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ICT in Business and the Public Sector

Improving the Quality of Integrated Reporting

A Mixed-Method Report on How Readability is Perceived Within Dutch Accountancy Companies.

Master's Thesis

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Master's Thesis

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by

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Abstract

The aim of this research was to verify whether complexity within integrated reporting is still being rewarded by the EY Ranking and if this is also applicable in The Netherlands. Because of this, readers need to be in possession of at least an undergraduate degree in order to understand the material. Furthermore, we conducted semi-structured interviews to gain insights into the way integrated reports are being examined and to what extend readability is taking into account.

The foundation of this research was built on the basis of literature research, data analysis and interviews. The data analysis of the JSE-listed organizations took place in the period from 2017 to 2019 with an average of 280 companies publishing an integrated report. In addition, we also collected data from the AEX-listed organizations in The Netherlands for the very first time with an average of 10 companies publishing an integrated report. An attempt has been made to make a comparison between the Johannesburg and Amsterdam stock exchange. However, due to the differences in size, selection of the companies based on market capitalization and the national and international focus, no proper comparison could be made. Furthermore, the correlations that have been conducted between the dependent variables of EY Ranking and Transparency benchmark and independent variables consisting of the three popular readability formulas through statistical analysis showed no correlation.

Because we did not find a correlation, interviews have been conducted within this study at three different companies, two accountancy firms and one banking firm, which have been recorded, transcribed and coded. This resulted in 18 different concepts that have been discussed.

Based on the research that has been conducted, readability within accountancy companies is not the main priority during the assessment of an integrated report. Readability is equivalent to each other along with other elements. However, this research shows that it is difficult to keep readability comprehensible for a large group of stakeholders within integrated reports. This research indicates that the method of CORE and MORE is not yet widely applied, requires a lot of work, but provides the benefit to improve readability aimed at one specific target group.

Keywords: Readability, Readability within Business Disciplines, Information Technology, Integrated Reporting, IIRC, CORE and MORE, <IR> Framework, Accounting Communication Studies.

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Acknowledgements

"The comfort zone is a psychological state in which one feels familiar, safe, at ease, and secure. If you always do what is easy and choose the patch of least resistance, you never step outside your comfort zone. Great things don't come from comfort zones." – Quote by Roy T. Bennett, The Light in the Heart.

During my studies, I stepped outside my comfort zone by persuading a master's degree in English for the first time. Besides this, I have completed my exchange period of four months living and studying in Australia, which was very challenging and new for me. At the end of this phase I had to write a master thesis, in which I made a choice for a subject I had little knowledge about, but which turned out to be very interesting afterwards. In conclusion, I can say that the past two years were very educational, in which I challenged myself in different ways. Throughout this period my parents and sister have continuously supported me and therefore I would like to thank them first.

Besides this, I would like to thank my research supervisor's professor Joost Visser and assistant professor Jian Wang for their support, guidance and enthusiastic encouragement while writing my thesis. I would also like to thank my supervisor at KPMG, Annika van der Linden, for providing and giving access to the resources that I needed in order to successfully complete this thesis.

Finally, I want to thank the interviewers within the sustainability department for providing input regarding integrated reporting, feedback and new insights in which I can make a contribution to the scientific literature.

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List of abbreviations

IR Integrated Reporting

IIRC International Integrated Reporting Council

GRI Global Reporting Initiative

NFI Non-Financial Information

A4S Prince of Wales' Accounting for Sustainability Project

CSR Corporate Social Responsibility

Chapter 1 – Introduction

1.1 Problem Statement and Research Question

The IIRC movement has aroused a great deal of interest among a wide variety of stakeholders (Cheng, Green, & Ko, 2015). However, in terms of readability integrated reports on average are hard to read, include verbosity and require an undergraduate degree in order to be understood. Furthermore, research revealed that integrated reports do not fit well with the population of the country of South Africa, and this also applies to global organizations. This is in contradiction with the vision of IIRC to reduce the clutter of traditional corporate reporting by promoting conciseness and contribute to the need of clearly written and comprehensible reports (IIRC, 2011, 2012a, 2012b, 2013). Furthermore, the main finding from the Du Toit (2017) study indicates that complexity is being rewarded by the EY Ranking, which is concerning because it negatively impacts the readability of integrated reports. Although this is true, this finding contains limitations and are only applicable to the South African context and hence is not generalizable to other countries. In addition to this, the findings regarding the readability in context of the South African and global organizations are somewhat outdated. This research takes inspiration from the study of Du Toit (2017) and its calls for further work. First of all, this study answers the call for research into comparing South African companies with other countries, in this case the Netherlands. Secondly, we want to examine whether complex language is still being rewarded in integrated reports. As the third goal, we would like to investigate whether there are ways to make integrated reports more accessible to a specific target group and thus improve the readability of Integrated Reports. Finally, we want to investigate to what extent technology supports the assessment of integrated reports. Henceforth, the research question that guides this work reads:

"How can the information provisioning be established in order to increase the quality of Integrated Reporting?".

1.2 Subquestions

In order to answer the main research question, subquestions have been formulated and are listed below.

Subquestions

S1. How can the readability of an integrated reported be measured?
S2. What criteria do accountancy practitioners apply to evaluate the quality of integrated reports?
S3. What are the structure and elements that are commonly found in good integrated reports?
S4. What are the effects of providing assurance based on the <IR> Framework?

1.3 Research Approach

The first step of this research involves literature research that will be carried out in order to obtain background information regarding integrated reporting, specifically: the IIRC's vision, importance of readability, role of technology and the awards in which organizations can participate in, showing appreciation for the quality of integrated reporting. Subsequently, we will conduct research into existing studies which will provide relevant themes, the use of known readability formulas for accounting communication purposes and the impact that readability has on the assessment of investors regarding the organization that they want to invest on as well as the importance of readability within business disciplines. In this research we will make use of the mixed-method approach, in which we are first going to make use of the quantitative methods. Then we will create our own independent analysis to determine whether complexity within the EY Ranking is still rewarded. In order to verify this, we will collect new data from the JSE-listed companies to determine whether the readability within integrated reporting has been improved, has remained the same or has deteriorated. Besides this, we are going to verify whether the existing readability formulas are good predictors to assess the quality of integrated reports. Based on the results, we can conclude which indicators closely mimic the assessment of the experts. Additionally, to the best of our knowledge, we will for the very first time collect data from the AEX-listed organizations in order to determine whether the readability concern is applicable for the Netherlands. Therefore, this will allow us to make a comparison between the readability scores of South Africa and The Netherlands. Furthermore, this study distinguishes itself by making use of the qualitative methodology which will be deployed on the subject readability of integrated reporting in which we will gain more insight into this phenomenon on the basis of interviews. These interviews are intended to map out the experiences of primarily accountants with regard to the assessment of integrated reports that could possibly lead to points for improvement in terms of readability within integrated reporting. Moreover, the interviews provide the opportunity to ask questions about which criteria is being used, how integrated reports can be made more accessible to a specific target group and the use of technology which supports the work of accountants to evaluate the integration of financial and non-financial information which could be of influence on the readability of an integrated report. Additionally, we will also attempt to interview an organization that is responsible for the preparation of the integrated report.

These insights can provide valuable insights into the use of the <IR> Framework, the impact of the transformation from traditional reporting to integrated reporting and to what extent the organization takes readability into account when preparing the integrated report.

1.4 Research Objective

In this study we aim to provide new insights into how readability within integrated reports has recently been developed over the past couple of years. Furthermore, research has shown that improving readability yields benefits for investors, such as making better analyses of the trend performance of an organization. When an organization has a positive trend performance this leads to a higher performance judgement (Tan, Wang, & Zhou, 2015). On the other hand, when the trend performance is negative this will help the investors to determine a lower performance judgement. Another advantage of improving the quality of an integrated report, is the reduction of imbalance of information which enables analysts to make better predictions (Bakker, Georgakopoulos, Sotiropoulou, & Tountas, 2020). Furthermore, the finding of Tan et al. (2015) indicates that when organizations provide integrated reports with a higher readability, this will benefit the perspective of investors in terms of how they perceive the reliability of the disclosures and performance judgement through processing fluency. However, this is only the case when organizations provide benchmarks that are consistent (Tan et al., 2015). Furthermore, this study will also contribute to the way investors evaluate an organization and therefore their judgement about the company. When organizations provide less readable disclosures, the study of Asay, Elliott, and Rennekamp (2017) show that investors tend to rely more on outside information. Additionally, the study of Sun (2014) indicates that integrated reporting has a significant impact on external stakeholders. Because of this, it can be said that readability also has an impact on the general population of integrated reporting. Lastly, increasing the readability helps the population to understand the value creation that organizations are creating, which can lead to additional types of capitals. These different capitals can help stakeholders to understand the relationships between the aspects of value creation (Sun, 2014).

1.5 Research Relevance

The study of Du Toit (2017) mentions that the global leader of integrated reporting practice is South Africa, which is represented in the amount of companies that prepare an integrated report on the

Johannesburg Stock Exchange (JSE). Although JSE-listed organizations are not compulsory to prepare an integrated report, the companies still choose to publish an integrated report because of its advantages (Du Toit, 2017). One of the advantages is that research has shown that companies who disclose more non-financial information surpass their peers (Carroll & Shabana, 2010; Eccles, Ioannou, & Serafeim, 2014). Another benefit from integrated reporting is that it can be used for the purpose of creating organizational legitimacy (de Villiers & Alexander, 2014; Solomon & Maroun, 2012). Besides organizational legitimacy, research has shown that integrated reporting which are of good quality can be used for other reasons as well: enhancing the reputation of the company and managing the impressions (Eccles & Saltzman, 2011; Haji & Anifowose, 2016; Steyn, 2014; Stubbs & Higgins, 2014). Furthermore, this research is of importance because corporate reporting can influence the corporate value and reputation of an organization (Hrasky & Smith, 2008). Because of this, organizations need to disclose information beyond the financial statements in order for stakeholders to precisely determine whether an organization is either creating or destroying value (Buitendag, Fortuin, & De Laan, 2017; De Villiers & Sharma, 2017; De Villiers & Van Staden, 2010; Du Toit, 2017; Flower, 2015; Krzus, 2011; Phillips, Watson, & Willis, 2011; Rahman, 2014; Setia, Abhayawansa, Joshi, & Huynh, 2015; Wee et al., 2016; Zhou, Simnett, & Green, 2017). Although integrated reporting receives sufficient attention (Higgins, Stubbs, & Love, 2014; Setia et al., 2015; Wild & van Staden, 2013), the <IR> Framework does not exist more than a decade and therefore research is still fairly limited (Du Toit, 2017). Because of this, we will contribute to the scientific literature by providing more insights about the impact and value regarding integrated reporting.

1.5.1 Theoretical Relevance

This research will be primarily relevant to accounting organizations that examine the integrated reports of clients. One of the main reasons for conducting this study is that complex language seemed to be rewarded by the EY Ranking and we want to verify if this is still the case. Furthermore, for the first time, we will make use of qualitative methods (e.g., interviews) that can provide valuable insights into how the quality of an integrated report is assessed and to what extent readability is considered within a report. Besides this, studies have shown that IT yields several benefits (e.g., data quality, internal and

external data reliability, flexibility, risk management support and information quality) and therefore is fundamental for the success of corporate reporting (Lamboglia, Mancini, & Paolone, 2017). We will investigate to what extent organizations are making use of it. Despite these benefits, little to no scientific research has been conducted regarding the effectiveness of IT on the integrated reporting process (Lamboglia et al., 2017). In contrast to the paper of Lamboglia et al. (2017) that has studied the influence that IT can provide in the different phases characterized by the IIRC, this paper will focus on this gap and give answers to the question of how information technology can contribute to readability of integrated reporting.

1.5.2 Practical Relevance

This research has practical relevance for companies who create and use integrated reports to inform their stakeholders about the value creation and financial performance of the company. In addition to this, this research has the ambition to improve the effectiveness of the communication and therefore the readability narratives in integrated reports. In this study we will provide two deliverables:

Recommendations

As the first deliverable, we will provide recommendations at the end of this research for further work. These can be used to look for possible other relationships or ways to measure the readability within integrated reporting with the aim to improve readability.

Data compilation

Furthermore, we will provide a data set[1] to enable the repeatability of the quantitative study. This data set can be used to test other readability indicators or to add new information that can contribute to scientific literature.

[1] Data Compilation can be found on: https://doi.org/10.5281/zenodo.4549868

1.6 Research Scope

Definition	Description
Information provision	A process within which information is provided to users or users' community without any individualization of content or purpose specialization of the information or the delivery process (Tara, 2015).
Readability	The ease of understanding or comprehension due to the style of writing (Klare, 1963).
Integrated Reporting	An integrated report is a concise communication about how an organization's strategy, governance, performance and prospects, in the context of its external environment, lead to the creation of value over the short, medium and long term (IIRC, 2013).

This study intends to conduct literature research and make use of the mixed-method approach in order to determine how readability can be measured, to what extent readability is being assessed within integrated reports and provide insights into how technology is currently being used to either support or examine the information containing in the integrated report.

1.7 Introduction KPMG

This research project is conducted at KPMG, department IT Advisory and Assurance, for approximately 9 months. The KPMG network was formed in 1987 and merged along with their respective members firms (KPMG, 2021). Currently the KPMG member firm operates in 147 countries and is collectively employing more than 219.000 people (KPMG, 2021). Furthermore, the organization is focused on serving the needs of the business, governments, public-sector agencies, not-for-profits and through member firms' audit and assurance practices, and the capital markets (KPMG, 2021). Furthermore, KPMG is dedicated for delivering quality and service excellence in their work activities and attach great importance to bringing the best to clients and earning the public's trust through KPMG's actions both professionally and personally (KPMG, 2021).

1.8 Thesis Overview

The remainder of this thesis is structured into the following chapters:

- Chapter 2 - Background: The elements that are relevant to this research will be discussed in the background chapter which will provide the reader a good overview of the most important elements.
- Chapter 3 Literature Review & Related Work: Dedicated to present the relevant literature review that has been found when performing the research.

- Chapter 4 - Methodology: Provides an overview of the methods that have been used for the purpose of this research. Furthermore, we will give a brief explanation of what the method entails and what kind of contribution it can make in this study.
- Chapter 5 – Results of Quantitative Research: In this chapter we will discuss the findings of the quantitative results.
- Chapter 6 – Results of Qualitative Research: In this chapter we will discuss the findings of the qualitative results.
- Chapter 7 - Discussion: Builds on the findings that have been discussed, we will make several interpretations and deliberate about the limitations of this study.
- Chapter 8 - Conclusion: Lastly, we will answer the research questions that have been formulated in the first chapter and provide suggestions for further research.

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Chapter 2 – Background

In this chapter we will provide the context of this research and justify why it is important to conduct more research about this particular problem.

2.1 The development of Integrated Reporting

Serafeim (2016, p. 5) writes that "Corporate reporting has undergone various transformations to adapt to a changing landscape of economic, technological, social, and political drivers and to the information needs of different stakeholders". The reason for this transformation is due to the fact that stakeholders want to have a better understanding of the value creating capacity of an organizations, whereby this can be achieved by providing more information than just the financial statements (Serafeim, 2016, p. 5). When organizations include more information (e.g., management commentary or governance disclosures) stakeholders gain more confidence in the company and are therefore more likely to make a purchase more often (Serafeim, 2016, p. 5). Moreover, Serafeim (2016) writes that other reasons for the transformation of business reporting are managerial problems within companies and an increase in terms of governance-related scandals. Several examples of scandals related to financial reports are options backdating, insider trading and excessive pay (Serafeim, 2016, p. 5). Regardless of the changes in information provision, Serafeim (2016) mentions that readers are still not satisfied because they find information incomplete and inadequate on aspects such as the value creation process and material non-financial risks.

2.2 The International Integrated Reporting Council (IIRC)

According to De Villiers, Venter, and Hsiao (2017, p. 2) the reaction to the dissatisfaction of the current corporate reporting models was the creation of the International Integrated Reporting Council (IIRC) in 2010. The IIRC and the associated reporting norm has been established by both prominent organizations GRI and A4S (Flower, 2015, p. 1). To steer IIRC on the right track and support organizations in the use and implementation of the <IR> Framework, the IIRC issued various discussion papers, proposals and guides (Stone & Lodhia, 2019, p. 1). IIRC (2013, p. 4) writes that the aim of the <IR> Framework is to establish guiding principles and content elements which organizations can use to structure the integrated report and gives the IIRC the opportunity to explain the fundamental concepts. Furthermore, the IIRC underlines the importance of integrated thinking within the organization which ensures that they provide the necessary information about how they create value over time (IIRC, 2013, p. 4). One striking feature is that it has been critical about the conventional corporate reporting frameworks and state in their paper that "long and

complex reports are often impenetrable for many readers" (Committee, 2011, p. 9). Furthermore, the IIRC (2013, p. 8) states that the development of the framework is aimed to meet the criteria of investors. This deviates from the original purpose of the IIRC in which they initially want to address a wide range of stakeholders (Rensburg & Botha, 2014, p. 2) and are primarily written for informed readers which has influence on the readability of integrated reports (Du Toit, 2017, p. 630).

2.3 The vision of the IIRC

Zhou et al. (2017, p. 95) states that the goal of IIRC is to stimulate organizations to create integrated reports that are concise and therefore change the traditional way companies provide information which consist of disarrangement. The report of Caglio, Melloni, and Perego (2020, p. 55) acknowledges this and indicates that findings show that capital market participants appreciate reports that are readable, short and focused. Moreover, in terms of readability integrated reports should also promote plain language instead of highly technical terminology, which emphasizes the communication style that organizations use to disclose information (Caglio et al., 2020, p. 59). Furthermore, integrated reports are intended to change the business environment and therefore get rid of departments who have the mindset of silo-thinking (Kim, Maas, & Perego, 2018, p. 4). In supplement to this, Eccles and Armbrester (2011) indicate that integrated reporting is also focused on providing internal users a greater understanding of both financial and non-financial performance. When it comes to the external users, integrated reporting should provide comprehensive information about the aspects such as: financial metrics, capital markets and regulatory risk (Eccles & Armbrester, 2011).

2.4 Readability

The dictionary defines readability as "legibility, reading ease, the interest value of a text and lastly ease of comprehension" (Klare, 1963; Nilsson & Archer, 2014). Furthermore, the aspects of readability and accessibility have been the subject within accounting communications since the 1960s (Lewis, Parker, Pound, & Sutcliffe, 1986), which indicates that these aspects have been recognized for quite a while now and need to be improved. In order for organizations to communicate in an effective manner in terms of accounting information, readability is an important determinant (Courtis, 2004; Rutherford, 2003). When organizations do not implement this in a proper way and thus communicate inefficiently,

provided information will not be clear and understandable for the intended group (Woodall, 2006). According to Woodall (2006) this could have big consequences for the accounting profession and could lead to an archive repository of basically financial performance statistics. The main focus of readability research so far has been conducted in relation to accounting communications, specifically on annual report narratives (Stone & Lodhia, 2019). According to Nilsson and Archer (2014) formulas can be used in order to measure readability which can determine whether the report narrative that has been written by the content creator is understood by the target group. However, the use of formulas does have limitations and therefore it can only be used for predictive validity (Nilsson & Archer, 2014). Besides this, Ziafar and Namaziandost (2020) mention that users also need to take other limitations of readability formulas into account, since they are focused on measuring the surface factors. According to Stone and Parker (2013) at this moment readability instruments consist of two types of analysis which are: form-oriented and meaning-oriented analysis. The form-oriented analysis is focused on determining whether the provided information reflects a functionalist orientation towards readability (Stone & Parker, 2013). While the second type of analysis, meaning-oriented analysis, focuses on the hidden or explicit meaning of the analyzed text that has been provided (Guthrie & Abeysekera, 2006; Smith & Taffler, 2000; Steenkamp & Northcott, 2007). Since understandability comprises of a broader range of factors, writers also need to take this into account because it can influence the understanding of the reader (Nilsson & Archer, 2014). These factors include the following: individual reader's interest, experience, familiarity and knowledge of the subject matter of composition (Nilsson & Archer, 2014).

