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The Tone of Business Model Disclosure:

An Analysis of Integrated Reports of JSE Listed Entities



A research report submitted by

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A research report submitted to the Faculty of Commerce, Law and Management at the University of the Witwatersrand in partial fulfilment of the requirements for the degree of a Masters in Commerce

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Date: February 2020

Declaration

I hereby declare this research report to be my own work. It is submitted in partial fulfilment of the requirements for the degree of Master of Commerce at the University of the Witwatersrand. The completion of the degree included both the coursework and this research report. This submission constitutes the first submission of this research report. This research report has not been submitted to another university for examination purposes or for another degree.

Phuti Tshepo Moloto

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Abstract

Orientation: Stakeholders (such as shareholders) provide resources to entities to ensure management has adequate tools to execute the strategy. The business model disclosure shows how resources provided by stakeholders will be utilised to create value. However, the use of impression management strategies in the business model disclosure as a means to promote corporate image was raised as a major concern by prior researchers. More specifically, the use of "tone" (i.e. thematic manipulation) to portray entities in a good image has attracted the attention of researchers.

Research Purpose: The purpose of this study is to determine whether JSE listed entities adopt impression management strategies by manipulating the tone of the business model disclosure provided in their integrated reports.

Significance of Study: This study contributes to enhancing the quality of disclosure and highlighting key observations in the business model disclosure within the South African context. To the best of the researcher's knowledge, this is a pioneering study within the South African context. Stakeholders and regulatory bodies (such as the JSE) might use findings of this study to gauge the usefulness of the business model disclosure.

Overview of Research Method: This study followed a quantitative approach. Every sentence in the business model disclosure designated section in the integrated reports of a sample of 88 entities from the Top 100 JSE listed entities was read and analysed. The sample was selected based on the highest market capitalisation for the 2018 Financial year-end. Although the data collected was qualititative in nature, it was used to derive statistical results interpreted by the researcher. The research design comprised of; a manual content analysis, a univariate analysis and a multivariate analysis.

Main Findings: This study found that "non-positive tone" is more dominant in the business model disclosure. The findings do not show the adoption of impression management techniques in the business model disclosure provided in the integrated reports within the South African context. As depicted by the results, there was also no significant statistical relationship between disclosure tone and the set of disclosure variables (i.e. corporate governance, performance and disclosure verifiability). The mandatory inclusion of the business model

disclosure as required by the JSE might be a factor that contributes to the contrasting results of this study in comparison with previous studies.

Keywords: business model, thematic manipulation, impression management, integrated reporting

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List of Abbreviations

Abbreviations	Descriptions
CF	Conceptual Framework
CIMA	Chartered Institute of Management Accountants
IASB	International Accounting Standards Board
IIRC	International Integrated Reporting Council
IFAC	International Federation of Accountants
IIRF	International Integrated reporting Framework
JSE	Johannesburg Stock Exchange
PwC	PricewaterhouseCoopers
UK	United Kingdom
SLR	Structured Literature Review
FTSE	Financial Times Stock Exchange

CHAPTER 1: INTRODUCTION

1.1 Context

A business model is a detailed narrative of how entities generate value over the long term (PwC, 2016). Entities may choose from various types of business models depending on their strategy (Achtenhagen, Melin, & Naldi, 2013). Types of business models include manufacturing, distribution, retail and franchise (CIMA, IFAC, & PwC, 2013). Manufacturing is a business model that involves a process of turning inputs into finished products to meet the customers' needs (Karana, Hekkert, & Kandachar, 2009). Distribution is a business model where there is movement, in the form of physical delivery or through online platforms, of goods between parties in exchange for payment (Camponovo & Pigneur, 2003).

Retail is a business model that involves the sale of finished products to the public (Berman & Evans, 1988). A franchise is a mechanism where one party (i.e. the franchisee) gets the privilege of utilising another party's (i.e. franchisor's) proprietary knowledge, processes and trademarks for a fee (Hing, 1995). These basic business models provide a high-level overview of how entities could plan to create value for stakeholders (CIMA et al., 2013). However, it must be noted that business models evolve over time to keep up with the rapid growth in the global economy (Teece, 2010).

The banking sector, for example, is experiencing significant changes in how they do business (Humphrey & Pulley, 1997). Artificial intelligence has led to changes in the business model of most banking entities (Fethi & Pasiouras, 2010). Internet banking has resulted in a reduction in the number of branches (Ensign, Rexrode, & Jone, 2018). The number of branches in the United States shrank by more than 1,700 in 2017, and that was the biggest decline on record (Ensign et al., 2018). The cutting down of branches had a negative impact on the employees as most of them lost their jobs (Ensign et al., 2018). The loss of jobs show that how management decide to create value has an impact on different stakeholders such as employees (Achtenhagen et al., 2013).

Stakeholders such as investors and lenders provide financial resources to the entities to ensure management has adequate tools necessary to execute the strategy (Cooper, Gimeno-Gascon, & Woo, 1994). The business model

disclosure is a platform for management to communicate how management plan on utilising resources provided by stakeholders (Zott, Amit, & Massa, 2011). It is reasonable for stakeholders to expect some form of communication on a continuous basis (Courtis, 1998). The significance of business model disclosure was further highlighted when reputable professional bodies like the International Accounting Standards Board (IASB) issued a statement in support of this designated disclosure section (Melloni, Stacchezzini, & Lai, 2016). The IASB regards the business model disclosure as a relevant tool that can improve the usefulness of integrated reports (Melloni et al., 2016). Investors also regard the business model disclosure as a useful tool to examine in order to make informed investment decisions (Greiner & Ang, 2012).

Stakeholders have reacted positively to the evolution of integrated reporting (Churet & Eccles, 2014). More specifically, the inclusion of narrative disclosures has grown significantly (Churet & Eccles, 2014). The business model disclosure is a narrative disclosure primarily based on the six capitals that are found in the International Integrated Reporting Framework (IIRF) (IIRC, 2013). It is the value creation process explained in words (CIMA et al., 2013). The six capitals are illustrated in Figure 1.

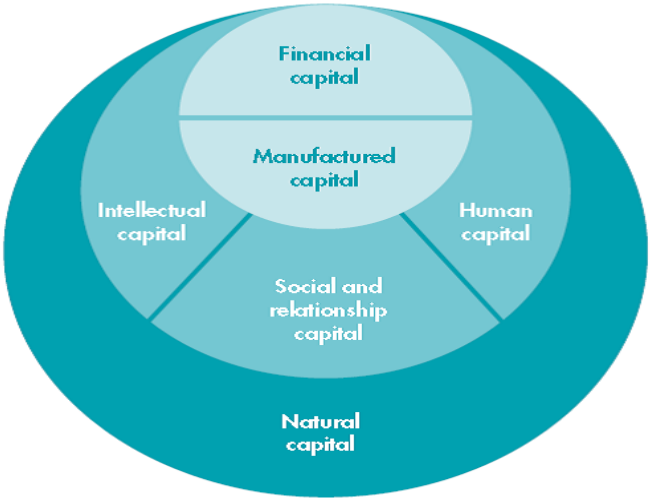


Figure 1: The six capitals.

Source: *The International Integrated Reporting Framework* (IIRC, 2013)

In the value creation process, interests of all stakeholders are of paramount importance and they need to be addressed in the business model disclosure (Li,

Pike, & Haniffa, 2008). To add to the increasing prevalence and relevance of the business model disclosure, countries such as South Africa and the United Kingdom (UK), decided to mandate the inclusion of the business model disclosure in the integrated reports of listed entities (FRC, 2010). However, regulatory bodies and academics have raised some concerns about the quality of the business model disclosure (FRC, 2010). Page (2014) raised a concern that the business model disclosure section is dominated by generic, unsupported and biased statements.

Melloni et al., (2016) conducted an impression management study highlighting how entities in the UK focus more on good news in business model disclosure to manipulate the stakeholders' perception about an entity. Good news about the entities' performance and the surrounding environment was categorised as a "positive tone" and other type of news (i.e. neutral and negative news) as a "non-positive tone" (Melloni et al., 2016). Business model disclosure is meant to be objective and a true representation of an entity's circumstances and expectations (Neu, Warsame, & Pedwell, 1998). The objective of this research study is to investigate whether Johannesburg Stock Exchange (JSE) listed entities adopt impression management strategies by manipulating the tone of the business model disclosure provided in their integrated reports.

1.2 Problem statement

Corporate governance has come under attack following major corporate scandals such as Enron, WorldCom and African Bank (Yasseen, Moola-Yasseen, & Padia, 2017). The quality of corporate reporting has often been linked to the quality of corporate governance (Khanna, Palepu, & Srinivasan, 2004). To ensure a country such as South Africa attracts more foreign investment, high quality corporate reporting must be maintained (Oberholster, 1999; Omarjee, Joosub, & Coldwell, 2016). Unfortunately, according to previous studies, impression management strategies were found to be used in different sections of the integrated reports (Beattie & Jones, 2002; Clatworthy & Jones, 2006; Khanna et al., 2004; Melloni et al., 2016; Merkl-Davies & Brennan, 2007; Yasseen et al., 2017).

The inclusion of narrative disclosures in the integrated reports has given management an opportunity to use words to explain the accounting numbers (Aerts, 1994). However, the International Integrated Reporting Council (IIRC)

requires narrative disclosures such as the business model disclosure to provide an unbiased description of the value creation process (IIRC, 2013a). The use of impression management strategies in the business model disclosure as a means to promote corporate image is representative of biased reporting (Beattie, McInnes, & Fearnley, 2004; Melloni et al., 2016; Merkl-Davies & Brennan, 2007). There is a study that found biased reporting to be associated with weak corporate governance (Khanna et al., 2004).

A culture of weak corporate governance restricts entities from accessing capital markets (Omarjee et al., 2016). Entities require financial capital to grow and the use of impression management strategies could be detrimental to their success (Oberholster, 1999). There are studies conducted in developed countries where the preferred style of writing and selection of words (i.e. “tone”) in the integrated reports was investigated (Beattie et al., 2004; Melloni et al., 2016; Merkl-Davies & Brennan, 2007, p. 126). However, there is limited research on the topic in developing countries such as South Africa.

1.3 Purpose of study

The purpose of this study is to determine whether JSE listed entities adopt impression management strategies by manipulating the tone of the business model disclosure provided in their integrated reports. This study aimed to replicate a study conducted by Melloni et al. (2016) within the South African context.

1.4 Significance of study

1.4.1 Practical contributions

The recent corporate scandals within South Africa have raised concerns in terms of the quality of corporate governance (Skae, 2018). Entities such as Steinhoff, VBS Mutual Bank and Gupta-linked entities have been implicated in massive fraudulent activities (Crotty, 2017; Mantshantsha, 2018; Skae, 2018). The aim of this study is to contribute to enhancing the quality of disclosure by highlighting possible flaws in the business model disclosure for the benefit of all stakeholders. For example, investors rely heavily on the business model disclosure outlined in the integrated reports in their investment decision- making process (Melloni et al., 2016).

The JSE might also benefit from this study as flaws identified in the business model disclosure could be an indicator of a need for change. For example, more rigorous listing requirements could be introduced by the JSE to improve the objectivity and transparency of the business model disclosure. As a result, the stakeholders' exposure to possible manipulation of the business model disclosure could be reduced significantly and the reputation of the JSE maintained.

The business model disclosure plays a critical role in highlighting the contribution made by entities to the economy as well as the preservation of the environment (Churet & Eccles, 2014). The fundamental purpose of government is to ensure the public's needs are satisfied (Dorasamy, 2010). This study aims to show whether claims in terms of value-creation are faithfully represented. As a result, this study could assist the South African government in introducing stringent legislation where private entities are not engaging in sustainable business practices.

This study also highlights issues to be considered by accounting standard setters such as the IASB. Findings in this study make a contribution to the IASB as certain factors could be considered when revising the accounting standard on IFRS 9: *Financial Instruments* in the future. The measurement basis for financial assets that are debt instruments depends on the business model of the entity (IASB, 2018). Therefore, it is important to determine the usefulness of the business model disclosure section.

1.4.2 Academic contributions

This research study adds to the existing body of knowledge on narrative disclosures. Studies in this field have mostly focused on other narrative disclosures in the integrated reports such as the chairman's statement and strategy (Padia & Yasseen, 2011). There is limited research on the manipulation of tone of the business model disclosure in developing countries (Melloni et al., 2016). To the best of the researcher's knowledge, this is a pioneering study within the South African context.

Stakeholders and preparers of integrated reports are focusing more on qualitative information and less on quantitative information (Flöstrand & Ström, 2006; Stanton, Stanton, & Pires, 2004). The Conceptual Framework (CF) of the

IASB states that relevant financial information must be faithfully presented (IASB, 2018). Narrative disclosures (such as the business model disclosure) must also provide relevant information as they describe the financial information (Melloni et al., 2016). This study aims to add to the existing body of knowledge of corporate disclosure by investigating whether transparent and relevant information is provided to stakeholders.

1.5 Research question

The main question addressed by this study is:

Do management teams of JSE listed entities adopt impression management strategies by manipulating the tone (i.e. the use of a more positive tone) of the business model disclosure provided in their integrated reports?

1.6 Limitations of study

This study is limited to one section of the integrated report, the business model disclosure. The period covered was only the 2018 financial year-end. The findings of this study do not necessarily apply to other narrative disclosures in the integrated report. The sample of this study only consisted of JSE listed entities and the findings might not be applicable to entities in other developing countries.

Out of all forms of communications (for example, social media, press releases and others), the integrated report was the only means of communication between stakeholders and entities utilised in this study. It was deemed sufficient as Stainbank and Peebles (2006) found that the integrated reports are perceived to provide the most useful information by stakeholders. Impression management strategies that could possibly be utilised in the integrated reports include thematic manipulation, syntactical manipulation, performance comparisons and attribution of organisational outcomes (Melloni et al., 2016).

