefore a combination of stakeholders and there are also legal requirements (Participant 37).

It is thus evident that the external drivers for reporting for SOCs are very similar to those of JSE listed firms. All the participants from SOCs referred to the shareholder compact, which is a mechanism between SOCs and the National Department of Public Enterprises (DPE) that is indirectly promoting integrated reporting in the same way as the JSE listing requirements.

4.10.2 Internal Drivers for Reporting for SOCs

The importance of leadership and organisational experience were evident as key internal drivers of reporting. Participant 31 described some internal drivers for sustainability reporting as "improving with years with years, because of each year there is a lesson learnt and improved controls. This is improving with time. There is a policy and a sustainability framework that the business is committed to but it's all internal".

4.11. Findings for Research Question 3 for South African SOCs

The determinants of quality are similar to the listed firms. The IIRC framework and the GRI guideline (now standards) have been entrenched in the SOCs. Like JSE listed firms, practitioners for SOCs view sustainability report quality through the lens of the GRI guidelines.

4.12. Findings for Research Question 4 for South African SOCs

What are the mechanisms for sustainability assurance for South African SOCs?

The SOCs have adopted similar assurance mechanisms to the JSE listed firms as a means of best practice. This is explained by a participant from a large South African SOC:

> Our reports are also audited. We have 3 levels of assurance

1) Self-assessment;
2) Internal audits; and
3) External audits.

We engage the auditors at 2 levels for (1) Financial and (2) Sustainability Information (Interview: Participant 37).

The reporting quality is thus improving for both SOCs and JSE listed firms. The "sustainability reporting life stages" are also observable in SOCs like JSE listed firms.

4.13. Conclusion on Findings from SOCs

Findings from the control sample of SOCs shows very similar findings to those of the SOCs. IR and SR are improving over time for a core selection of reporters that adopted IR and SR reporting earlier than others. The sustainability reporting life stages as observed in JSE firms are also applicable to the SOCs. The SOCs Shareholders compact, while not mandatory, is functioning in the similar manner to the JSE's listed requirements that are indirectly promoting IR and SR. The external and internal drivers also share similarities, together with other external forces such as ratings from third parties. The role of stakeholders is also significant in SOCs in shaping the IR and SR. Table 4.12 is a summary of the comparison between SOCs and JSE listed companies.

Table 4.12: Comparison of SR Contexts between JSE Listed Firms and Large South African SOCs

	Listed Firms	**SOCs**
1.	JSE Listing requirements that promotes IR and SR	Shareholder compact with National Departing of Public Enterprises promotes IR and SR
2.	External Drivers for Reporting: • Stakeholder expectations • Legal Requirements, for example the Mining Charter • Investor/lenders, pressure, for example FSTE4Good rating	External Drivers for Reporting • Stakeholder expectations • Legal Requirements, for example PFMA • Investor/lenders pressure, for example World Bank missions.
3.	Competitive Awards, for example EY Annual Awards and Nkonki ratings	Competitive Awards, for example Nkonki ratings
4.	Follow best practice with King IV, IIRC Framework and GRI	Follow best practice with King IV, IIRC Framework and GRI

Source: Outcome of this study

Table 4.13 below is a summary of the findings for the control sample of SOCs.

Table 4.13: Summary of Key Findings from the Control Sample of SOCs

	Summary of Findings	**Section**	**Source of Evidence (Pri/Sec)**	**Agrees with main sample (Yes/No)**
1.	There are shareholder compacts that promote IR and SR for SOCs. This is comparable to the JSE listing requirements and both not explicitly mandatory	4.9	Primary	Yes
2.	SR and IR are improving some groups of large SOCs in South Africa	4.9.1	Primary & Secondary	Yes
3.	There are external and internal drivers of SR for SOCs in South Africa	4.10.1	Primary	Yes
4.	The most significant external driver of SR for SOCs in South Africa is stakeholder expectations	4.10.1	Primary	Yes
5.	There are many determinants of SR quality for SOCs in South Africa	4.11	Primary	Yes
6.	Large SOCs have taken King Codes of Corporate Governance as best practice	4.12	Primary	Yes
7.	Large SOCs in South Africa have adopted the Combined Assurance Models for SR as a best practice. This is similar to the high impact JSE listed firms	4.12	Primary	Yes
8.	The Sustainability Reporting Life stages as observed in JSE listed firms is also observed in South African SOCs	4.13	Primary	Yes

A review of the findings also shows that stakeholders take centre stage in SR and IR, for both JSE listed firms and SOCs. The next section presents a detailed analysis of the various stakeholders influencing SR and IR within the South African context.

4.14. Stakeholders of South Africa's Large Organisations

A key finding of the study under all the research questions is that South Africa's large organisations are dealing with a multitude of direct and indirect stakeholders. There are primary stakeholders, such as employees and customers, who are crucial to the survival of the organisation (Waddock et al., 2002). Besides the primary stakeholders, Waddock et al., (2002) further identify the increasing importance of non-government organisations (NGOs), activists, communities and governments as important secondary stakeholders. These secondary stakeholders arise out of several societal issues, such as environmental concerns. Luoma, Patrice, Goodstein (1999) and Christopher (2010) found that organisations were under increased pressure to include a much wider stakeholder base in organisational processes.

Through analysis of the interviews, it was also found that the range and types of the stakeholders are generally the same for JSE listed firms and large South African SOCs. Tables 4.14 and 4.15 show the primary and secondary stakeholders of listed firms respectively. Tables 4.15 and 4.17 also show the primary and secondary stakeholders of large SOCs.

Table 4.14: List of Primary Stakeholders of a JSE Listed firm and their Relationship to SR and IR

	Stakeholder group	Interest in Sustainability and Integrated Reporting	Level of Interest
1.	Employees	Interested in SR as a sign of long-term survival of the organisation and operation efficiency (e.g. Cost savings)	Medium -low
2.	Holding company (Group)	Locally or globally is interested in the long-term survival of the organisation and profits. Compliance with local and international laws and standards is important.	High
3.	Board & Executive	Exercising its fiducial responsibility in the interest of the long-term survival of the organisation and profits. Also looking at the various interests of stakeholders to get a licence to operate. Interested in complying with laws and governance through the Social & Ethics Committee.	High
4.	Local Communities	Interested in how operations positively or negatively affect their social & economic opportunities. Public safety and environmental concerns are crucial to local communities	High
5.	Funders (Banks)	Interested in the sustainability of the organisation, both financially and in terms of its compliance to laws. The Equator principles of responsible funding increases interest of funding institutions	High
6.	Investors	Locally or globally are interested in the long-term survival of the organisation and profits. Compliance with local and international laws and standards is important.	Medium
7.	Shareholders	Locally or globally, are interested in the long-term survival of the organisation and profits. Compliance with local and international laws and standards is important.	Medium
8.	Suppliers	Locally or globally, are interested in the long-term survival of the organisation and profits. Compliance with local and international laws and standards is important.	Low to medium
9.	Customers	Locally or globally, are interested in the long-term survival of the organisation and profits. Compliance with local and international laws and standards is important.	Low to Medium

Table 4.15 below is a list of secondary stakeholders of JSE firms.

Table 4.15: List of Secondary Stakeholders of a JSE Listed firm and their Relationship to SR and IR

	Stakeholder group	Interest in Sustainability and Integrated reporting	Level of Interest
1.	Public	Interested in SR as a sign of long-term survival of the organisation and operation efficiency (eg cost savings)	Medium -low
2.	Government (National & Local)	Interested in the long-term survival of the organisation economic contribution and employment creation. Compliance with local and international laws	High
3.	Parliament	Exercising its oversight and public interests, and various interests of stakeholders. Interested in compliance with laws and governance through the Social & Ethics Committees of listed firms. Several large listed companies have appeared before a parliamentary committee in relation to varying ESG matters, including transformation	Medium
4.	NGOs	Interested in how operations positively or negatively affect their social & economic opportunities. Public safety and environmental concerns are crucial to NGOs	High
5.	Regulators	Interested in the sustainability of the organisation both financially and with compliance to laws. These include government as a regulator of various specific aspects of JSE listed firms' operations.	High
6.	Listing body and other global stock exchanges	Interested in sustainability of the organisation and how ESG are managed by listed firms. JSE promoting King Codes of Corporate Governance as a best practice approach and responsible investment indexes. Other stock exchanges also interested as some JSE listed firm have dual listings.	High
6.	Media	Locally or globally is interested in the long-term survival of the organisation, and profits. Compliance with local and international laws also critical for the media. Issues of environmental concerns and public safety also of importance to the media	High

7.	Competitions	Locally or globally is interested in gauging compliance with local and international laws	Medium
8.	Third party rating agencies	Local and international rating and awards organisation are interested in trends in quality or reporting. These include the FTSE/JSE Responsible Investment index, CDB, EY, Nkonki and others	High

Table 4.16 is a list of the primary stakeholders of SOCs.