2.5 Readability of integrated reporting

Despite the fact that IIRC wants to avoid long and complex reports, findings of the readability study by Du Toit (2017) show that integrated reports consist of complex language and are therefore not useful for the entire population of South Africa. This is not only applicable for the situation of South Africa, but also seems the case for other regions (Stone & Lodhia, 2019). The conclusion that has been drawn from the findings is that use of complex language seems to be rewarded by the EY ranking and that readability scores have not been improved over time. When financial reports are written in a complex way, evidence indicates that this has negative consequences on stakeholders, such as: retail investors

(Lawrence, 2013), sell-side equity analysts (Bozanic & Thevenot, 2015; Lehavy, Li, & Merkley, 2011) and rating agencies (Bonsall & Miller, 2017). When organizations are making use of passive voice and therefore providing information in a complex way, this could mean that organizations are obfuscating the negative messages (Brennan Niamh, Guillamon-Saorin, & Pierce, 2009; Haji & Hossain, 2016; Lo, Ramos, & Rogo, 2017; Solomon & Maroun, 2012). According to Sydserff and Weetman (1999) the usage of passive voice is often used by companies that are not performing well. Another possible explanation is that it could be used in order to make the text look more interesting. This can also be achieved by using more "wordy" items (Du Toit, 2017). Furthermore, findings of Asay et al. (2017) indicate that the provision of private information which is intended for investors, can be affected when organizations provide less readable disclosures and therefore the managers ability to communicate effectively. Prior scientific research indicates that managers who deliberately provide less readable disclosures and therefore cover up poor performance and this has consequences for the readers. The results show that readers will be less comfortable making judgments and thus assessing the company (Asay et al., 2017). As a consequence, investors will inform themselves through outside information and therefore partially reduce the strategic obfuscation that managers use in order to hide negative performance (Asay et al., 2017). Furthermore, the study of Fisher, van Staden Chris, and Richards (2019) looked into the relationship between tone and readability in terms of corporate disclosures in which the findings indiciate that all six forms (positivity, tone, optimism, certainty, realism and cohesion) are significant influential when it comes to readability. The elements that are positively related to readability are: positive language, optimistic language and realism (Fisher et al., 2019). While the elements of tone, certainty and cohesion are negatively related to readability (Fisher et al., 2019).

2.6 Role of technology in Integrated Reporting

While the study of Monterio (2014) shows that technology has an essential role in the integrated reporting process, the IIRC consultation drafts point out issues regarding the capability of organizations making use of technology for integrated reporting. Furthermore, the IIRC consultation draft indicates that this is also applicable for report creators or providers of financial capital, who are not preparing themselves in order to efficiently leverage technology regarding integrated reporting (Monterio, 2014).

Because of this, the IIRC emphasizes that organizations should contemplate technology as an enabler instead of a precondition to prepare for an integrated report (Monterio, 2014).When organizations pay more attention to emerging technology, this could drastically change the way companies manage, analyze and share their information (Monterio, 2014). This can be applied to several forms with the organization, such as: internal management reports, regulatory filings or integrated reports (Monterio, 2014). The benefits that organizations can take advantage of is interactive structured data (e.g., XBRL), which allows users to create their own integrated reports based on their interest and preferences (Monterio, 2014). This option can be provided through the corporate website which is similar to that of SAP and Southwest Airlines (Monterio, 2014).

2.7 Awards that organizations can participate within The Netherlands

Within The Netherlands, the government attaches great importance to the transparency of Dutch companies regarding their activities and policy at the social level (Policy, 2021b). Because of this, the Ministry of Economic Affairs and Climate decided to conduct the Transparency Benchmark occurring twice a year in which they investigate the transparency in reporting on CSR of around 500 of the biggest companies of The Netherlands (Policy, 2021b). In addition to this, the Transparency Benchmark consists of a panel with experts in which they examine the following aspects: connectivity, materiality, stakeholder engagement and self-learning capacity of an organization. Based on these elements, a nominated company is selected that will receive the “Crystal Award” for the creation of the best corporate social responsibility report (Policy, 2021a). Another award that organizations can earn is participating in the FD Henri Sijthoff prize, in which companies are encouraged to improve reporting. Moreover, this award also looks at the interim reporting, presentation and financial website (Kakebeeke, 2019). The awards are presented to AEX-listed organizations, the remaining listed AEX organizations and non-listed companies within the Netherlands (Kakebeeke, 2019). In contradiction to the Transparency Benchmark this award assesses the elements of clarity, finance, strategy and society (Kakebeeke, 2019).

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Chapter 3 – Literature Review & Related Work

In this chapter we will provide an overview of the most relevant and significant published scientific articles based on the study of integrated reporting and readability. Additionally, the article of IIRC will be presented which discusses the commitment of IIRC to provide clear and comprehensive reports. Besides this, the issues of readability that exist in business disciplines and the key and optional characteristics that need to be taken into account when writing a technical report will be mapped out. Also, the relationship between textual characteristics and the organizations potential economic effects will be provided. Lastly the way value creation can be measured can also be found in the last section. As the main publication in this research is that of Du Toit (2017), we will build on the findings and therefore this study will be discussed extensively in this chapter.

3.1 Readability of Integrated Reports

The most important finding that the study of Du Toit (2017) points out that complex language has been rewarded by the EY ranking in terms of integrated reports. When organizations make use of complex language the correlation between TOP 100 JSE-listed firms and EY Integrated Reporting Awards implies that the report is rated as higher quality. The correlation is based on existing readability measurements in order to analyze the integrated reports. The TOP 100 JSE-listed firms are selected based on market capitalization. Table 1 derived from Du Toit (2017) shows that the JSE exchange has a total of approximately 290 companies within 8 industries, with 223 integrated reports in year 2015 and 237 in the year 2016.

MEDAR
25,4

640

Industry	No. of companies per industry	No. of integrated reports	(%)
2015			
Basic materials	52	40	77
Consumer goods	22	15	68
Consumer services	38	35	92
Financials	100	65	65
Health care	7	6	86
Industrials	60	50	83
Technology	8	7	88
Telecommunications	5	5	100
Total	292	223	76
2016			
Basic materials	51	42	82
Consumer goods	22	16	73
Consumer services	38	36	95
Financials	100	73	73
Health care	7	5	71
Industrials	60	53	88
Technology	8	7	88
Telecommunications	5	5	100
Total	291	237	81

Table II.
Integrated reports analysed

Source: Author's own compilation

Table 1: JSE industry period 2015 – 2016, Source: (Du Toit, 2017)

In addition, Du Toit (2017) disclosed the readability scores of JSE in the years 2015 and 2016 by making use of three most frequently used readability measures that are used in both accounting communications of Jones and Smith (2014) and corporate report readability studies: Flesch Reading Ease (Courtis, 2004; Richards & van Staden, 2015), Flesch Kincaid and Gunning Fog Index (Stone & Lodhia, 2019). The Flesch Reading Ease is an index that looks at aspects such as words and sentence length and gives an output that ranges from 1 to 100, with higher scores indicating better readability (Courtis, 1998; Dreyer, 1984). These scores can be interpretated in terms of complex language that is being used as well as the education level that is needed in order to understand the provided information. Secondly, the formula of Flesch Kincaid is a revision of the Flesch Reading Ease, which specifies the US grade/education level that is required in order to understand the report narratives (Li, 2008). This formula provides an output between 0 to 18, that can be interpretated as the reading level and correlates with the same complex language that can be found in a particular book. Contrary to the Flesch Reading Ease, a lower score indicates a better readability. The third formula of Gunning Fog performs a computation based on the number of words per sentence and number of syllables per word, which provides a score ranging starting from 8 till 18 or more (Li, 2008). Also, in line with the Flesch Reading Ease, this formula indicates a better readability when giving a lower score. Based on the output, the score can be interpretated by a specific kind of material ranging from Youth Magazines to Technical Books.

The sample which has been composed by Du Toit (2017) has excluded a number of integrated reports based on three criteria:

- Only integrated reports from South Africa (Du Toit, 2017);
- Reports that are not explicitly called integrated reports;
- Does not have a section referred to as an integrated report.

Besides this, Du Toit (2017) decided to analyze integrated reports per industry because of the different characteristics and sizes between industries.

Industry	2015							2016						
		Flesch reading ease		Flesch-Kincaid		Gunning fog			Flesch reading Ease		Flesch-Kincaid		Gunning fog	
	n	Mean	SD	Mean	SD	Mean	SD	*n*	Mean	SD	Mean	SD	Mean	SD
Basic materials	40	21.15	3.21	16.59	0.83	15.93	0.87	42	30.19	2.57	15.71	0.65	15.74	0.72
Consumer goods	15	29.87	2.90	15.55	0.71	16.13	0.89	16	30.69	3.28	15.43	0.91	15.98	0.83
Consumer services	35	32.31	2.89	15.13	0.70	15.74	0.94	36	32.31	2.73	15.14	0.64	15.79	0.90
Financials	65	31.63	3.34	15.31	0.72	15.88	0.82	73	31.07	3.79	15.38	0.75	15.91	0.80
Health care	6	28.17	2.48	15.60	0.77	15.85	0.55	5	27.40	3.36	15.38	0.88	15.82	0.66
Industrials	50	30.70	4.87	15.27	1.22	16.00	1.40	53	29.43	3.02	15.47	0.66	16.26	0.80
Technology	7	30.00	2.65	15.44	0.78	15.93	0.42	7	30.43	1.72	15.46	0.52	15.74	0.61
Telecommunications	5	32.80	3.70	15.06	0.59	15.36	1.14	5	32.60	1.82	14.88	0.34	15.34	0.57
Total	*223*	*29.41*	*5.33*	*15.52*	*1.00*	*15.90*	*1.00*	*237*	*30.65*	*3.29*	*15.42*	*0.71*	*15.93*	*0.81*

Note: Additional analysis to compare the mode, median and mean were performed and indicated very little deviation between the different measures; thus, the mode and median are not presented here
Source: Author's own compilation

Table 2 JSE-listed companies readability scores period 2015 – 2016, Source: (Du Toit, 2017)

Table 2 indicates that the scores range between 20 and 30 based on the Flesch Reading Ease formula. This means that the integrated reports contain material which can be classified as very difficult and therefore readers need at least a postgraduate degree to understand the material. Another formula that has been used is the updated version of Flesch-Kincaid and shows similar results in terms of JSE-listed companies that have published an integrated report in the years 2015 and 2016. This can be seen in the results in which Flesch Kincaid's scores differ between 15 and 16 and hence implies that the material is understandable for university graduates or postgraduate students (Du Toit, 2017). The Gunning Fog formula shows a consistent picture in which the scores can be attributed to scientific literature where, according to US standards, at least education level of 15 years is required to be able to read and understand the material. The Telecommunications and Consumer Services industry ranks among the most readable integrated reports in 2015 and 2016, with the industries of basic materials, consumer good, industrials and health-care industries among the most difficult-to-read integrated reports (Du Toit, 2017). Moreover, the population of South Africa has been taken into account, where results shown that the complex nature of company information will not be well understood by the general population and this also applies to institutional investors and analysts (Du Toit 2017). Furthermore, Table 3 displayed in the study of Du Toit (2017) shows that three significant relationships have been found. The results show various correlations where EY Integrated Reporting Awards ranking is the dependent variable along with Flesch Reading Ease and percentage of both complex and long words.

Variables	Mean	SD	1	2	3	4	5	6	7	8	9	10	11
Dependent variable													
1. EY ranking	3.00	1.24											
Independent variables													
2. Flesch Reading Ease	28.73	5.22	0.276*										
3. Flesch–Kincaid	15.55	0.89	−0.115	−0.816**									
4. Gunning Fog	15.89	0.88	−0.010	−0.413**	0.547**								
5. Complex words	0.26	0.02	−0.258*	−0.832**	0.481**	0.277*							
6. Long words	0.43	0.02	−0.451**	−0.745**	0.405**	0.096	0.868**						
7. Fog hard words	0.20	0.01	−0.132	−0.270*	0.063	0.591**	0.567**	0.462**					
8. Passive voice	587.77	328.53	0.185	−0.039	−0.068	0.000	−0.010	−0.058	0.027				
9. Wordy items	3,717.51	1,565.88	−0.027	−0.099	−0.067	−0.034	0.067	0.088	0.056	0.905**			
Control variables													
10. Total words	44,498.92	18,971.06	−0.028	−0.176	−0.001	−0.093	0.071	0.105	−0.077	0.883**	0.959**		
11. Number of pages	156.77	78.95	0.046	0.040	−0.165	−0.043	−0.023	−0.004	0.100	0.817**	0.858**	0.806**	N/A

Notes: Year = 2015; $N = 75$; *Correlation is significant at the 0.05 level two2-tailed); **Correlation is significant at the 0.01 level (two-tailed)
Source: Author's own compilation

Table 3 Correlation found between EY Integrated Reporting Award as dependent variable and readability measures as independent variables, Source: (Du Toit, 2017)

3.2 Clear and understandable language endorsed by IIRC

Another research similar to that of Du Toit (2017) is the study conducted by Stone and Lodhia (2019) who have made a contribution to the scientific literature by focusing on the need for clearly written and comprehensible reports, which is one of the key characteristics of the IIRC (IIRC, 2011, 2012a, 2012b, 2013). Similar to the research of Du Toit (2017) this study also made use of the same formulas to measure readability in integrated reports, which are: Flesch Reading Ease, Flesch-Kincaid and Gunning Fog Index. This study differs from the previous study of Du Toit (2017) by compiling a sample consisting of global integrated reports of 100 multinational and public sector organizations which has been collected from the IIRC examples database between 2011 and 2015 (Stone & Lodhia, 2019). In addition, Stone and Lodhia (2019) indicate that in their research South African organizations have been excluded because JSE-listed companies are required to comply with the corporate governance standards in the King Reports and Code (Stone & Lodhia, 2019). The main finding of the study indicates that the majority of integrated reports who are established in different regions contain generally low formulaic readability and therefore are estimated to be difficult to read (Stone & Lodhia, 2019). Supplementary to this, the study has found that low readability scores in disclosures are caused by the difficult technical information and therefore technical language in order to comply with legislation (Jang & Rho, 2016; Li, 2008; Richards & van Staden, 2015; Smith & Taffler, 1992). Although organizations need to comply with legislation, the whole-read analysis by Stone and Lodhia (2019) shows that half of the texts, which scored low on readability, do not have to comply with regulated disclosures or legislation. Nevertheless, the remaining findings showed that organizations made an improvement in terms of readability, in which Asian organizations overall have the highest readability score among the regions (Stone &

Lodhia, 2019). In contrast to the study of Du Toit (2017), this study distinguishes itself by making use of additional measurements to demonstrate the accessibility of integrated reports. Although Stone and Lodhia (2019) acknowledge that these measurements are more subjective in nature, the author contends that they still provide valuable insights that formulaic measurements cannot show. Stone and Lodhia (2019) took the following visual forms of integrated reports into account: visual forms per page and headings and subheadings. The results show that even though the majority of integrated reports process one or two visual forms of communication a substantial portion of the evaluated pages do not enclose visual communication elements (Stone & Lodhia, 2019). Furthermore Stone and Lodhia (2019) note that the extent to which headings and subheadings are used in integrated reports has been analyzed and the results indicate that they are used too much. Based on these findings, Stone and Lodhia (2019) suggest improvements in terms of visual communication to enhance the readers accessibility of integrated reports.

3.3 Issues of Readability in Business Disciplines

Based on the study conducted by Sattari (2012), it emerges that readability plays a decisive role in business communication, in which business communication studies point out that readability is essential in order to communicate adequately (Courtis, 2004; Faris & Smeltzer, 1997; Lesikar, Pettit, & Flatley, 1999; Sawyer, Laran, & Xu, 2008). To be able to do this, Warren (2008) explains that more effort is required to ensure the readability for target groups such as: regulators, consumer educators, and researchers. When organizations improve their written communications, stakeholders benefit from locating, reading and recalling the material easier (Lee, Chung, & Haley, 2011; Philpot & Johnson, 2007). In addition to this, Sattari (2012) indicates that written communication is important because organizations can manage their relationships and thus reach out to different individuals in both inside and outside the organization (Pathi, 2008). Written material can take various forms within a company, such as: letters, memos, reports, proposals, statements, notes and advertisements (Sattari, 2012). However, it is important to verify whether the written material is understood by the people for which it is being written. Therefore, content creators must measure the readers' understanding and appreciation of the material presented in the text (Sattari, 2012). The extent to which the required text is understood

by the reader depends on factors such as the way it is written and its coherence, and these aspects have a significant influence on the level of understanding and comprehension (Mason & Krashen, 1997; Sattari, 2012). Additionally, several scientific articles made an attempt to define text readability, in which Pitler and Nenkova (2008) defines readability as "The ease in which a person understands a piece of text and the ease with which a document can be read" (Wimmer & Dominick, 2006). Another definition can be found by Klare (1963) who defines readability as: "The ease of understanding or comprehension due to the style of writing". Moreover, Sattari (2012) points out that readability has also been outlined as "the total sum of all those elements within a given piece of printed material that affect the success a group of readers have with it". Because of this, it can be said that there is still no shared understanding of the definition of readability. Subsequently, Sattari (2012) points out that content creators should be aware of the effect in which they convey the information. When information is written in a simple way, this can lead to readers' perceptions that they are not being taken seriously or as an insult to their intelligence. On the other hand, the outcome of hard-to-read text can cause confusion, misunderstanding and therefore dishearten readers from reading them in the first place (Sattari, 2012). Moreover, multiple scientific studies show that positive relationships have been found between readability of a firm's annual report (Sattari, 2012), profitability (Courtis, 2004; Subramanian, Insley, & Blackwell, 1993), return on equity (Baker & Kare, 1992) and prediction of corporate failure (Smith & Taffler, 1992, 2000). Lastly, Sattari (2012) included Figure 1 in the study in order to show the communication process where ideas are exchanged that are sent by the sender and thus is responsible for encrypting the message and the recipient decoding the message (Adelberg, 1983). According to Smith and Smith (1971), we can speak of successful communication when the meaning that is intended by the sender is allocated to the messages received by the receiver. Therefore, Sattari (2012) mentions that an important prerequisite is how we convey the message and thus:

*"*Effective communication occurs when the message is transmitted through different media to the recipient in a way that ensures that it is understood by the recipient in a way that ensures that it is understood by the recipient in the same manner as intended by the sender"(Sattari, 2012).

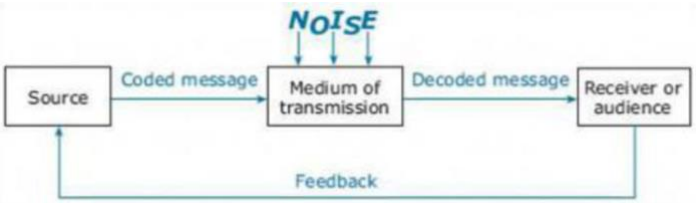


Figure 1: A Linear Model of Communication, Source: (Fill, 2005)

3.4 Developing Quality Technical Information

Next to the research of problems regarding readability within the business discipline, we also look into the quality characteristics of technical material. The reason for this is that integrated reports contain technical information in terms of the provided disclosures or technical terminology. The study of Hargis et al. (2004) has been conducted because quality has been the key problem within technical material for a long period and therefore has collected feedback regarding the user needs and experience. This has resulted in a book intended for both writers and editors which contains quality characteristics for technical information and thus reveals the needs of the users which will be briefly summarized below (Hargis et al., 2004). To keep the summary short and concise, we have chosen to discuss only the quality characteristics and added the quality characteristics together with the definitions in Appendix 1.1, Table 27.

Quality characteristics of technical information

The quality characteristics of Hargis et al. (2004) are fundamental when it comes to specifying quality of technical information and have been categorized into three different categories: Easy to use, Easy to understand, and Easy to find. The characteristics are grouped for the reason that they focus on one primary area but can nevertheless potentially influence another group (Hargis et al., 2004). The first category of "Easy to use" aims to establish whether users can apply the information and in order to do so, needs the elements of task orientation, accuracy and completeness. In the second category of "Easy to understand" the focus lies on the way the information is presented and hence the elements clarity, concreteness and style play an important role. Lastly, the elements of organization, retrievability and visual elements belong to the category of "Easy to find" and can be beneficial for the user retrieving the correct information. In addition to these quality characteristics, Hargis et al. (2004) mapped out other elements as well that can identify the quality of technical communication. These elements are

conciseness, consistency, preciseness, readability, relevance, simplicity, adequacy, correctness, honesty and usefulness. Appendix 1.2, Table 28 has been included for the definitions of the other possible characteristics.

3.5 Informational content and assurance of textual disclosures

Another study that we looked into is the research of Caglio et al. (2020) who has investigated the textual characteristics of reading difficulty, length and tone combined with potential economic effects such as: market value, stock liquidity and forecast accuracy of analysts. Additionally, Caglio et al. (2020) assessed to what extent third-party assurance can improve trustworthiness of IR disclosures and also looked into the effects between assurance and the textual features of potential financial outcomes. The results of the study showed several findings, with the first one indicating that there is a link between integrated reporting readability and better market evaluation (Caglio et al., 2020). Secondly, the relationship among higher stock liquidness and integrated reporting conciseness has been found (Caglio et al., 2020). Lastly, an association has been found between integrated reporting tone bias and fewer distributed analyst estimates (Caglio et al., 2020). According to Caglio et al. (2020), findings indicate that the usage of textual characteristics can also be used for potential impression management strategies and therefore enables organizations to manipulate stakeholders. In short, organizations can make use of assurance regarding their integrated reports which will lead to credibility enhancing mechanisms to regulate the negative impact of low-quality textual attributes. While this is true, the findings of Caglio et al. (2020) indicate that only a small percentage (18.4%) of integrated reports make use of the assurance that external assurance providers can deliver. Based on these results, Caglio et al. (2020) has concluded that organizations should provide readable, short and focused reports for the target group of capital market participants. In addition, evidence has been found in terms of the effect of IR assurance regulating the negative associations of low-quality textual attributes of integrated reports and thus the economic outcomes (Caglio et al., 2020). This implies that organizations who provide assured hard-to-read integrated reports, will be compensated regarding the influence of bad readability on the organizations market value (Caglio et al., 2020). Another noteworthy finding is that in comparison to non-assured integrated reports, the assured integrated reports seem to be notably longer and exhibit a

lower tone bias (Caglio et al., 2020). This is not the case for non-assured integrated reports who show a lower level of certainty in their language (Caglio et al., 2020).