The other limitation is that this study only focused on thematic manipulation. The method approach followed had an element of subjectivity as the researcher had to read and analyse each sentence to determine the “tone”. However, the subjectivity element was reduced through rigorous consultations and comparisons with other academics’ analysis of the same sentences. A detailed

coding description for each sentence was also utilised to ensure consistency (Melloni et al., 2016)

1.7 Assumptions

It was assumed that the disclosure characteristics (through analysing the business model disclosure sections) derived from the entities in the sample are representative of the total population of JSE listed entities. A positivist paradigm underpinned this research study. This research study was exposed to subjectivity as each statement in the business model disclosure had to be examined and analysed by the researcher. However, a key assumption of a positivist research is that the researcher is objective and unbiased (Kaminskiy, 2014).

It was assumed that the integrated reports are reliable as one of the JSE listing requirements include a mandatory audit for each entity (RSA, 2008). Each statement was analysed and examined by the researcher in determining the "tone" used. Drawing from Clatworthy and Jones (2003), it was assumed that good news to the entity and the environment in which the entity operates implied a "positive tone".

1.8 Definition of terms

Terms	Definitions
Business model	A description of how an entity creates value over the long-term (Melloni et al., 2016).
Conceptual Framework	The conceptual framework describes the key elements and concepts underpinning the preparation and presentation of financial statements (IASB, 2015a;2018).
Impression management	A process of influencing the perceptions of other people about a certain event (Brennan & Merkl-Davies, 2013).

Integrated report	Integrated reporting is a combination of the annual report, the corporate governance report, and the sustainability report into one standalone document (IIRC, 2011).
Thematic manipulation	Altering the tone of the narrative in an attempt to conceal bad news (Melloni et al., 2016).
Tone	The authors' style of writing as well as the choice of words to convey a message (Maddieson, 2013).

1.9 Chapter layout

This research study has five chapters in total including this chapter (i.e. Chapter 1). The study proceeds as follows. In Chapter 2 the extensive existing literature is discussed in detail. The literature review includes discussions on the importance of integrated reporting, impression management, agency theory and business model disclosure. In Chapter 3 a detailed explanation of the research method and the mechanisms used to analyse the business model disclosure section in the integrated reports is provided. Chapter 4 is dedicated to an outline and analysis of the results. This is followed by Chapter 5 which is the conclusion of the study and also includes the recommendations for future research.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

The objective of a literature review is to lay out theories developed in previous studies related to the topic under study (Hart, 2018). The literature review is also used to identify gaps within the research topic (Hart, 2018). A Structured Literature Review method (SLR) was used to ensure all aspects relating to business model disclosure are discussed. An SLR is the use of a well-structured methodology to identify, evaluate and interpret all available research relevant to a particular research question or topic area (Engelbrecht, Yasseen, & Omarjee, 2018; Kitchenham, 2004; Mohamed, Yasseen, & Omarjee, 2019; Omarjee, Yasseen, & Mohamed, 2019; Yasseen, Mohamed, & Moola-Yasseen, 2019; Yasseen et al., 2017). Google scholar was used to obtain sufficient and reliable journal articles and conference papers. Keyword searches using words and phrases such as 'business model disclosure, tone, integrated reporting and impression management' were conducted to find articles relevant to the research topic (Wright, Brand, Dunn, & Spindler, 2007).

In Section 2.1, the background of the research topic is introduced. This is followed by a discussion of different perspectives on the importance of integrated reporting in Section 2.2. The business model disclosure is a component of the integrated report (Teece, 2010). Therefore, it is important to determine the usefulness and relevance of the integrated reports. Section 2.3 follows with a discussion on different impression management techniques used in corporate reporting. The contributory factors for the application of impression management techniques by management are summarised in Section 2.3.1 and 2.3.2. The contributory factors include a discussion involving two theories (i.e. agency theory and attribution theory) developed in prior studies (Aerts, 2001; Fama & Jensen, 1983).

Since the business model disclosure is of a narrative nature, the usefulness of narrative disclosures is analysed in Section 2.4. The concept of "business model" is explored in detail in Section 2.5. It is followed by an in-depth discussion of the different elements that make up the "business model disclosure" section of the integrated report in Section 2.6. The final section is the summary of Chapter 2 where different perspectives in the existing body of knowledge are summarised

and synthesised. Figure 2 below illustrates the logical flow and structure of this literature review:

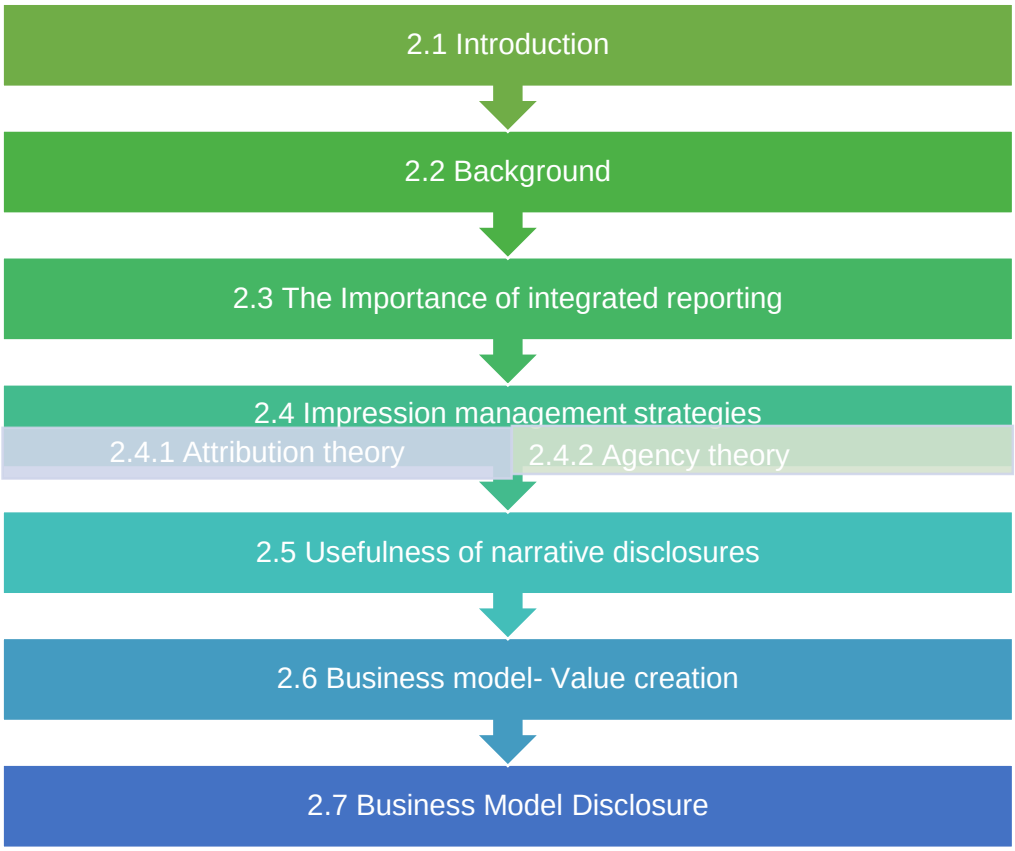


Figure 2: Structure of the literature review.

2.2 Background

The business model concept has attracted a lot of interest from academics and management of entities in the corporate world who are interested in explaining how an entity is able to remain sustainable and competitive (PwC, 2016). Prior researchers have struggled to have a set definition of the business model concept (Zott et al., 2011). Zott et al. (2011) reviewed 103 business model publications, and found that 37% do not define the concept while 44% explicitly define it by referring to key components making up a business model. “The other publications refer to prior research in defining the concept” (Zott et al., 2011, p. 55). However, the dominant definition for the business model concept is that it is a description of how entities create and preserve value over the long term (Melloni et al., 2016).

Stakeholders need useful information to make informed decisions (Stainbank & Peebles, 2006). The interest of stakeholders in knowing how entities create value led to the introduction of the business model disclosure in the integrated reports (CIMA et al., 2013). Graphs, video clips, informal text and other representations have been used to communicate business models to stakeholders (Zott et al., 2011). However, the study by CIMA et al., (2013, p. 43) on the Top 350 Financial Times Stock Exchange (FTSE) found that "only 40% of the entities provide an informative business model disclosure". Melloni et al. (2016) went further to highlight that there is a risk that the business model disclosure might eventually comprise of generic and marketing-exercise statements that are exposed to manipulation by management. However, Melloni et al., (2016) analysed data primarily focusing on entities in developed countries.

2.3 Importance of integrated reporting

Management of an entity is obliged to keep the entity's stakeholders informed (Courtis, 1998). The communication of results and any other significant announcements takes place on a regular basis (Courtis, 1998). Stakeholders make various economic decisions relating to the entities and they need access to information to make informed decisions (Rutherford, 2005). Management teams of the entities have various platforms to communicate with stakeholders (Courtis, 1998). The IIRC plays an important role to provide guidance to the entities in terms of corporate reporting (IIRC, 2011).

Stainbank and Peebles (2006) investigated the importance of information obtained through the entities' reports in South Africa. It was found that the user group ranked the reports as containing the most important information relevant to investment decisions (Stainbank & Peebles, 2006). Information provided in corporate reporting does not only focus on the interest of investors (IIRC, 2011). Subramaniam, Insley, and Blackwell (1993) highlighted the increased influence entities have on the lives of the public members and the broader definition of stakeholders as factors that changed the traditional perception of corporate reporting.

More parties are interested in entities' performance and the impact it has on the environment (Abrahamson & Amir, 1996). The move away from solely focusing on accounting numbers has led to the inclusion of narrative disclosures such as the business model disclosure (Abrahamson & Amir, 1996). Solomon and

Maroun (2012) further emphasised the support for the integration of financial and non-financial information as being important in encouraging the principles of stakeholder accountability and sustainable business practice.

The introduction of a more inclusive “triple-bottom-line” approach reporting in King II was met by overwhelming support in 2002 (Solomon & Maroun, 2012). The global financial crisis and the socio-economic inequality faced by the various countries were indicators of the necessity for change in the way corporate reporting was produced (Solomon & Maroun, 2012). This led to the principles of integrated reporting in King III (IOD, 2009). Integrated reporting principles provide a platform to promote more holistic and unbiased reporting (Solomon & Maroun, 2012). Integrated reporting illustrates the links between financial performance and entities’ commitment to social and environmental responsibilities (Jensen & Berg, 2012).

The relevance of integrated reporting was prevalent when South Africa became the first country to make integrated reporting compulsory for JSE listed entities (Sierra-García, Zorio-Grima, & García-Benau, 2015). Integrated reporting has various sections designated to narrative disclosures (Merkl-Davies & Brennan, 2007). The significant support and success of integrated reporting is at risk when there are concerns raised about the inappropriate use of impression management strategies in narrative disclosures (Melloni et al., 2016). This study aims to add to the body of existing knowledge in terms of impression management techniques that could possibly be used by management in integrated reports in developing countries.

2.4 Impression management strategies

The concept of impression management was derived from social psychology (Brennan & Merkl-Davies, 2013). Impression management may be defined as deliberately or unintentionally attempting to control perceptions of human beings (Stanton et al., 2004). Stanton et al., (2004) suggest that impression management is a natural behaviour for human beings to portray themselves in a favourable light in order to appear successful. The intentions might not be to deceive or mislead anyone (Clatworthy & Jones, 2006). However, within the context of corporate reporting, impression management techniques may mislead stakeholders in their decision-making in terms of providing resources to entities.

The preparation of the integrated report presents management with an opportunity to apply impression management strategies (Yasseen et al., 2017). Management is provided with resources by shareholders to look after (Fama & Jensen, 1983). Eventually, management needs to give feedback on the entity's financial performance as well as how that has boosted both shareholder value and impacted the community in which it operates (Davison, 2002). There is the temptation to solely base the disclosure on matters that put the entity in a favourable light (Stanton et al., 2004). Hence, prior research has been focused on the assumption that management is incentivised by a desire to present the entity's performance in a manner that suits them (Brennan, Guillamon-S, & Pierce, 2009).

Yasseen et al., (2017) provide the following two primary reasons for management's desire to present the entity's performance in a favourable light:

a) Performance management

The first reason is the perception that stakeholders regard what is reported to be reflecting management's performance (Merkl-Davies, Brennan, & McLeay, 2011). Corporate collapses and major scandals have increased public scrutiny of entities and the performance of management (Merkl-Davies et al., 2011). Large corporate collapses such as those of Enron and WorldCom have brought into question the relevance of corporate reporting (Brennan & Merkl-Davies, 2013). Corruption and impression management are identified as the two key causes of these corporate collapses (Brennan & Merkl-Davies, 2013; Clatworthy & Jones, 2006). Davison (2002) found a large number of Wall Street investment banks facing serious allegations about using excessive impression management strategies in the reports of their clients.

Failures are bound to lead to calls from stakeholders for more accountability (Hammack, 1995). Aerts (2005) further confirmed that good organisational and accounting achievements are associated with a competent management team. The increased public scrutiny following the most recent corporate collapses and higher demands for accountability are other factors that added to management's desire to provide corporate disclosures that put the entities in a favourable light (Merkl-Davies et al., 2011).

b) Good investor confidence

The desire of management teams to portray a certain image about the entities they are responsible for, is also driven by the pressure of ensuring the entities are investment destinations for investors (Milne & Chan, 1999). The second reason is that the management of public entities feel responsible to maintain good investor confidence (Aerts, 2005). Access to capital markets is influenced by the financial and non-financial information presented by the entities (Aerts, 2005). Hence, management is incentivised to apply impression management techniques to ensure they remain on the listed exchanges for the long-term (Aerts, 2005). As a result, Aerts (2005) found that management teams of publicly listed entities tend to disclose more positive disclosures and less negative disclosures in their integrated reports.

Clatworthy and Jones (2006) raised a controversial finding that another possible reason would be the intent by management at times to dictate the way the information must be communicated to conceal poor performance. The use of words to describe the financial performance may be used as a manipulation technique according to Clatworthy and Jones (2006). Aerts (1994, p. 347) summarised this perception by stating that, “through language, the public is brought to appreciate the world as the actor portrays it”.