Table 4.16: List of Primary Stakeholders of a Large SOC in South Africa and their Relationship to SR and IR

	Stakeholder group	**Interest in Sustainability and Integrated reporting**	**Level of Interest**
1.	Employees	Interested in SR long-term survival of the organisation and operations efficiency (eg cost savings)	Medium -low
2.	Holding company (Group)	Some SOCs have a holding/group structure and the holding company interested in the long-term survival of the subsidiaries. Compliance with local and international laws important.	High
3.	Board & Executive	Exercising its fiducial responsibility is the interest of the long-term survival of the organisation and profits. Also looking at the various interests of stakeholders to get a licence to operate. Interested in compliance with laws and governance through the Social & Ethics Committee.	High
4.	Local Communities	Interested in how operation positively or negatively affect their social & economic opportunities. Public safety and environmental concerns are crucial to local communities	High
5.	Funders (Banks)	Local and international funders have interests in the sustainability of the organisation both financially and compliance to laws. The Equator principles of responsible funding increasing interest of funding institutions	High

6.	Investors	SOCs do not have investors technically speaking but some development institutions have a vested interest (covered under funding).	N/A
7.	Shareholders	The Minister of Department of Public Enterprise (DPE) is the shareholder. Mostly interested in the developmental outcomes and compliance with local and international laws (shareholder compact includes KPIs of sustainability issues)	High
8.	Suppliers	Locally or globally, suppliers are interested in the long-term survival of the organisation and profits. Compliance with local and international laws and standards is important.	Low to medium
9.	Customers	Locally or globally, customers are interested in the long-term survival of the organisation and profits. Compliance with local and international laws and standards is important.	Medium

Table 4.17 is a list of secondary stakeholders of SOCs in South Africa.

Table 4.17: List of Secondary Stakeholders of a South African SOC and their Relationship to SR and IR

	Stakeholder group	**Interest in Sustainability and Integrated reporting**	**Level of Interest**
1.	Public	Interested in SR as a sign of long-term survival of the organisation and operation efficiency (eg cost savings)	Medium -low
2.	Government (National & Local)	Interested in the long-term survival of the organisation economic contribution and employment creation. Compliance with local and international laws	High
3.	Parliament	Exercising its oversight role in the responsible ministry (DPE) and interests of the public. Interested in compliance with laws. Several large SOCs periodically appear before a parliamentary committee in relation to varying developmental outcomes and ESG matters	Medium

4.	NGOs	Interested in how operations positively or negatively affect social & economic opportunities of members of public. Public safety and environmental concerns are crucial to NGOs	High
5.	Regulators	Interested in the sustainability of the organisation both financially and in terms of its compliance with laws. These include government as a regulator of various specific aspects of SOCs and other specific industry regulators	High
6.	Government (Local non-core ministries	Interested in sustainability of the organisation and how ESG are managed by listed firms.	High
7.	Media	Locally or globally media organisations are interested in the long-term survival of the organisation, and profits. Compliance with local and international laws also critical for the media. Issues of environmental concerns and public safety also of importance to the media	High
8.	Competitions	Locally or globally, interested gauging compliance with local and international laws	Medium
9.	Rating and Awards organisers	Local rating from Nkonki has an interest in SR and IR for SOCs	High

The tables above developed shows that JSE listed firms and SOCs have a wide range of stakeholders with interests in the sustainability performance of the organisation. It is also observed that both the primary and secondary stakeholders have combinations of low, medium and high levels of interests in SR. The JSE as an organisation is one of many stakeholders with high interests in the JSE firms.

The only significant difference between JSE listed firms and SOCs is the absence of typical "investors" in SOCs, but the other stakeholders are the same or have an equivalent. The absence of investors in SOCs is not significant, because SOCs also have local and international funding partners, such as the Bretton Woods institutions with

sustainability interests equivalent or even greater than some investors of stocks on the JSE.

It is therefore not surprising why there is such a similarity in trends for sustainability reporting between JSE listed firms and SOCs despite the listed firms being ahead of listed firms.

According to Participant 33, who is a report preparer with SOCs, "Listed firms are producing better reports than SOCs. The reason could be primarily about some bureaucracy in SOCs being government related institutions and this has an effect". It was observed that approvals of certain information and processes takes longer in SOCs. There is, however, enough evidence that SR is improving in JSE listed firms and SOCs as confirmed by the control sample of SOCs and the assurance providers. The internal drivers of SR of stakeholder demand and the role of leadership is similar in both JSE listed firms and SOCs. Stakeholders therefore play a significant role in the advancement of SR and IR across many large organisations in South Africa.

The next section deals with identification of the critical paths for sustainability reporting for JSE listed firms.

4.15. Critical Paths for Sustainability Reporting

Based on the findings of the study, Figure 4.16 below illustrates the critical paths for sustainability reporting of a firm. This emerges from the outcome of this study that the most significant external drivers of reporting are stakeholders and the most significant internal driver is leadership. These two drivers are the bedrocks of the success of environmental sustainability reporting for large firms in South Africa. An organisation needs to adopt an industry-wide guideline for sustainability reporting and ensure that this guideline is established in the organisation by applying the principles of the frameworks. In the South African context, GRI guidelines, the IRC Framework and King Code of Corporate Governance are best practice tools for sustainability and integrated reporting based on findings of this study. All these frameworks are anchored to a stakeholder inclusive approach. Finally, external assurance using the Combined Assurance Model provided in King Codes is the final path in the journey of advancing sustainability reporting to meet stakeholder expectations (see Figure 4.16). Figure 4.16 is an illustration and the process is more complex and not all businesses follow this linear path.