3.6 Value creation of integrated reports for investors

Lastly, we found the study of Chabboe (2018) who has conducted research into how the degree of value creation can be measured, which can be established by four qualitative criteria: reliability, relevance, the understandability and comparability of integrated reports. According to Chabboe (2018) these criteria can be used to determine whether the information that is being provided by an organization is of high quality. Furthermore, Chabboe (2018) explains that the quality of an integrated report will increase if a higher degree of these criteria is found. In addition, Chabboe (2018) explains what the aim is of these measures and this will be summarized below:

- Reliability: "Ensuring that information is error-free, represents accurate information and is done in a neutral manner".
- Relevance: "Information provided in the integrated report must be accessible and up to date".
- Understandability: "Information must be presented in a clearly and concisely manner".
- Comparability: "Information is comparable over time and between companies".

In addition to the second criteria of relevance, Chabboe (2018) indicates that proponents of integrated reports assume that integrated thinking leads to timely information. Besides this, managers point out that integrated reporting yields greater benefits then the costs that are needed to disclose voluntary information. While this may be the case, it also exhibits risks since companies only want to disclose information that will enhance the company's image and therefore excludes the negative information. Another risk is that the information disclosed by organizations is not relevant enough and is therefore less appreciated (Chabboe, 2018, p. 27). Additionally, Chabboe (2018) points out that organizations need to take sensitive business information into account since disclosing this material could be beneficial to competitors and thus costly for companies. The third criteria of understandability is about the way information is presented. Moreover, Chabboe (2018) points out that the IIRC is new initiative and the reports are characterized as exhibiting a lack of readability, making it unlikely that investors will fully understand the integrated report. Although this is the case, Chabboe (2018) is of the opinion

that integrated reports can still be an improvement in terms of information environment, since IIRC is not only aiming for improvement for disclosing information but also ensures that information is displayed in an easier way. This is especially applicable for companies that are not only large but also complex in nature (Chabboe, 2018). Finally, the comparability criteria are of benefit to investors. When similarities are found, it acts as a guarantee to investors that the company has reported the information correctly (Chabboe, 2018). Moreover, Chabboe (2018) points out that since integrated reporting is currently a voluntary way of reporting, this creates a barrier in terms of comparability between different companies. In the case that organizations are comparing their integrated reports with countries that have a different cultural system, the degree of comparability will be even smaller (Chabboe, 2018). On the other hand, organizations can make use of external assurance for their integrated reports, which will make a contribution to the quality of the reports, credibility of information and comparability between companies (Chabboe, 2018). Other possible benefits that external assurance providers can yield are less information asymmetry and preventing that integrated reports are examined in a subjective manner (Chabboe, 2018). The reason for this is that auditors have certain assurance procedures that they need to follow and this is associated with professional judgement (Chabboe, 2018).

Chapter 4 – Methodology

In this chapter the methods that are going to be used within this research are going to be discussed. First, we will start off with a brief introduction and subsequently give an overview of the methods.

4.1 Introduction

The aim of this study is to investigate the quality of integrated reporting within South Africa and the Netherlands. Based on the literature review that has been conducted, low levels of formulaic readability exist within accounting communications over more than a decade and has been found in multiple regions. Furthermore, the study of Du Toit (2017) is limited due to the fact that the findings of South Africa cannot be generalized to other countries. Because of this, we will partly conduct repetitive research in order to find out whether the readability problem also exists within Netherlands and if the results are comparable. Since this research is going to be conducted within the firm KPMG, we have the privilege to conduct interviews within the sustainability department and therefore we are able to conduct interviews with auditors who provide assurance of integrated reporting. In order to make a contribution to the scientific literature, we have used a mixed approach which means that both quantitative research and qualitative research is going to be conducted.

4.2 Mixed methods research

According to McKim (2017) the two methodologies are increasingly being used, because the methods can complement each other and thus reduce the shortcomings (Creswell & Clark, 2017). In addition, the mixed method approach is beneficial because researchers need to determine the encoded variable of the information, which is substantial for making interpretations (Toomela, 2008). The researchers of Morse and Chung (2003) and Tashakkori and Teddlie (2003) acknowledge this and mention that the mixed method approach distinguishes itself for delivering the most accurate interpretation. McKim (2017) support this finding in which graduate students indicated that the mixed methods approach can explain a complex phenomenon well and thus increases the understandability of readers. Other advantages that the mixed method approach offer compared to only quantitative research or qualitative research is that it provides more breadth, depth, richness (Schulze, 2003) and a more balanced viewpoint (Morse & Chung, 2003). Besides this, the study of Bryman (2006) points out that the added value of

mixed methods is that they have a strong rationale for complementing the findings along with defining a sharp purpose. Additionally, students within the study of McKim (2017) explain that the mixed method approach is a way to confirm the results, provide deeper meaning and several perceptions, and more accuracy.

4.3 Quantitative research

As indicated by Tracy (2020) quantitative research is about the conversion of data (e.g. conversations, actions or media stories) into numbers. In this study, the methodology will be used to perform measurements and statistics with the use of data collection. On the basis of statistical analysis, we will arrive at new findings (Marczyk, DeMatteo, & Festinger, 2005) that may contribute to the scientific literature. Within this thesis, we will first collect data and subsequently perform several readability measurements in order to determine the quality of integrated reporting within South Africa and the Netherlands.

4.3.1 Sample

In the study by Du Toit (2017) a sample was created for the JSE-listed companies to confirm whether the readability of published integrated reports corresponds to the South African population. The criteria for the selection of the integrated reports have been discussed in the literature review of this study. Furthermore, the study of Du Toit (2017) will be used as an inspiration in which we will compile a new sample in this research for the JSE-listed organizations for the period 2017 till 2019. Additionally, we will also create a new sample which is based on the AEX-listed companies to see whether the findings are also applicable in the Dutch context.

4.3.2 Correlation matrix

The data will be analyzed by performing a correlation matrix in which independent and dependent variables are used to get a better understanding of the readability issue. As described in the study of Marczyk et al. (2005), the independent variable can be defined as “the factor that is manipulated or controlled by the researcher”. The second variable is that of dependent variables and can be described as: “measure of the effect (if any) of the independent variable”. For the purpose of this research, we will make use of readability formulas in order to determine the quality of the integrated reports in both South Africa and the Netherlands. The dependent variable is either going to be EY Ranking or Transparency

Benchmark. The two rankings will be used as a criterion to validate whether the measures are able to indicate whether complex language within integrated reporting is being rewarded or not.

4.3.3 Readability formulas

Within this study, we made use of three existing readability formulas that are used for accounting communication purposes.

4.3.3.1 Flesch Reading Ease

The Flesch Reading Ease formula is the most recognized method for measuring readability within accounting communication research (Jones & Smith, 2014), such as annual report narratives or similar corporate publications (Cheung & Lau, 2016; Group, 2021; Melloni, Caglio, & Perego, 2017; Yusuf & Jordan, 2017). Although this is the case, it also raises questions because the formula is focused on the elements of words and sentence length (Courtis, 1998; Dreyer, 1984). But at the same time, does not take the other attributes of syntax, format, graphics into account (Courtis, 1998; Dreyer, 1984). The Flesch Reading Ease can be calculated by the following formula (Stone & Lodhia, 2019):

$$206.835 - (84.6\ x\ syllables\ per\ word) - (1.015\ x\ words\ per\ sentence).$$

When the formula has been used, a score between 0 till 100 will be presented and gives an indication of how readable the text is. In the event that the formula produces a high score, then this is an indication of high readability (Courtis, 2004). And vice versa, a lower score implies that the provided text has a low readability (Courtis, 2004). As shown in Table 4, when the formula provides an output between 0 till 30, this means that the difficulty of the text can be graded as very difficult and therefore in order to understand you will need a college graduate degree. Furthermore, a reading ease score between the bracket of 50-60 can be interpreted as a text that is easier to read and understand (Courtis, 2004).

Reading Ease Score	Description of style	School level (source: Flesch, 1981)
0 - 30	Very difficult	College graduate
30-50	Difficult	College
50-60	Fairly difficult	10^{th} to 12^{th} grade (high school)
60-70	Standard	8^{th} and 9^{th} grade
70-80	Fairly easy	7^{th} grade
80-90	Easy	6^{th} grade
90-100	Very easy	5^{th} grade

Table 4 Interpretation of Flesch Reading Ease scores, Source:(Stone & Lodhia, 2019)

4.3.3.2 Flesch Kincaid Grade Level

Another readability formula that has been widely used and has been developed by the US Navy is the Flesch Kincaid Grade Level. According to Readable (2020), the previous readability formula of Flesch Reading Ease has been revisited due to the fact that the reading ease scores needed to be translated in order to find out what the reading grade level is. Therefore, this formula is being used to indicate the US grade/education level that is necessary for the reader in order to understand the material (Li, 2008). The Flesch Kincaid Grade Level can be calculated by using the following formula (Du Toit, 2017):

$$(0.39\ x\ average\ sentence\ length\ ) + (11.8\ x\ average\ syllables\ per\ word) - 15.59)$$

To make it more feasible, Readable (2020) also provided a Flesch Kincaid chart in which the US grade level can be compared with the reading level (basic, average and skilled), along with the accompanying book associating to the complexity of the readability. As illustrated in Figure 2, the US grade level of 8 is estimated to be understood by the average 8th grade student (Stone & Lodhia, 2019) and can be compared with the complexity level that is written in the book "Harry Potter". Hence, the Flesch Kincaid level can be interpreted as a higher level indicating that the reader needs to be more proficient to understand the material. Conversely, when a lower US grade level is indicated, the reader may be less competent to understand the material.

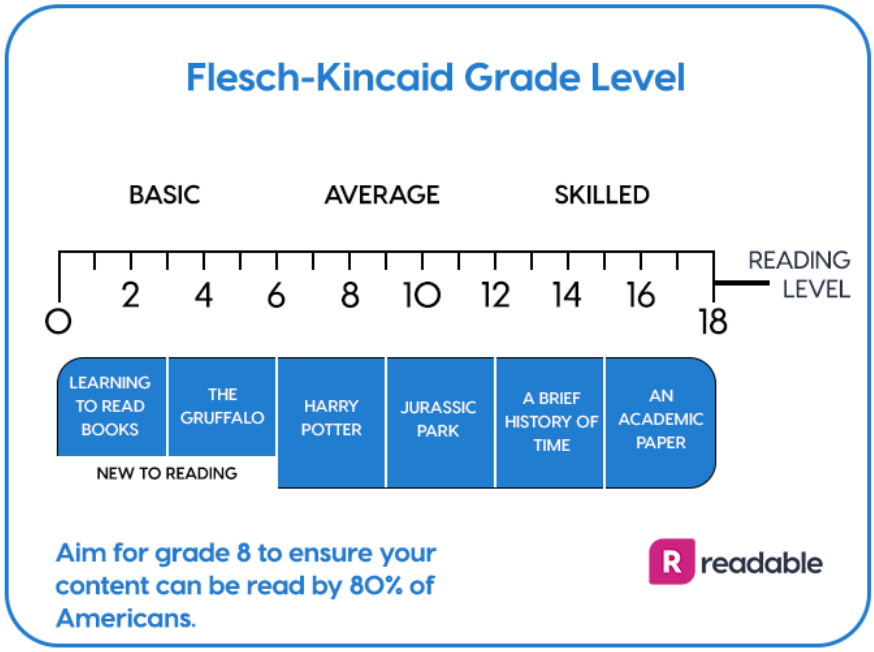


Figure 2: Flesch Kincaid Chart, Source: (Readable, 2020)

4.3.3.3 Gunning Fog Index

Lastly, the readability formula of Gunning Fog has been used within this research and has been developed by Robert Gunning (1969). As pointed out by Gunning (1969), the purpose of producing this readability measure is to provide people with a reliable yet easy-to-use way to improve organizational writing. According to Li (2008), the formula distinguishes itself on combining the number of words per sentence and the number of syllables per word in order to provide the readability score. Therefore, the Gunning Fog suggest that when writers use more syllables per word or more words per sentence, it will make the text more difficult in terms of comprehensibility. The Gunning Fog can be calculated by using the following formula (Du Toit, 2017):

$$0.4\ x\ (average\ number\ of\ words\ per\ sentence + percentage\ of\ \text{hard}\ words\ in\ the\ passage)$$

The percentage of hard words in this formula are calculated by counting words that have three or more syllables (Courtis, 1986; Li, 2008). Table 5 shows that the Gunning Fog Index can be compared by several types of literature, ranging from Youth Magazines to Technical Books. When a Gunning Fog index of 14 – 18 is found, the complexity of this material in terms of complexity can be categorized as difficult. Furthermore, the score can be compared with scientific literature in which the reader needs special interest, motivation or education in order to understand (Du Toit, 2017). Conversely, when a Gunning Fog Score of 8 – 10 is found, the complexity level can be interpretated as childish and can be compared with Youth Magazines. In this case, no special knowledge or motivation is required to understand the material.

Gunning Fog Score	**Complexity (source: (Li, 2008)**	**Literature type (source: (Courtis, 1986)**
18 or more	Unreadable	Technical Books
14 - 18	Difficult	Scientific Literature
12 - 14	Ideal	Instruction Manuals / Newspapers
10 – 12	Acceptable	Generation Circulation Magazines
8 - 10	Childish	Youth Magazines

Table 5 Interpretation of Gunning Fog Score

4.3.4 Method for statistical analysis

In the study of Du Toit (2017) a small sample has been derived from the JSE-listed companies and because of this the method of Spearman Rho has been applied. This sample has been used to determine whether there is a correlation between the readability measurements and the TOP 100 JSE-listed companies based on market capitalization (Du Toit, 2017). Since this research will build on the study of Du Toit (2017), this method will also be applied within this study.

4.3.4.1 Spearman Rho

The Spearman Rho method is a non-parametric test (Du Toit, 2017) with the aim to generate a ranking order for the dataset (Cleff, 2014). Subsequently, the method is looking at the difference between the ranks of each observation (Cleff, 2014). StatisticsSolutions indicates that ranking in the Spearman Rho analysis can be defined as the average position in the ascending order of values. The Spearman Rho considers the ranking positions as main scales and presumes that there are equal distances (Cleff, 2014). As indicated by Cleff (2014) in order to conduct a correlation matrix between two variables the prerequisite is to rank the data first and order the different observations independently and subsequently needs to be numbered based on the distribution. Based on the dataset, two different formulas can be used depending on whether the dataset is tied or not. As indicated in the example of StatisticsSolutions a tied dataset can be viewed as when two observations have the same number and thus the same ranking. As a consequence, a more complicated formula is needed in order to compute the correlation coefficient of the Spearman Rho (StatisticsSolutions).

The Spearman Rho brief formula that can be used for a non-tied dataset (Cleff, 2014):

$$p = 1 - \frac{6 \cdot \sum_{i=1}^{n} d\frac{2}{i}}{n \cdot (n^2 - 1)} mit\ d_i = \left(R(x_i) - R(y_i)\right)$$

When the dataset has involved any tied ranks the brief formula below can be used (Cleff, 2014):

$$\rho_{korr=} \frac{2 \cdot \left(\frac{N^3 - N}{12} - N\right) - T - U - \sum_{i=1}^{n} d\frac{2}{i}}{2 \cdot \sqrt{\left(\frac{N^3 - N}{12} - T\right)} \cdot \left(\frac{N^{3-}N}{12} - U\right)}$$

4.3.5 Readability platform

Before we started with analyzing the integrated reports of both the JSE-listed organizations and AEX-listed organizations, we performed an analysis regarding the readability platforms that can be used for data-analysis. Since the information contained in integrated reports is publicly accessible, we do not have to take into account confidentiality and security of data collected as well as professional secrecy in relation to the confidential information. For this reason, we considered readability tools that can be deployed online or offline together with the functions that it offers. In order to find out how these readability platforms performed, a sample text has been put together and subjected to the different tools that have been found. As the first finding, we found a difference in the number of words as well as the number of sentences is measured. Gústafsdóttir (2020) acknowledges this by mentioning that this difference is not unusual and in terms of quality assurance results can deviate when other readability tools are being used. This is because although the readability platforms use the same algorithms, the way the data is collected and the refinement that takes place in the final algorithm, could lead to a difference in readability scores. The reason for this, is that the final algorithm can contain other criteria in order to measure elements, such as: characters, words and sentences. Another finding that we encountered and has been confirmed by Gústafsdóttir (2020) is the way the final algorithm handles characters like: dashes, apostrophe and colons whereas other algorithms don't. This is also applicable to the way the syllables are measured and therefore can result in considerably different results. In order to mitigate this problem, we have chosen to choose one readability platform consistently in this research. Since the research of Du Toit (2017) is used as an inspiration in terms of the data analysis, this is used as support when the researcher encounters problems and gives the benefit from using additional tools and readability ratings. Therefore, we decided to opt for this tool. Once the reports for the compilation of the sample have been analyzed within the readability platform of Readable, the user has the option to export the readability scores to a csv file, which can be opened by Microsoft Excel. Subsequently, we merged the readability scores of the sample that has been compiled and selected the independent variables: Flesch Reading Ease, Flesch Kincaid and Gunning Fog. These readability scores are needed in order to perform the analysis.

4.3.6 IBM SPSS Statistics

In order to perform the correlation matrix between the publicly traded organizations and the ranking awards, we made use of the IBM SPSS Statistics version 26. This software enables us to import the data of the three different readability scores that have been collected from the readability platform in order to perform statistical functions (Field, 2018). The requirement for performing the statistical functions is that the researcher needs to indicate the way the independent and dependent variables need to be measured and provides us options for measures such as: central tendency (e.g., mean, mode, median) and variability (range, standard deviation, variance or quartile splits) (Field, 2018). Also, we made use of the correlation coefficient of Spearman's rho, in which the prerequisite is to allocate the integrated reports with a ranking derived from the EY Ranking awards or Transparency benchmark. Furthermore, the software used in this study was used to display the readability scores between the different industries and to provide an overview of the readability scores per year as well as performing correlations to see if complexity within integrated reporting is being rewarded.

4.4 Qualitative Research

The qualitative methodology covers a range of different elements, such as: interviews, participant observation and textual analysis (Tracy, 2020). Furthermore, Tracy (2020) indicates that researcher have the ability to employ qualitative methods for either a long phase or very short duration. Other fundamental differences that Tracy (2020) emphasizes is that within qualitative research the researcher is the instrument, which means that in comparison to quantitative method, the researcher records the observations. The qualitative methods used in the study include desk research and interviews. A description of these methods will be provided below.

4.4.1 Desk Research

One of the first steps that we performed during this research is the method of desk research. The purpose of this method is to understand complex situations which can be used to find relevant variables for quantitative research. Furthermore, Westerkamp and van Veen (2010) indicate that this systematic approach is used in practice to consult various databases in order to arrive at different information and subsequently process the information in a way that is presentable. According to Boekhorst, Kwast, and Wevers (2004) there are three ways to collect information: observation, conversation and consultation.

4.4.2 Semi-structured interviews

The second data gathering tool that has been used in this research, is the method of interviews. Based on the insights that have been gained during the interviews, new relevant literature can be found as well as search terms for the research. This method can be performed in three different ways: structured, unstructured or semi-structured interviews (Thomas, 2017). Because the semi-structured interviews provide us the option to make use of an interview schedule as well as having the possibility to ask follow-up questions, this structure has been chosen. As indicated by Tracy (2020) the approach of semi-structured interviews stimulates the interviewer to "listen, reflect, adapt to ever-changing circumstances, and cede control of the dialogue to the interviewee". Additionally, the insights that have been gathered will be used in order to answer multiple sub questions of this research. Besides this, the interviewer does not necessarily have to follow the procedure based on the interview schedule that has been prepared and can deviate based on the answer to arrive at questions that could be relevant to this research (Thomas, 2017). Therefore, the advantage of this method is that the limitations of scripted questions can be overcome by listening to the complex viewpoints of the interviews (Tracy, 2020). However, we also have to take into account that due to the semi-structured interviews, this can also result into dialogues which are more complex in nature and at the same time can lead into different directions.

4.4.3 Participant selection criteria

For this research, we used several criteria with regard to find suitable participants to gain more knowledge about readability within integrated reports. These criteria are listed below:

- Participants perform audit activities within the organization or has any responsibility for the preparation of the integrated report;
- Participants must have access to integrated reports or made any contribution in the process;
- Participants have knowledge of tools for measuring the quality of integrated reports.