Stainbank and Peebles (2006) conducted a study highlighting the importance of unbiased reporting. The study also provided insight into what the most important reason for regulating narrative disclosures, such as the business model disclosure, is (Stainbank & Peebles, 2006). An overwhelming majority (i.e. 75%) chose ensuring management does not conceal bad news as the most important reason for regulating narrative disclosures (Stainbank & Peebles, 2006). A prior study went further to describe four perspectives from which impression management may be viewed (Brennan et al., 2009).

These perspectives are closely related to theories supporting the existence of impression management (Brennan et al., 2009). These perspectives are summarised in Figure 3.

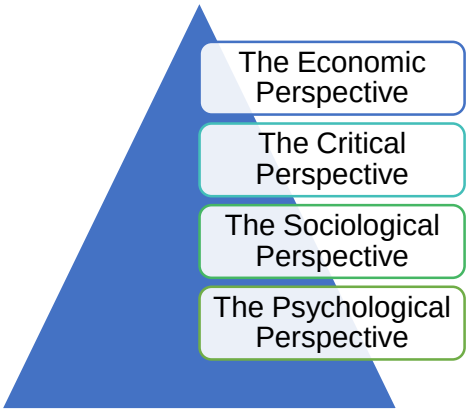


Figure 3: The four perspectives on impression management.

The economic perspective is related to the agency theory (Brennan & Merkl-Davies, 2013) and explains how management may be incentivised by improved remuneration packages to influence the stakeholders' perceptions about how the entity is performing (Brennan & Merkl-Davies, 2013). Poor performance of the entity might limit management's access to high remuneration packages as increased benefits cannot be justified in light of poor performance (Brennan & Merkl-Davies, 2013). Management's failure to meet the set targets might create conflict of interest between management and stakeholders (Abrahamson & Park, 1994; Brennan & Merkl-Davies, 2013). As a result, management might abuse the information asymmetry between management and stakeholders (Fama & Jensen, 1983).

From a psychological perspective, the social relations aspect inherent in the decision-making context is taken into account (Brennan & Merkl-Davies, 2013). Management expect to be evaluated based on decisions taken on behalf of the entity (Brennan et al., 2009). Management that is expecting to be judged by stakeholders, tend to engage in impression management techniques (Brennan & Merkl-Davies, 2013). As a result, management apply reporting bias in circumstances where the relationship with stakeholders is tense and there is no room for mistakes (Brennan & Merkl-Davies, 2013).

In terms of the sociological perspective, impression management is regarded as an outcome of structural limitations imposed either by different stakeholder groups or by society at large (Brennan & Merkl-Davies, 2013). Impression management is seen as either a response to concerns on the part of stakeholders about a controversial event or as arising from inconsistencies between an entity's norms and societal norms (Brennan & Merkl-Davies, 2013).

Management engages in impression management techniques to align societal norms and the norms of an entity (Breton & Côté, 2006). Previous studies also described management's actions under the legitimacy theory (Brennan & Merkl-Davies, 2013; Suchman, 1995).

The legitimacy theory refers to "a generalised perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions" (Suchman, 1995, p. 574). Prior studies found some management teams go to extreme lengths to establish their legitimacy through impression management techniques (Ashforth & Gibbs, 1990). Particularly in situations where firms face legitimacy threats, such as corporate scandals, product safety issues or environmental disasters (Brennan & Merkl-Davies, 2013).

The critical perspective considers impression management as a mechanism used by management to "control the way in which the corporate story is interpreted" (Crowther, Carter, & Cooper, 2006, p. 177). Powerful management teams tend to be obsessed with control and engage in impression management techniques to control perceptions of stakeholders (Crowther et al., 2006). The perspectives imposed are on the entities' financial performance, reasons for conflicts encountered with specific stakeholders and any other issues that might have an impact on the reputation of the entities such as environmental issues (Amernic & Craig, 2004; White & Hanson, 2002). Even though the four perspectives describe how impression management is incentivised, the quality of corporate reporting has been heavily criticised (Brennan & Merkl-Davies, 2013; Churet & Eccles, 2014; Melloni et al., 2016).

The CF introduced by the IASB gives guidance on the core principles to be applied in improving the quality of corporate reporting (IASB, 2018). In terms of the CF, financial information must be presented fairly and without bias (IASB, 2018). However, the biased selection of information in order to distort the stakeholders' perceptions illustrates the persistence of impression management techniques (Godfrey, Mather, & Ramsay, 2003). Prior studies investigated whether impression management may be regarded as a human attribute of management (Clatworthy & Jones, 2006). However, the unintended implications negatively impact the purpose of financial reporting (Clatworthy & Jones, 2006).

Clatworthy and Jones (2006) argue that impression management strategies might lead to the declaration of integrated reports as uninformative.

Aerts (2005) has rebutted the declaration that integrated reports will be regarded as uninformative. Aerts (2005) states that stakeholders are able to identify transparent marketing-exercise disclosures in their decision-making, as they generally recognise that reporters tend to exaggerate their achievements. This phenomenon is sometimes referred to as a "self-promotion paradox" as the entities are portrayed in a good image (Aerts, 2005). However, it would be interesting to investigate whether stakeholders are aware of the different impression management techniques (Melloni et al., 2016).

Merkl-Davies and Brennan (2007) discuss different forms of impression management strategies used by management to influence the readers' perception. These impression management strategies include:

- Thematic manipulation: The inappropriate use of tone in the integrated reports to conceal negative aspects;
- Taking ownership of good news and shifting of responsibility for poor performance to external factors;
- The use of complicated language to confuse the reader; and
- The subjective selection of benchmarks that portray the entities' performance as being better than the industry average (Merkl-Davies & Brennan, 2007).

Multiple studies on impression management techniques within the context of accounting and business have been conducted (Clatworthy & Jones, 2006). However, these studies initially focused solely on financial disclosures (Aerts, 2005). Recent studies indicate the extension towards non-financial disclosures contained within integrated reports (Aerts, 1994; Aerts, 2005; Clatworthy & Jones, 2006). The use of narratives and pictures to portray a good image of entities has been the main focus of these previous studies (Clatworthy & Jones, 2006). This has led to the development of two well-researched theories that may be used to explain the existence of impression management strategies (Aerts, 2005). The theories include the attribution theory and agency theory that are discussed in Section 2.4.1 and Section 2.4.2 below.

2.4.1 Attribution theory

Attribution theory refers to management taking ownership of positive outcomes whilst shifting responsibility for negative outcomes (Aerts, 2005). Negative outcomes are blamed on external events (Aerts, 2005). Examples of external events include political uncertainty or economic recession (i.e. not within management's control) in the country where operations are based (Aerts, 2005). However, Aerts (2005) argues that attributional bias may be the result of informational processes and not necessarily impression management processes.

The informational model claims that human beings tend to expect to achieve the targets they set because of self-belief (Aerts, 2005). Therefore, attribution bias might not be due to impression management techniques (Aerts, 2005). When entities meet their set targets it is expected that management will be proud of their actions and decisions and completely disregard that the success could be due to external events (Aerts, 2001). Prior studies, however, place emphasis on the impression management model being the root cause of the attribution theory as a result of major corporate scandals experienced (Aerts, 2005).

There are different ways of applying attributional bias techniques in terms of positive outcomes. The narrative statements could have enhancement or entitlement characteristics in how they are worded (Aerts, 2005). Positive outcomes might be disclosed within the context of a negative external environment (Aerts, 2005). An example would be, "despite the load shedding by Eskom in South Africa… the entity has experienced significant revenue growth" (own example). In essence, there is an intention by management to attribute positive news to the entity's actions.

There are also different ways to employ negative attribution bias in corporate disclosure (Aerts, 2005). Negative attribution bias can be split into three basic attributional descriptions depending on the context facing a specific entity (Aerts, 2005). These descriptions include:

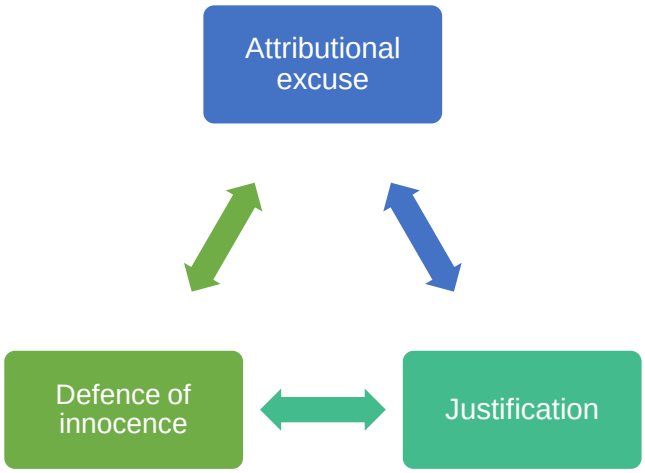


Figure 4: Negative attributional bias descriptions.

Source: *Aerts (2005)*

An attributional excuse is when management declares poor performance, but blames it on external events not within their control (Aerts, 2005). For example, an entity may disclose a high staff turnover rate but blame it on the fact that South Africa experienced an economic recession. When an attributional defence of innocence is used, similar mechanisms to an attributional excuse are applied. In the instance of attributional justification, poor performance is declared but management attempt to portray it as a normal situation that is expected as a step towards achieving a greater positive outcome (Aerts, 2005). In addition to attributional theory, the agency theory has been investigated in prior studies on impression management (Abrahamson & Park, 1994) and is discussed in Section 2.4.2.

2.4.2 Agency theory

An agency relationship is a contract under which one party (the principal) engages another person (the agent) to perform some duties on their behalf (Jensen & Meckling, 1976). The agency relationship became more prevalent with the emergence of large entities (Berle & Means, 1933). It became apparent that there was a separation of ownership and control in the large entities (Fama & Jensen, 1983). Both the principal and agent are assumed to be concerned about maximising their own utility (Jensen & Meckling, 1976). The concept was later formalised and termed the ‘agency theory’ by Jensen and Meckling (1976).

The agency theory reflects the conflict of interest between the principal and the agent as the main issue (Fama & Jensen, 1983). Prior research illustrates that the agent may not always act in the best interest of the principal (Jensen & Meckling, 1976). Unfortunately, it becomes difficult for the principal in large corporations to monitor the agent's actions and decisions as they are not involved in the daily operations (Jensen & Meckling, 1976). However, measures can be taken by the principal to incentivise the agent to make appropriate decisions.

Management control systems need to enable the alignment of decisions made to the entity's strategy (Kaplan, 1984). The principal is usually aiming for sustainable practices and not short-term profit plans (Fama & Jensen, 1983). The performance management system employed must be based on factors that encourage sustainable practices (Kaplan, 1984). However, the extent of information asymmetry could affect the decision-making process (Wohlstetter, Datnow, & Park, 2008).

The agent has access to more information than the principal (Fama & Jensen, 1983). It gives rise to the concept of "information asymmetry" (Fama & Jensen, 1983; Jensen & Meckling, 1976). Access to more information allows management to engage in impression management strategies to conceal poor performance (Leary & Kowalski, 1990). As a result, reporting bias might dominate corporate disclosure where only good news are communicated (Merkl-Davies et al., 2011). Previous studies attribute the manipulation of stakeholders' perceptions about how entities are performing to the agency theory (Brennan & Merkl-Davies, 2013; Merkl-Davies et al., 2011).

The business model disclosure has a specific section solely focusing on describing the value created for all stakeholders (Melloni et al., 2016). Management (i.e. the agent) is responsible for the preparation of the business model disclosure and stakeholders (i.e. principal) are the recipients (Teece, 2010). In applying the agency theory, the business model disclosure is exposed to information asymmetry as management has access to more information than stakeholders (Melloni et al., 2016). Melloni et al., (2016) have shown in a study conducted in the UK (i.e. a developed country) that the business model disclosure is subject to impression management techniques. The existing

deficiencies in corporate reporting have led to the questioning of the value of additional disclosures (Churet & Eccles, 2014).

Integrated reporting has shown an increase in the amount of disclosure that is required (Churet & Eccles, 2014). Increased disclosure is meant to reduce the level of information asymmetry (Churet & Eccles, 2014). However, it is argued in prior research that the use of impression management in the business model disclosure (i.e. a narrative disclosure) could be used to mislead stakeholders (Melloni et al., 2016). The argument has raised a concern in terms of the usefulness of narrative disclosures and this will be discussed in Section 2.5 (Melloni et al., 2016).

2.5 Usefulness of narrative disclosures

Stakeholders are showing interest in the value provided by narrative disclosures (Clatworthy & Jones, 2006). The IASB even went a step further by issuing guidelines on what must be considered when preparing narrative disclosures (IASB, 2018). IASB's interest in narrative disclosures is backed by their argument that financial statements outline financial effects of past events and nothing on non-financial performance measures and the future outlook (IASB, 2015b). Davison (2002) also found that stakeholders are broadening the aspects they consider in their investment decision-making process and not just merely inspecting financial statements.

Faithful representation is a key attribute of corporate disclosure to ensure stakeholders' interests are protected (IASB, 2015b). For information to be useful, it must faithfully represent what it purports to represent (IASB, 2015b). In the CF, elements needed to ensure information is faithfully represented, are discussed. These elements are provided in Figure 5:

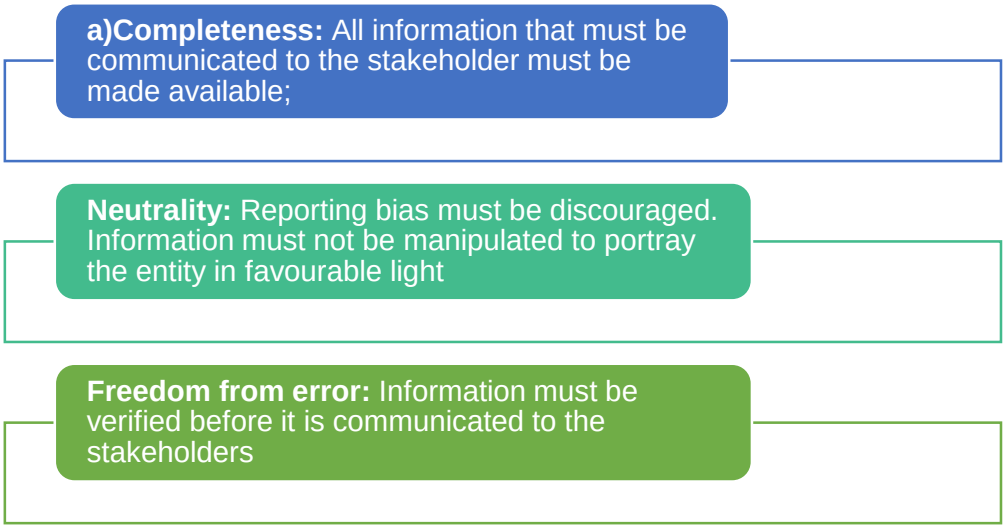


Figure 5: Elements of faithful representation.