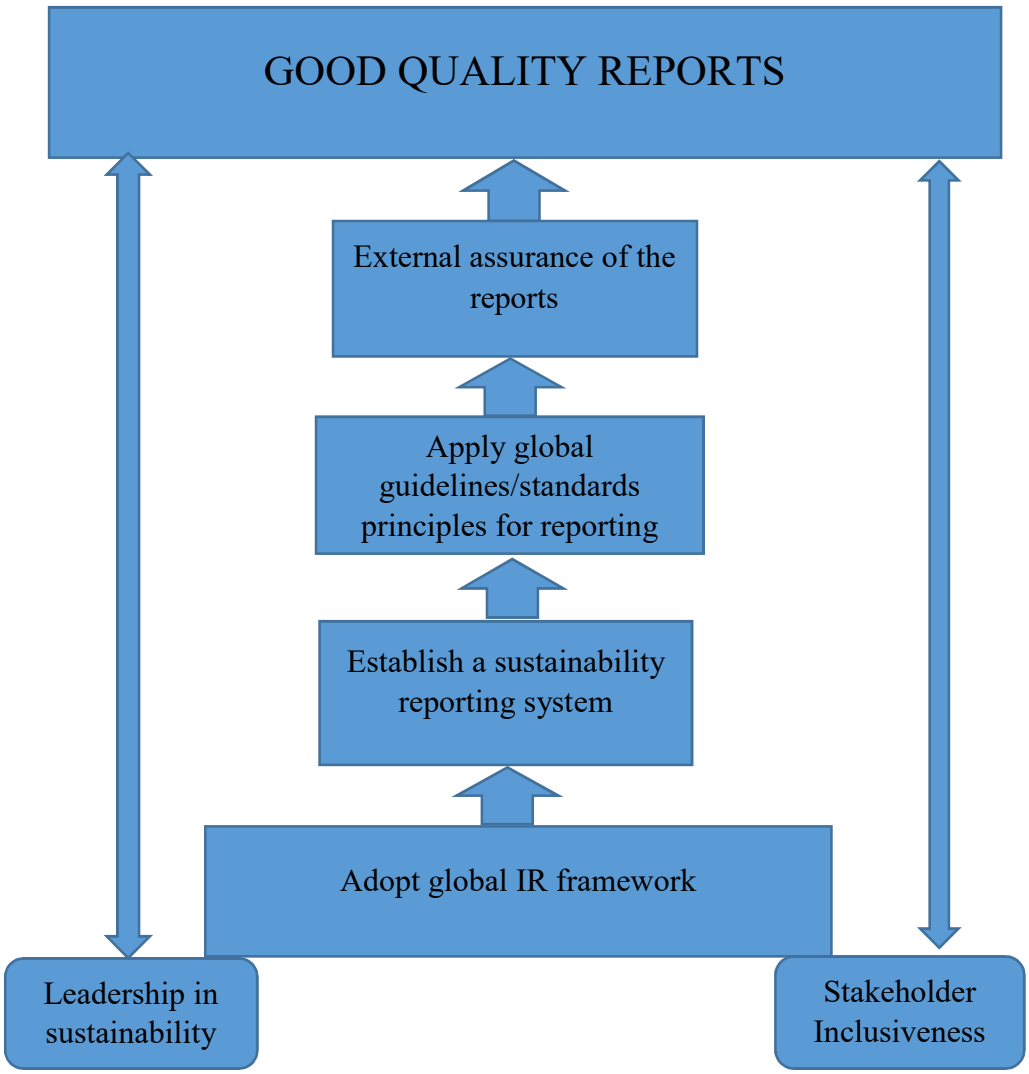

Figure 4.16: Critical Paths for Environmental Sustainability Reporting for a Large Firm in South Africa (outcomes of this study)

CHAPTER 5: DISCUSSION

The first Chapter of this study provided an overview of the current issues in Sustainability Reporting (SR) and Integrated Reporting (IR) at a global level and within the South African context with particular attention given to firms listed of the JSE. This was followed by an outline of the rationale for this research, the emerging research problem and the identification of literature associated with it. In the second Chapter, a thorough analysis of the literature on Sustainability Reporting, Integrated Reporting, report quality, and theories for sustainability reporting was undertaken. This Chapter concluded with the formulation of four research questions which required further investigation to address the research problem.

Chapter 2 took the form of a detailed literature review of the key issues in this study. Chapter 3 justified the chosen qualitative study methodology for the research problem identified in Chapter 1. Chapter 3 explained the sampling procedure, data collection, data analysis, steps that ensured the credibility of this study, limitations of the case study, and ethical considerations of the project. Chapter 4 discussed the findings in detail from both primary and secondary data sources. In this Chapter 5, all existing, advanced and new knowledge gained from the data analysis are compared and evaluated with the literature. From this, critical insights emerged from the study that helped link the findings to the theory and policy implications.

This study's findings were evaluated through a two-level process. The findings were first evaluated to investigate whether there has been prior academic literature on the findings. The following indication was given at this level: (i) "none" means there were no previous academic findings available based on the literature review (ii) "limited" means there has been little information in academic literature, and (iii) "yes" means there is some academic literature available on the finding. The second level involved an indication of the impact of the finding and its contribution to knowledge. This indication is provided as follows: (i) "new" means this is a new finding in the literature, (ii) "added" means the finding adds more knowledge and (iii) "supported" means the finding supports existing knowledge.

5.1. Discussion on Research Question 1

(a) How has the introduction of mandatory requirements on reporting contributed to quality of sustainability reporting for South African listed companies? (b) Is sustainability reporting and or integrated reporting really mandatory for firms listed on the JSE?

The study revealed that the quality of sustainability reporting has significantly improved, but this cannot be singularly attributed to the listing requirements that promote IR and SR for listed firms. The table below contains a summary of the key findings of Research Question 1, including how the findings have contributed to knowledge.

Table 5.1: Summary of Key Findings for Research Question 1 and the Contribution to Knowledge

	Summary of Findings	**Section in Results**	**Presence in Literature**	**Impact of Finding to knowledge**
1.	Amount of sustainability disclosure is not synonymous with the quality of sustainability reporting	4.5.1	Limited	Added
2.	There are mixed views on whether the JSE listing requirements are mandatory or not	4.5.2	Limited	New
3.	IR and SR are not explicitly mandatory for firms listed on the JSE	4.5.2	Limited	New
4.	IR and SR are now business best practice for JSE listed firms and SOCs	4.5.2	Limited	New
5.	There are listing requirements that promote IR and SR on the JSE	4.5.2	Limited	Added
6.	Shareholder compacts in SOCs promote IR and SR and are comparable to listing requirements	4.5.2	None	New
7.	There are mixed views on the desirability of mandatory requirements for reporting	4.5.3	Limited	Added
8.	There are existing market forces adequate to promote better SR report quality	4.5.3	Limited	Added

9.	Quality of IR and SR is not formally regulated	4.5.3	Limited	Added
10.	There are no enforcement mechanisms and penalties for IR and SR for JSE listed firms	4.5.2	None	New
11.	The quality of reporting for JSE has improved in the last 5-9 years but this cannot be solely attributed to listing requirements	4.5.4	Limited (non-conclusive)	Added
12.	Report preparers do not connect improved SR quality with listing requirements	4.5.4	None	New
13.	There is room for improvement in SR quality for listed firms	4.5.4	Yes	Supported
14.	There is need for more transparency of SR of listed firms	4.5.4	Limited	Added
15.	There are sectoral differences in quality of SR for firms on the JSE	4.5.5	Limited	Added
16.	The best performing sectors are resources, banks and Industrial goods sectors but there are exceptional reporters in other sectors	4.5.5	Limited	Added

5.1.1 Mandatory or Non-Mandatory IR Listing Requirements

A key assumption made in previous studies, which also informed this study, was that there are mandatory listing requirements for integrated reporting and sustainability reporting for firms listed on the JSE (Ackers & Eccles, 2015; Carels, 2013; Chersan, 2015; Doni et al., 2016; Rensburg & Botha, 2013). This study has added a contribution to knowledge in that it has shown that the listing requirements are not mandatory for both sustainability reporting and integrated reporting. Nevertheless, publication of integrated reports is now best practice for firms on the JSE, admittedly partly because of the listing requirements.

The listing requirements require firms to apply King IV code of Good Corporate Governance, whereas King IV recommends integrated reporting. This is consistent with Mansoor and Maroun (2016) who pointed to the fact that South Africa has a well-established code of corporate governance and is an advocate of the integrated reporting movement. Based on the findings of the current study, the JSE listing requirement promotes integrated reporting and, by extension, sustainability reporting for South

African listed firms. State-owned companies also follow best practice and hence also provide integrated reports. The JSE listing requirements are not mandatory but the listing requirements strongly imply that there is a need for firms to report.

5.1.2 Desirability of Mandatory Requirements

There are mixed views on desirability of mandatory requirements for reporting amongst the sustainability practitioners of JSE listed firms. The idea of mandatory sustainability reporting has also been a subject of debate globally, primarily because of lack of clarity on the enforcement mechanisms and standards (Brown et al., 2009). In the context of the JSE in South Africa, the market forces exist in the form of the external and internal drivers of sustainability reporting described under Research Question 2.

The study found that the listing requirements promoted integrated reporting and indirectly encouraged sustainability reporting for late adopters. However, it will be challenging to subject the quality of sustainability reporting to rules. As it emerged in the study, there are existing market forces that are up to the task of pushing for better quality reporting. Even before the introduction of the listing requirements promoting integrated reporting, there were companies already producing good reports. There is therefore a market mechanism available to reward reporters that report adequately and punish those who do not report adequately or by withholding investment capital. The study also found that investors are key stakeholders for any organisation.