4.4.4 Demographic characteristics of participants

Table 6 shows the demographics of the 7 interviewees, with ages ranging from 26 to 53 years old. Furthermore, all the participants can be attributed to the gender male and work mostly in a large accountancy firm except for one participant that works in a large bank environment and is also co-chair

of the Integrated Thinking and Strategy. Additionally, the roles of the participants vary from consultants, managers, global head of advisory, reporting and engagement and partner. The work experiences of the various participants have also been included, from the person with two years of experience working as a Senior Consultant up to the Partner who now has 35 years of experience in the field of Sustainability Services.

Participant	***Gender***	***Age***	***Company A***	***Role***	***Department***	***Experience***
A	Male	35	Large accountancy firm	Sustainability Manager	Sustainability & ESG Assurance	5 years
B	Male	36	Large accountancy firm	Senior Manager	Sustainability & ESG Assurance	9 years
C	Male	34	Large accountancy firm	Senior Manager	Sustainability & ESG Assurance	9 years
D	Male	26	Large accountancy firm	Consultant	Sustainability & ESG Assurance	3 years
E	Male	29	Large accountancy firm	Senior Consultant	Sustainability & Impact Assessment	2 years
Participant	***Gender***	***Age***	***Company B***	***Role***	***Department***	***Experience***
F	Male	43	Large bank	Head	Advisory & Reporting	21 years
				Co-chair	Integrated Thinking & Strategy	1 year
Participant	***Gender***	***Age***	***Company C***	***Role***	***Department***	***Experience***
G	Male	53	Large accountancy firm	Partner	Sustainability Services	35 years

Table 6 Demographic characteristics of participants

4.4.5 The interview process

The first step we have gone through is writing multiple interview questionnaires based on literature that is relevant for readability in integrated reporting. In addition, we also take into account the role and work activities of accountants within a Big Four environment of the sustainability department. The interviews have been conducted at three different companies online via Microsoft Teams due to the COVID-19 with the duration of approximately one hour. Subsequently, the interviews have been transcribed in a very accurate way using sound recordings. As soon as the transcribing process was finished, we listened to the sound recording one last time and compared this with the transcription to make sure that important information was not being overlooked. The transcription was then saved and

imported into the ATLAS.ti tool in order to initiate the open-coding process for conducting qualitative analysis of textual data. The open coding process has resulted in more than 1200 codes, which has given us a good overview of the most important concepts discussed, partly involving consensus as well as differences of opinion. In addition, we used the axial coding process in order to find the relationships of the various concepts. These concepts have been incorporated in Table 7 which can be found below.

Participants	*Integrated reporting*	*Risk aversion*	*Assurance procedures*	*Comparability of information*	*AEX Stock Exchange*	*Adoption of <IR> framework*	*Readability*	*Materiality analysis*	*Conciseness*	*Text & Graphics*	*Balance*	*Accessiblity of report*	*Jargon*	*Size integrated report*	*CORE and MORE*	*Technology*	*Sesame Tool*	*Media-analysis*
Participant A	✓		✓		✓	✓	✓	✓	✓	✓	✓		✓	✓				
Participant B	✓		✓	✓	✓	✓	✓	✓			✓	✓			✓	✓	✓	
Participant C	✓	✓	✓	✓	✓		✓	✓		✓	✓	✓	✓	✓		✓	✓	
Participant D	✓		✓	✓	✓	✓	✓		✓	✓	✓	✓	✓				✓	
Participant E	✓				✓		✓			✓						✓	✓	✓
Participant F	✓					✓	✓	✓	✓	✓	✓	✓	✓		✓	✓		
Participant G	✓		✓	✓			✓	✓	✓	✓	✓	✓	✓		✓			✓

Table 7 Overview of topics/concepts covered during the interviews

In addition to the concepts covered during the interviews, the interview questionnaire is structured in the three following areas:

- Introduction: asking for permission to record the interview, round of introduction, industry in which the interviewee operates and providing background information regarding the research that is being conducted.
- Posing the interview questions.
- Ending: Giving the interviewee the opportunity to make recommendations or provide relevant information that may not have been included during the interview.

4.4.6 Qualitative Analysis

After the collection of the qualitative data, we made use of the core functionality of coding within the software ATLAS.ti (Friese, 2020). The aim of ATLAS.ti is to provide users with a set of tools and functions for qualitative analysis of a range of media (Friese, 2020). This enables us to import the

transcripts from the interviews and assign different labels (e.g., description, concept, subcategory or wildcard) to a specific data segment (Friese, 2020). As a result, this allows us to provide interpretations based on the qualitative data analysis that is contained in the transcript (Creswell & Báez, 2015). Furthermore, Creswell and Báez (2015) mentions that the coding process can be distinguished by three different types of coding: open, axial or selective. While open coding is generally the first method to start with in practice, it doesn't necessarily have to be done in this order (Kaiser & Presmeg, 2019). According to Kaiser and Presmeg (2019) this type of coding can be recognized by the core elements: asking awareness questions and the comparison of data and codes. The first type of open coding can be defined as "breaking data apart and delineating concepts to stand for blocks of raw data" (Corbin & Strauss, 2014). Subsequently, we categorize these concepts based on their characteristics and dimensions in order to provide a conceptualization and classification of the phenomena. After the open coding process has been finished, the second type of axial coding can be initiated. In this type of coding the focus lies on exploring the relationships or similarities of different concepts and categories that have been established in the open coding process. This means that the codes that have been created in the open coding process are connected in a new way between the categories and subcategories. In the last type of selective coding, the objective is to incorporate the codes that have been created in the axial coding into one cohesive concept (Kaiser & Presmeg, 2019).

Chapter 5 – Results of quantitative research

In this chapter the results of the quantitative research will be discussed. First of all, the findings of the JSE-listed companies together with the correlations that have been conducted to determine the complexity that has been used by organizations are going to be explained. Subsequently, the same procedure has been applied for the AEX-listed companies. At the end of this chapter, a comparison of the findings will be discussed.

5.1 Readability of JSE-listed companies - South Africa

As a contribution to the research of Du Toit (2017), we have performed an independent analysis in which data of the companies that are listed on the JSE in the years 2017, 2018 and 2019 have been collected. The JSE-listed companies are derived from the African Markets website, where the industry, sector, name of the company together with a description can be found in an overview. The website also provides updates about the JSE and provides insights whether a company is still listed on the JSE stock exchange or has been delisted. An attempt has been made to include the integrated reports of the year 2020. However, after the analysis it appeared that about 40 percent of the companies still have to publish their integrated reports and therefore, we decided to exclude them. This has been determined by making a comparison of organizations who previously published an integrated report and therefore most likely publish an integrated report again for the year 2020. Although we perform our own analysis, in order to build on the data which is analyzed by Du Toit (2017), it is important that the researcher takes the same criteria into account for the new data collection. This means that during the data collection we looked at whether an annual report was explicitly called an integrated report. When this was not the case, we looked at sections in the reports for integrated reports. In exceptional cases we have seen that despite the title of annual reports, reports can still be labeled as integrated report because they follow the IIRC framework for drawing up the report or use elements such as the value creation model to give stakeholders insights into how the business creates value over time. For this reason, these reports have also been included in the analysis of the readability of integrated reports in the JSE listed companies. Subsequently, we have done a comparison of Table 2 with the years 2015 and 2016 published by Du Toit (2017) and Table 8 in this study of the years 2017, 2018 and 2019 of the JSE-listed companies. When we make a comparison of the two different tables, we notice that there are several differences.

First of all, this sample exists of 10 different industries compared to 8 industries displayed in Table 2. Du Toit (2017) explains that she has ignored the industry of Oil and Gas, because only one company has been found that prepared an integrated report. Because this specific company was listed in both Oil and Gas and Industrials, Du Toit (2017) decided to allocate the company to the industry of Industrials. In this study we found significant companies that prepare an integrated report for the industry of Oil and Gas, as well as Utilities. Another difference that we have noticed, is that the number of JSE-listed companies has increased by 100 companies. This increase is due to the industry of Financials which has increased considerably by +37 companies, Basic materials with +13 and lastly Technology with +12 companies. The comparison has been done between the years 2015 and 2017. In terms of integrated reports, we found that the industries of Financials, Technology and Industrials are the JSE listed companies that have published more in an integrated manner since 2015. Moreover, the reason why the number of integrated reports has decreased in 2019 is that 11 organizations still need to publish their integrated report. Secondly, the three different readability formulas of Flesch Reading Ease, Flesch Kincaid and Gunning Fog are used to calculate the new readability scores of the JSE-listed companies in 2017, 2018 and 2019. The results can be found in Appendix 1. Based on the results, we can conclude that the JSE-listed companies have made a significant catch-up compared to 2015 and 2016. Despite the fact that the Flesch Reading Ease score has been improved by nearly 10 points, it still falls within the category (30-50) of undergraduate degree in order to understand the material. For this reason, there is no improvement in terms of the readability. Furthermore, the Flesch Kincaid has been lowered by approximately 5 points, indicating that in terms of US grade, level 10 is required to understand the material rather than US grade level 15 which is equivalent to university graduates or postgraduate students. According to the website Readable (2020), level 10 is equivalent to a Jurassic Park Book. In addition, the website mentions that when organizations aim for grade level 8, 80 percent of the Americans will be able to read the content. Finally, the Gunning Fog formula was used, whereby a certain type of material is indicated on the basis of the score. Tables 29, 30 and 31 show that the overall average rounded off is 12, which is the estimated level of education to understand the material. The education level 12 implies that the material is equivalent to “Harper’s or The Wall Street Journal” (Wylie, 2018). Appendix 1 provides an overview of the readability scores per year with the weighted

average, standard deviation, variation per industry and a total score. In this study, we found that Consumer Services is the industry that has the highest ranking in 2017 and 2018 in terms of the most readable reports. Surprisingly, we see that the Utilities industry scores slightly better in 2019 and with that, in addition to Consumer Services, also belongs to the industry of the most readable report. In contrast, Healthcare, Technology and Telecommunications are the industries that generally publish the most difficult integrated reports.

Industry	*Number of companies per industry*	*Number of integrated reports*	*%*
2017			
Basic Materials	65	39	60
Consumer Goods	28	17	61
Consumer Services	46	37	80
Financials	137	96	70
Health Care	10	8	80
Industrials	69	54	78
Oil & Gas	10	5	50
Technology	20	12	60
Telecommunications	6	6	100
Utilities	2	2	100
Total	**393**	**276**	**70**
2018			
Basic materials	65	39	60
Consumer Goods	28	19	68
Consumer Services	46	37	80
Financials	137	102	75
Health Care	10	9	90
Industrials	69	52	75
Oil & Gas	10	6	60
Technology	20	14	70
Telecommunications	6	6	100
Utilities	2	2	100
Total	**393**	**286**	**73**
2019			
Basic materials	65	37	57
Consumer Goods	28	19	68
Consumer Services	46	35	76
Financials	137	99	72
Health Care	10	9	90
Industrials	69	48	70
Oil & Gas	10	6	60
Technology	20	14	70
Telecommunications	6	6	100
Utilities	2	2	100
Total	**393**	**275**	**70**

Table 8 Overview South Africa industry period 2017 – 2019

Variables	**Mean**	**SD**	**1**	**2**	**3**	**4**	**5**
Dependent variable							
1. EY ranking	3.22	1.27					
Independent variables							
2. Flesch Reading Ease	39.00	7.42	.137				
3. Flesch-Kincaid	9.79	1.21	.021	**-.885***			
4. Gunning Fog	11.49	1.42	.088	**-.582***	**.782***		
5. Passive voice	481.77	337.47	.229	.132	.053	.042	

Notes: Year = 2019; N=68. *Correlation is significant at the 0.01 level (2-tailed)
Source: Author's own compilation

Table 9 Correlation between EY Ranking 2019 and TOP 100 JSE-listed companies 2019

Furthermore, a Spearman's Rho correlation matrix has been applied in order to find out whether complexity in integrated reporting is still being awarded. In order to do this, the EY Ranking of EY Excellence in Integrated Reporting Awards 2019 has been used and compared with the TOP 100 JSE-listed companies based on market capitalization. This TOP 100 JSE List has been made public by SA Shares' financial media group focused on South Africa's financial news (Shares, 2021). The EY Ranking classifies entities in the following categories: Top 10, Excellent (includes the top 10 positions), Good, Average and Progress to be made (Clark, 2020). Likewise as Du Toit (2017), the reports have been coded from 1 (Top 10) to 5 (Progress to be made) using the same classification. Table 9 shows the correlation results, and this can be interpreted as that no significant relationship can be found between the readability measures as well as passive voice, r = .137, p = 0.01. Although this is the case, correlations have been found between the readability measures. Additionally, in this study we also performed a correlation matrix between the EY Ranking 2019 and the EY Excellence in Integrated Reporting Awards 2019. Unlike Table 9, a correlation has been found as shown in Table 10, between EY Ranking and the Flesch Reading Ease, as well as Passive Voice, r = .274 and .262 p = 0.01. However, these correlations are not strong.

Variables	**Mean**	**SD**	**1**	**2**	**3**	**4**	**5**
Dependent variable							
1. EY ranking	3.41	1.27					
Independent variables							
2. Flesch Reading Ease	39.21	6.92	**.274****				
3. Flesch-Kincaid	9.80	1.13	-.098	**-.805****			
4. Gunning Fog	11.44	1.33	-.078	**-.550****	**.784****		
5. Passive voice	499.68	336.46	**.262****	.173	.029	.002	
Notes: Year = 2019; N=100 *. Correlation is significant at the 0.01 level (2-tailed) **Source:** Author's own compilation							

Table 10 Correlation between EY Ranking and EY Excellence in Integrated Reporting Awards 2019

5.2 Readability of AEX-listed companies - Netherlands

Besides the analysis of the readability of JSE-listed companies, we have examined the 25 AEX listed organizations in the period 2016 – 2019 for the Netherlands in the same way as Du Toit (2017). Before applying readability formulas, the reports have been analyzed and it appeared that from the 25 companies, 13 organizations do not use the <IR> Framework and neither use <IR> elements. Despite not using the <IR> Framework, companies in the European Union (EU) are required to report

consolidated financial statements according to the International Financial Reporting Standards Regulation No 1606/2002 since 2005 (Ball, 2006; Guermazi & Khamoussi, 2018). As of this moment, no research has been found with regard to the impact of IFRS on readability in Europe and therefore also not in the Netherlands. Of the 12 remaining AEX listed companies in the Netherlands, 7 companies only use elements of the <IR> Framework, specifically the value creation model. When organizations include the value creation model in the report, it shows the transformation of the capital together caused by the organizational business activities and thus the output, the value an organization creates for itself and the value it can create for others (Council, 2013). The other 5 organizations use the <IR> Framework as reporting guidelines to determine the structure of integrated reports as well as the integration of <IR> elements such as the value creation model. Based on these 5 organizations, 1 organization distinguishes itself by requesting assurance build on the <IR> Framework. Table 12 shows the AEX listed companies in the year 2016 – 2019 grouped in 13 different industries, with the largest industry being Technology and Financial companies. In supplement to this, the results show that in 2016 there were 9 companies who report their annual report in an integrated manner. Moreover, there has been an upward trend with the number remaining at 10 in 2017 and 2018, eventually increasing to 11 integrated reports in 2019. The conclusion that can be drawn from this, is that the AEX listed organizations are gradually publishing more integrated reports over time.

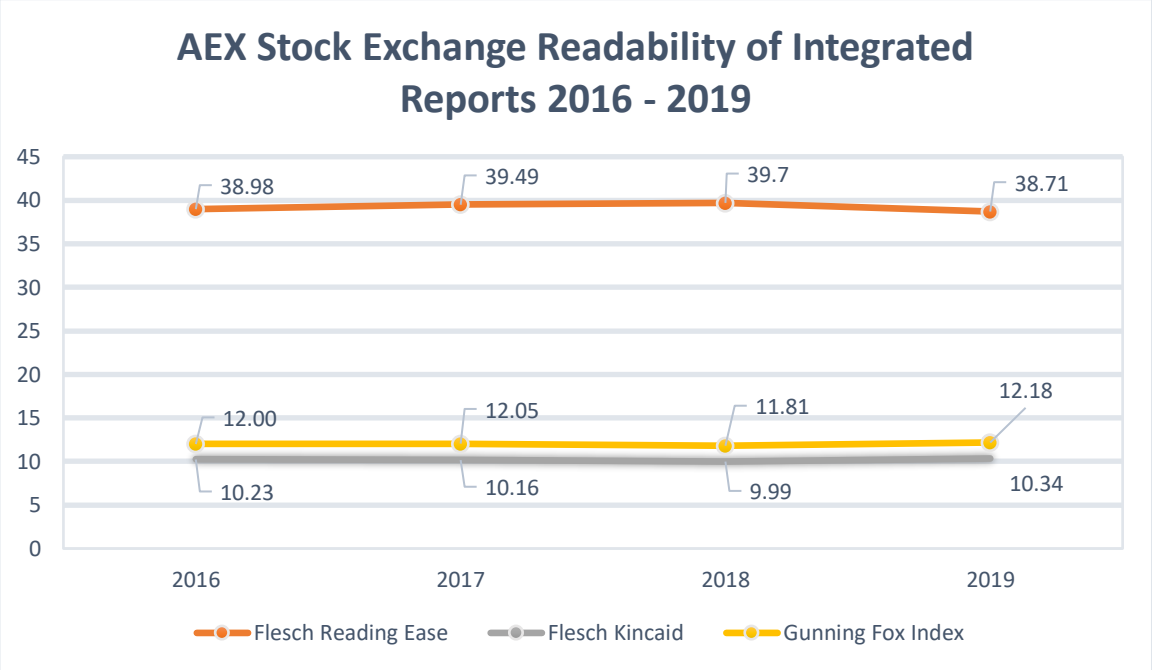


Table 11: AEX Stock Exchange Readability Scores of Integrated Reports Period 2016 - 2019

Subsequently, the readability formulas are applied to the AEX-listed companies in which the results can be found in the Appendix 2. An overview of the average readability scores of the AEX organizations is shown in Table 11. Based on the results, Table 32 till 35 show that in the years 2016 – 2019 the Flesch Reading Ease scores range between 38 and 40. These scores imply that the AEX-listed organizations write report narratives for which at least an undergraduate degree is required to understand the material. In addition, looking at the Flesch Kincaid formula, we see that the scores vary between 10 and 11, where in US school years, grade 10 or 11 is required to understand the material. Finally, the Gunning Fog Index shows scores between 11 and 13. This formula distinguishes itself by translating the scores into written material ranging from youth journals to technical written material. Based on the results, we can conclude that the industry of Basic materials and Telecommunications generally publish the most readable integrated report for the years 2016 – 2018. However, we note that in the year 2019 the Basic Materials industry scored somewhat lower compared to the previous years and thus the Telecommunications industry will remain at the forefront together with Financial service providers and Technology. When it comes to the industry publishing the least readable report, we found that the Chemistry and Healthcare industry generally publishes the most difficult integrated report. To check whether complexity is also rewarded in the Netherlands, a correlation matrix has been performed between the Transparency benchmark (Dutch for: Transparantiebenchmark) 2019 and integrated reports from AEX-listed companies. The Transparency benchmark ranks organizations in the following categories: Leading group (Dutch for Kopgroep), Chasers (Dutch for Achtervolgers), Platoon (Dutch for: Peloton), Stragglers (Dutch for: Achterblijvers), and Garbage truck (Dutch for: Bezemwagen). In order to make the correlation matrix work, the reports have been coded from 1 (Leading Group) to 5 (Garbage Truck). As can be seen from Table 13, no significant relationship can be found between the dependent variable of Transparency benchmark and the independent variables, $r = -.080$, $p = 0.05$. Strong correlations have been found between the independent variables, Flesch Reading Ease, Flesch Kincaid and Passive voice. Another strong correlation is found between Gunning Fog and Flesch-Kincaid as well.