Source: *IASB (2015a)*

The abovementioned attributes are relevant in determining the credibility of information at the disposal of stakeholders (Aerts, 2001). The major corporate scandals have resulted in greater public scrutiny of corporate disclosure (Aerts, 2001). The credibility of narrative disclosures is key as it will be rendered useful only if the stakeholders perceive it to be reliable and relevant (Aerts, 2001). Accordingly, management must ignore turning narrative disclosures into a marketing tool that is dominated by self-praise and exaggerated claims (Milne & Chan, 1999).

The emergence of narrative disclosures has led to an extensive focus change in integrated reporting (IIRC, 2011). The structure of the integrated reports shows that financial statements now usually come at the end (Stanton et al., 2004). Attention is diverted away from financial statements and directed towards narrative disclosures (Stanton et al., 2004). The amount of narrative disclosures in the integrated reports is increasing at a higher rate relative to the statutory financial information disclosure (Stanton et al., 2004). Clatworthy and Jones (2006) and Stanton et al., (2004) suggest that there is a possible risk that financial information will not be thoroughly analysed due to the amount of narrative disclosure provided at the beginning of the integrated reports.

Bartlett and Chandler (1997) found that less people are reading the financial statements and more people are reading the narrative disclosures. Stakeholders are beginning to be more interested in how the entity is expected to perform in

the future (Beynon, Clatworthy, & Jones, 2004). Narrative disclosures provide context to the numbers in the financial statements and management can provide justifications to assist stakeholders in predicting future financial performance (Beynon et al., 2004). Previous studies found narrative disclosures such as the business model disclosure in the integrated reports to be providing useful information, while other researchers have a different perception (Melloni et al., 2016; Page, 2014; Teece, 2010).

2.6 The business model and value-creation

The business model is a key component in integrated reporting (Page, 2014). There is extensive prior research on the business model topic and understanding the underlying concept is valuable (CIMA et al., 2013). As previously stated, the business model outline the process undertaken to turn inputs into outputs and how the value created is distributed to stakeholders (Teece, 2010). A business model is more generic when compared to a strategy (Teece, 2010). Each entity has a business model the moment it is established (Teece, 2010). The business model could be written on a document or implicitly illustrated in how the entity plans to do its business on a daily basis (Teece, 2010). The significance of the business model concept is rarely studied in the economics literature (Achtenhagen et al., 2013).

The existence of a well-structured business model has been found to be one of the ingredients needed for an entity to be successful (Teece, 2010). An entity must be innovative and take advantage of opportunities to ensure consistent success (Teece, 2010). Management that is good at designing a relevant business model, understands customer needs and remains up to date with technological developments will profit from innovation (Teece, 2010). The rapid growth in the global economy has meant entities need to improve the way they do business to keep up (Ensign et al., 2018). Customers have more choices to choose from and can raise complaints on social media platforms (Teece, 2010). These developments in turn require entities to regularly improve the value propositions they present to relevant stakeholders (Teece, 2010).

Entities might have all the necessary resources (i.e. skilled personnel, efficient and effective leadership, and advanced technology) but to ensure profitability in the long-term, the business model must be properly adapted to the competitive environment (Achtenhagen et al., 2013). Zott et al., (2011) suggest that entities

that do not adapt or change their business models over time have greater chances of failure. A business model must be structured to meet particular customer needs (Teece, 2010).

Apart from not adapting the business model on a regular basis, the existence of a mere business model is insufficient to assure competitive advantage as it is often easy for competitors to copy (Teece, 2010). Competitive environments force entities within a certain sector to be exposed to lower profit margins (Beynon et al., 2004). Prior research suggests that a business model must consist of attributes that make it difficult to replicate as that will serve as a constraint for new entrants (Teece, 2010). A business model must be something more than just a good logical way of doing business (Teece, 2010). A business model might be difficult for competitors to replicate for the reasons summarised in Figure 6.

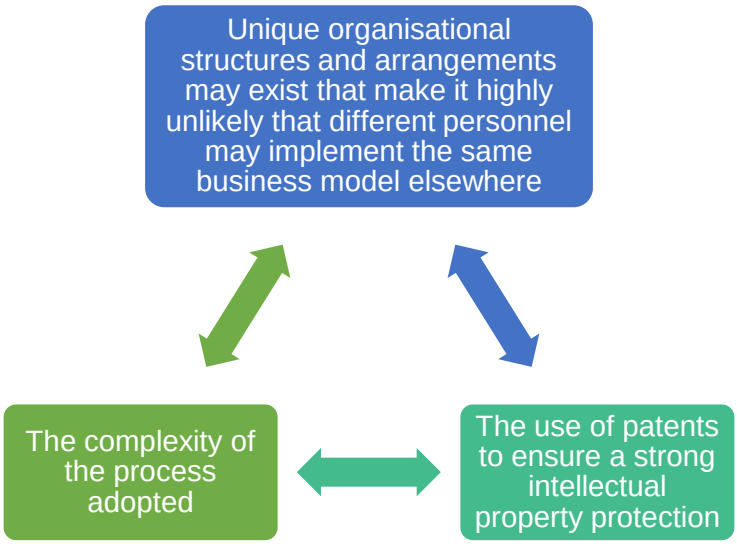


Figure 6: Barriers to replicating a business model.

Source: *Teece (2010)*

Entities with a good business model are in a position to ensure sustained value-creation and significant growth (Achtenhagen et al., 2013). However, the unintended implications of growth might include the inability to control the consumption of resources at the disposal of the entity (Achtenhagen et al., 2013). Instead of creating value for all stakeholders, a crisis might unfold (Achtenhagen et al., 2013). For example, employees might be overworked and natural resources might also be negatively affected. The possible negative

repercussions illustrate how important it is for an unbiased business model to be communicated to all stakeholders (Melloni et al., 2016). As a result, the business model disclosure was introduced in integrated reporting (IIRC, 2011). Guidance has been provided on what must be considered in the business model disclosure section (CIMA et al., 2013).

2.7 Business model disclosure

According to the IIRF, the intention of the business model disclosure is to ensure the value-creation process communicated is authentic and brief but comprehensive (IIRC, 2011). The business model disclosure must not be used to promote the entity's hidden motives and it must be complete (IIRC, 2013a). As previously stated, the IASB provided a practical guideline on business model disclosure (IASB, 2010, p. 26). The IASB stepped in due to the unpredictability in the quality of business model disclosure encountered amongst different entities (CIMA et al., 2013).

According to the IIRF, the recognition of fundamental business model elements will improve the readability of the business model section (IIRC, 2011). The identified elements would also bring an aspect of consistency in terms of business model disclosure (IIRC, 2013). There are four elements in the business model disclosure section found in integrated reports (IIRC, 2013a). The business model disclosure is structured to include the elements as summarised in Figure 7.

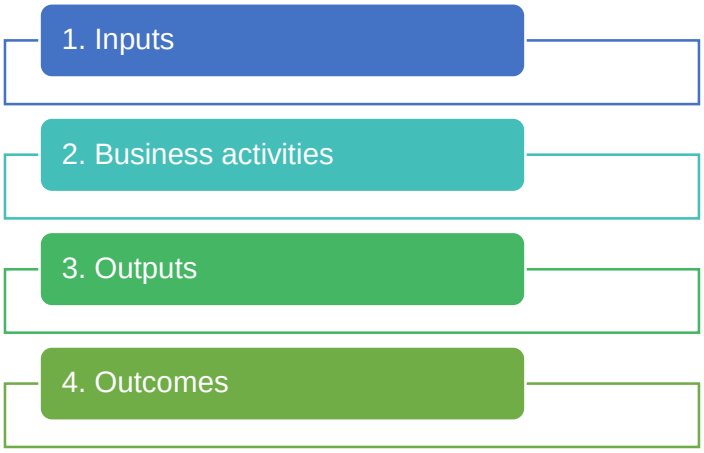


Figure 7: Four elements in business model disclosure.

Source: *IIRC (2013a)*.

The ‘‘Inputs’’ section outlines the use of resources (water, land, capital assets, labour, debt financing, and many more) and it is mainly focused on the six capitals on which the entity depends (IIRC, 2013). The six capitals are financial, manufactured, human, intellectual, social and relationship, and natural capitals and are defined as follows:

- **Financial capital**

Financial capital is described as the capital structure of an entity (IIRC, 2013). It is representative of funds available to the entity and the manner in which the funds was obtained (IIRC, 2013). For example, capital can be raised by entities through issuing shares to the public, obtaining debt financing or (and) generated through investments (including returns from operations) (IIRC, 2013).

- **Manufactured capital**

Manufactured capital refers to investments made in tangible assets (IIRC, 2013). Tangible assets are assets that can be seen and touched (IIRC, 2013). Manufactured capital include; buildings, equipment and infrastructure (Ekins, Simon, Deutsch, Folke, & De Groot, 2003). They constitute physical assets that are needed in the production of good and services (Ekins et al., 2003).

- **Human capital**

Human capital refers to the production factors, coming from human beings, we use to create goods and services (IIRC, 2013). Our knowledge, skills, habits, and social and personality characteristics all form part of the human capital that contributes to the creation of goods and services (Marimuthu, Arokiasamy, & Ismail, 2009). This capital describes the extent to which competent human beings are at the entities' disposal (IIRC, 2013). Any entity would prefer attracting and retaining experienced and skilled employees (Earle, 2003). The payroll costs (i.e. the compensation structure) are also an important element that is of interest to stakeholders (Mahoney & Thorn, 2006).

- **Intellectual capital**

Intellectual capital refers to intangible assets at the entity's disposal to use in their daily operations (IIRC, 2013). Unlike tangible assets, intangible assets cannot be seen or touched (Marr & Adams, 2004). This capital consists of intellectual property including patents, licenses, copyright, and others (IIRC, 2013). Organisational capital such as tacit knowledge, processes and systems that make the entity unique also constitute intellectual property (IIRC, 2013).

- **Social and relationship capital**

Social and relationship capital describes the extent to which the entity interacts with other stakeholders as well as the quality of the interaction (for example, the interaction with communities, employees, regulatory bodies, and others) (IIRC, 2013). This capital outlines the shared norms and values (IIRC, 2013). This capital is important as entities get a platform of expressing their progress in terms of building relationships with key stakeholders (IIRC, 2013).

- **Natural capital**

Natural capital mainly refers to resources needed in the production process (Costanza & Daly, 1992). For example, an entity might need water, electricity, land, mineral resources, and others to conduct their daily operations (IIRC, 2013). All six capitals need some level of attention, however, not all capitals are addressed equally by entities (IIRC, 2013). The "Inputs" section is followed by the "Business activities" section in the integrated report (Teece, 2010).

The “Business activities” section in the integrated report outlines the process and phases involved in converting inputs into finished products to meet customers’ needs (Melloni et al., 2016). For example, mining entities must extract, refine and then market the minerals discovered. However, there are some entities that provide services and have no output in the form of physical units. Although there is no existence of manufacturing processes in the service sector, the service offered has to be marketed and there is administration activities that need to be undertaken within that specific service entity (Amernic & Craig, 2004).

The “Outputs” section in the integrated report outlines the productivity levels for manufacturing entities (Melloni et al., 2016). It shows the actual outcome of the inputs put into the production process. For example, if an entity produces soccer balls, the number of soccer balls produced in the 2019 financial year must be disclosed in the output section. However, management teams of some entities have been found to be confused by the difference between the “output” and “outcomes” sections (CIMA et al., 2013).

The “Outcomes” section outlines the impact of the entity within the internal environment as well as the external environment (IIRC, 2013a). An example would include disclosure of the impact the operations had on the natural resources and the surrounding community. Management utilises this section to show how the created value is distributed to stakeholders (Melloni et al., 2016). However, management has also been found to be using this section as a marketing tool (Melloni et al., 2016).

Melloni et al., (2016) suggests that tone is used as a manipulation technique in the business model disclosure. Brennan et al., (2009) found that impression management techniques are mostly used by management in narrative disclosures that explain the financial statements. The manipulation is more prevalent in narrative disclosures that are less regulated like the business model disclosures (Brennan et al., 2009). The JSE is a highly regulated stock exchange and it is of interest to determine if thematic manipulation also exists in the integrated reports of JSE listed entities.

Melloni et al., (2016) further tested relationships to investigate whether the tone used in the business model disclosure is influenced by certain factors. The factors comprised of disclosure variables such as corporate governance, performance and disclosure verifiability (Melloni et al., 2016).

2.7.1 Corporate governance

In line with previous research conducted, Osma and Guillamo´n-Saorı´n (2011) found that strong leadership promotes transparent and fair reporting of the business model disclosure. Strong and weak leadership were distinguished through looking at the number of board members, the proportion of independent members on the board of directors and the number of independent audit committee members (Klein, 2002; Osma & Guillamo´n-Saorı´n, 2011). Strong leadership was associated with a limited number on the board of directors and more independent members on the audit committee (Melloni et al., 2016). However, the composition of the audit committee was not relevant in this study as members of the audit committee must all be independent for JSE listed entities.

In the current study, the researcher tested the following hypothesis developed by Melloni et al., (2016):

Hp1: There is a statistically significant relationship between a more positive tone of business model disclosure and more board members (Melloni et al., 2016).