Both the rationalist and normative theories of compliance provide vital understandings into sustainability management through the achievement of compliance (Paterson, Alexander; Kotze, 2009). Globally, most governments have not been directly involved in sustainability reporting as they regard them as voluntary and private initiatives. The key argument in support of reducing regulation is that complying with environmental regulations is costly for business, and the associated enforcement is regarded as expensive for the State. The perfect situation would therefore be when private players were to conduct themselves with due care for the environment, avoiding the need for regulation to be enforced by either provincial or national legislation. The argument is that regulations can prohibit and punish worst practice but cannot secure best practice. Adoption of such a corporate philosophy is premised on the desire to address environmental problems at their source. An example of this would be sustainability

reporting and the resultant adoption of corporate sustainability indexes (Paterson, Alexander; Kotze, 2009).

5.1.3 Trends in the Quality of Sustainability Reporting

Through empirical evidence, this study has shown that disclosure of information and quality of reporting has significantly improved between 2009 and 2017. Previous studies have attempted to establish the trends in quality by using various scoring systems (Skouloudis et al., 2010). In the case of the JSE, there were previous quantitative studies using the scoring of disclosure (Mansoor & Maroun, 2016; Mashile, 2015). These findings showed an increase and an improvement in reporting for the same period; however, the increase was not significant enough to confirm the link between improvement in reporting and the introduction of listing requirements (Mansoor & Maroun, 2016; Mashile, 2015).

The current study points in the same direction as previous studies in that the quality of reporting has been improving. This qualitative study also found that the improvements in reporting could not be attributed to the listing requirements. This was because the listing requirements were not mandatory just as the researcher had initially assumed based on previous scholars' assumptions. Rather, this study found that there are stronger drivers of reporting besides the listing requirements. The study confirms other findings that sustainability reporting by corporations has become entrenched in organisations across the globe (Bonsón & Bednárová, 2015; Dragu & Tiron-Tudor, 2013; Lozano & Huisingh, 2011).

5.1.4 Sectoral Analysis of Sustainability Reporting Quality

The current study reveals a sectoral difference in report quality. The resources sector emerged as the best performing sector followed by the banking sector in providing good quality reports. The finding on the resources sector confirms previous findings by Jose (2013) in India, where it was found that the heavy industry sectors such as cement, metals and mining outperformed others and this was attributed to their need for a social licence to operate. The South African resources sector is an early adopter of reporting because of relatively higher stakeholder expectation and because of other legislative pressures associated with the dependence of the sector on natural resources.

The resources sector has significant impacts on the environment and society at large. Similar findings were observed in Malaysia, where companies in sensitive sectors were

found to disclose more sustainability information (Amran, 2012). Another study on IR pilot program companies showed that the industry in which companies operate has an influence on IR materiality disclosures (Fasan & Mio, 2017).

The banking sector, although a late adopter of reporting, is shown to be advanced in reporting. Interestingly, the sector is also highly regulated and the expectations of the stakeholders and society in generally also high when compared with other sectors. This finding is consistent with previous studies in Bangladesh as cited in Sobhani et al. (2011), which showed that banking companies were more likely to disclose sustainability information than other listed companies.

This study therefore added more clarification to an existing body of knowledge that shows how sectors with high environmental and social impacts are inclined to provide better sustainability reports.

5.2. Discussion on Research Question 2

What are the drivers for quality of sustainability reporting in South Africa?

There are many drivers of sustainability and integrated reporting for firms on the JSE. The drivers were categorised into internal and external drivers. The internal drivers can be viewed as critical success factors for sustainability reporting quality for JSE listed firms. The table below is the summary of the findings for research question 2 and includes an indication on how the findings have contributed to knowledge.

Table 5.2: Summary of Key Findings for Research Question 2 and the contribution to knowledge

	Summary of Findings	Section	Presence in Literature	Impact of Finding
1.	There are many drivers of SR and IR for JSE listed firms	4.6	Limited	Added
2.	There are external and internal drivers of reporting.	4.6.1	Limited	Added
3.	Stakeholders expectations is the most significant external driver of reporting for JSE listed firms	4.6.1(a)	Limited	Added
4.	Stakeholder demands are partly creating the perceptions that SR and IR are mandatory	4.6.1(a)	Limited	New
5.	King Codes for Corporate Governance of IoDSA is regarded as best practice by JSE listed firms	4.6.1(b)	Limited	Added
6.	Legislative requirements on the operations of high impact sectors such as resources have a strong indirect influence on IR and SR	4.6.1(c)	Limited	Added
7.	Competition for good IR and SR is an external driver of SR and IR for JSE listed firms	4.6.1 (d)	None	New
8.	Pressure from investors have an influence on IR and SR for JSE listed firms	4.6.1(e)	Limited	Added
9.	Risks and Opportunities have an influence on SR and IR for JSE listed firms	4.6.1(f)	Limited	New
10.	Shareholder influence has a minimum impact on JSE listed firms. The shareholder has more influence on SOCs through the Shareholders compact	4.6.1 9(g)	Limited	New
11.	Reporting frameworks of GRI, IIRC and CDP play a critical role in IR and SR for JSE listed firms	4.6.1(h)	Yes	Added

12.	Third party rating agencies play a significant role in SR and IR for JSE listed firms	4.6.1(i)	Limited	Added
13.	The internal drivers of SR reporting can be regarded as the critical success factors in SR reporting	4.6.2	None	New
14.	Leadership is the most significant internal driver of SR for JSE listed firms	4.6.2(a)	None	New
15.	An organisation's reporting experience is an internal driver of SR for JSE listed firms	4.6.2(b)	Limited	Added
16.	The capacity for data collection is an internal driver of SR for JSE listed firms	4.6.2 (c)	Limited	Added
17.	The use of both quantitative and qualitative data is crucial for SR	4.6.2 (c) (i)	Limited	Supported
18.	Banks are not reporting the impact of their lending activities due to the absence of tools for measuring that third-party impact	4.6.2 (c) (ii)	Limited	Added

The findings of this study showed that role played by stakeholders in sustainability reporting was strong. This confirms that Freeman's stakeholder theory (1984) is the most appropriate lens in the study of sustainability reporting. This is because stakeholders are increasingly taking on the role of sustainability leadership as the key external and internal drivers of sustainability reporting for firms on the JSE.

A similar trend was evident for the control sample of SOCs. Stakeholders are those groups or individuals that can be expected to be significantly affected by an organisation's activity (Freeman, 1984; King, 2016). On the other hand, a sustainability leader inspires and supports stakeholders towards achieving a better world (Visser & Courtice, 2011). It is clear from the study that influence on an organisation can come from stakeholders inside and outside the firm. In this way, the idea of leadership moves from the concept of leadership as a relationship to the concept of leadership as a social process that contains complex relationships (Barker, 2001; Yukl, 2001).

This study therefore confirms a key assumption of the stakeholder theory in that organisations have a desire to continue in the long term. The study further confirms that organisations have an objective to create value for several stakeholders that are either

contracted by the firm or have some association with it (Freeman, 1984). Based on the empirical evidence provided by this study, the most significant internal drivers of reporting for JSE listed firms are leadership, organisation experience in reporting, data collection system, skills for sustainability management and the need for a more environmentally sustainable operation. Another key assumption of the stakeholder theory is that the management of a firm plays a unique role in coordinating and managing relationships with all the stakeholders (Freeman, 1984; Hill & Jones, 1992).

It is also observed that both the primary and secondary stakeholders have combinations of low, medium and high levels of interests in SR. The JSE is one of many other stakeholders with equivalent high interests in the JSE firms. It is therefore not surprising why there is such a similarity in trends for sustainability reporting between JSE listed firms and SOCs. The internal drivers of SR of stakeholder demand and the role of leadership is similar in both JSE listed firms and SOCs. Stakeholders therefore play a significant role in the advancement of SR and IR across many large organisations in South Africa. The study thus confirms another assumption of the stakeholder theory that stakeholder expectations are a critical factor in the development of sustainability reporting (Wang, 2017).