Industry	*Number of companies per industry*	*Number of integrated reports*	*%*
2016			
Basic materials	2	1	50
Chemistry	2	2	100
Retail & Wholesale	1	0	0
Pharmacy	1	0	0
Financial serviceproviders	5	3	60
Healthcare	1	1	100
Media	2	0	0
Oil & Gas	1	0	0
Technology	5	1	20
Telecommunications	1	1	100
Employment agency	1	0	0
Real estate	1	0	0
Food and Beverage	2	0	0
Total	**25**	**9**	**36**
2017			
Basic materials	2	1	50
Chemistry	2	2	100
Retail & Wholesale	1	0	0
Pharmacy	1	0	0
Financial serviceproviders	5	3	60
Healthcare	1	1	100
Media	2	0	0
Oil & Gas	1	0	0
Technology	5	2	40
Telecommunications	1	1	100
Employment agency	1	0	0
Real estate	1	0	0
Food and Beverage	2	0	0
Total	**25**	**10**	**40**
2018			
Basic materials	2	1	50
Chemistry	2	2	100
Retail & Wholesale	1	0	0
Pharmacy	1	0	0
Financial serviceproviders	5	4	80
Healthcare	1	0	0
Media	2	0	0
Oil & Gas	1	0	0
Technology	5	2	40
Telecommunications	1	1	100
Employment agency	1	0	0
Real estate	1	0	0
Food and Beverage	2	0	0
Total	**25**	**10**	**40**
2019			
Basic materials	2	1	50
Chemistry	2	2	100
Retail & Wholesale	1	1	100
Pharmacy	1	0	0
Financial serviceproviders	5	3	60
Healthcare	1	1	100
Media	2	0	0
Oil & Gas	1	0	0
Technology	5	2	40
Telecommunications	1	1	100
Employment agency	1	0	0
Real estate	1	0	0
Food and Beverage	2	0	0
Total	**25**	**11**	**44**

Table 12 Overview Netherlands industry period 2016 – 2019

Variables	Mean	SD	1	2	3	4	5
Dependent variable							
1. Transparantiebenchmark ranking	1.89	.78					
Independent variables							
2. Flesch Reading Ease	38.83	3.06	-.080				
3. Flesch-Kincaid	10.33	.65	.170	**-.845****			
4. Gunning Fog	12.19	.80	.312	-.633	**.912****		
5. Passive voice	829.89	607.61	.187	**-.717***	.653	.400	

Notes: Year = 2019; N=9 *. Correlation is significant at the 0.05 level (2-tailed) **. Correlation is significant at the 0.01 level (2-tailed)
Source: Author's own compilation

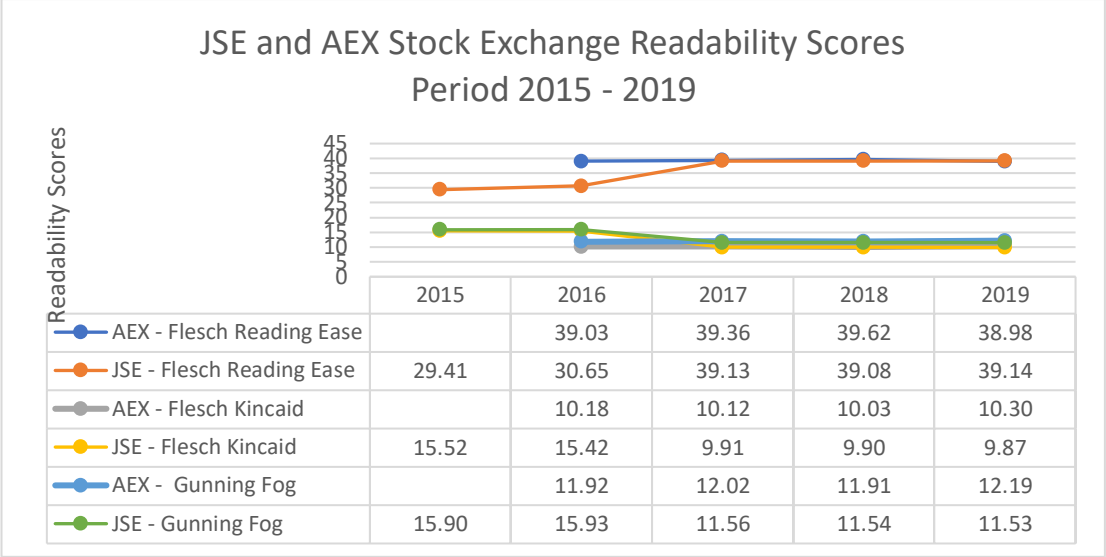
Table 13 Correlation between Transparency benchmark 2019 and AEX-listed companies 2019

5.3 Readability comparison between South Africa and Netherlands

An attempt has been made to see whether the results of the JSE-listed organizations and AEX-listed organization can be compared with each other. Based on the results of the quantitative research, we can conclude that there are a number of differences between the JSE listed organizations and the AEX listed organizations. Table 14 shows a large difference in the size of listed organizations, with JSE having a minimum of 220 companies and a maximum of 275 companies involved in integrated reporting. If we compare this with the AEX-listed organizations, this number is significantly lower, with a minimum of 9 and a maximum of 11 organizations performing integrated reporting. Furthermore, Table 15 shows that there is a difference in the readability scores, with the Flesch Reading Ease of the JSE differing by 10 points compared to AEX.

Stock Exchange	Years	n	Flesch Reading Ease (higher = better)	Flesch Kincaid (lower = better)	Gunning Fog Index (lower = better)
JSE	2015	223	29.41	15.52	15.90
	2016	237	30.65	15.42	15.93
	2017	276	39.13	9.91	11.56
	2018	286	39.08	9.90	11.54
	2019	275	39.14	9.87	11.53
AEX	2016	9	39.03	10.18	11.92
	2017	10	39.36	10.12	12.02
	2018	10	39.62	10.03	11.91
	2019	11	38.98	10.30	12.19

Table 14 Overview JSE and AEX stock exchange readability formula scores



	2015	2016	2017	2018	2019
AEX - Flesch Reading Ease		39.03	39.36	39.62	38.98
JSE - Flesch Reading Ease	29.41	30.65	39.13	39.08	39.14
AEX - Flesch Kincaid		10.18	10.12	10.03	10.30
JSE - Flesch Kincaid	15.52	15.42	9.91	9.90	9.87
AEX - Gunning Fog		11.92	12.02	11.91	12.19
JSE - Gunning Fog	15.90	15.93	11.56	11.54	11.53

Table 15: Overview JSE and AEX stock exchange readability formula scores

This indicates that the report narratives by AEX is somewhat easier to understand by readers but still need to be in possession of an undergraduate degree to understand the material. Additionally, there seems to be a positive trend in both the JSE and AEX stock exchange, with the Flesch Reading Ease gradually improving slightly. However, there seems to be a slight decrease in the AEX stock exchange in 2019, which can be explained by the number of integrated reports that still need to be published. Besides this when looking at the other readability scores, we see that the scores of the AEX-listed organizations generally fluctuate compared to the two observations of the JSE-listed organizations. The third readability formula from Flesch Kincaid indicates a difference of approximately 5 points between JSE and AEX, whereby readers need grade 15 for the material of JSE which is equivalent to scientific literature. On the other hand, AEX needs a grade of 10 and this is comparable to a Jurassic Park book. In the event that writers are writing for the general public, a grade level of 8 is recommended. This can be compared to children between the ages of 13 to 14 years old. Lastly, we noticed a difference in the Gunning Fog Index formula between the JSE and AEX listed organizations. As shown in Table 15, a score of 15.90 indicates that the written material is equivalent to the category of a scientific article. In contrast to JSE, the AEX scores 3 points lower where the report narratives can be compared to a newspaper and is therefore easier to understand. Text aimed at the general audience should aim for a score of around 8, while a score of 17 indicates that the material is understandable for readers with graduate level. Before we proceed to make an interpretation, it is important to reflect on the different characteristics of the stock exchanges. According to the website Ltd (2020), the composition of the

AEX is determined on the basis of market capitalization. The choice was made to choose the 25 largest Dutch companies on the basis of sales turnover that are listed on the Amsterdam stock index (Ltd, 2020). The reason why the largest AEX Dutch companies are selected is that these organizations have the greatest impact when it comes to price movements in terms of the share price (Ltd, 2020). We also researched the composition of the JSE stock exchange, in which the website of SA Shares mentions that the JSE is categorized into three different categories based on the market capitalization: Small Cap, Medium Cap and Large Cap. The CME Group (2021) indicates that the JSE is the largest stock exchange on the African continent which lists both local and foreign companies in which it allows global investors to trade on their platform. However, this does not mean that small or medium sized companies are listed on the JSE Stock Exchange. As the article of Egu and Chiloane-Tsoka (2018) mentions the JSE has decided to set up an alternative exchange with the name of AltX. The reason for this is to provide assistance to small and medium high-growth businesses that can benefit the economy. Based on this information, we can say that no proper comparison can be made between these two different stock exchanges due to the different characteristics and thus a selection difference.

Comparison of the population of South Africa and Netherlands

Besides measuring the readability of IRs in a South African context, Du Toit (2017) also considered the population of South Africa in order to determine if the report narratives can be understood. Hence, this study will compare the population of South Africa with the Netherlands to see if the population is somewhat comparable or if there are major differences. Figures from the CBS (2019) show that the economically active population of the Netherlands with the age category of 20 to 65 years is more than 10 million people. Based on this, we can say that the population of the Netherlands and South Africa (25 million) differ from each other by 15 million people (CBS, 2019). According to Maslowski (2018), 22 percent (2.2) million people in the Netherlands had an undergraduate degree while 15 percent (1.5 million) had a post-graduate degree in 2017. Furthermore, the report of Eurobarometer (2017) reveals that 90 percent (9 million) of the Netherlands population are able to speak English well enough to have a conversation. In addition, the EPI (2019); (EPI, 2020) shows that the Netherlands has on a global basis the highest proficiency. This is quite surprising since Dutch is the native language that is spoken in the Netherlands.

Chapter 6 - Results of qualitative research

In the previous chapter, we did not find a correlation between the two rankings and readability measures. Because the results indicate that the readability measures are not good indicators to measure the complexity in integrated reporting, this study attempts to find new criterion. Therefore, we will discuss in this chapter the results of the conducted interviews, in which a summary per organization will be provided with the most relevant topics that have been discussed. Finally, we made an analysis of the interviews in which only those elements that could be compared were discussed or found to be contradictory.

6.1 Summary organization A – Large accountancy firm 1

The interviewees working at organization A indicated that their role as accountants primarily focuses on assurance procedures for auditing approximately 40 different clients for non-financial information. The audit procedures consist of examining whether the criteria selected by the organization are appropriate. This is done through various assurance activities, which start off with the planning phase in which the assignment is laid down and risk procedures are undertaken. In addition, it is determined which activities will be performed per KPI and the information is verified by means of site visits. The purpose of the site visits is to assess how the information is collected and in which way it is reported to the group. This is assessed by making use of scientific studies. Furthermore, the information has been verified by looking at the energy company invoice to validate that the information entered matches. The reason why we perform these activities is for the sake of completeness, correctness and to make sure that the organization has included all entities in the energy calculation. After this has been completed, the group review activities will start, which is a combination of substantive interviews and review of data. All of these work activities contribute to the KPI level. Furthermore, we assess whether the text is in balance and provides a good reflection of what we have observed in our other activities. During the assessment of an integrated report, we pay more attention to the connectivity of information, specifically the flows, whether a good balance is being made and a full report is made on it. Due to the small department, the accountants work in various sectors and have observed that the maturity of integrated reporting and non-financial information has increased over the years. Furthermore,

organizations process non-financial information and integration of information in their own way, including government agencies that are responsible for developing a framework.

6.1.1 Integrated reporting

One of the findings of the interviews is that it is difficult to define what an integrated report is. This makes it challenging to indicate which of the customers publishes an integrated report. Besides this, there are many standards and frameworks available, giving organizations the freedom to choose which one they want to apply. As a result, differences are noticed in the extent to which an organization has applied a certain framework. Despite the fact that clients are not making use of the fairly principle-based <IR> framework, participant C mentions that clients are already quite advanced in terms of integrated reporting. Participant A adds that organizations can achieve this if they include a good financial and non-financial paragraph. One of the reasons for not including the <IR> framework is that it is a holistic model and therefore does not provide any guidance on how to include certain indicators. This is reflected in just a few pages of rules intended for a full report. As a result, it is difficult for auditors to provide assurance in terms of reporting. This contradicts what participant A says, namely that the <IR> framework is the most widely used model in the field of integration and that no other initiatives exist. Next to this, organizations have room to interpret the way they will use the framework, which makes it subjective. This is not the case with existing standards such as GRI and IFRS. While this may be true, participant A states that the advantage of using the <IR> framework is that it presents the capital flows in a neat way. Furthermore, there are a number of parties that use the <IR> framework to some extent, but do not yet fully elaborate the capitals as prescribed in the model, with the exception of organization B located in the Netherlands which receives assurance from another accounting firm based on the <IR> framework. Although this is the case, there is a lot of debate whether the <IR> model is sufficiently detailed to give an assurance statement. This is also reflected in the studies on the status of integrated reporting, which are still fairly limited. Therefore, the expectation of participant C is that not many new parties will obtain <IR> assurance as well as that Organization B's report will be better compared to a company seeking assurance based on GRI. Furthermore, the extent to which an organization is engaged in integrated reporting differs depending on whether it is a corporate or smaller organization. Corporate organizations have set up a special team that is working full time on integrating

as many topics as possible. This difference is clearly noticeable for corporate customers where discussions are held with management instead of a sustainability manager, indicating that they are involved and consider this important. Additionally, interest in integrated reporting depends on the industry in which the company operates. Unlike smaller organizations that are less concerned with integrated reporting with the possible explanation that they are financially profit-driven. The reason for this, is that smaller organizations look at whether a possible opportunity has financial impact and is important. Regardless of the fact that the opportunity in a productive state has an indirect financial impact in the long term. Reports containing an integrated structure distinguish themselves by indicating the connection between the different capitals. Following on from this, another important aspect of integrated reporting is the non-financial reporting directive, which contains the rules on disclosure of non-financial and diversity information by large companies. This overview of connections is the added value of integrated reporting, which is reflected in the business model of the organization indicating how they add value for us and society. When an organization properly presents the report in terms of readability, structure and integration of the model, investors will get a good impression of the extent to which an organization is prepared in the context of risks and thus a completely different type of report. In addition, the information will be presented in an understandable and well-organized manner. At the same time this is a good way to justify the value that an organization adds as well as become more resilient for future developments. One of the topics that is becoming an important part of risks is climate which can have a serious impact on the business. These developments are very interesting for investors and stakeholders who can find their data, draw conclusions and make decisions based on the information. Another important finding from the interviews is that we have a whole set of organizations claiming to have an integrated report, but insufficient depth has been found. Complementary, participant B and D indicate that the link with the non-financial results are not made sufficiently. The non-financial information is important and over time will be reflected in the financial results. When organizations include the <IR> framework in their reporting, this does not automatically mean that there is an integrated business operation and therefore do not always take management decisions based on both financial and non-financial information. According to participants A, C and D practice shows that one organization produces a better integrated report than another. Lastly, we also see a large part of our

customers who still publishes a standalone or separate sustainability report, where no clear link can be found with the annual accounts or financials. Besides this, there are also companies that choose to publish the information separately from each other because they cannot retrieve the data with a certain reliability. The reason for this is that they have to collect all their emissions and map them properly. Second, the systems do not lend themselves to this. These are all legitimate arguments according to participant A.

Adoption of <IR> Framework

Opinions regarding the adoption of <IR> framework differ considerably, participant D encourages to take up the pioneering role, in which you as a company contribute to the use of the framework and thus the uptake of the framework will grow. Furthermore, participant A indicates that a possible obstacle for the development of the framework, is that not all the investors are interested in the details that can be included on the basis of the framework. Alternatively, participant B indicates that the quality of the <IR> Framework can be improved by extending it with detailed interpretations that can also be found in other standards. Furthermore, organizations are often pressured by stakeholders to focus more on the short term in order to get insight into the current financial information and investments that organizations need to make to remain profitable. When more organizations focus on the long term, this will increase the degree of value creation model resulting in a more integrated report.

Providing assurance on <IR> Framework

In the opinion of participant C, organization A is never expected to provide assurance based on the <IR> Framework. Participant C also thinks that other large assurance companies will not give assurance based on the <IR> framework, even though organization C has done this before. Because of the limitations, he doubts whether organization C will provide <IR> assurance more often. Therefore, he indicates that it is more important to focus on providing assurance on non-financial information instead of looking at which framework to use. He gives as an example that there is an organization in his portfolio that is possibly the best in the field of reporting non-financial information. This organization does not request assurance based on the IIRC framework and we will also advice against this.

Standards

In the accountants' experience, the GRI standard is the most widely used for several reasons: it provides organizations guidance about how to report, is increasingly improving topics and becoming more concrete in terms of KPIs. Despite the fact that participant C indicates that this is the best reporting standard, there are parties who argue whether they cannot test against the <IR> framework because GRI does not include everything. According to participant A and D, the existing standards are a logical consequence of each other, whereby the <IR> framework focuses on the form of the report and which subjects should be highlighted. While GRI is seen as the starting point in which materiality looks at what is important for stakeholders and associated topics. In order to stay informed of the current developments within GRI indicators or categories, training courses take place within organization A. Besides this, organizations can use the Greenhouse GAS protocol for active internal monitoring and control, where SASB provides guidance for determining materiality topics for an organization with accompanying tools to support it. As a conclusion, organizations must therefore use different standards to create a report, where in the future this can be integrated into a document.

Which reports does the large accounting firm consider to be well integrated?

To be able to properly measure the degree to which a report is integrated, reports should be compared in the same way. On this basis, it can be said which report is of better quality in terms of integration and therefore can be used as best example. Other factors that play a role is that the design is broad and the <IR> framework is holistic in nature. In addition, there is currently no legal obligation to monitor financial information, nor to prepare an integrated report. Contrary to the answer of participant A, participant B indicates that a well-integrated report can be noticed by placing the focus on both the short term and long term with the aim of creating value for the investors and stakeholders. Secondly, it is the organization's responsibility to create long-term value for all stakeholders. It is therefore important that the stakeholder analysis is carried out to identify the most important aspects and to display information about the value creation capacity of the organization. Additionally, it is important that there is a good balance, a clear link with current and future results as well as planned investments can be found. The value creation model from the <IR> framework offers good tools for this, looking from the perspective of stakeholders and making use of the capital flows. Furthermore, the model focuses to create value on

the long term. When an organization weaves this structure into the report and makes a link with the sustainable development goals, then this is essentially a good structure for the report.

AEX Stock Exchange

In addition to these findings, the AEX listed companies were also discussed in the interviews, in which participant B indicates that they may differ in terms of maturity. Therefore, the findings could indicate that the reports are of lower quality, but this may be due to the fact that they are still working on the integration of information. This contradicts what Participant C says, in which he indicates that most companies within the AEX stock exchange report in an integrated manner, especially those companies that request assurance from large accountancy firms. These are the firms that are quite advanced when it comes to providing non-financial assurance. When the AEX listed companies are examined, we see that the nature and business model of the companies differ from each other and therefore also what they outline in the integrated report. This means that one company is able to clarify more risks that they run in their portfolios compared to other companies. In addition, participant C indicates that the NFI guidelines reflects the most important elements for a well-integrated report and are a good indication of what should at least be included in the report. These NFI guidelines have been required in Dutch legislation since 2017 in order to be in compliance with the law and are applicable to AEX-listed companies, banks and insurance companies. The NFI is a European directive that has been incorporated by the Netherlands, in which companies must report on five areas (e.g., social and human rights) regarding the integration of financial and non-financial matters.

6.1.2 Readability

Readability has various meanings within accountancy firms, whereby participant A and C considers a good readable report when it has a logical sequence. This translates into companies starting with mentioning their vision, mission and subsequently strategy. The underlying thought is that companies describe how they will achieve this, followed by strategy pillars in operations. Furthermore, organizations must determine how they will formulate their performance indicators and how they will link this to their objectives as well as continuously monitor the process, risk management, and daily performance of the activities, both financial and non-financial. Subsequently, companies need to cover

their financial and non-financial matrix. In addition, participant C and D indicates that readability is based on subjectivity involving human work, checking on the basis of multiple reviews which is done internally by the organization and being reviewed within the assurance department by an auditor and several native English speakers, whether a sentence is logically structured and is consistent with what has been mentioned earlier. It is therefore expected that the readability of integrated reports that are reviewed by several parties is well put together in which the writer takes into account that the story has been constructed in a logical way to ensure that the social traffic understands it. At the same time, participant D points out that readability is about conciseness and therefore writing to the point. Likewise, as participant C said, companies must provide information on how a company is performing on a specific topic and how they are going to reduce their emissions. Companies can use the climate footprint for this, whereby organizations can determine a strategy to reduce the carbon footprint and hence the total amount of greenhouse gases that are generated by the actions of an organization.

Establishment of an integrated report

The establishment of an integrated report starts with performing a materiality analysis and differs per organization. The reason for this, is that the stakeholder group varies from customers, investors to non-governmental organization (NGO). Furthermore, a company that operates on a larger scale has more resources compared to a smaller company and therefore more attention will be paid to the quality of the integrated report. In Participant C's experience, this explains why smaller customers occasionally provide a less readable report. As an illustration, participants C explains that he has a client who publishes a sustainability report in which the report has increased over the years from a report of twenty to hundred pages per year. Every time the company publishes a new report, it is criticized by the assurance department in terms of readability, in which the organization adds new pages with the result that we perceive a lot of repetition. In addition, half of the operations take place abroad, yet the company only publishes information about activities that take place in the Netherlands.