2.7.2 Performance

Previous studies have attempted to link the tone used in business model disclosure and the financial results of the entity (i.e. performance) (Schleicher & Walker, 2010). Stakeholders are expecting desirable outcomes at the end of each reporting period. The failure to achieve the targets set by the entity might lead to management attempting to divert attention away from poor performance (Brennan & Merkl-Davies, 2013). Previous studies on impression management emphasise the impact of poor performance on reporting bias encountered in narrative disclosures (Adelberg, 1979; Clatworthy & Jones, 2003).

In attempting to conceal poor outcomes, tone is found to be a tool that might be used to manipulate the portrayal of a certain image to stakeholders (Clatworthy & Jones, 2003). Previous studies argue that a positive tone in business model disclosure is expected where there is a decline in profitability as management attempts to conceal the bad financial results through narrative disclosures (Clatworthy & Jones, 2003). Courtis (1995) supports this finding by concluding

that information presented to stakeholders is biased and mechanisms are undertaken to hide negative outcomes.

In the current study, the following hypothesis was tested:

Hp2: There is a significant statistical relationship between a more positive tone of business model disclosure and a decline in profitability (Melloni et al., 2016).

2.7.3 Disclosure verifiability

Beattie et al., (2004) suggest that the type of information presented to stakeholders has specific disclosure characteristics. Previous studies also show that impression management techniques could be easily applied depending on the disclosure characteristics (Dobler, Lajili, & Ze´ghal, 2011). Dobler et al., (2011) found that management easily manipulates the tone used when providing information that cannot be corroborated (Dobler et al., 2011). For example, qualitative information has been found to be associated with a more positive tone as it is hard to dispute (Bryan, 1997). In addition, forward-looking information has been associated with a more positive tone as it is based on events that have not yet occurred (Bryan, 1997). Bryan (1997) explains it by stating that information that is not supported by facts and relevant documentation is susceptible to impression management strategies.

In this study the following hypotheses were tested:

Hp3a: There is a significant statistical relationship between a more positive tone of business model disclosure and forward-looking information (Melloni et al., 2016).

Hp3b: There is a significant statistical relationship between a more positive tone of business model disclosure and qualitative information (Melloni et al., 2016).

2.8 Summary

In analysing the importance of integrated reporting, Stainbank and Peebles (2006) found that the user group ranked the integrated reports as containing the most important information relevant to investment decisions. This literature review also showed that there is a significant amount of accounting research on impression management strategies in developed markets that can assist in

testing whether management attempts to deceive stakeholders' perception in South Africa. Literature on impression management included a discussion on the agency theory and attribution theory in attempting to explain the existence of impression management strategies (Aerts, 2005). Prior studies also show that attention is diverted away from financial statements to narrative disclosures (Stanton et al., 2004).

The "business model disclosure" constitute a narrative disclosure (Melloni et al., 2016). Melloni et al. (2016) investigated whether tone is used in business model disclosure to mislead the stakeholders. Melloni et al. (2016) further tested relationships to investigate whether the tone used in the business model disclosure is influenced by certain disclosure variables. Clatworthy and Jones (2003) also investigated the extent to which entities in the UK mention positive news relative to less positive or negative news. It was found that emphasis was placed on the positive aspects (Clatworthy & Jones, 2003). This report reflects research of a similar study but within a South African context.

CHAPTER 3: METHODOLOGY

3.1 Introduction

The purpose of this study was to determine whether JSE listed entities adopt impression management strategies by manipulating the tone of the business model disclosure provided in their integrated reports. This study is a replication of a study conducted by Melloni et al., (2016). The business model disclosure outlines the value-creation process and it is only fair to represent both positive and negative aspects faced by the entity. If emphasis is placed on positive news only, it may have a detrimental effect on the investors' decision-making process (Milne & Chan, 1999). In this chapter, the methodology followed to fulfil the research purpose is discussed.

In Section 3.2, an overview of the method is provided followed by a discussion of the research design of the study in Section 3.3. In Section 3.4, a discussion on the population of the study and the sampling strategy is provided followed by a discussion on how data was collected in Section 3.5. In Section 3.6, a clear description of the data analysis of the study is provided followed by a discussion on the reliability of the research methodology followed in Section 3.7. In Section 3.8, a discussion on the validity of the study is provided followed by ethical considerations in Section 3.9. In Section 3.10, a summary of the methodology chapter is provided.

3.2 Overview of method

This study was conducted within a positivist paradigm (Chilisa & Kawulich, 2012; Kaboub, 2008). A paradigm is a comprehensive belief system, world view, or framework that guides research and practice in a field (Taylor & Medina, 2011). The positivist paradigm mostly involves a quantitative methodology (Taylor & Medina, 2011). A positivist study aims to generalise results obtained to the entire population (Chilisa & Kawulich, 2012). This research paradigm strives to investigate, confirm and predict law-like patterns of behaviour, and is commonly used in graduate research to test theories or hypotheses (Taylor & Medina, 2011).

A positivist paradigm was deemed to be the most appropriate for this study as this study is dependent on quantifiable observations that make use of statistical

analyses (Chilisa & Kawulich, 2012). The individual sentences from the business model disclosure in the integrated reports of JSE listed entities were analysed, and that data is qualitative in nature. However, the data collected was used to derive statistical results interpreted by the researcher. Therefore, the study constituted a quantitative research (Bryman & Bell, 2011; Leedy & Ormrod, 2005). In addition, four hypotheses that were developed in prior literature were tested and hypothesis testing is an attribute of quantitative research within a positivist paradigm (Neuman, 2011).

Quantitative research can be classified as being either experimental, descriptive or causal comparative research (Bijou, Peterson, & Ault, 1968). Experimental research involves the investigation of the impact of a certain element into the study group and then measures the outcomes (Williams, 2007). Descriptive research identifies attributes of a particular phenomenon based on an observational basis, or the exploration of correlation between two or more phenomena (Williams, 2007). In causal comparative research, the researcher examines how independent variables are affected by dependent variables and involves cause and effect relationships between the variables (Williams, 2007). This study identified attributes of the sentences found in the business model disclosure in relation to the type of tone used on an observational basis. Correlation between the various attributes and the tone used was explored with the hypotheses testing. Therefore, this study is a descriptive study.

3.3 Research Design

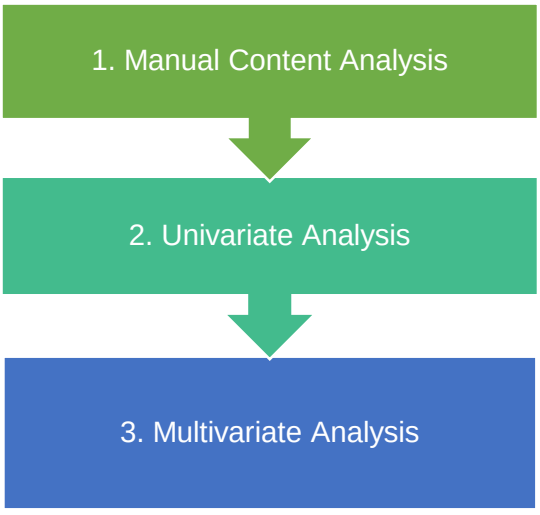


Figure 8: An overview of the three research design phases.

A three-level analysis was performed. The method is consistent with similar studies conducted by Melloni et al., (2016) and Beattie et al., (2004). The first phase was a manual content analysis. Business model disclosure consists of sentences and a manual content analysis was an appropriate method as it allows for the compression of text into fewer content categories based on explicit rules of coding (Krippendorff, 2013; Stemler, 2001). This systematic categorisation allowed for the collected data to be summarised, interpreted and comparable between entities (Holsti, 1969).

The second phase was the univariate analysis of the relationships between tone and disclosure variables. A univariate analysis was appropriate as it determines whether there is a relationship between tone and each category identified in the manual content analysis (Holsti, 1969). The key fact with a univariate analysis is that only one variable is involved and it allows for the test of each relationship in isolation (Melloni et al., 2016).

Univariate analysis can yield misleading results in circumstances where a multivariate analysis is more appropriate (Melloni et al., 2016). A multivariate analysis was more appropriate as the “tone” of business model disclosure might be influenced by more than one variable (Beattie et al., 2004). Therefore, the final and third phase was a multivariate analysis to test the following hypotheses developed in Melloni et al., 2016 on the relationship between the “tone” of business model disclosure and a set of variables that refer to corporate governance, performance and disclosure verifiability:

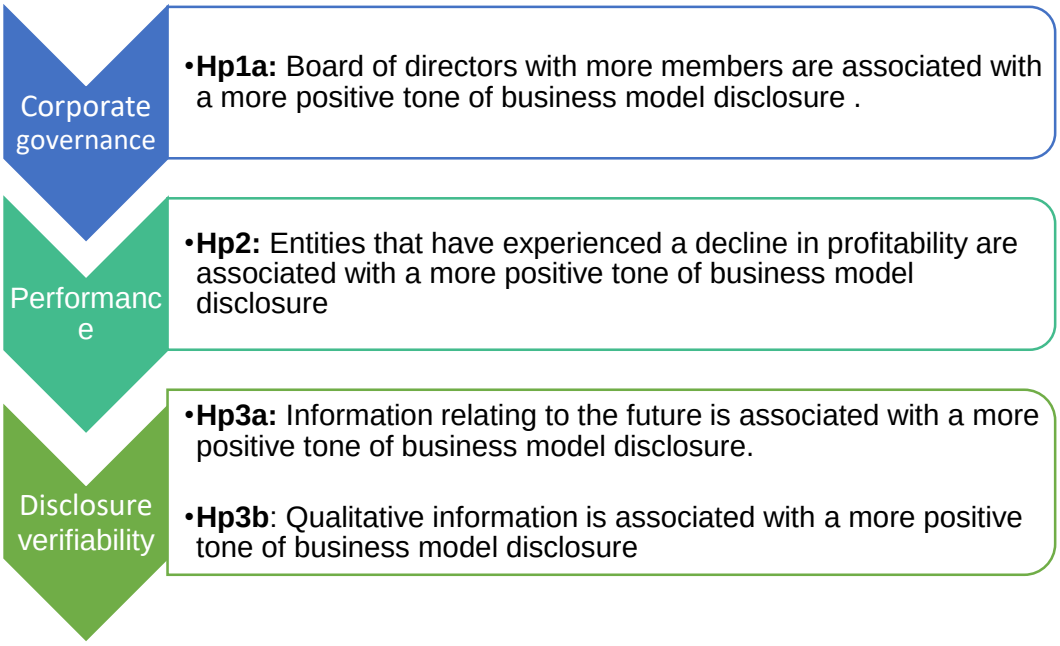


Figure 9: Hypotheses testing.

Source: *Melloni et al., (2016).*

3.4 Population and sample selection

The population consisted of all entities listed on the JSE. Only integrated reports for the 2018 financial year-end were examined and investigated. However, only the business model disclosure section in the integrated report was examined by the researcher.

A purposive sampling strategy was applied in this research. The use of a purposive sample does not consume a lot of time and the cost incurred is minimal (Dudovskiy, 2018). This sampling technique was appropriate as the researcher has chosen the sample size based on the entities with the highest market capitalisation for the 2018 financial year. The integrated reports of the Top 100 JSE listed entities were downloaded. However, the sample size was 88 integrated reports as 12 integrated reports did not have a specific section designated to business model disclosure. The focus on the Top 100 JSE listed entities was more appropriate as most stakeholders are generally interested in entities with high market capitalisation (especially, investors). Therefore, the quality of corporate reporting for such entities requires close monitoring. The sample size is consistent with the study conducted in the UK (Melloni et al., 2016).

3.5 Data collection

All 100 integrated reports were downloaded from the official websites of the respective JSE listed entities. Each integrated report was read to determine if there is a section designated for business model disclosure. 12 integrated reports were excluded from the study as they do not devote a section to business model disclosure. Data on governance (i.e. the number of board of directors) and performance (i.e. the return on equity) variables used in the multivariate analysis was also obtained in the integrated reports of the entities. Therefore, the business model disclosure section of 88 integrated reports from the Top 100 JSE listed entities for the 2018 financial year were analysed and examined.

3.6 Data analysis

3.6.1 Phase one: Manual content analysis

The researcher conducted a manual content analysis, consistent with Melloni et al., (2016), to determine whether or not a positive tone is used to manipulate the business model disclosure in the integrated reports. Figure 10 illustrates the step-by-step approach of how the content analysis was carried out (Krippendorff, 2013);

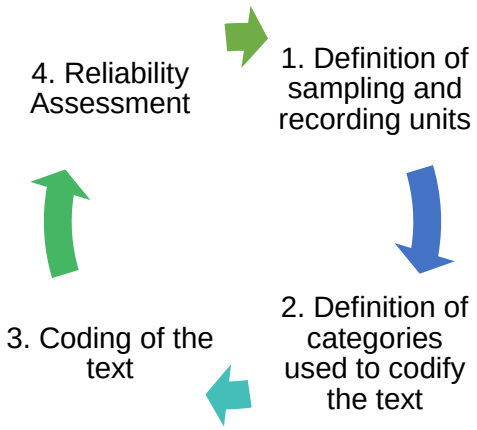


Figure 10: Manual content analysis procedure.

Source: *(Melloni et al., 2016)*.

Step 1: Definition of sampling units and recording units

The sampling units are the sections designated for business model disclosure in the entities' integrated reports. The individual sentences in the business model disclosure constitute recording units (Beattie et al., 2004). Consistent with Melloni et al., (2016), each sentence in the business model disclosure was read and coded.

Step 2 and 3: Definition of categories used to codify the text and coding of the text

In figure 11, the four categories of the content analysis are provided and followed by clear descriptions of each category.

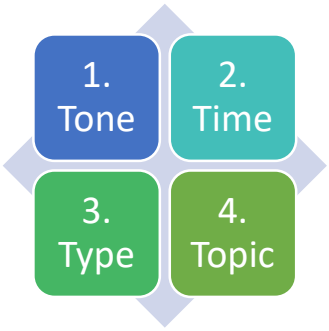


Figure 11: Four categories of the content analysis

Source: *(Melloni et al., 2016)*.