The emergence of stakeholders and leadership as the main drivers of sustainability reporting within the South African context is not entirely a surprise considering the entrenchment of King IV Code of Good Governance and GRI guidelines in South Africa's large firms. Both King IV and GRI adopt a stakeholder inclusive approach (GRI, 2002; King, 2009) and this was also the perception of sustainability practitioners.

The study further confirms that besides the most significant role played by stakeholders inside and outside an organisation, there are many drivers of SR, such as the listing requirements, legislative requirements, pressure from investors, role of reporting frameworks, competitions, shareholders and other internal critical success factors. This confirms previous studies in other jurisdictions which revealed that SR is influenced by many forces (Cormier et al., 2005; Martin & Hadley, 2008). An interesting new finding was that State-owned enterprises also have their own "soft" requirements promoting sustainability and integrated reporting, and this was in the form of the "shareholder compact".

In the process of determining the trends in reporting and the actual drivers of improved quality in reporting, the cross-cutting theme that emerged was that reporting is a journey and different organisations are in different stages of their reporting journey. Previous studies have also identified that embracing integrated reporting is a journey; it is for this reason that there are early adopters and late adopters of IR (Carels, 2013; Cozma Ighian, 2015; Marimon et al., 2012). In another study, the mining sector was used as an example of a sector that adopted IR earlier than other sectors (Doni et al., 2016). Furthermore, a survey done by ACCA in 2017 found that many challenges existed in the application of the IIRC framework, but this survey viewed the adoption of this framework as a long-term journey towards better reporting and the creation of value by the organisations in the study (ACCA, 2017). The author has therefore concluded that there are "sustainability reporting life stages" that every reporting organisation goes through as part of their advancement towards becoming a mature reporter (this has been represented in Figure 4.17 in chapter 4).

The next section discusses the findings for Research Question 3.

5.3. Discussion on Research Question 3

What are the key determining factors for the quality of sustainability reporting of the JSE firms?

There are many determinants of SR quality for JSE listed firms. The sustainability practitioners review the quality of reports using the GRI and IIRC frameworks. GRI reporting has been increasing in many parts of the globe (Marimon et al., 2012) and in many large South African companies. This study found that the two frameworks are used in SR within the South African context. Table 5.3 below provides a summary of the findings of Research Question 3. The table also provides an indication on how the findings make a contribution to knowledge.

Table 5.3: Summary of Key Findings for Research Question 3 and the contribution to knowledge

	Summary of Findings	Section	Presence in Literature	Impact of Finding
1.	There are many determinants of SR quality for JSE listed firms	4.7	Yes	Added
2.	JSE Sustainability practitioners are measuring quality using the lenses of the IIRC Framework and GRI	4.7	None	New
3.	Materiality to stakeholder is the most significant determinant of quality for SR for JSE listed firms	4.7.1	Limited	Added
4.	Stakeholder engagement is also a determinant of SR quality for JSE listed firms	4.7.2	Limited	Added
5.	Context of reporting organisation is a determinant of SR quality	4.7.3	Limited	Added
6.	Providing a link to key performance indicators is a determinant of SR quality	4.7.4	Limited	Added
7.	Providing an indication on the improvements on SR is also a determinant of quality	4.7.5	Limited	Added
8.	GRI and IIRC frameworks have been deeply entrenched in the SR and IR for JSE listed firms	4.7.6	Limited	Added
9.	There are enough guidelines for SR for JSE listed firms	4.7.6	Limited	Added
10.	There are challenges in transparency and sustainability report assurance for JSE listed firms	4.7.7	Yes	Supported
11.	There are implementation challenges that come with IR and SR for some JSE listed firms	4.7	Yes	Supported

The study revealed that there are many determinants of quality in the sustainability reporting fraternity of JSE listed firms. The emerging determinants are also common in both the GRI and the IIRC frameworks. This is an addition to existing but limited knowledge. Similar findings were observed in Australia, for example, where research conducted with key preparers in the various organisations found that their reporting was informed by GRI (Farneti & Guthrie, 2009). The most significant finding was that the key theme in the investigations on the determinants of report quality was the materiality of the information provided to stakeholders. This further confirms the role of stakeholders in sustainability reporting within the South African context.

The most commonly referred to guidelines for sustainability reporting were the GRI guidelines, IIRC framework, CDP and other UN frameworks including the UN Global Compact. Based on empirical evidence, the GRI is the *de facto* sustainability reporting guideline for JSE listed firms. This confirms some findings in other locations that GRI is the best-known framework for sustainability reporting by business across the world (Brown et al., 2009).

The wide adoption of the GRI guidelines is most likely the reason why the GRI indicators formed a good percentage of the determinants of sustainability report quality from the practitioner's experiences. This further confirms other studies that show that sustainability reporting by corporations have become engrained in organisations across the globe (Bonsón & Bednárová, 2015; Dragu & Tiron-Tudor, 2013; Lozano & Huisingh, 2011).

The GRI was first developed with the aim of assisting "reporting organisations and their stakeholders in articulating and understanding contributions of the reporting organisation to sustainable development" (GRI, 2002). The GRI has changed the approach of organisations by considering sustainability as an element for performance measurement, in the same light as financial reporting is for financial resources. The GRI Guidelines provide for "sustainability reporting" to consider economic, environmental, and social performance (also known as the "triple bottom line"). This approach reflects the most widely accepted approach in sustainability reporting (Moneva *et al.*, 2006).

There is a challenge in determining aspects that are significant in terms of their impact on the value creation of organisations. It is argued that materiality must be defined on a sector specific basis (Eccles et al., 2012). The principle of materiality needs to be

considered in the same light as the precautionary principle in ecology, whereby action to manage the impact on the environment is not deferred due to scientific uncertainty (Lamberton, 2005).

Another key theme that supports existing knowledge emerged from the study. There is a.need to use a combination of quantitative and qualitative information in sustainability reporting. A similar view is held by other researchers as they raised the need for reports to contain qualitative and quantitative information on how companies have managed to improve their economic, environmental, social effectiveness and efficiency in the reporting period (Daub, 2007; Skouloudis, Evangelinos & Kourmousis, 2010).

The materiality of information to stakeholders is the most significant determinant of the quality of sustainability reporting. SR and IR have on many occasions been criticised for being of poor quality as a result of failing to address all material issues relating to the sustainability performance of firms (Comyns et al., 2013). This confirms that there is a challenge in determining aspects that are significant in terms of their impact on the value creation.

GRI guildelines IIRC framework and King Codes for Corporate Governance are now regarded as best practice tools by firms on the JSE as it emerged in this study. The Merriam-Webster dictionary defines best practice as "a procedure that has been shown by research and experience to produce optimal results and that is established or proposed as a standard suitable for widespread adoption" (Merriam-Webster Dictionary, 2018). Sustainability reporting has been referred as business practice of companies in Croatia (Dubravka, 2017).

The academic literature has little definition of "best practice" in the field of integrated reporting and or sustainability reporting. However, the term has been used extensively in some professional reports such as ACCA and UFI reports (ACCA, 2017; UFI, 2017) and in a book by Epstein and Buhovac, (2009). There is therefore a gap in academic literature on the definition of best practice in integrated reporting. This finding therefore constitutes an addition to the existing body of knowledge on best practice for sustainability reporting.

The next section is a discussion on Research Question 4 focusing on assurance of sustainability reports.

5.4. Discussion of Research Question 4

What are the sustainability reporting assurance mechanisms in South Africa?

Despite existing challenges to assure sustainability reports, the assurance of reports is now best practice in large firms of South Africa. Assurance uptake is high despite this not being mandatory for firms in South Africa. Table 5.4 below provides a summary of the key findings under Research Question 4 and the respective contribution that this project makes to knowledge.