What makes an integrated report readable?

Based on the answers that participant A and D have provided, we can conclude that the IIRC framework is the most important aspect together with guiding principles and elements as a guideline. Furthermore,

a good explanation of how the capitals relate to each other in relation to the business model and the output generated on both financial and non-financial area. Other elements that can contribute to readability are a clear title, meaningful graphs, good accountability and having conversations with your stakeholder group that can serve as input for the creation of the integrated report. Moreover, attention must be paid to the clarity, concreteness and comparability of the information as well as providing a clear timetable and finding the good balance. Finding a good balance also applies to the layout of the chapters and documentation of information.

Which variables can be influenced when it comes to readability of integrated reporting?

The answer to this question was answered in different ways. First of all, participant A explains that readability is difficult to place in the context of integrated reporting, because some aspects of the <IR> Framework are also important in a non-integrated report and should also be reflected in, for example, a sustainability report. Furthermore, it is important that the materiality concepts are proper comparable, the information is reliable and hence similar to other companies. According to participant B other variables in which readability can be influenced are size of the report, number of passive words and lack of specific information. In his experience, companies have difficulty with how to write certain information down and are therefore inclined to write down too much. To support his words, participant B quotes Shakespeare with the following text: “I’m sending you a long letter because I didn’t have enough time to write a short one”. This is what companies also have to deal with, when it comes to writing information as briefly as possible and in a transparent manner, as well as write down the truth. This is possible in my opinion. Additionally, participants C and D indicate that balance plays an important role, whereby organizations must determine how much information they provide, write to the point and at the same time provide sufficient information. Therefore, it can be said that organization should not aim to provide an advertising brochure to the stakeholders, but instead provide reliable information so that stakeholders can make well-considered decisions. This can be realized by not only highlighting the positive story in an organization but focusing on the bigger wins and parts of the organization as a whole.

How important is readability compared to other criteria?

Multiple participants indicate that the different criteria follow each other up. When the information is not trustworthy and complete, good readability will be to no use. At the same time, when information is reliable, but not written down in a readable manner, this will also be of no use to the reader. To summarize, it can be said that one criterion is not more or less important than the other criterion. In contrast to participant D who believes that connectivity and correctness are the basic elements. Furthermore, participant D explains that if there is no compactness, the stakeholders will not read the report. Therefore, readability is expected to become one of the most important aspects because organizations put all their information at one central place. By integrating the information, it is important that organizations are concise and articulate clearly what they want to say.

Balance

As stated earlier, balance plays an important role in which the auditors analyze the reports on the basis of their professional judgment. However, as participant D points out, it is difficult to determine how many positive and negative developments must be reported in order to achieve a good balance in the report. For this reason, we cannot express a concrete opinion on this and hence have a general conversation with the client. In the case that a company has poor financial results, this must also be reflected in the non-financial information. Additionally, it should clearly state why the information is relevant in a concise manner. The aspect of balance is also reflected in the sustainability standard GRI, which is likewise important for an integrated report. Although auditors do not assess the balance between textual and visual information, it is important for organizations to include this in the internal process so that readers can be provided with data that is clearly displayed visually.

The accessibility of an integrated report

When it comes to the accessibility of an integrated report, it emerges that there are differences of opinion. For instance, participant D indicates that in terms of facilities, it is not necessary to provide options to select chapters that are of interest to stakeholders. The benefit for providing the entire report is that stakeholders can find other relevant information along the way. Besides this, participant B

mentions that one of the organizations uses an interactive impact report, which distinguishes itself by letting the stakeholders choose which sections are of interest.

How harmful is it when jargon is used?

Opinions on the use of jargon are divided, with participants A and C indicating that readability can be increased by explaining certain definitions or by using a legend at the end of the report. Furthermore, the report must be readable in such a way that society, the general reader and stakeholders must be able to understand it. However, the reader is expected to be familiar with the specific industry in which the company operates, and therefore does not need to be understood by everyone. The reason for this, is that the report narratives consist of subject-specific knowledge in which it is difficult to avoid the use of jargon or technical terminology. In contradiction, participants D and F believe that avoiding jargon can increase readability because the use of jargon is harmful and makes the information unusable for the average reader.

To what extend is examined whether the report narratives that are written for an integrated report match the target group?

Before the report is made, a stakeholder assessment takes place by interviewing a large group of different stakeholders about what they find important based on the reviews and what the organization can provide them. The readers of an integrated report mainly consist of a highly diversified group of investors who all read and look at readability in their own. As a result, companies are inclined to write extensively, taking diversity of stakeholders into account which has negative consequences for readability. Furthermore, participants A and B indicate that it's not certain whether people who, in addition to the readers of the company itself, the accountants and the companies that present awards such as the transparency benchmark, will also read the report.

6.1.3 Technology

What role does technology play when it comes to integrated reporting?

The interviews show that the role of technology is currently limited to measuring sentiment and regulations. Regardless of this, there are differences of opinion about what role technology could play in integrated reports in the future. For example, several participants indicate that technology is required

to provide a good insight into the degree of connectivity and can offer support to convert large amounts of data. Furthermore, participant B and F indicate that organizations can work towards an XBRL report, in which the standards are clearly formulated in the area of non-financial information for all parties and therefore other companies will follow. As a consequence, IT tools can be developed and deployed which allows organizations to compare figures from different industries. Besides this, technology can play a role in terms of readability by applying certain algorithms to a report and therefore increase the chance that the scan will detect if the report is not completely correct. Finally, participant D indicates that technology cannot contribute much and therefore do not expect developments anytime soon.

Sesame Tool

Currently there is no legislation requiring organizations to report on non-financial indicators. In particular, GRI provides guidelines for organizations on what to disclose and how to disclose it. One of the main pillars of GRI is that the sustainability report must be balanced. Since companies need to verify that they meet this GRI requirement, organization A performs a text review since this year that provides us with text claims of the annual report. This boils down to a big table in which we make selections of that report and text claims of the most relevant ones. To achieve this, the Semantic Tool was developed in collaboration with the data analysis team, in which the tool uses various APIs from Google in the field of natural language processing. Since the sustainability department is dependent on the availability of the data analytics team, a platform has been set up in which reports can be uploaded with the output a csv file. In addition, Tableau (visualization tool) scripts are used to create meaningful graphs of the data. In order to make the Sentiment tool useful for the sustainability department, the tool has been trained to detect whether a certain segment falls within a certain sentiment range. Basically, what the tool does is reading the entire report and gives for each sentence a distribution in term of how negative, neutral or positive it is. In addition, the tool is able to detect a certain theme (e.g., financial or non-financial information), in which users can see what the average sentiment is throughout the report excluding visual elements. So far, the draft reports of the audit clients have been analyzed, which are used as input for a discussion with the client. As a result, we see an improvement in the final reports that the organizations publish. Additionally, an interesting exercise has been carried out, in which we

have performed sentiment analysis on all the reports of AEX listed companies. By doing this, companies can compare their draft report with the peers and how the companies rank against each other. Another possibility is that the customer can see how he would score in the market by changing or taking another particular segment, which is a trigger for most clients and partners if their organization stands out. Another advantage of using this tool, is that it provides a good foundation for how to next report is going to look like. At the moment, the tool is aimed at determining the sentiment of the report and not its readability. However, participant E thinks that it would be an interesting feature to have, since organizations do not want to send the wrong message to their stakeholders. Lastly, participant E indicates that the tool has not yet been implemented in the assurance procedures.

6.2 Summary organization B –Large banking firm

In 2015, organization B made its first attempt to create an integrated report, which was found to be very difficult because they came from a traditional annual report and sustainability report. The reason for this is that integrated reporting requires organizations to bring information together, to integrate it well and thus requires a different approach and a different structure. Because the <IR> framework is a tool that provides prescribed guidelines for creating an integrated report, we decided to opt for this framework. In addition, participant F mentions that there are a number of organizations working on this as well and therefore the amount is expected to increase. Furthermore, the questions that had to be answered varied from: creating a value creation model, determining our materiality, how elements can be displayed and how this can be written down in the best possible way. This can be referred to as the disciplining effect of reporting because the framework forces you to think about how to write it down for the organization. As time passed, the elements have developed more strongly and gradually integrated into the business in terms of capitals, impact, output and value creation. Hence, it can be described as a continuous development where an organization looks how to properly integrate the elements. While a number of elements are now well appointed, there are still points of improvements with regard to managing long-term value creation in which an organization focuses on impact and makes it an integrated part of the entire organization. This aspect requires a lot of attention. Moreover, organization B has translated the objectives, ambitions and strategy of the company into capital, value

creation and impact, while this should have been done the other way around. Furthermore, participant F explains that there is an interaction between: integrated reporting, integrated thinking, management of an organization and financial and non-financial information as well as decision making. The integrated report demonstrates to what extend an organization is asked to put all these elements together in which they either reinforce or help each other. Although this integration of elements is not easy, it is going to be the norm, and everyone understands this.

6.2.1 Integrated Reporting

In preparation of the integrated report, the six principles of the <IR> framework has been used along with the aspects: consistency, conciseness and balance. All these aspects are in fact principles and reflected in the <IR> framework to create an integrated report. Additionally, the organization decided to request assurance based on these principles, which is a new and logical step for us. This was done in consultation with big four assurance providers, because we believe that the current standards on which assurance is provided do not match well with integrated reporting. Subsequently, one big four assurance provide agreed to test based on the principles, which resulted in an assurance statement. According to participant F, very complicated assurance statements are usually found and therefore, in consultation with the assurance provider, we wanted to include a clear assurance statement based on the <IR> Framework assurance standard in which the principles are tested. In addition to the dialogue with the assurance provider, stakeholders have been asked for feedback in order to identify possible points of improvement for the next report. Lastly, it is important to include the value-creation model in the report, which is a difficult model because organizations need to consider the capitals, input, output, outcome and impact. Furthermore, the model discusses important aspects such as risks, opportunities and balance. The balance must be drawn up according to the value creation materiality from a stakeholder perspective. Hence, it becomes clear for both organization and stakeholders what value is added and how this is done. Lastly, organizations need to take the internal stakeholders into account when producing an integrated report. The internal stakeholders would like to see certain elements reflected in the report. Because these internal dynamics are difficult to structure, communication plays an important role.

The effect of receiving <IR> Assurance

When an organization request assurance based on the <IR> Framework, different questions will be asked from the assurance provider. The conversation focuses on how you as an organization will comply with the principles of integrated reporting, which is very educational. Due to the questions, the organization will be critical at its own integrated report and see the points for improvement. By repeating this process, an organization can learn and therefore produce a technical better report. However, this does not mean that the company performances better, but is able to produce a better annual report with the advantage of increasing readability for stakeholders. Furthermore, the organization noticed that there is a lot of appreciation from stakeholders for a solid assurance on the <IR> Framework.

6.2.2 Readability

According to participant F, readability should be defined by the reader. The reason for this is that the reader decides whether the report narrative is readable. Because of this, the draftsman of the report should consider for which stakeholder group it is being written down with the desired result that it is understandable for the target group. The aspects that are equivalent to readability are: consistency, clarity, degree of completeness and structure. Furthermore, there are two opinions about readability within organization B. The first group find it very important that our report is read by many people due to the amount of time that we spend and energy that is consumed in order to create the report. While the second group believes that the process of creating an integrated report is of value to the company. Various discussions arise from the making of a report, as well as processes and governance that are very valuable. Because of this, it doesn't really matter who reads the report since we have learned so much from it. Participant F agrees with both the groups, because the process forces an organization to consider a number of elements when writing a report as well as that it would be a waste if nobody is reading a good integrated report. In this aspect, a communication department could play a role. Moreover, an organization should aim on creating a well-integrated report rather than focusing on the popularity. According to participant F, it is technically impossible to make an entire annual report that is interesting for shareholders, employees, customers and society. This is not possible in terms of communication, technical and interest. Furthermore, there are some stakeholders that have common interest, but there

are also stakeholder groups that have major differences, such as an investor and social organizations. Since there are differences in information needs, it is therefore challenging to bring those needs together in an integrated report. For example, the target group differs from a financial annual report with an integrated report of which you must provide information about long-term value creation, strategy, impact and output. This is one of the reasons why we like to work with the CORE and MORE concept, because the organization can write a compact and integrated annual report. This varies between 60 to 70 pages for a wide group of stakeholders, which you can keep readable in an accessible way by means of graphics. In case specialist would like to have additional details, the organization can provide a separate report. This is how the organization provides an answer to the major challenge when it comes to difference in information needs of the stakeholders.

CORE and MORE

Organization B has opted for approach called CORE and MORE developed by the accountancy Europe. The aim of this approach is that an organization maintains one core report and produces several more reports around it which support the core report. However, the core report is not supposed to be the summary of the other more reports. The core report must be an integrated part, where stakeholders get the option to read more detailed information by referring to the underlying reports. Furthermore, the CORE and MORE principles gives you the option to differentiate when it comes to writing for a specific group, which is an answer to increasingly ticker reports. The reason why reports keep growing is that of the demands, wishes and expectations from stakeholders are increasing over time. Despite the fact that we use this concept, it does not seem to be popular by other companies who are still trying to make one well-integrated report. In some cases, they are able to accomplish this, but they also struggle with the same challenges as us in regard to who the reader of the report is and for which target group the organization is writing. Besides this, we also get criticism from people for publishing 9 different types of reports, and this causes confusion. Another reason is that this demands a lot of work and therefore costs more money, in which participant F does not fully agree with. Regardless of this, participant F understands why people are saying this because more attention must be paid to correctly display the information in the different reports, and it is therefore more difficult to monitor and be in control.

Furthermore, we sometimes use different guidelines for each type of report. For instance, for the annual report we must comply with the IFRS guidelines, while for the human rights report we must be in compliance with the Human GRP framework. Although we as an organization have to be in compliance for many guidelines, we keep using the <IR> framework for the structure of the report.

Writing the Integrated Report

For the past three years, the large banking firm has chosen for one central writing team who is responsible for the input of interviews and preparing the integrated report. In order to ensure consistency in the report, there is one writer who is responsible for writing the report narratives and can therefore ensure a constant one as well as collectivity. Furthermore, the writer hired by organization B, understands integrated reporting, the banking firm, regulations and our wishes. The writer collaborates with a wider team, defining the structure of the report and providing the most important topics to be discussed for this year. In addition, the large banking firm has drawn up guidelines for aspects such as jargon and passive words, which are referred to as the writing guide. This is an extensive document guide, that deals with spelling, abbreviations, formal/informal and personal or single form. These writing guides can be expected from every medium-sized or large company which not only applies to reports, but all types of communication. Furthermore, a communication agency is involved to determine the balance within the integrated report. In addition, they help to increase readability such as certain long text or in some cases, replace three pages of text by placing a graph.

6.2.3 Technology

Technology plays a major role in the integration of financial and non-financial information in a report and if you want to provide insight to stakeholders into how an organization deals with this. In the financial sector, financial systems are highly developed when it comes to data. Later on, the attention for non-financial has increased, whereby interaction must take place between two systems and this can still be improved within the company.

6.2.4 Insights from Special Interest Group (IIRC)

Participant F explains that next to his position in the large banking firm, he works and advocate within the IIRC that organizations and people who work on the integrated report, collaborate and therefore get

more involved. The Special Interest Group tries to stimulate organizations for improving their integrated report, by letting people read reports from other organizations. As a result, dialogues and discussions are initiated which leads to people who are learning from each other and hence how to mitigate various challenges of integrated reporting and integrated thinking. In the opinion of participant F, this is an important role and added value of the IIRC. Besides this, organizations should focus on integrated thinking, which is going to determine the future of certain organizations.

6.3 Summary organization C – Large assurance firm 2

The interviewee works within the Climate Change Sustainability department within the large assurance firm. In his role as financial auditor, he is involved in the department to provide assurance based on the <IR> Framework of the integrated report published by the large banking firm.

6.3.1 Integrated Report

Organizations within the Netherlands have the freedom to give their report the name of integrated and therefore any company has the possibility to do this. Furthermore, there are two variants when it comes to the integrated report. The first variant is an integrated report and consists of an annual report and annual accounts in which the financial and non-financial information, partly legally and partly not, are intertwined. In the case of the large banking company, they have decided to opt for a different approach, the so-called CORE and MORE approach, for which a separate report is being prepared. In addition to the existing MORE reports (e.g., compliance report or annual accounts), the CORE overall report is aimed to show the value creating capacity of an organization. For the very first time, this report is not only based on the <IR> Framework but has also requested assurance based on principles. Regardless of this granting assurance on integrated reporting does not yet meet the criteria 100 percent, which is also applicable to the large banking firm. Despite this, it can be called an integrated report because it draws up the report on that convention. Another finding is that according to participant G the line between sustainable and financial information is becoming increasingly blurred. This is reflected in the topics covered in an integrated report which contains both financial and non-financial elements in one box. Consequently, it is difficult for internal and external regulators as well as accountants, since there is a mandate for one part and not for the other part. Additionally, participant G indicates that the current

problem is that organizations use multiple foundations to create annual accounts or annual reports. In the opinion of participant G, organizations should choose one foundation and follow this foundation and not say that they have built the report on different foundations.

Reviewing an integrated report

The most important elements that must be anchored in the integrated report are the value creation model and the materiality analyzes, these elements form the report on which the outcomes follow. In the case that an organization created an outstanding value creation model, but this does not fit well with the organization, it will become impossible to achieve the KPIs at the end of the year. In summary, participant G adds that the value creation model is the core of an organization that is maintained by both the company's strategy and the risk management that is incorporated into the measurement systems. The organization then implements this on their value creation and starts managing it.

The methods and techniques used to monetize the value creation model

To find out what information people need and to which degree the information needs to be ordered, we use stakeholder analysis or a stakeholder dialogue about the materiality analysis. Subsequently, we look at what value an organization wants to create in the long term, organization's strategy and pay attention to why certain items are important and others are not. It is also important to check whether both the bank and the stakeholder consider this important. If one of the parties does not find this, it could pose a problem. That is why it is important for organizations to use these methods, as it gives a certain direction and structure to the reporting. For example, the process to arrive at a value creation model, how the process is structured for the organization's stakeholder and test analysis. Lastly, we check whether the overall view is representative of what people might expect. We have found that this ideology can be found in all the different conventions and financial audit, including the GRI standard that makes use of the materiality analysis. However, with a financial audit you have a kind of customized assumption of people as a user which does not work in other type of reports, because of the different backgrounds people have. Besides this, stakeholders are generally quite selfish who are engaged with a certain topic and are not interested in other topics. When an organization has a lot of these stakeholders, things will become quite difficult and therefore you need to quote a kind of common denominator.

Providing assurance based on the <IR> framework

The large banking firm was convinced that the current standards were inadequate and therefore asked us to test the integrated report on the basis of the principles of the <IR> Framework. In addition to the research that has been carried out by organization B, we looked at the present conditions in the integrated report. For us it was important to check whether it is possible and if it is a rational assignment. Both parties were convinced that providing assurance is possible and were happy with the outcome in terms of assurance and integrated reporting. Over the next few years, we tried to improve the integrated report as well as providing assurance. Therefore, we can say that it is still in development. The analysis process begins with the overall picture described in the report and if the information provided is representative of what the company has done in the past years. Furthermore, the <IR> Framework indicates bond printed statements in which we check whether these are also reflected in the report. We do this in two different ways: by means of a checklist and by determining whether the materiality is properly integrated. Additionally, organizations need to determine which additional information needs to be reported and we as auditors check whether these considerations have been made seriously, whether this is substantiated and if it was done in a good environment. Also, we need to check whether we can rely on the information and whether the observation is done as agreed in the framework.

Lessons learned

As an assurance provider we have learned that you cannot report based on the principle-based method of <IR> Framework alone, because the framework is too broad and only describes the content elements and guiding principles. The <IR> Framework only mentions that the integrated report needs to be concise, transparent and measurable. However, the extent to which something is concise is not described. At the same time, it does not provide any measuring instruments or indicate what is expected of an organization per sector, with the result that organizations always need to fill the gaps by making use of other foundations. This can also be seen in the assurance statement that we have provided as an assurance provider. Therefore, it can be said that the <IR> Framework does not aim for comparability but focuses on the value creating capacity in a company. As long as it is representative and the content that is required has been incorporated in the report. Participant G mentions that it is important for him as auditor to find out whether the value creating capacity is reflected in the decision-making, whether

it is more balanced or alternatively if a company does it for the financial aspect. In the case that the company does it for the financials, it is going to make mistakes and will not maintain this for the long term. However, if a company is intrinsically motivated, then it is easier to justify in the reporting than for a company to artificially convert it. Another advantage is that organizations can embed it more easily since the organization creates real value. Furthermore, the <IR> Framework serves as a nice weighing instrument in which you can put aspects such as management advice, financial and sustainability on it. If an organization does it this way, value is going to be created. This must be evident from the report that a company has written and is easier to translate into the organizations internal business operations. It is then up to the stakeholder group or investor to determine which companies it wants to do business with. Since the framework is too broad, companies perceive this as a deterrent to create and request assurance based on the <IR> Framework and therefore rather opt for the GRI standard which is much more detailed in this regard. Because the GRI standard has a different method, you will have a different discussion where the main focus is on improving sustainability. Another reason why companies are reluctant is that they do not know how this can be compared and standardized. As an assurance company, we were not deterred by this and it is our job to take a good snapshot of the company and check whether it is a good snapshot that has been taken. What we have learned from this, is that different conventions can co-exist and all of them give a fair and faithful picture based on that convention. If all goes well, a company will also create value for the wider society, social and environmental, and not just financially. As points of improvements, it would be easier if the framework provides a list of the minimum points that need to be included, which makes it simpler and more accessible.