The ‘‘tone’’ of disclosure can either be a positive or non-positive tone. Consistent with the Clatworthy and Jones (2003) study, positive news for the entity and environment in which it operates imply a positive tone. Therefore, non-positive tone consists of both neutral and negative news to the entity and the environment in which an entity operates. Table 1 illustrates an example of how data relating to disclosure tone was collected and captured.

Table 1: *Data captured for disclosure tone [An example]*

Company name	Page number in Annual report	Number of text units	Length of the business model (Pages)	Return on equity (1 decrease, 0 otherwise)	No. of independent members on the board of directors	No. of board of directors members	No. of independent audit committee members	Tone	
								Positive	Non-Positive
ABC Limited	18	21	2	1	7	11	3	4	18

The ‘‘type’’ of sentence was categorised as either a quantitative or qualitative sentence. Quantitative information was coded based on the inclusion of a numerical element in the sentence. Whereas, sentences that consisted solely of words and no numbers were considered to constitute qualitative information. Table 2 illustrates an example of how data collected in terms of the “type” category was captured.

Table 2: *Data captured for disclosure type [An example]*

Company name	Page number in Annual report	Number of text units	Length of the business model (Pages)	Return on equity (1 decrease, 0 otherwise)	No. of independent members on the board of directors	No. of board of directors members	No. of independent audit committee members	Type	
								Quantitative	Qualitative
ABC Limited	18	21	2	1	7	11	3	8	14

In terms of the ‘‘time’’ category, each sentence was categorised as either forward-looking or non-forward-looking information. Table 3 illustrates an example of how the researcher analysed the time orientation of the sentences in the business model disclosure.

Table 3: *Data captured for time orientation [An example]*

Company name	Page number in Annual report	Number of text units	Length of the business model (Pages)	Return on equity (1 decrease, 0 otherwise)	No. of independent members on the board of directors	No. of board of directors members	No. of independent audit committee members	Time	
								Forward looking	Non-Forward looking
ABC Limited	18	21	2	1	7	11	3	2	20

The headings as displayed in the business model disclosure constitute “topics”. One heading includes “Inputs, business activities and outputs”; the second heading includes “Outcomes” (Melloni et al., 2016). Table 4 illustrates an example of how the researcher analysed the business model disclosure and assigned the sentences to the appropriate heading. The description of the “topics” category concludes step 2.

Table 4: *Data captured for topic [An example]*

Company name	Page number in Annual report	Number of text units	Length of the business model (Pages)	Return on equity (1 decrease, 0 otherwise)	No. of independent members on the board of directors	No. of board of directors members	No. of independent audit committee members	Topic	
								Inputs, Business Activities or Outputs	Outcomes
ABC Limited	18	21	2	1	7	11	3	17	5

Step 3 represents the coding of each sentence (or recording unit) in the business model disclosure section. Each sentence (or recording unit) was allocated a number in terms of one or zero by the researcher. For example, when considering the “tone” category, one was allocated to the positive tone sub-category and zero to the non-positive sub-category if the sentence was considered to be positive. The allocation exercise was conducted for each sentence analysed by the researcher.

Step 4: Reliability assessment

The reliability of the classification procedure used in the manual content analysis was assessed following Krippendorff (2013) in the replicated study. A list of

detection and classification rules for each category was identified and discussed with other academics (including the two experienced supervisors). Consistency was ensured through trial runs at different time periods whereby the sentences of the same entity were examined and analysed by different experienced academics and the supervisors. The results of the trial runs were examined and compared, and differences were addressed to highlight any unclear coding rules encountered. The trial runs took place before the actual data collection and analysis officially commenced. Therefore, the process enhanced the reliability of the manual content analysis techniques.

3.6.2 Phase two: Univariate analysis

A univariate analysis to determine whether tone is associated with disclosure variables was conducted using the Pearson Chi square test (Melloni et al., 2016). The Pearson Chi square test was an appropriate test as it is designed to analyse categorised data (Alamartine, Sabatier, Guerin, Berliet, & Berthoux, 1991). Tone was the dependent variable. The independent variables were the following: quantitative versus qualitative disclosure; forward versus non-forward-looking disclosure; disclosure on outcomes versus disclosure on inputs, business activities, and output (Melloni et al., 2016). The Pearson Chi square test of independence is used to determine if there is a significant relationship between two nominal variables (Zibran, 2007)[1]. If the Pearson Chi-square probabilities is below the conventionally accepted significance level of 0.05 (i.e. $p < 0.05$), the two nominal variables (for example, “tone” and “type”) are statistically associated (Melloni et al., 2016).

Crosstabs were used in conducting the univariate analysis (Wong, Wei, Qi, & Zhao, 2008). Crosstabs show that the researcher captured all the data and there are no missing values (Wong et al., 2008). A crosstab is a systematic and statistically well-defined method to automatically identify suspicious code that should be examined for possible fault locations (Wong et al., 2008). Traditional ad-hoc methods for locating errors can be time-consuming and ineffective because they rely on programmers’ intuitive guesswork, which may be neither accurate nor reliable (Wong et al., 2008). The usage of a crosstab-based method is highly regarded (Wong et al., 2008).

[1] The degrees of freedom (df= 1) and a 95 % confidence interval

3.6.3 Phase three: Multivariate Analysis

Previous studies identified possible relationships with the aim of determining whether the tone of disclosure and a set of variables that refer to corporate governance, performance and disclosure verifiability were associated (Beattie et al., 2004). The researcher tested the hypotheses in this study to determine if the findings by Melloni et al. (2016) are consistent within a South African context. The following hypotheses developed in previous studies were tested using the multivariate analysis (as stated in Chapter 2):

Null hypothesis:

H0: There is no significant statistical relationship between a more positive tone of disclosure and a set of variables that refer to corporate governance, performance and disclosure verifiability.

Alternate hypotheses:

H1a: There is a statistically significant relationship between a more positive tone of business model disclosure and more board members (Melloni et al., 2016).

Hp2: There is a significant statistical relationship between a more positive tone of business model disclosure and a decline in profitability (Melloni et al., 2016).

Hp3a: There is a significant statistical relationship between a more positive tone of business model disclosure and forward-looking information (Melloni et al., 2016).

Hp3b: There is a significant statistical relationship between a more positive tone of business model disclosure and qualitative information (Melloni et al., 2016).

Descriptive statistics were used in the analysis of the multivariate analysis results. The dependent variable was the disclosure tone (Melloni et al., 2016). The independent variables consisted of the following;

- **A governance variable**: The number of members on a board of directors (Melloni et al., 2016).

- **A performance variable**: Declining performance is a dummy variable set equal to one if firm return on equity is decreasing and 0 otherwise (Melloni et al., 2016).
- **Disclosure verifiability variables**:
  - "Time" is measured as the number of non-forward-looking information deflated by the total number of statements (Melloni et al., 2016).
  - "Type" is measured as the number of quantitative information statements deflated by the total number of statements (Melloni et al., 2016)

For a multivariate test, the covariance matrices of the dependent variable must be the same across all levels of the independent variables (Sclove, 1987). The Box's test of equality was used to determine if there was homogeneity of variance to ensure the assumption of a multivariate test is not violated (Geisser & Greenhouse, 1958). The Levine's Test was used to test the assumption that variances of each variable are the same across groups. If the Levine's Test was significant, it meant that the assumption had been violated and the researcher must examine the data with caution (Braver, MacKinnon, & Page, 2003).

For each hypothesis tested, the researcher compared the means between positive tone and non-positive tone for the set of independent variables. The Wilks Lambda test was used to determine if the difference was significant (Friston, Poline, Holmes, Frith, & Frackowiak, 1996). If the p-value is less than 0.05, the relationship is significant with 95 percent confidence (Ramana, Babu, & Venkateswarlu, 2012). However, ***Hp3a*** and ***Hp3b*** were tested using the Pearson Chi-square correlation coefficients as the variables involved did not satisfy the conditions for a multivariate analysis.

3.7 Reliability

When performing research, it is important for the researcher to not be subjective (Sutrisna, 2009). The researcher must be honest in their study (Sutrisna, 2009). The possibility of subjectivity is reduced since this study was conducted following a quantitative research methodology (Neuman, 2011). Reliability and validity are key concepts that are defined in a prior study (Neuman, 2011). Reliability refers to the quality of the data collected and the method used to analyse the data (Neuman, 2011). The sample only consisted of JSE listed entities. The

integrated reports can be considered reliable as they were obtained from entities listed on a well-recognised stock exchange and they were audited. This study is a replication of a published study conducted by Melloni et al. (2016) and that enhances the reliability of the methodology.

3.8 Validity

Validity refers to the credibility of both the research design and method of the study in determining whether it is truly representative of the phenomenon the researcher is claiming to measure (Golafshani, 2003). In simple terms, the research method must enable the research question(s) to be answered in order for the study to be considered valid (Golafshani, 2003). A methodology that lacks validity, results in other researchers regarding the study as being of low quality and unreliable (Straub, Gefen, & Boudreau, 2004).

3.8.1 Internal validity

Internal validity refers to whether the quality (or accuracy) of the conclusions reached are logically and factually sound (Neuman, 2011). The key factor is determining whether another researcher would come to the same conclusions given the same data (Neuman, 2011). Internal validity of the classification procedure used in the manual content analysis was high as the original study used the Krippendorf's alpha coefficient to test the internal validity (Melloni et al., 2016). In addition, the supervisors have vast experience in terms of analysing narrative disclosures in the integrated reports such as the Chairman's statement and strategy disclosures. Therefore, the research design and method can be relied upon to result in accurate conclusions.

3.8.2 External validity

External validity refers to the manner in which the findings of a study could be generalised to the entire population (Shuttleworth, 2009). The sample size comprising of 88 integrated reports from the Top 100 JSE listed entities is sufficient and improves the external validity as it is a large sample size. External validity of the study is also high as similar studies were performed by Melloni et al., (2016) and Beattie et al., (2004) in developed countries, following the same methodology. Hence, it shows the study may be reproduced in a different context.

3.8.3 Content validity

Content validity refers to the effectiveness of a test to measure what it purported to measure (Heale & Twycross, 2015). The data collected and research method enabled the researcher to answer the research question as well as test each hypothesis to reach a conclusion as intended.

3.9 Ethical considerations

The data collected was obtained from the official websites of the JSE listed entities. The entities' names were not mentioned in this study. This study constituted a quantitative study; therefore, subjectivity was minimised. The sample size was chosen based on the highest market capitalisation for the 2018 financial year and not based on personal preferences. The results disclosed faithfully represent the findings of this study as there was no pre-determined outcome that was desirable for the researcher. The analysis of results is transparent and reliable as it includes both positive and negative findings

3.10 Summary

This study followed a quantitative research methodology. Although the data is qualitative in nature, the collected data was used to derive statistical results interpreted by the researcher. A three-level analysis consisting of a manual content analysis, a univariate analysis and a multivariate analysis were conducted. The sample size comprises of 88 integrated reports from the Top 100 JSE listed entities. This study is a replication of a published study conducted by Melloni et al., (2016) and that enhances the reliability and validity of the methodology.

CHAPTER 4: ANALYSIS OF RESULTS

4.1 Introduction

In this chapter, the analysis of results obtained in this study is provided. In Section 4.2, the results of the manual content analysis are discussed followed by a discussion of results of the univariate analysis in Section 4.3. In Section 4.4, there is an illustration of the hypotheses testing results obtained using the multivariate analysis. The chapter concludes with summarised results obtained from the three-level analysis conducted by the researcher.

4.2 Content analysis

The study was conducted to determine whether JSE listed entities adopt impression management strategies by manipulating the tone of the business model disclosure provided in their integrated reports. The purpose of this study was to determine whether integrated reports of JSE listed entities maintain objectivity and integrity in their corporate reporting disclosure. A total of 2 943 sentences were examined and analysed by the researcher.

Table 5: *Content Analysis Results*

	Tone		Type		Time		Topic	
Categories	**Positive**	**Non-positive**	**Quantitative**	**Qualitative**	**Forward-looking**	**Non-forward looking**	**Inputs, business activities and outputs**	**Outcomes**
Number of sentences per category	1 194	1 749	992	1 951	165	2 778	1 607	1 336
% per Category	40.57	59.43	33.71	66.29	5.61	94.39	54.60	45.40
Number of sentences	2 943		2 943		2 943		2 943	

The manual content analysis results in Table 5 indicate, out of the 2 943 sentences analysed, that 40.57 % have a positive tone whilst 59.43 % have a negative or neutral tone. In a similar study conducted by Melloni et al., (2016) in

the UK, the content analysis revealed that from the sentences analysed, 42.93 % have a positive tone whilst 57.07 % have a non-positive tone. The results from this study are consistent with the results of Melloni et al., (2016) with JSE listed entities found to be marginally more objective in their business model disclosure. Table 5 also shows an in-depth analysis of each category.

In terms of the "type" category, the results illustrate qualitative information (66.29 % of the total amount of disclosure analysed in this study) is dominant in the business model disclosure when compared to quantitative information. The results of this study are consistent with Melloni et al. (2016) as that study showed that only 25.58 % of the sentences have quantitative elements. The results of this paper support the perception that the business model disclosure is dominated by the type of information that is difficult for stakeholders to verify (Beattie et al., 2004; Melloni et al., 2016). Figure 13 further illustrates the spread of the sentences examined by the researcher amongst the various categories identified in a bar graph:

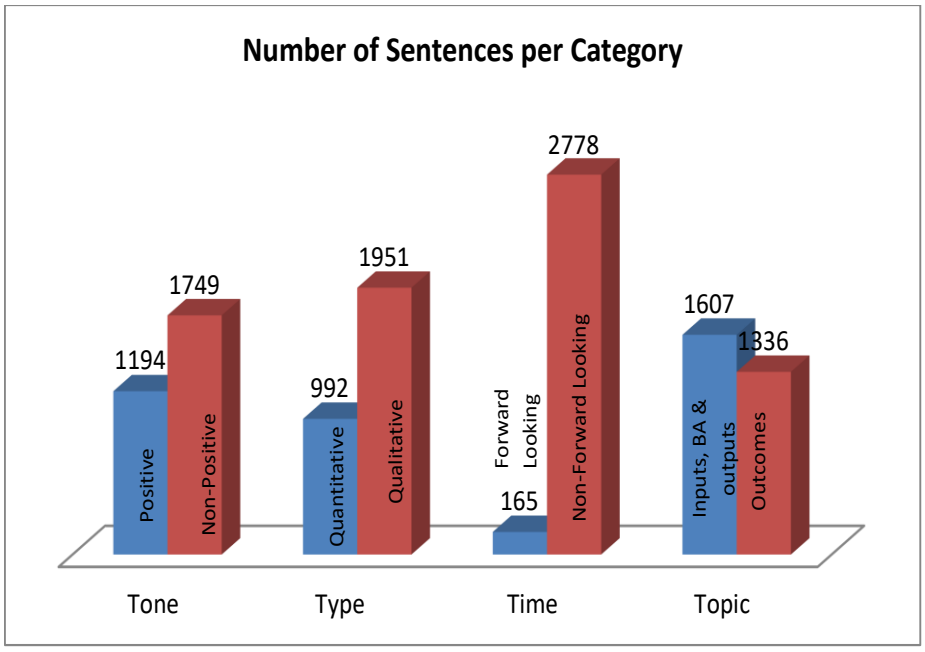


Figure 12: Graphical representation: Number of sentences per category.