Table 5.4: Summary of Key Findings for Research Question 4 and the contribution to knowledge

	Summary of Findings	**Section**	**Presence in Literature**	**Impact of Finding**
1	Assurance sustainability reporting is now best practice for JSE listed firms	4.8	Limited	New
2.	There are no mandatory requirements for assurance of sustainability reports for JSE listed firms	4.8	Limited	Added
3.	The most adopted and rigorous form of assurance by best SR performing JSE listed firms is the Combined Assurance Model (CAM) in King Codes of Corporate Governance	4.8.1	None	New
4.	There are two standards in use by the assurance providers for JSE listed firms that include ISA E3000 and AA1000	4.8.2	Limited	Added
5.	Sustainability assurance plays a critical role in advancing SR	4.8.3	Limited	Added
6.	There are comparability challenges due to the adoption of different standards of assurance	4.8.2 & 4.8.4	Limited	Added
7.	Assurance for some JSE listed firms is sometimes limited to verifying the figures reported and this is not adequate	4.8.3 & 4.8.4	Limited	Added

8.	There is less rigour for sustainability assurance as compared to financial statements auditing	4.8.4	Limited	Added
9.	There are challenges of auditing qualitative information due to its subjectivity	4.8.4	Limited	Added

The Combined Assurance Model is currently the most adopted assurance mechanism for the best reporting JSE listed firms. The acceptance of the CAM model has not been covered in the academic literature. A study by Damen (2016) suggest that higher quality sustainability assurance is used as a response to high stakeholder pressures that companies face due to sustainability matters.

The need for assurance was a major theme in the current study. The assurance of integrated reports also needs to be addressed as certain material issues on sustainability are not complete in some sustainability reports (Adams, 2015; IIRC, 2013). There are existing good practices on assurance by firms on the JSE. Some firms, for example, demonstrate an adoption of the CAM as explained in King IV and other industry requirements. There are challenges with current assurance mechanisms as reporting entities are using different standards. The issues emerging from this study have been raised by other researchers in South Africa and in other jurisdictions.

The materiality process is often not assured, and in many instances, it is left for the governing body to determine their material KPIs, which are then audited. According to Maroun (2018), conventional methods of assurance from professional standards are risk-based and the emphasis is on the accuracy of disclosed information rather than on the quality of the interpretation of the information for the benefit of readers of reports. For this reason, the methods are not exactly appropriate as they take the form of expressing an opinion on qualitative information that is largely subjective (Maroun, 2018). These issues have been confirmed in this study.

There is evidence of challenges in assuring qualitative information. This is a similar observation made by previous researchers as the narrations of reports are subjective, making them difficult to evaluate based on set criteria as would normally be required by conventional professional standards such as International Standards on Auditing and International Standards on Assurance Engagements used in traditional annual reports (ISAEs) (Atkins & Maroun, 2015; Fasan & Mio, 2017; Maroun, 2018).

In the South African context, an auditor needs to express an opinion on a client's financial statements which are often included as part of an integrated report. In this process, the auditor is only required to read the rest of the integrated report for identifying inconsistencies with the financial statement (IAASB, 2009). Neither the IIRC nor the King Codes of corporate governance mandate the assurance of an integrated report (Maroun, 2018). Nevertheless, the IIRC states that the reliability of information provided to stakeholders is affected by "mechanisms such as robust internal control and reporting systems, stakeholder engagement, internal audit or similar functions, and independent, external assurance" (IIRC, 2013).

There are two standards in use by the assurance providers for JSE listed firms that include ISA E3000 and AA1000 as also reported by previous researchers (Ackers & Eccles, 2015; Maroun, 2018). This is thus a confirmation of existing knowledge.

The challenges of the assurance mechanism for JSE listed firms demonstrates a present need and real scope for the industry to improve processes of assurance of sustainability information. Considering that sustainability and integrated reporting is driven by stakeholders, a tripartite process between auditees, auditors and stakeholders is critical in the process of advancing the auditing process for JSE listed firms.

5.5. Discussion on Findings from the Control Sample of SOCs

Practitioners of SOCs were selected as a control sample in order to validate findings from the JSE practitioners. This was because SOCs are also large and well-established organisations that are working in the similar jurisdiction to JSE listed firms. The table below is the summary of key findings from the control sample of SOCs and also indicates the study's contribution to knowledge.

Table 5.5: Summary of Key Findings from the Control Sample of SOCs and contribution to knowledge

	Summary of Findings	Section	Presence in Literature	Impact of Finding
1.	There are Shareholder compacts that promote IR and SR for SOCs in South Africa. This is almost comparable to the JSE listing requirements and both are not explicitly mandatory	4.9	None	New
2.	SR and IR are improving for some groups of large SOCs in South Africa	4.9.1	None	Added
3.	There are internal and external drivers of SR for SOCs in South Africa	4.10.1	Limited	Added
5.	The most significant external driver of SR for SOCs in South Africa is stakeholder expectations	4.10.1	None	Added
6	There are many determinants of SR quality for SOCs in South Africa	4.11	None	Added
7.	Large SOCs have taken King Codes of Corporate Governance as best practice	4.12	None	Added
8.	Large SOCs in South Africa have adopted the Combined Assurance Models for SR as a best practice, similarly to high performing and high impact JSE listed firms	4.12	None	Added
9.	The Sustainability Reporting Life stages as observed in JSE listed firms is also observed in South African SOCs	4.13	Limited	Added

The findings for SOCs confirms that the forces driving SR in SOCs are similar to those of the JSE. The findings show that the role of stakeholders is strong in both SOCs and JSE listed firms. King Code, IIRC framework and GRI are regarded as best practice by both SOCs and JSE listed firms.

5.6. Contribution to Theory

This study confirmed a key assumption of the stakeholder theory: that companies have a desire to continue in the long term and that they have an objective to create value for a number of stakeholders that are either contracted by the firm or have some association with the firm (Freeman, 1984). The current study is conclusive on the critical role played by stakeholders in shaping sustainability reporting for both JSE listed firms and large SOCs. A wide range of stakeholders for JSE listed firms and SOCs have emerged from this study.

The South African legal regime has been changing to provide mechanisms for the inclusion of stakeholders in corporate governance. Esser and Delport (2017) are of the view that stakeholders receive substantial protection in the Companies Act of South Africa and many provisions in Section 7 were drafted with a broader purpose than shareholders profit maximisation. Furthermore, the establishment of the social and ethics committee provides stakeholders with sound legal standing as their interests are protected in terms of the law (Esser & Delport, 2017). Both King III, and now King IV, are still self-regulatory mechanisms and they promote a stakeholder inclusive approach (Esser & Delport, 2017; Paterson & Kotze, 2009).The Social and Ethics Committee was developed as a move to protect the interests of stakeholders in the context of company law in South Africa. The GRI guidelines for sustainability reporting also centred on a stakeholder driven approach (GRI, 2002).

It has been argued by Christopher (2010) that the influencing forces impacting on the governance processes of companies are indirectly caused by the changing environment in which companies operate. This could be partly due to increased stakeholder interest in the company, which extend beyond shareholders to include other stakeholders. This is applicable to both private sector and public sector companies. It is therefore necessary to recognise the interest of the stakeholders in the sustainability performance of firms and appropriately address them.

There are primary stakeholders, such as employees and customers who are crucial to the survival of the organisation (Waddock et al., 2002). Besides the primary stakeholders, Waddock et al. (2002) further identified the increasing importance of non-government organisations (NGOs), activists, communities and governments as important secondary stakeholders. These secondary stakeholders arise out of several societal issues such as

environmental concerns. Luoma, Patrice and Goodstein (1999) as well as Christopher (2010) found that organisations were under increased pressure to include a much wider stakeholder base in organisational processes. The stakeholder theory is therefore the most appropriate lenses for sustainability reporting within the context of large organisations in South Africa.

5.7. Research Gaps and Avenues for Further Studies

This study focused on firms listed on the main board of the JSE and SOCs. These two sets of organisations can be regarded as large firms based on their market capitalisation. This exploratory study demonstrates the life stages of large South African organisations. For this reason, there is a gap in research on the similar developmental stages of sustainability reporting in smaller organisations. A future researcher may wish to focus on non-listed firms or firms on the JSE's alternate exchange, which can be regarded as small organisations.