Provisioning of information to the outside world

According to signaling theory, the extent to which companies publish information has to do with how the company performs. When a company performs below average it will be less likely to report and therefore not voluntarily disclose this information. In the event that an organization reaches or scores above the average, then the organization will have a benefit. It is therefore important that a company takes account of the balance sheet in a report, in which the account plays an important role. The report should not become an advertising brochure and that is why the value creation model is also very

important, because it also contains negative things. For example, to be able to produce something a company can score negatively in terms of impact, but at the same time also deliver social benefits. In the past, investors were only interested in the financial side of a business, but this has now changed as investors look beyond profit and loss. This is why it is so important to include all components in your report. However, it is difficult to provide the information and make it measurable.

AEX Stock Exchange

AEX listed companies above a certain level must comply with the non-financial reporting directive and therefore provide non-financial information. In the case that a company does not comply with certain aspect (e.g., risk management, corruption) or have a policy, organizations need to mention this in their report which is also sufficient for the legislation. Several developments are working on this and therefore it can be expected that in the future this is going to become mandatory. The core problem is that requesting assurance within the Netherlands is not yet an obligation and therefore organizations are free to report this within the report. The reason why this is a problem, is that only we as auditors check whether the information conflicts. In addition, the auditors are the only ones checking the information for discrepancies.

Feedback <IR> Assurance

The large accountancy firm has received feedback from various parties in which they expressed their appreciation for the fact that an accountancy firm has taken this step. In addition, he has also received quite positive feedback from insiders and people involved in this. Furthermore, by providing <IR> Assurance we notice within our environment that discussion is initiated among individual professionals. For this reason, it contributes to the discussion that is being held and with that we take the profession further and contribute to the world by showing how companies are performing. Moreover, we have heard a few opponents about providing <IR> assurance. However, due to the holistic nature of the framework, people are wondering whether it can be certified. Participant G indicates that it is possible as long as clear criteria are added. Besides this, it is also important to consider what contribution it can make instead of looking at why something cannot or may not be done. Participant G further points out that he cannot disclose all information on this matter because he has a duty of confidentiality.

Ultimately, it is about the user who does not wait for the information we provide, but for the certainty we provide about the information they need.

Difference between companies that request assurance and no assurance

When companies request assurance for the first time, it generally creates awareness of what an organization is writing down, must be substantiated and show traceability. Organizations should also pay more attention to correctly display the information and keep up to date in terms of information provision. These are the positive aspects that we influence as an auditor. Furthermore, providing assurance does not result in completely different types of reporting. Additionally, in our role as auditor we generally ask a lot of questions which companies always experience as useful. This especially applies to areas that are still under development. In addition, it is not possible to make a comparison between <IR> Framework and other frameworks, as there is currently only one of them. However, when it comes to companies that receive assurance and non-assurance, we see clear differences. The companies that request assurance do this on a voluntary basis and therefore handle it properly.

6.3.2 Readability

Readability is important in the sense that the user can understand the information. Another way to define readability is that the user is able to take in information with normal effort, depending on the average person you project on as a writer or organization. The reason for this is that what is readable to me does not necessarily have to be readable to you or vice versa. When the information is meaningless then you may not need to include it in your reporting. Furthermore, it is important that it stays rational and that there is a balance between pictures, text and data. The aspect of balance means that it is important that negative topics are addressed not only at the bottom but also at the beginning of the report, this will make a report more readable. Participant G also indicates that readability must always be based on the structure in which the most important elements of strategy such as value creation, strategy, risk management and KPIs must be incorporated. In addition, organizations also need to take accessibility into account, in which writers write it down in a neat way. If writers maintain this flow, then this is the information I need as an accountant. According to participant G, reporting in Netherlands can be characterized by the stories that are told in comparison with other countries. The other countries are

more focused on the facts. In the Netherlands we feel uncomfortable with this and we are more focused on readability and making a logical connection. Subsequently, we put the dataset somewhere in the attachment. Therefore, it can be said that the different countries can be recognized in the culture style and thus the extent to which they report. Other aspects that we consider important are the degree to which it is presented and the communication. This is also the case for the other parties, but they mainly focus on the data. In our role as auditor, we argue that the inclusion of the data is important to do, and this is done in accordance with the legislation or guidelines. Furthermore, the number of sustainability reports in Netherlands is limited in comparison with other countries such as Italy, because we integrate this into the annual report. Furthermore, participant G mentions that the relevance of information is important and therefore it is better to have information which is somewhat wrong instead of information that is less relevant and completely right. Subsequently, investors need to look what information they want to have. In addition to this, there is currently no criteria as an accountant and therefore we cannot say that there is something missing or needs to be included. However, there are more elements in terms of rationality of reports. As a supplement to this, participant G mentions that he analyses reports by the number of words on pages, average sentence length what type of words there are used, the complexity of words and number of emotions both positive and negative. In addition, it is important to check whether the content of the report is correct, has a logical structure and that people intend to write and present it in an understandable way. Besides this, we look at how many pages are related to non-financial and financial information. Based on the information that is provided, we see the big picture, and this partly says something in terms of readability. Moreover, when a large information density is found on a page, it is by definition less readable. While this may be true, it does not mean it is wrong as the snapshot taken is the same as the information you need. Additionally, we often hear from investors that there is no use to stories and instead are more focused on the facts and data. This implies that they do not want an advertising brochure. Moreover, participant G mentions that the purpose of organizations is to convey a transparent story and hence did not encounter sentences that are completely unreadable. However, when an organization delivers a report that contains 400 pages, it may be intrinsically readable, but this is probably not the case.

Measuring readability within the large accounting firm

Although auditors do not assess readability, we do provide point of improvements in terms of the story. In our role, we look at the minimum elements to be included and whether the construction is complete and meets all conditions. When an organization meets these criteria, you will then arrive at a readable report. Additionally, the advantage that we as auditors have is that we quickly notice if an organization provides more information than usual due to the number of rapports that we see on a daily basis. Companies adopt this information in their report not only for readability purposes but also for legitimacy reasons. When a company has problems with a particular topic, it will automatically write more about this to explain as an organization what you are doing in terms of legitimacy. Therefore, it can also be used as a kind of management tool for specific target groups. For this reason, the approach of CORE and MORE is attractive because as an organization you can adjust the readability per target group. This enables organizations to create theme reports in which companies can use certain technical terminology for interested parties. In addition, writers are allowed to provide more details on a topic and keep readability at the same level.

Accessibility of integrated report

As an auditor we work for social traffic and therefore the information must be accessible and readable otherwise you have no rational assignment. When the information is not clear enough then readers should be given the opportunity to ask for more explanation. As an organization it is important that you provide sufficient starting points for a conversation. Furthermore, a writer may assume that a user also has a reasonable degree of knowledge. On the other hand, the reader can also expect the writer to have a certain level of service orientation or provide information that has sufficient intensity to convey the information to which you are entitled.

6.3.3 Technology

Within the large accountancy firm two things are done to do a completeness check and thus verify whether the integrated reports are complete and to make sure that we possess all the information. First of all, a media analysis is used every quarter that looks at all elements, such as media composition positive or negative. This is all done digitally, where the data is put in a dossier and we can then start

analyzing the information. The degree of impact and whether they have been reported are also examined. In addition, the tool is used to continuously monitor what is said about the organizations. This is a commonly available tool that any company can buy, in which you can configure them to either monitor your own organization or apply them to the competitors as well. Another option is to apply them to the customer names so that all media articles about that specific organization are pulled up from sources. Furthermore, it is important for accountants to maintain good contact with the customers and at the same time this forms a kind of test that is not fully communicated to the customer. It is a strategy that is applied when we notice that the organization is preparing a report that is not balanced. In addition, we have to report this and show the client the collected media. These are used to initiate the discussion and to find out what considerations have been made. The second thing that we do is selecting about 100 claims based on criteria statements that are made in the integrated report and then we ask the client to justify this as well. Depending on the answers, the organization can include it in the report or omit when the provided arguments are invalid.

6.4 Analysis of interviews

After the process of transcribing, coding and grouping has been completed, the information gathered during the interviews have been analyzed and will briefly be summarized below. Please note that only the concepts that we have been able to compare are included in the analysis as well as the contradictory ones.

6.4.1 Assurance procedures

The first main finding from the interviews is presented in Table 16, which provides an overview of the aspects that Organization A examines during the assurance procedures of non-financial information. These aspects apply to both non-integrated reports and integrated reports. Furthermore, these aspects are performed on behalf of completeness, correctness and to make sure that the organization has included all entities.

	Assurance procedures for non-financial information						
Participants	*Criteria*	*Planning phase*	*Risk procedures*	*KPI*	*Site visits*	*Group review*	*Balance*
Participant A	✓	✓	✓	✓	✓	✓	✓
Participant B	✓	✓	✓	✓	✓	✓	✓
Participant C	✓	✓	✓	✓	✓	✓	✓
Participant D	✓	✓	✓	✓	✓	✓	✓
Participant E*							
Participant F*							
Participant G*							

Table 16 Aspects of assurance procedures non-financial information

**During the interviews with participants E, F and G, no questions were asked with regard to providing assurance on non-financial information.*

6.4.2 Integrated Reporting

Table 17 shows the aspects that are undertaken in integrated reports in addition to the existing assurance procedures for non-financial information.

	Assessment of an integrated report		
Participants	*Difficulty definition IR*	*Connectivity of information*	**Financial & Non-Financial paragraph*
Participant A	✓	✓	✓
Participant B	✓	✓	
Participant C	✓	✓	
Participant D	✓	✓	
Participant E			
Participant F			
Participant G			

Table 17 Assessment of an integrated report

**This table shows that participant A is of the opinion that organizations can arrive at an integrated report on the basis of good financial and non-financial information.*

Adoption of <IR> Framework

Based on the findings that are presented in Table 18, the results show what the reasons are in terms of organizations being reluctant for using the <IR> Framework as guiding principles. Despite these findings, participant A indicates that it is the most widely used model in the field of integration and that there are currently no other initiatives that also focus on value creation.

Reluctance of companies to use <IR> Framework

Participants	*Holistic model*	*Provide Assurance*	*Room for own interpretation*	*Interest in provided details*	*Comparison*	*Standardized*
Participant A	✓	✓	✓	✓		
Participant B	✓	✓	✓			
Participant C	✓	✓	✓			
Participant D	✓	✓	✓			
Participant E						
Participant F						
Participant G	✓	✓			✓	✓

Table 18 Reluctance of companies to use <IR> Framework

Reluctance of companies to create an integrated report

Participants	*Limited status of Integrated Reporting*	*Size of organization*	*Short term vs long term*	*Retrieve data with a certain reliability*
Participant A	✓	✓	✓	✓
Participant B	✓	✓	✓	✓
Participant C	✓	✓	✓	✓
Participant D	✓	✓	✓	✓
Participant E				
Participant F				
Participant G				

Table 19 Reluctance of companies to use <IR> Framework

Based on the findings presented in Table 19, participant C is of the opinion that a report that has used and received assurance based on the principles of <IR> Framework, will not automatically be better compared to organizations that receive assurance based on GRI. Organization B agrees with the opinion of participant C but mentions that creating an integrated report based on the <IR> Framework comes with the advantage of increasing readability for stakeholders. Besides this, organization B noticed that there is appreciation from stakeholders for requesting assurance based on the <IR> Framework. Another finding is that according to organization A and B, in addition to the elements presented in Table 20, investors and stakeholders get a good idea of the degree to which organizations are prepared for risks and receive information in an understandable and well-organized manner. At the same time organizations are becoming more flexible for future developments. It is important to note that these findings do not specifically apply to integrated reporting based on <IR> Framework, but about integrated reporting in general. In addition, organization A mentions that organizations that have

included the <IR> Framework, this does not automatically imply that there is an integrated business operation.

	Elements in order to create a good integrated report					
Participants	*Financial & Non-financial*	*Value creation model*	*Materiality analysis*	*Non-financial reporting directive*	*Stakeholder analysis*	*Link current and future results*
Participant A	✓	✓	✓		✓	✓
Participant B	✓	✓	✓		✓	✓
Participant C	✓	✓	✓	✓	✓	✓
Participant D	✓	✓	✓		✓	✓
Participant E						
Participant F	✓	✓	✓		✓	
Participant G	✓	✓	✓		✓	

Table 20 Elements containing in a good integrated report

In addition to the findings of Table 21, participant F indicates that there is an interaction between integrated reporting, integrated thinking, management board, decision-making and financial and non-financial information. Since these elements are have not been mentioned in the other interviews and are specifically for <IR> Framework, they have not been included in the table. Furthermore, we also found contradictions in terms of the usage of <IR> Framework as guiding principles for integrated reporting. Although participant A indicates that the <IR> Framework is holistic in nature, he is also of the opinion that it is the most widely used model in the field of integration. Secondly, participant D is supportive when it comes to using the <IR> Framework in order to increase the uptake of the framework.

	Which standard should be used to create an integrated report?	
Participants	*GRI*	*<IR> Framework*
Participant A	✓	
Participant B		
Participant C	✓	
Participant D	✓	✓
Participant E		
Participant F		✓
Participant G		✓

Table 21 Usage of standard to create integrated report

6.4.3 Readability

Furthermore, the findings of the interviews point out that the elements presented in Table 22 are needed in order to produce a good readable report. Also, the results of Table 23 indicate that these elements can be used to influence the readability of integrated reporting. Lastly, Table 24 shows that there are differences of opinion in terms of using jargon to increase the readability.

Elements needed in order to create a good readable report

Participants	*Logical Sequence*	*Consistency*	*Conciseness*	*Concreteness / Clarity*	*Resources*	*Comparability*	*Accountability*	*Conversation stakeholder*	*Balance*	*Completeness*
Participant A	✓			✓		✓	✓	✓	✓	
Participant B				✓		✓	✓	✓	✓	
Participant C	✓	✓		✓	✓	✓	✓	✓	✓	
Participant D		✓	✓	✓		✓	✓	✓	✓	
Participant E										
Participant F	✓	✓	✓					✓	✓	✓
Participant G	✓		✓						✓	

Table 22 Elements needed to create a good readable report

Variables that can be influenced when it comes to readability of integrated reporting

Participants	*Materiality concepts*	*Stakeholder assessment*	*Reliability information*	*Size of report*	*Number passive words*	*Specific information*	*Balance*	*Jargon*
Participant A	✓	✓	✓					✓
Participant B	✓	✓	✓	✓	✓	✓		
Participant C	✓	✓	✓				✓	✓
Participant D	✓	✓	✓				✓	✓
Participant E								
Participant F					✓			✓
Participant G			✓	✓	✓	✓	✓	✓

Table 23 Aspects influencing readability of integrated report

Organizations should prevent using jargon in terms of readability

Participants	*Yes*	*No*
Participant A		✓
Participant B		
Participant C		✓
Participant D	✓	
Participant E		
Participant F	✓	
Participant G		

Table 24 Jargon to increase readability

6.4.4 Technology

Table 25 shows what role technology could play in the future when it comes to integrated reporting. From the perspective of organization B, technology is already used for the degree of connectivity, specifically the integration of financial and non-financial information in the report. This also applies in the way organization B is dealing with large amount of data in the financial systems. Furthermore, Table 26 shows the current tools for analyzing and using tools to arrive at an integrated report.

	Possible role that technology could have in terms of integrated reporting					
Participants	*Degree of connectivity*	*Converting large amount of data*	*XBLR Report*	*Comparison*	*Algorithms specifically for readability*	*Technology cannot offer contribution*
Participant A	✓	✓				
Participant B	✓	✓	✓	✓		
Participant C	✓	✓			✓	
Participant D	✓	✓				✓
Participant E						
Participant F			✓	✓		
Participant G						

Table 25 Role of technology in the future of integrated reporting

	Tools that are currently used in terms of integrated reporting			
Participants	*Core and More*	*Sesame Tool*	*Tableau*	*Media-analysis*
Participant A		✓		
Participant B	✓	✓	✓	
Participant C		✓		
Participant D		✓		
Participant E		✓	✓	
Participant F	✓			
Participant G	✓			✓

Table 26 Tools being used for analyzing/creating an integrated report

Chapter 7 – Discussion

In this chapter we will start off with a small introduction of the research problem and subsequently summarize the main findings of this study. The contributions of the research will also be mentioned. In addition, the limitations of the research will be mapped and based on these points we will make a number of recommendations for future research. Finally, in the course of the research, we found relevant articles that will be briefly discussed.

Research problem

The importance of readability has been emphasized by several scientific studies and can offer benefits for organizations as well as a wide range of stakeholders. This was one of the drivers for the IIRC initiative to establish a new framework with the vision to encourage organizations to produce clearly written and comprehensible reports. However, several studies show that this commitment to improve readability has not yet been sufficiently achieved. This is reflected in the integrated reports that are published in multiple regions that contain complex technical language and as a result low formulaic readability has been discovered. Based on a mixed design approach, an attempt was made in this study to determine whether the low readability level of integrated reports is still applicable within the countries of South Africa as well as in the Netherlands. Because no correlation has been found, qualitative research has been conducted to determine new criterion with regard to measuring the readability of integrated reporting and provide new insights within the Netherlands as well as the perspective of accountants within large accountancy firms and the implementation of the <IR> framework within the banking industry.

7.1 Interpretations of results from JSE-listed companies – South Africa

The results of the quantitative study indicate that in comparison to the sample of Du Toit (2017), the JSE-stock exchange has increased in terms of companies and amount of industries, producing more than 280 integrated reports on a yearly basis. Furthermore, the findings show that JSE-listed companies have made a significant catch-up in comparison to the readability scores produced in 2015 and 2016. This finding is quite surprising and may be due to the fact that in the study of Du Toit (2017), the integrated reports have been converted from PDF format to Microsoft Word format before evaluating. This does not apply in this study, in which we have analyzed the reports from PDF format. In addition,

Du Toit (2017) points out that another observation she found is that some integrated reports in both 2015 and 2016 were provided with security and therefore could not be converted to Microsoft Word format. Although this is the case, we still do not expect much of a difference in terms of the readability scores. Regardless of the improved readability scores, the integrated reports published by the JSE-listed companies still fall under the undergraduate degree category, meaning that, as Du Toit (2017) stated, will only be accessible to a small portion of the population of South Africa who are in possession of either a undergraduate or postgraduate degree. Moreover, the findings also shows that the most readable integrated reports are published by the industries of both "Consumer Services" as well as "Utilities, in which the last industry has made a significant improvement in the last year. Subsequently, a correlation matrix has been performed to determine whether the use of complex language in integrated reports is still being rewarded by the EY ranking 2019. The first correlation matrix was conducted between EY Ranking 2019 and TOP 100 JSE-listed companies, whereby no correlation was found between the EY Ranking and readability formulas. Because of this finding, we tried to search for the TOP 100 JSE-listed companies which has been used within the study of Du Toit (2017) in order to reproduce the positive correlation in the EY Ranking 2015, but have not been able to find it. Furthermore, the report of Clark (2020) indicates that EY is accompanied by the University of Cape Town's College of Accounting in which they track and evaluate the TOP 100 JSE-listed companies. When we compare Table 3 which originates from the research Du Toit (2017) and Table 9 in this study, we find that Table 3 analyzed 75 companies while we analyzed 68 companies as shown in Table 9. Therefore, it can be said that the TOP 100 JSE-listed companies and thus the EY Ranking change on a regular basis. Because of this, the data of the EY Ranking 2015 and EY Ranking 2019 is different and this makes it difficult to validate whether the readability scores can indeed be compared with each other. In addition to this, we attempted to include additional measurements such as the complexity, wordy items and fog hard work which have been used in the research of Du Toit (2017) as well. However, due to the lack of information about the calculations that have been performed to arrive at these scores, these scores have not been included in this sample. As a result, the data analysis performed within this study counts as an independent analysis, in which the study by Du Toit (2017) is used as an inspiration of how to collect more data of the JSE-listed companies and validate the readability methods. Another attempt has been

made by applying the same method between the EY Ranking 2019 and EY Excellence in Integrated Reporting Awards 2019, displaying a weak correlation between the dependent variable of EY Ranking and independent variables of Flesch Reading Ease, as well as the use of Passive Voice. Due to the weak relationship that has been found, it is therefore difficult to determine whether organizations are still being rewarded by the EY ranking for using complex language in their integrated reports. This raises questions whether the existing readability measurements are still a good method for measuring readability and thus the quality of integrated reports. Furthermore, as discussed in Chapter 3: Literature Review, the findings of the research Stone and Lodhia (2019) point out that among the regions Asian organizations provide the best readable integrated report. A possible explanation for this could be that South African integrated reports are written by and for the target group of native English speakers, while this may not be the case for Asian integrated reports. As indicated by several sources, South Africa has 2 million people, which is ten percent of the total population of South Africa, in which English language is their first or home language (Africa;, 2017; Rensburg & Botha, 2014). Additionally, the report of EF English Proficiency Index acknowledges this by indicating that South Africa falls under the category of "Very High Proficiency" (EPI, 2020). When we compare this with the Asian region, results show that from the 24 Asian countries, the proficiency bands of Asia countries are: 1 "Very Average", 2 "High", 5 "Moderate", 8 "Low" and 9 "Very Low". Based on these results, we can conclude that the Asian region still has room for improvement, and this may also explain that in comparison to South African organizations, less difficult levels of English can be found which also has been found by the study of Stone and Lodhia (2019).