Apparent from Figure 13, Table 5 also shows that only 5.61 % of the business model disclosure contains forward-looking information. Entities are disclosing more non-forward-looking information (i.e. information based on what has

already taken place). A stewardship outlook continues to be adopted by most entities instead of a neoliberal perspective (Georgiou & Jack, 2011). A neoliberal perspective assumes that stakeholders are more interested in the future outlook of the entities in making investment decisions (Hopwood, 1987). The results are consistent with the results of Melloni et al., (2016) namely, that only 12.11 % of the sentences analysed were forward-looking. As much as the neoliberal perspective might be promoted, entities remain accountable to stakeholders for value created at the present moment (Georgiou & Jack, 2011).

As previously stated in the methodology chapter, the “topics” category deals with two sections in business model disclosure that provide entities with a platform to describe the value-creation process and the value generated for stakeholders (CIMA et al., 2013). The results provided in Table 5 indicate that, in terms of the “topics” category, the business model disclosure is spread out as follows: 45.4 % of the sentences are in the outcomes category, and the remaining 54.6 % are in the inputs, business activities and outputs category. Melloni et al., (2016) also found that only 41.01 % of the sentences analysed are under the ‘outcomes’ heading. The results are consistent with Melloni et al., (2016) as the results imply that management focus more on outlining the resources needed by the entities and the production processes, while there is less focus on describing the value created for stakeholders (i.e. Outcomes).

4.3 Univariate analysis

The manual content results revealed an in-depth analysis of the characteristics of the sentences examined in the business model disclosure. However, a univariate analysis was conducted to test whether there is a significant statistical relationship between the “tone” used and the various categories (i.e. type, time and topics) identified. The results of a case processing summary (i.e. a summarised version of crosstabs) for each relationship tested by the researcher are provided in Table 6. The Case Processing summary illustrates that across the different categories there is no mismatch. For example, the same amount of statements captured for “tone” were also captured for “type”, “time” and “topic” respectively. The first relationship tested was between “tone” and “type”.

Table 6: *Case Processing Summary*

Variables	Valid		Cases missing		Total	
	Number	Percent	Number	Percent	Number	Percent
Tone versus Type	2 943	100 %	0	0.0 %	2 943	100 %
Tone versus Time	2 943	100 %	0	0.0 %	2 943	100 %
Tone versus Topic	2 943	100 %	0	0.0 %	2 943	100 %

4.3.1 Relationship between tone and type

The results in Table 7 indicate that non-positive tone is dominant in the “type’ category at 59.4 %. The results on qualitative sentences show positive tone is used in 64.3 % of the sentences. There are more qualitative sentences and that is a concern as it is difficult for stakeholders to hold management accountable for statements that are not easily verifiable.

Table 7: *Crosstab of the Relationship between "Tone" and "Type" of Information*

			Type		
			Qualitative	**Quantitative**	**Total**
Tone	**Non-positive**	**Count**	1183	566	1749
		% Within Tone	67.6 %	32.4 %	100 %
		% Within Type	60.6 %	57. 1 %	59. 4 %
		Total	40.2 %	19.2 %	59.4 %
	Positive	**Count**	768	426	1194
		% Within Tone	64.3 %	35.7 %	100 %
		% Within Type	39.4 %	42.9 %	40.6 %

		Total	26.1 %	14.5 %	40.6 %
	Total	**Count**	1951	992	2943
		% Within Tone	66.3 %	33.7 %	100 %
		% Within Type	100 %	100 %	100 %
		% Total	66.3 %	33.7 %	100 %

However, the Pearson Chi-squared test results in Table 8 show whether or not there is a statistical relationship between the “tone” used and the “type” of information.

Table 8: *Pearson Chi-Square Test for the relationship between “Tone" and "Type"*

	Value	**df**	**Asymptotic Significance (2-sided)**	**Exact Sig. (2-sided)**	**Exact Sig. (1-sided)**
Pearson Chi-Square	3.494	1	.062		
Continuity Correction	3.347	1	.067		
Likelihood Ratio	3.484	1	.062		
Fisher's Exact Test				.062	.034
Number of Valid Cases	2 943				

Consistent with the results of Melloni et al., (2016), results of the univariate analysis on the relationship between “disclosure tone” and “type of information” show that there is no significant statistical relationship between the former and the latter. The Pearson Chi-square value amounted to 3.494 in this study whereas Melloni et al., (2016) arrived at 0.812. The Pearson Chi-squared probability is above 0.05 (i.e. p= 0.062), showing that tone is independent from the “type of information”. The second relationship tested using the univariate analysis was between “tone” and “time”.

4.3.2 Relationship between Tone and Time

As mentioned above in the manual content analysis results, the results in Table 9 also indicate that little forward-looking information is disclosed in the business model section. Contrary to findings by Melloni et al., (2016), a neutral or negative tone is dominant in forward-looking information as results show that only 47.3 % of the forward-looking sentences have a positive tone. A neutral or negative tone is also shown to be used significantly in non-forward-looking statements in the business model disclosure. Of the 2 778 non-forward-looking sentences, 56.5 % is attributable to non-positive tone. Hence, the outcome might be indicative of the restriction on management to apply a positive tone to historic events as they are relatively easily verifiable.

Table 9: *Crosstab of the Relationship between "Tone" and "Time Orientation"*

			Time		
			Forward looking	**Non-forward looking**	**Total**
Tone	**Non-positive**	**Count**	87	1662	1749
		% Within Tone	5 %	95 %	100 %
		% Within Time	52.7 %	59.8 %	59.4 %
		% of Total	3 %	56.5 %	59.4 %
	Positive	**Count**	78	1116	1194
		% Within Tone	6.5 %	93.5 %	100 %
		% Within Time	47.3 %	40.2 %	40.6 %
		% of Total	2.7 %	37.9 %	40.6 %
	Total	**Count**	165	2778	2943
		% Within Tone	5.6 %	94.4 %	100 %
		% Within Time	100 %	100 %	100 %
		% of Total	5.6 %	94.4 %	100 %

However, the Pearson Chi-squared test results in Table 10 show whether or not there is a relationship between the “tone” used and the “time orientation”.

Table 10: *Pearson Chi-Square Test for the Relationship between “Tone" and "Time Orientation”*

	Value	**Df**	**Asymptotic Significance (2-sided)**	**Exact Sig. (2-sided)**	**Exact Sig. (1-sided)**
Pearson Chi square	3.256	1	.071		
Continuity Correction	2.968	1	.085		
Likelihood Ratio	3.213	1	.073		
Fisher’s Exact Test				.073	.043
Number of Valid Cases	2943				

Contrary to the results in the study by Melloni et al., (2016), results of the univariate analysis on the relationship between disclosure tone and its time orientation show that the former is independent to the latter. The results in Table 10 indicate that the Pearson Chi-square value is only 3.256 in this study while Melloni et al., (2016) obtained a Pearson Chi-square value of 47.324. The Pearson Chi-squared probability is above 0.05 (P=0.073). Therefore, the results show that tone is not associated with time orientation. Lastly, the relationship analysed using the univariate analysis was between “tone” and “topic”.

4.3.3 Relationship between Tone and Topic

As stated in terms of the manual content analysis results provided in Table 5, the results in Table 11 also indicate that more sentences are found in the “inputs, business activities and outputs” sections. However, positive tone is more dominant in “outcomes”. Of the 1 194 positive sentences within the “topic” category, 64.2 % of the sentences are in the “outcomes” category. “Outcomes” are representative of the impact of the business models on an entity itself and on the external environment (PwC, 2016). The results of this study might imply the existence of the perception that management feel under pressure to disclose outcomes in a positive light.

Table 11: *Crosstab of the Relationship between "Tone" and "Topic"*

			Topic		
			Inputs, business activities and outputs	**Outcomes**	**Total**
Tone	**Non-positive**	**Count**	1 187	562	1 749
		% Within Tone	67.9 %	32.1 %	100 %
		% Within Topic	73.5 %	42.3 %	59.4 %
		% of Total	40.3 %	19.1 %	59.4 %
	Positive	**Count**	427	767	1 194
		% Within Tone	35.8 %	64.2 %	100 %
		% Within Topic	26.5 %	57.7 %	40.6 %
		% of Total	14.5 %	26.1 %	40.6 %
	Total	**Count**	1614	1329	2943
		% Within Tone	54.8 %	45.2 %	100 %
		% Within Topic	100 %	100 %	100 %
		% of Total	54.8 %	45.2 %	100 %

However, the Pearson Chi-squared test results in Table 12 show whether or not there is a relationship between the “tone” used and the “topic”.

Table 12: *Pearson Chi-Square Test for the Relationship between “Tone" and "Topic”*

	Value	**Df**	**Asymptotic Significance (2-sided)**	**Exact Sig. (2-sided)**	**Exact Sig. (1-sided)**

Pearson Chi square	295.330	1	.000		
Continuity Correction	294.035	1	.000		
Likelihood Ratio	298.884	1	.000		
Fisher's Exact Test				.000	.000
Number of Valid Cases	2.943				

Consistent with findings by Melloni et al., (2016), the results of the univariate analysis further show that the disclosure tone is significantly related to the disclosure topic. The results in Table 12 indicate that the Pearson Chi-square value in this study is over 290 (i.e. 295.330). Melloni et al., (2016) had a Pearson Chi square value of 137.405 and that value was also relatively high compared to Pearson Chi-square values obtained for “tone versus type” and “tone versus time”. The results also indicate a Pearson Chi-square probability that is below 0.05 (i.e. P=0.000), indicating that there is a significant statistical relationship between “tone” and “topic” at the 95 % confidence level.

4.4 Multivariate analysis

Although the univariate analysis allowed for the examination of statistical relationships between tone and disclosure variables, a multivariate analysis was conducted to address hypotheses developed in prior studies relating to disclosure tone. Each hypothesis was tested separately in this. The first hypothesis that was tested related to the governance variable.

4.4.1 Corporate governance

The following hypothesis was tested:

H0: There is no statistically significant relationship between a more positive tone of business model disclosure and more board members.

Hp1: There is a statistically significant relationship between a more positive tone of business model disclosure and more board members.

Hp1 test the relationship between disclosure tone and the number of members on the board of directors. In Table 13, the descriptive statistics obtained by the researcher are provided. The lowest number of members on a board of directors out of the 88 JSE listed entities examined was six members. The highest number of members on a board of directors was twenty-three members. However, entities seem to limit the number of members on the board of directors. Only 23.86 % of the 88 entities have board members more than or equal to fourteen members. Klein (2002) found good corporate governance to be associated with a limited number of members on the board of directors.

Table 13: *Descriptive Statistics for Disclosure Tone versus the Number of Members on the Board of Directors*

	Number of members on the board of directors	**Mean**	**Std. Deviation**	**Number**
Positive	6	14.00	.	1
	8	15.75	4.856	4
	9	11.78	7.276	9
	10	12.44	6.803	9
	11	13.11	8.302	18
	12	13.31	5.779	13
	13	17.00	9.730	13
	14	14.00	.	1
	15	10.40	4.450	5
	16	16.17	6.676	6
	17	13.33	9.074	3
	18	14.00	7.071	2
	19	5.00	7.071	2
	20	12.00	.	1
	23	16.00	.	1
	Total	13.57	7.274	88
Non-Positive	6	12.00	.	1
	8	20.00	8.832	4
	9	16.67	9.962	9
	10	17.89	9.239	9
	11	19.39	9.095	18
	12	20.38	10.038	13
	13	25.00	11.790	13
	14	18.00	.	1
	15	18.60	8.112	5
	16	25.00	9.402	6
	17	23.67	7.024	3

	18	16.50	4.950	2
	19	7.50	6.364	2
	20	21.00	.	1
	23	6.00	.	1
	Total	19.87	9.671	88

Prior to conducting a multivariate test, there are certain principles that must not be violated (Sclove, 1987). For a multivariate test, covariance matrices of the dependent variable must be the same across all levels of the independent variable (Sclove, 1987). The results of the Box's test of Equality that tests whether or not the multivariate test principle is violated are provided in Table 14.

Table 14: *Box's Test of Equality of Covariance Matrices (Corporate Governance)*

Box's M	18.906
F	.651
df1	24
df2	1455.939
Sig.	.900

The results of the test show that p=0.9 which suggests that there is homogeneity of variance and the assumption is not violated. Therefore, the Wilks Lambda test could be conducted to perform the multivariate test. The results of the multivariate test using the Wilks Lambda test are provided in Table 15.