The study has demonstrated that the quality of reporting cannot be completely determined by measuring the disclosure of sustainability information in integrated reports, as quality and amount of disclosure are not synonymous. It follows therefore that the quality of sustainability reports ought to be measured qualitatively. There is scope to develop a method or tool that may be able to qualitatively measure the quality of sustainability information in integrated reports. This tool could consider issues raised in the IIRC framework regarding linking reported information with the strategy of an organisation and also relating to the context of a particular organisation. Such a tool is absent in the academic literature; however, similar efforts are being done by EY as part of the Annual Awards, but these efforts have not found their way into the literature yet.

The emerging theme on transparency was not fully unpacked in the current study. Future research may need to define transparency within the context of sustainability reporting arena and provide solutions to this phenomenon.

There is also a gap in knowledge in determining how other big non-listed firms can adopt integrated reporting similarly to listed firms and SOCs. Future studies may wish to explore what the role of government departments such as Department of Trade and Industry (DTI) may play in such an effort. The researcher may also want to ask how the Reserve Bank of South Africa can promote integrated reporting in non-listed financial institutions using the "soft" mechanism such as JSE listing requirements or the

shareholder compact for the SOCs? There is also an opportunity to investigate how sustainability reports by non-listed companies can be based on the Carbon Tax Regime currently being discussed in South Africa.

Despite primary evidence and supplementary data sources indicating relatively better reporting, banks are not reporting the impact of their core business associated with lending activities. Admittedly, this is partly due to an absence of tools for measuring such third-party impact. There is huge scope for future research for developing tools that the financial services industry can use to collect data and manage impacts associated with the money they use to fund the projects of third parties who are typically their clients.

Previous studies have attempted to determine the influence of listing types on sustainability reporting, but the results have been inconclusive. This study did not find any significant influence based on the thematic analysis done. The participants of dual listed firms, typically those with secondary listings in South Africa, did not raise any link between listing type and quality or content of sustainability reporting but the current study was not conclusive. The sample only had two firms with secondary listing, while the rest were primarily listed.

While this may be an avenue of future research, limited findings from the current study point in the direction that listing types do not have significant influence on SR because the main drivers of sustainability reporting are stakeholder related. Primary listed and secondary listed entities are operating within the same environment with similar stakeholder demands. The secondary listed firms are all producing IR and SR despite this not being a requirement for them as per their listing type. They are doing it, in other words, because it is best practice for them to do so. Supplementary secondary data also shows that some secondary listed entities are competing very favourably on IR and SR with the primary listed firms. In that case, any further interest in investigating this variable might be better tested in other jurisdictions where reporting is properly subjected to rules.

Previous studies sought to determine whether the preparer has a direct influence on the quality of reports. This relates to individuals' perceptions, experience and qualifications. This study attempted to find that influence, but findings were not conclusive, as preparations were done by a team of people in the sampled firms which were large

organisations. As a result, the individual's perceptions and qualifications are absorbed into the team effort.

The majority of large South African organisations have "materiality workshops" that determine the most important issues or KPIs to be included in the report. These workshops involve a team of preparers in the organisations and in some cases external services providers. These materiality workshops limit any possibility for individuals own perceptions to influence the reporting. Further research can still be done on perceptions, ideally if this research is targeting smaller organisations such as firms listed on the alternate exchange of the JSE or some smaller non-listed firms where reports can be done by an individual or just two people.

Large organisations in South Africa tend to have teams of up to five people involved in sustainability reporting because of the large volume of work and the high value placed on IR and SR by large organisations within the South African context. Despite this gap, this study was conclusive in showing the critical role played by leadership in sustainability reporting. It is clear that good sustainability leadership is a critical success factor in sustainability reporting.

This study has provided findings from a qualitative study targeting sustainability practitioners including report preparers, report assurance providers, report users who are sustainability practitioners and some critical reviewers of sustainability reports. It is therefore true that the finding largely reflects the practitioner's views within large organisations in South Africa. The study also showed that the preparers and assurance providers have similar views on trends and the quality of sustainability reporting.

There is therefore an avenue for further studies to undertake a qualitative study that would target a bigger sample of report users who are not sustainability practitioners in order to also capture their perceptions. The immediate challenge with such an exploratory study is that the ordinary users will likely not be familiar with reports as those users are normally interested mostly in a small section of the reports. Most ordinary users of reports will not be able to give a balanced view of the progression and quality as they read with an assumption that the report ought to be perfect and this might be a wrong assumption. Furthermore, not many ordinary users have the time, or the skill, needed to read a sustainability report completely. Although useful in providing more insight into IR and SR, such a qualitative study will likely be more difficult to undertake.

The key finding of this study is that reporting is a journey and most entities are still developing and advancing in their integrated reporting journey. It is the researcher's view that exploratory studies on the quality of reporting need to be centred on practitioners who, despite certain biases, tend to read the reports in full and are therefore able to give a more objective view on the quality and trends of reporting. Furthermore, if there is a need for quick exploratory surveys on quality and usefulness of reports, then the most useful and reliable target group amongst the practitioners are sustainability assurance providers. This is because this group of practitioners have a much stronger exposure to key information, have the skills, and tend to work with a wider range of companies comprised of different sizes and from different sectors.

This study focused on understanding the relationships of the organisations with its primary and secondary stakeholders as provided in the traditional Stakeholder theory (Freeman, 1984). There are relationships between the stakeholders of an organisation and there are also trisector partnerships of stakeholders (Louw & Venter 2013). There is an avenue for further study to research of the relationships between the stakeholders of JSE listed firms and any trisector relationships.

CHAPTER 6: CONCLUSION AND RECOMMENDATIONS

This Chapter provides the main conclusions of the study under each research question. Recommendations for practice and policy makers are also included.

6.1. Conclusion on Research Question 1

The study revealed that the quality of sustainability reporting has significantly improved, but this cannot be singularly attributed to the JSE listing requirements. Based on evidence from this study, the researcher concludes that there are listing requirements that earnestly promote integrated and sustainability reporting for firms listed on the JSE. Those requirements are not mandatory because they are not explicitly prescribed as such in the listing requirements and there is no enforcement mechanism. Further, and more importantly, the application of what constitutes integrated reporting is subject to different interpretations. There was also no formal mechanism in place at the time of the study that regulates the quality of the reports. Nonetheless, based on what emerged in this exploratory study, integrated reporting that follows the IIRC Framework and the sustainability reporting that follows the GRI is now best business practice for JSE listed firms.

The study confirms that existing market forces may provide enough motivation for advancing sustainability reporting in South Africa. Basic interventions such as listing requirements that promote reporting and shareholder compacts in State-owned companies have managed to advance reporting in South Africa.

6.2. Conclusion on Research Question 2

There are many drivers of reporting on the JSE. The drivers can be categorised as internal and external drivers. The internal drivers can also be viewed as critical success factors for sustainability reporting quality. This current study confirms that the stakeholder theory is the most appropriate lens for understanding the development of sustainability reporting for JSE listed firms. This is due to the convergence of the two drivers of stakeholder demands and the role of management in shaping sustainability reporting for JSE listed firms. This was also confirmed by the evidence from SOCs.

In the process of determining the trends in reporting and the actual drivers for improved quality in reporting, the cross-cutting theme that emerged is that different organisations are at different stages of their reporting journey. There are early adopters and late

adopters. The mining sector is an example of a sector that adopted SR earlier than other sectors (Doni et al., 2016). When an organisation chooses to pursue sustainability reporting, it becomes a real journey of reporting; hence various organisations are at different stages depending when and how they commenced their SR journey. The researcher therefore termed that process "sustainability reporting life stages".

6.3. Conclusion on Research Question 3

There are many determinants of SR quality for JSE listed firms. Sustainability practitioners view quality from the view provided by the GRI and IIRC frameworks. This further confirms the entrenchment of the two frameworks in SR within the South African context. The critical paths for sustainability reporting have been provided, indicating the need for leadership and stakeholder inclusiveness.

6.4. Conclusion to Research Question 4

It is business norm for JSE listed firms to assure sustainability reports. The Combined Assurance Model is the currently the most adopted assurance mechanism for JSE listed firms. There are still many challenges and there is room for improvement to ensure adequate assurance for listed firms, as there is currently no standardisation for sustainability reporting.

6.5. Recommendations for Policy makers

It is clear from the study that both listed firms and SOCs rely on "soft" requirements that promote integrated reporting. In the case of the JSE listed firms, this referred to the listing requirements promoting application of King Codes. These "soft" requirements are being used in SOCs through the shareholder compact that requires reporting on certain key performance indicators that are better reported through integrated reports in the case of SOCs. The Department of Trade and Industry (DTI) and the National Department of Environmental Affairs can explore ways to also promote sustainability reporting through appropriate "soft" requirements for non-listed firms since the benefits for sustainability reporting are similar for listed and non-listed companies.

GRI guidelines and IRC frameworks are now business best practice. This provides leaders and policy makers alike with an opportunity to recommend adoptions of the standards when and where appropriate. There is a need to foster sustainability reporting even in smaller companies, as the sustainability impact of many small companies

combined may be potentially significant. There are also other non-listed companies with similar impact to listed companies that need to provide reports to stakeholder and give an account of their sustainability performance. The ongoing discussions in South Africa on Carbon Tax is a potential avenue for investigating appropriate thresholds for criteria to be developed for non-listed companies to report through an appropriate "soft" regulating mechanism. Considering that sustainability and integrated reporting is driven by stakeholders, a tripartite process between auditees, auditors and stakeholders is critical in the process of advancing the auditing process for JSE listed firms.

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APPENDIX 1: LETTER REQUESTING INTERVIEW TIME WITH PARTICIPANTS (INCLUDING CONSENT)

Dear Respondent

You are herewith invited to participate in an academic research study conducted by myself (Gabriel T Ngorima, a student in the Doctor of Business Leadership programme at UNISA's Graduate School of Business Leadership (SBL).

This study will provide policy makers and stakeholders with a tool for making sound decision concerning environmental compliance in South Africa.

All your answers will be treated as confidential, and you will not be identified in any of the research reports emanating from this research.

Your participation in this study is very important to us. You may however choose not to participate, and you may also withdraw from the study at any time without any negative consequences. You are asked to participate in a face to face interview with me as I seek to understand how organisation select material issues to include in the integrated reports. The results of the study will be used for academic purposes only and may be published in an academic journal. We will provide you with a summary of our findings on request.

Please contact my supervisor, Professor Pumela Msweli (pumelamsweli@gmail.com if you have any questions or comments regarding the study. Please sign below to indicate your willingness to participate in the study.

Yours sincerely

Gabriel T Ngorima

I, ……. herewith give my consent to participate in the study. I have read the letter and understand my rights with regard to participating in the research.

I also Do/Do not (delete where necessary) give consent to electronic audio recording that will be confidential and remain anonymous and kept in safe place by the Researcher for a limited time. Access only granted to the Supervisor Ethics committee for verification purposes only.

_____	**20 December 2017**
Participant's signature	**Date**

APPENDIX 2: SUMMARY CODE BOOK

CODE	DESCRIPTION	EXAMPLE
PRESENCE OF PENALTIES FOR NOT PROVIDING SUSTAINABILITY REPORTS		
1.No	There are no penalties	Sustainability reporting is not regulated by government, there is no requirement that listed firms companies must submit sustainability reports to government.
2.Yes	There are penalties	-
SUSTAINABILITY REPORTING TREND		
1.Improving	Reporting quality is improving	Even if I look at our reporting, when I started 9 years and now, the quality and quantity of our disclosure has improved.
2.Not Improving	Reporting quality is not improving	Reporting has not changed in quality.
3.Gone down	Reporting quality has gone down	The Integrated Reporting process which has shifted from sustainability to financial materiality has meant that most information is no longer presented which might have been relevant from a sustainability perceptive. There has been a reduction in quality between 2006 and today.
BEST PERFORMING SECTORS ON SUSTAINABILITY REPORTING		
1.Resources	Resources sector providing the best reports	From a sustainability point of view, the resources sector reports better because it is under the microscope.
2.Banking	Banking sector providing the best reports	The banking sector is up there in terms of reporting. There is a lot of attention on the banks and hence you need to be good at communicating.
3.Manufacturing	Manufacturing sector providing the best reports	The manufacturing sector it is the same as retailers, they are lagging.
DRIVERS FOR SUSTAINABILITY REPORTING		
1.	Opportunity	Business efficiency such as cost reduction also plays a role.
2.	Risk	It's a risk based approach.
3.	International obligations	The UN Global compact pushing to report.
4.	Best practice	There is compliance level and best practice level above.
5.	Reporting Frameworks	GRI and IRC are driving reporting.

6.	Rating Agencies	We thought we were doing well in terms of JSE ratings, FSHE4Good then realised we had some gaps.
7.	Industry Requirements	Every year FSHE4Good, International Responsible Mining (IRM), and other rating agencies.
8.	Competition	You realise other companies are reporting then you realise it's a good thing and the EY rating the best performing companies.
9.	Legal Requirements	Some of the reported issues are mandatory from legislation and some not legislated. Department of Mineral Resources requires us to report on progress on mining charter, compliance to Social & Labour Plans.
10.	Listing requirements	The King report is a driver.
11.	Reputation	However, you can't to avoid sustainability, because of reputation.
12.	Investors	Has an impact on the balance sheet to such as extent that investors need to know about it.
13.	Stakeholders	There is a lot of stakeholders. They will focus on certain things eg on community relations. In previous years, we had stakeholders asking about dust, water, discharges, tailing dams.
14.	Shareholders	Some shareholders are starting to have an interest in sustainability reports.
DETERMINANTS OF QUALITY OF SUSTAINABILITY REPORTING		
1.	Context	Based on size, strategic importance and on profile.
2.	Impact	There are some sectors that will always greater focus on sustainability e.g. extractive sector by nature have more significant impact.
3.	KPI	Key performance Indicators and targets will assist in determine quality of reports.
4.	Targets	Key performance Indicators and targets will assist in determine quality of reports.
5.	Opportunities	Its therefore an issue of capturing the risks and opportunities.
6.	Risk	what are the issues to the key risks.
7.	Strategy	It must link strategy and risk and the management thereof.
8.	Assurance	Is it assured.
9.	Projections	Does a report show expected changes in future.

10.	Trends	The indications of trend over a period of time.
11.	Improvements	Plans for improving performance
12.	Disclosure	That's governed by the company's appetite to disclose.
13.	Benchmarking	How does it compare with industry standards
14.	Legal	Information of a legal nature is fully disclosed
15.	Stakeholders	Stakeholder involvement
16.	Materiality	Materiality is the key in terms of what are issues that are strategic
17.	Balance	Is the reporting balanced
18.	Transparency	Is there an effort to be transparent
19.	Relevancy	for example quality attributes such as the relevance
20.	Accuracy	Accuracy of data
21.	Reliability	for example quality attributes such as the reliability of the information being reported
22.	Comparability	Is the report comparable to other companies
ASSURANCE TYPES		
1.	CAM	The first level being internal, and the second independent audits organised by the mother company. It's internal but not within the subsidiary. The third level concerns independent third-party assurance, which is the certification. For example, ISO14001 certification and the associated audits on the reporting itself would have "big 4" accounting firms also validating the reporting and hence providing additional assurance. So, we would have assurance of the system, assurance for reporting and assurance the management system.
2.	Third Party	Level 3 is for the most material KPIs, where we get PWC to do assurance on our key KPIs.
3.	Head office	Level 2 is the corporate sustainability department, who do internal auditing on a mine. This is checking if the mine reported accurate information. This involves checking for proof of documentation that validates the number of KPI.
4.	Internal	Level 1 assurance is where the practitioners acts by checking with a manager, such as the Mine Manager, that the information is correct.