Table 15: *Multivariate test (Corporate Governance)*

Effect		**Value**	**F**	**Hypothesis df**	**Error df**
Intercept	**Pillai's Trace**	.709	87.827	2.000	72.00
	Wilks' Lambda	.291	87.827	2.000	72.00
	Hoteling's Trace	2.440	87.827	2.000	72.00
	Roy's Largest Root	2.440	87.827	2.000	72.00
Number of board of directors' members	**Pillai's Trace**	.219	.643	28.000	146.00
	Wilks' Lambda	.789	.649	28.000	144.00
	Hoteling's Trace	.258	.654	28.000	142.00

	Roy's Largest Root	.210	1.093	14.000	73.00

Effect		**Sig.**	**Partial Eta Squared**
Intercept	**Pillai's Trace**	.000	.709
	Wilks' Lambda	.000	.709
	Hoteling's Trace	.000	.709
	Roy's Largest Root	.000	.709
Number of board of directors' members	**Pillai's Trace**	.915	.110
	Wilks' Lambda	.910	.112
	Hoteling's Trace	.905	.114
	Roy's Largest Root	.379	.173

As depicted in Table 13, the results show means ($\bar{x}$) for both positive tone and non-positive tone as 13.57 and 19.87 respectively. The Wilks Lambda test results in Table 15 show p= 0.910 (i.e. p> 0.05). Contrary to findings by Melloni et al., (2016), the Wilks Lambda test results depict no significant statistical relationship between disclosure tone and the number of members on the board of directors at the 95 % confidence level. Therefore, the null hypothesis is accepted. Whereas, Melloni et al., (2016) found that a board of directors with a large number of members to be associated with a more positive tone. The Levine's test was not relevant when testing this hypothesis since p > 0.05. The second hypothesis tested was related to the performance variable.

4.4.2 Performance

The following hypothesis was tested:

H0: There is no significant statistical relationship between a more positive tone of business model disclosure and a decline in profitability.

Hp2: There is a significant statistical relationship between a more positive tone of business model disclosure and a decline in profitability.

Hp2 tests the relationship between disclosure tone and declining performance experienced by entities. Previous studies have attempted to link the tone used in business model disclosure and the financial results of the entity (i.e. performance) (Schleicher & Walker, 2010). The return on equity was used as a proxy for analysing performance (Melloni et al., 2016). In Table 16 descriptive statistics illustrate the relationship between disclosure tone and the performance variable. Out of 88 integrated reports examined, 54 % of entities experienced a decline in performance for the 2018 financial year.

Table 16: *Descriptive Statistics between Disclosure Tone and Declining Performance (Return on Equity)*

	Return on equity (1 decrease, 0 otherwise)	**Mean**	**Std. Deviation**	**Number**
Positive	0	14.85	6.601	40
	1	12.50	7.696	48
	Total	13.57	7.274	88
Non-positive	0	20.30	9.993	40
	1	19.52	9.487	48
	Total	19.87	9.671	88

The assumption of the multivariate test also had to be tested using the Box's test of Equality to ensure it is not violated. The results are provided in Table 17.

Table 17: *Box's Test of Equality of Covariance Matrices (Performance)*

Box's M	4.874
F	1.583
df1	3
df2	13261948.134
Sig.	.191

The Box's test of equality results in Table 17 show p= 0.191 which suggests that there is homogeneity of variance and the assumption of a multivariate analysis is not violated. The results of the multivariate test using the Wilks Lambda test follow in Table 18.

Table 18: *Multivariate Analysis (Performance)*

Effect		**Value**	**F**	**Hypothesis df**	**Error df**
Intercept	**Pillai's Trace**	.856	251.679	2.000	85.000
	Wilks' Lambda	.144	251.679	2.000	85.000
	Hoteling's Trace	5.922	251.679	2.000	85.000
	Roy's Largest Root	5.922	251.679	2.000	85.000
Return on equity (1 decrease and 0 otherwise)	**Pillai's Trace**	.026	1.153	2.000	85.000
	Wilks' Lambda	.974	1.153	2.000	85.000
	Hoteling's Trace	.027	1.153	2.000	85.000
	Roy's Largest Root	.027	1.153	2.000	85.000

Effect		**Sig.**	**Partial Eta Squared**
Intercept	**Pillai's Trace**	.000	.856
	Wilks' Lambda	.000	.856
	Hoteling's Trace	.000	.856
	Roy's Largest Root	.000	.856
Return on equity (1 decrease and 0 otherwise)	**Pillai's Trace**	.321	.026
	Wilks' Lambda	.321	.026
	Hoteling's Trace	.321	.026
	Roy's Largest Root	.321	.026

As depicted in Table 16, the results show means ($\bar{x}$) for both positive tone and non-positive tone as 13.57 and 19.87 respectively. The Wilks Lambda test results in Table 18 show p= 0.321 (i.e. p> 0.05). Contrary to findings by Melloni et al., (2016), the Wilks Lambda test results depict no significant statistical relationship between disclosure tone and declining performance at a 5 %

significance level. Therefore, the null hypothesis is accepted. Whereas, Melloni et al., (2016) found a positive relationship between declining performance and positive tone. The Levine's test was not relevant when testing this hypothesis since p > 0.05. The last two hypotheses tested were related to the disclosure verifiability.

4.4.3 Disclosure verifiability

The following hypothesis was tested:

H0: There is no significant statistical relationship between a more positive tone of business model disclosure and forward-looking information.

Hp3a: There is a significant statistical relationship between a more positive tone of business model disclosure and forward-looking information.

Hp3a tests the relationship between disclosure tone and time orientation. The results were compared to the univariate analysis results derived in phase two. In Table 19, the results of the Pearson Chi-square correlation coefficient used to test the relationship are provided.

Table 19: *Pearson Correlation Coefficient (Time Orientation)*

		Positive/ Non-Positive	**Forward looking – Non-forward looking**
Positive/ Non-Positive	**Pearson Correlation**	1	.033
	Sig. (2-tailed)		.071
	Number	2 943	2 943
Forward looking and non-forward looking	**Pearson Correlation**	.033	1
	Sig. (2-tailed)	.071	
	Number	2 943	2 943

As depicted in Table 19, the results show p=0.071 (i.e. p > 0.05). There is no significant statistical relationship between disclosure tone and time orientation at a 5 % significance level. Therefore, the null hypothesis is accepted. The results are consistent with the univariate statistical analysis results derived in phase two. However, Melloni et al., (2016) found that more of a positive tone is used in

forward-looking information. The type of information versus disclosure tone was the final hypothesis tested by the researcher.

The following hypothesis:

H0: There is no significant statistical relationship between more positive tone of business model disclosure and qualitative information.

Hp3b: There is a significant statistical relationship between more positive tone of business model disclosure and qualitative information (Melloni et al., 2016).

Hp3b tests the relationship between disclosure tone and the type of information. The results were compared to the univariate analysis results derived in phase two. The results of the Pearson Chi-square correlation coefficient used to test the relationship are provided in Table 20.

Table 20: *Pearson Correlation Coefficient (Type of Information)*

		Positive/ Non-Positive	**Quantitative/ Qualitative**
Positive/ Non-Positive	**Pearson Correlation**	1	.034
	Sig. (2-tailed)		.062
	Number	2 943	2 943
Quantitative/ Qualitative	**Pearson Correlation**	.034	1
	Sig. (2-tailed)	.062	
	Number	2 943	2 943

As depicted in Table 20, the results show p=0.062 (i.e. p > 0.05). There is no significant statistical relationship between disclosure tone and the type of information at a 5% significance level. Therefore, the null hypothesis is accepted. The results are consistent with the univariate statistical analysis results in phase two. Melloni et al., (2016) also found that there is no significant statistical relationship between disclosure tone and type of information in their multivariate analysis results.

4.5 Summary

The univariate analysis results illustrate the relevance of the different categories in terms of disclosure tone used in the business model disclosure. Whereas the

multivariate analysis results consider other factors (such as declining performance, corporate governance, and many more) that might influence the disclosure tone. The results in this paper mostly contrast findings by Melloni et al., (2016), which shows that different contexts could provide varying perceptions in terms of the quality of business model disclosure. In comparison to the Melloni et al., (2016) results, the following was noted:

a) Test results in line with Melloni et al., (2016)

- According to the manual content analysis: Qualitative information is dominant in the business model disclosure when compared to quantitative information; A stewardship outlook continues to be adopted by most entities instead of a neoliberal perspective; Management focus more on outlining the resources while there is less focus on describing the value created for stakeholders (i.e. Outcomes).
- According to the univariate and multivariate analysis; There is no significant statistical relationship between tone and the type of information; The results of the univariate analysis further show that the disclosure tone is significantly related to the disclosure topic.

b) Test results contrasting the findings by Melloni et al., (2016)

- Majority of the sentences in the business model disclosure were found to have a negative or neutral tone.
- According to the univariate and multivariate analysis: The is no significant relationship between disclosure tone and its time orientation.
- There was no significant statistical relationship between disclosure tone and the set of disclosure variables (i.e. corporate governance, performance and disclosure verifiability).

The findings in this study also contradicts what is expected based on both the Attribution and agency theory covered in the literature review. Regarding the agency theory, findings of this study show that there is less focus on disclosing “Outcomes” even though there is information asymmetry between management and stakeholders. Regarding the attribution theory, instead of management taking ownership of positive outcomes whilst shifting responsibility for negative outcomes, majority of the sentences in the business model disclosure were found to have a negative or neutral tone.

CHAPTER 5: CONCLUSION AND RECOMMENDATIONS FOR FUTURE RESEARCH

5.1 Conclusion

This purpose of this paper was to determine whether management teams of JSE listed entities adopt impression management strategies by manipulating the tone (i.e. the use of a more positive tone) of the business model disclosure provided in integrated reports. A set of disclosure variables (i.e. corporate governance, performance and disclosure verifiability) were examined to test if there is a relationship between the disclosure tone used in business model disclosure and these variables. The study replicates a study conducted by Melloni et al., (2016) in the UK. The aim was to investigate whether the findings in that study are consistent within the South African context. The focus of this paper was on the tone of business model disclosure section in the integrated reports.

Investors place reliance on the business model disclosure outlined in the integrated reports to gain an understanding about how the entities create value (Melloni et al., 2016). The business model disclosure plays a critical role in highlighting the contribution made by entities to the economy as well as the preservation of the environment (Teece, 2010). The aim of this study was to contribute to enhancing the quality of disclosure and highlighting key observations in the business model disclosure for the benefit of stakeholders (specifically, investors). There are existing studies focusing on the tone of business model disclosure (Beattie et al., 2004; Melloni et al., 2016). To the best of the researcher's knowledge, this study is a pioneering study within the South African context.

Prior studies on the use of impression management techniques in corporate reporting were reviewed. In the literature review the importance of integrated reporting for stakeholders was discussed since the business model disclosure is found in integrated reports. The discussion was followed by an analysis of the usefulness of narrative disclosures as the business model disclosure constitutes a narrative disclosure. Lastly, literature on the concept of "business model" was analysed and discussed. The extensive literature review was followed by the collection of data that was examined and analysed. This study followed a quantitative methodology.

The data analysis process was split into three phases. A manual content analysis, a univariate analysis and a multivariate analysis were conducted by the researcher. Statistical mechanisms such as the Pearson Chi-square tests, Wilks Lambda tests, Box's test of Equality, and Descriptive statistics were used to derive and interpret the results. Comparison of findings of this study to the replicated study was made to identify similarities and differences. The main findings of this study comprise of the following:

Contrary to findings by Clatworthy and Jones (2003) and Melloni et al., (2016), the results of the current research show that non-positive tone is dominant in the business model disclosure. Therefore, the findings show no adoption of impression management techniques in the business model disclosure provided in the integrated reports. The contrasting results when compared to prior studies might be attributable to the fact that it is compulsory for JSE listed entities to provide the business model disclosure. As a result, management of the entities might be feeling pressured to improve the quality of their corporate reporting.

As depicted by the results, there was no significant statistical relationship between disclosure tone and the set of disclosure variables (i.e. corporate governance, performance and disclosure verifiability). In terms of corporate governance, the entities seem to limit the number of members on the board of directors. Only 23.86 % of the eighty-eight entities have board members more than or equal to fourteen members. The findings in this paper are consistent with Osma and Guillamo´n-Saorı´n (2011), as a limited number of board members is associated with a less over-optimistic tone.

Previous studies have also attempted to link the tone used in business model disclosure and the financial results of the entity (i.e. performance) (Schleicher & Walker, 2010). However, the results of the current research show no significant statistical relationship between declining performance and the tone used in the business model disclosure. Clatworthy and Jones (2003) and Schleicher and Walker (2010) found that entities that experience poor performance or a controversial event that might damage their reputation tend to disclose more positive news. Therefore, the findings of the current research in terms of the performance variable are inconsistent with prior studies.

In terms of disclosure verifiability, little forward-looking information is disclosed in the business model section. However, qualitative information is dominant in

business model disclosure. Positive tone is also more dominant in “outcomes”. The results of this study might imply the existence of the perception that management feel under pressure to disclose outcomes in a positive light. These findings are consistent with Melloni et al., (2016).

Most of the results in this paper contrast findings by Melloni et al., (2016). It shows that there is a difference in the quality of business model disclosure between the UK and South Africa. However, this study has a number of limitations. The limitation of this study is that only integrated reports of the Top 100 JSE listed entities were analysed and examined. The findings might not be representative of entities in other developing countries. Findings on the use of impression management strategies in the business model disclosure section also does not necessarily entail that they were applied to the entire integrated report. Impression management strategies consist of thematic manipulation, syntactical manipulation, performance comparisons, and attribution of organisational outcomes (Melloni et al., 2016). The other limitation is that this research only focused on thematic manipulation.

5.2 Recommendations for further research

The findings in this study show interesting areas for future research. A comparison of the quality of the business model disclosure between entities that voluntarily disclose the business model and those that are compelled by regulatory bodies (such as the JSE) could be investigated. This investigation could assist regulatory bodies in other countries to determine whether they should follow suit in terms of making business model disclosure compulsory in their respective stock exchanges. An investigation could be conducted on the aspects that the different stakeholders would prefer to be included in the business model disclosure.

It will be interesting to note how the Top 100 JSE listed entities disclose value creation post the Covid 19 pandemic. This will be most relevant as management and those charged with governance are forced to revisit their value proposition of their companies. A stewardship outlook continues to be adopted by most entities instead of the neoliberal perspective. This is also worth investigating further. Eventually, the goal is to ensure the business model disclosure provides relevant and informative information.

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