7.2 Interpretations of results from AEX-listed companies – Netherlands

As a second part of the quantitative research, research was conducted into the readability of integrated reports within the Netherlands and thus the AEX stock exchange. This is to our knowledge the first analysis that has been performed within the AEX where a comparison is carried out between the AEX-listed companies and JSE-listed companies. Compared to the JSE-stock exchange, the AEX stock exchange has other characteristics, including the inclusion of Dutch established companies and are selected on the basis of market capital for the reason that they have the greatest impact. Other noteworthy differences are that due to the small size, only 11 integrated reports have been found that

yield a comparable score based on the same readability formulas. Based on the results, it can be said that the industries of “Telecommunications”, “Financial service providers” and “Technology” overall publish the most readable integrated reports in the AEX. In contrast to the industry of Chemistry and Healthcare who generally publishes the most difficult integrated report. Of these reports, currently only 7 organizations are making use of the elements that are prescribed by the <IR> Framework. Furthermore, also one company has been found that distinguishes itself from the rest of the companies, which not only uses the guiding principles of the <IR> Framework to determine the structure for the integrated report, but also request assurance based on these principles. This study builds on the study performed by Du Toit (2017), in which we also performed a correlation matrix within the AEX-listed companies to see whether there is a relationship between the Transparency benchmark ranking and readability formulas. However, also no correlation was found for this part of the quantitative study as well. A number of correlations have been found between the readability formulas, with the Flesch Kincaid and Passive Voice showing a significant correlation with the Flesch Reading Ease as well as a strong correlation between Gunning Fog and Flesch Kincaid. In addition, the population of the Netherlands and the level required to understand the report narratives and disclosures were also examined. Based on the figures presented by CBS (2019) the figures imply that 20 percent of the Dutch population must be able to understand the integrated reports drawn up by AEX-listed companies. Furthermore, a possible explanation why the AEX-listed companies have a higher readability in this study compared to the JSE-listed companies, is that according to the EF English Proficiency Index, The Netherlands is ranked as the number 1 which can be interpreted as “Very High Proficiency Band” of the English language. Additionally, one participant in this study pointed out that in terms of writing, the Netherlands can be easily identified by the reporting style in which we focus on providing stories in comparison to other countries, while other countries are more focused on mentioning the facts. Because of this, participant mentions that Netherlands is therefore more focused on readability and creating a logical connection.

7.3 Interpretations of qualitative study

7.3.1 Standards

For this study seven interviews were conducted within two big accountant firms and one large banking firm. The results of the interviews show that despite the fact that many standards and frameworks are available, organizations almost always opt for the sustainability standard or GRI. According to the participants, this is partly due to the detailed information about how organizations should include their information in the reporting. In contrast to the IIRC framework, which is holistic in nature and is therefore a deterrent for companies that want to make the switch to this framework. Although the framework is holistic in nature, it has not stopped the large banking firm from using this framework as they believe it is the only standard that provides guidelines for the preparation of an integrated report. The moment an organization takes the step towards this new framework, an organization must determine how the elements of the <IR> framework can be integrated into the business operations. In addition, organizations must anticipate that there is an interaction between integrated reports, integrated thinking, the management board of organization and the integration of financial and non-financial information in terms of decision making. Supplementary, the large banking firm has decided to request assurance from a large accountancy firm with the Netherlands to assess whether the principles prescribed by the <IR> Framework are properly used in the integrated report. The conversation with the assurance provider offers the large banking firm new insights, with the effect that the organization will look critical at their own integrated report and therefore see points of improvement.

7.3.2 Readability

As discussed in Chapter 3: Literature Review of this study, Sattari (2012) emphasizes that readability is important in terms of business communication, in which the factor of coherence affects the reader's understanding. Likewise, as Sattari (2012) has pointed out, we have also found different meanings while conducting the interviews with regard to readability within the accounting firms. Within the accountancy companies we have found that auditors primarily focus on the coherence of the integrated reports when they examine the readability. When organizations want to provide a logical sequence, companies should focus on translating their vision, mission and strategy in their daily business operations. While doing so, companies need to mention how this is linked with the company's objective

and to what extend the process is monitored in terms of risk management. In addition, Sattari (2012) indicates that it is important that the written text is understood by the people for who it is written for. Therefore, one of the participants in this study mentioned that readability should be defined by the reader due to the reason that the reader decides whether the report is understandable and hence comprehensible. Because of this, the large banking organization has chosen a draftsman who is responsible for writing an integrated report that is readable and understandable for the defined stakeholder group. Within the large banking industry, however, there are two different opinions about the readability of an integrated report, one group of which considers it important that the report is read by as many people as possible. While the other group attaches more value to the process and the discussions that is being held in order to arrive at an integrated report. However, the accountancy companies indicate that readability is based on subjectivity and thus forms an obstacle to the objective assessment of the written text. In order to increase readability, the assurance department works in collaboration with auditors and several native English speakers to find out whether the sentences are structured in a logical way to ensure that society understands it properly. Furthermore, participants indicated that the elements conciseness, concreteness, degree of completeness, consistency, clarity and structure (i.e., retrievability), visual effectiveness is correlated with readability. All of these elements are also reflected in the book of Hargis et al. (2004), which can be used to identify the quality of technical material and can be used to provide an easily readable report. Based on these findings, we can conclude that in general readability is a difficult concept. Furthermore, Warren (2008) indicated that organizations need to put in more effort when it comes to increasing the readability for a various group of stakeholders. However, in our study we have found that it is technically impossible for organizations to compile a readable integrated report that is not only accessible but also interesting to a wide range of stakeholders. The participants indicate that the reason for this, is that major differences can be found between the interest of stakeholders. Additionally, analysis of the interviews shows that there is a relationship between readability and elements such as materiality concepts, stakeholder assessment, reliability of information, size of report, number of passive words, balance and jargon. An organization must therefore take these aspects into account because they can have a significant influence on the readability of integrated reports. The element of balance has been mentioned a lot of times in this study,

in which auditors pay attention to the balance of pictures, text and data. Also, the elements of reliability, relevance, understandability and comparability that have been identified in the research by Chabboe (2018) has been mentioned in the analysis of the interviews. Based on this, we can say that these elements do not only show whether the information in an integrated report is of high quality, but also has an influence on the readability of a report. Due to the differences in the information needs of various stakeholders, the large banking organization has chosen to use the CORE and MORE concept, whereby organizations are triggered to write a compact and integrated annual report. The reason why this concept is beneficial is that organizations can use the core report for the integrated part and at the same time offer the option for other underlying reports if stakeholders want more information about a specific aspect. This allows organizations to keep the readability level at a high level and organizations can use certain terminology when writing their report narratives. The negative side of the concept is that more reports have to be drawn up, the quality of the information is therefore more difficult to guarantee and therefore more costs are involved. Additionally, it also creates confusion among stakeholders. Besides this, organizations also use various guidelines to comply with legislation and regulations which are dependent of the type of report that the company is creating. The analysis regarding readability also shows that there are differences of opinion about the use of jargon. Some of the participants indicate that the writer can expect a certain degree of knowledge while the other participants mention that jargon should be avoided. In addition, this study has found that when a large accounting firm provides assurance to an organization for the first time, this holds several benefits for the organization: creating awareness of what an organization should write, provide evidence when an organization claims something, and lastly show traceability. As Caglio et al. (2020) pointed out, when organizations provide a better readable integrated report, investors will benefit from a more accurate market evaluation.

7.3.3 Technology

Furthermore, the interviews also provided new insights into the use of technology regarding integrated reports. In this context, organization A large assurance firm indicates that it uses sentiment analyzes in which the texts of an integrated report are analyzed on the basis of natural language processing. The sentiment tool is known for performing text reviews in which the tool can detect whether a text falls

under a certain segment within a certain sentiment range. In short, the tool gives a distribution of each sentence in terms of how positive, negative or neutral the content creator has written the story. Besides this, the sentiment analysis is trained to detect certain themes in which the users of the tool can determine what the average sentiment is through the entire report. This tool is currently an experiment that has not yet been included in the assurance procedures within organization A. However, the results indicate that the tool offers favorable benefits to both the auditor and the client, which may also analyze and make a contribution to the readability in the future. In addition, it emerged from the conversation with organization C that they currently use a media analysis tool that is used with the aim of performing a completeness check. This media analysis tool is currently running every quarter of the year and looks at all elements such as media composition. The information that is found is stored in a file and subsequently used for analysis. If a customer provides an unbalanced report, the information gathered is used to start a discussion about what considerations have been made. Depending on the answers, the auditors ask the relevant organization to erase or rewrite the information to ensure that the provided information is trustworthy and therefore reliable.

7.4 Limitations

In this section we will provide a number of limitations when it comes to the quantitative and qualitative research that we have conducted. Some of the limitations have already been discussed in the previous sections in this chapter. As we have mentioned before, the first limitation of the quantitative study is that no additional measures besides the readability formulas have been used in order to measure the quality of the integrated reports and hence the readability. During this research, we attempted to include scores of complexity, wordy items and fog hard work (Du Toit, 2017). However, the calculations have not been found and the readability tool does not provide the scores. Therefore, these additional measures have not been included in this study. Another limitation of this study, is that although we have used the same methods as Du Toit (2017) not been able to rule out whether the calculations that have performed to arrive at the readability scores correspond to the readability scores that have been provided in this study. As Du Toit (2017) has mentioned, before evaluating the integrated reports she made converted the reports. However, we do not expect a significant difference compared to the readability scores before

conversion. Because of this limitation, we decided to provide the data set that has been used in this study for further research. The dataset that we will provide contains readability scores of both JSE-listed companies and AEX-listed companies for the years 2017, 2018 and 2019. As the third limitation, this study contains both South African and The Netherlands context and therefore these results cannot be generalized to other countries. The reason for this, is that the background and selection of companies need to be taken into account, as well as the characteristic of the stock exchange. Although this is the case, the evidence that has been collected can be used as points of improvement for companies who either evaluate or create a highly readable integrated report. Additionally, the fourth limitation of this study is that we find that readability is a complicated concept. The research of Hrasky and Smith (2008) acknowledges this and points out that readability cannot be easily converted into quantitative measures. Also, we want to emphasize that the readability formulas do not consider the degree of knowledge of the reader, interest level and coherence of a text which may have influence on the understandability of the reader. When we look at the limitations of the qualitative research, we acknowledge that although the interviews were scheduled upfront, the interviews in some cases have not been completely carried out completely, partly due to agreements made by the interviewee. Because of this, we focused on asking the most relevant interview questions based on the aim of this research. Another limitation that is important to note is that only men were interviewed in this study, while women may have a different perspective on readability. Furthermore, the last limitation of this research has to do with the fact that only the large banking firm uses the principles of the <IR> Framework as well as request assurance based on these principles. As a consequence, we are not able to do a comparison. Because of this, we do not know if these findings hold for other companies or the same sector of banking.

7.5 Relevant articles found in the course of the research

7.5.1 FD Henri Sijthoff

While this study was being conducted, the jury members of FD Henri Sijthoff published their results of the year 2020 in which the jury mentions that they are satisfied with the quality of the reporting listed companies (Dagblad 2020). This is especially the case with the AEX funds (Dagblad 2020). During the assessment, it can be seen that there is a clear improvement when it comes to the presentation on the website (Dagblad, 2020). Interested parties are increasingly seeing interactive presentations from

companies that make it possible to compile graphs, consult videos and find information about important projects (Dagblad, 2020). In addition, the jurors have noticed that there is still room for improvement when it comes to the risk paragraph published by companies (Dagblad, 2020). The listed companies list the risks, but readers do not benefit much from this (Dagblad, 2020). As a point for improvement, the jury members indicate to the companies should pay more attention to risks that are really important (Dagblad, 2020). Although the quality of the reporting on average has been improved on many points, the jury notes that the transparency of companies is declining (Dagblad, 2020). This is the case with the multi-year overview, where readers can only request presentations from the past year and view one or two years before (Dagblad, 2020). The jury members of FD Henri Sijthoff have nominated the following companies for the AEX funds category: Adyen, ASR Nederland and Shell (Dagblad, 2020). The winner in the category or AEX ultimately went to the company Shell (Dagblad, 2020). The jury members took into account the following criteria during the assessment: clarity, finances, strategy and risks, and society (Dagblad, 2020).

7.5.2 Comprehensive Corporate Reporting

Another important observation that we found during the research is the statement of intent where five framework- and standard-setting institutions CDP, CDSB, GRI, IIRC and SABS want to show their commitment to work towards a comprehensive corporate reporting system (Impact Management Project, 2020). The report of Impact Management Project (2020) states that the goal of this collaboration is to provide three aspects: joint market guidance, a joint vision and a joint commitment. Impact Management Project (2020) state that this corporate reporting system is urgently for several reasons: direct capital to sustainable enterprise, ensure resilient and efficient markets, address the global challenges of inequality, loss of biodiversity and climate change.

Chapter 8 – Conclusion

In this chapter, we provide answers to our main research questions, discuss the contributions that this research has made, provide recommendations on organizational level and close off with future work.

8.1 Answers to the research questions

S1. How can the readability of an integrated report be measured?

Based on the evidence that has been collected in this study, in the context of readability in integrated reporting, the readability formulas of Flesch Reading Ease, Flesch-Kincaid and Gunning Fog does not provide support when it comes to predicting the ranking of integrated reports in EY Ranking and Transparency benchmark, and the assessment of an expert. We come to this conclusion because three different correlation matrixes have been used in order to determine whether complexity is still being rewarded, where no correlation has been found between the awards and the readability formulas. Hence based on these correlations, we have not been able to collect evidence in order to decide whether these formula measures can be used. Normally, the readability scores are arrived at from readability tools that can be deployed online, offline or manually calculated. While the readability scores are relatively easy to calculate, it is important to note that the readability formulas do not consider visual elements when arriving at readability scores. Due to these findings, we made use of qualitative research in order to determine new criteria to measure the readability of an integrated report. The findings of this study show that readability is based on subjectivity and this makes it difficult for auditors to provide an objective assessment of the report narratives. As a result, accountants can only provide recommendations in terms of the readability of an integrated report. Furthermore, the findings show that most of the elements that are found in this study are correlated with the quality characteristics of technical written material. These elements are conciseness, concreteness, degree of completeness, consistency, clarity, retrievability and visual effectiveness. Furthermore, these are also the elements to which accountants pay attention when they assess the integrated report. In conclusion, instead of using readability formulas this study shows that these elements are used in practice and therefore are a better criterion for assessing the readability of an integrated report. Nevertheless, these criteria can only be assessed on a subjective level because no metrics do exist.

S2. What criteria do accountancy practitioners apply to evaluate the quality of integrated reports?

The findings of this study show that the most common criteria that accountancy practitioners apply in Netherlands is GRI, because it provides organizations detailed information about how to report sustainability information to the outside world and also contains concrete information regarding KPI's. Although other frameworks and standards exist, accountancy practitioners indicate that GRI can be considered as the starting point of reporting, because it looks at the materiality of an organization and makes organizations aware of the most important topics for stakeholders. Furthermore, accountancy companies provide training courses on a regular basis in order to stay informed about the current developments of GRI. Additionally, the aspect of balance is the main pillar of the sustainability standard, which is one of the most important elements that accountancy practitioners assess, and organizations need to comply with these requirements. Despite this, we have found during our investigation that one large banking firm uses the IIRC guiding principles in order to create an integrated report and subsequently request assurance from accountancy firm. The reason for this, is that they believe that the current standards do not align well with integrated reporting. When assurance practitioners evaluate the integrated reporting based on the guiding principles of the <IR> Framework, a dialogue is started on how an organization complies with the principles. Although the companies will not perform better in terms of performance, a better annual report will be created which increases the readability for stakeholders. The contradictions that have emerged during the research, is that auditors of organization A do not consider this as a suitable way to review an integrated report, while organizations B and C indicate that requesting <IR> assurance is possible if additional standards are used to fill the gaps. In conclusion, GRI is the most popular standard for evaluating the quality of an integrated report. However, IIRC is still in development and can potentially provide a better readability when this is being used together with other standards.

S3. What are the structure and elements that are commonly found in good integrated reports?

Organizations who structure their reports in an integrated way distinguishes itself by providing an overview of the connection between the different capitals. This overview provides investors the value creation process of an organization, which is also displayed in the business model. Additionally, the study has shown that the following elements can be used in order to create a good integrated report: proper integration of financial and non-financial information, value creation model, materiality analysis, stakeholder analysis and connection of current and future results. When organizations present their integrated report in a structured and readable way, investors will benefit from a good impression. The reason for this, is that organizations show to what extent they are prepared in the context of risks and this differentiates the use of an integrated report.

S4. What are the effects of providing assurance based on the <IR> Framework?

This study shows that when an organization request assurance based on the <IR> Framework, the conversation with the assurance provider focuses on the compliance of the principles of integrated reporting, which is found to be very educational for an organization. The reason for this is that different questions are being asked which results in the organization to be very critical about their own integrated report. When an organization decides to apply the <IR> Framework, this can be seen as an iterative process in which organizations continuously learn by repeating the process and learning from the obstacles that have occurred the previous time. Although this does not necessarily mean that the company performances better, it yields benefits for the stakeholders who will receive a technical better integrated report with the advantage of increasing readability for the target group. However, since the <IR> Framework is holistic in nature, this means that organizations need to fill certain gaps by making use of other foundations, such as GRI. The reason for this is that the framework does not provide any details about how to report and how to measure certain elements of the integrated reports. Therefore, as an accountancy firm it is important to determine whether the value creating capacity of an organization is reflected in the decision making and whether an organization has done this in a balanced manner. In conclusion, the effects of <IR> Framework is that its process is very educational for organizations. Also, it increases the readability for stakeholders and provides an overview of the value creation capacity of a company.

8.2 Contributions

Throughout this thesis we made a number of contributions.

- To the best of our knowledge, we have for the very first time made use of qualitative research techniques in the area of readability of integrated reporting. These interviews have been used to determine the role of readability within integrated reporting and how the quality of integrated reports is being assessed.
- An interview took place with a large banking firm because of the reason that they not only prepare their report according to the <IR> Framework guidelines, but also request assurance based on this foundation.
- Participant of the large banking firm is member of the Integrated Thinking & Strategy Special Interest Group, which can lead to providing new insights in terms of the scientific literature.
- Another interview has been conducted with a large accounting firm that provides assurance based on the <IR> Framework.
- We have expanded the dataset of JSE in this study in terms of readability scores of the JSE between the year 2017 to 2019.
- Another contribution we have made is creating a new dataset in terms of readability of integrated reporting for the AEX stock exchange in the Netherlands from 2016 to 2019.

8.3 Recommendations

As a first recommendation, we suggest organizations to explore the CORE and MORE approach, as it allows companies to distinguish between a core report and other underlying reports. The core report can refer to underlying reports, which can be used to gain more detailed information for stakeholders. Other reason why the CORE and MORE is beneficial to organizations, is that it provides organizations principles to write for a specific group. Therefore, organizations can meet the expectations of stakeholders in terms of their demands and wishes. However, organizations need to take into account that this approach requires organizations to monitor the information that is displayed in the different reports and requires more work which leads to additional expenses. The second recommendation is the use of technical resources for the purpose of analyzing readability within integrated report. Besides using technology for comparison integrated reports in the stock exchange, it can also be used to make recommendations on readability that needs further investigation. The interview show that this readability function will most likely be implemented in the Sesame tool.

8.4 Future work

To conclude this thesis, we would like to make a number of recommendations that can be used as additional future work:

- The following criterion: conciseness, concreteness, degree of completeness, consistency, clarity, retrievability and visual effectiveness, are currently measured on a subjective level, hence these criteria need to be converted to metrics in order to provide an objective measurement of readability.
- Based on the insights gained in this study, a Quality / Evaluation Model can be created that can support the audit department in assessing the integrated reports of their existing or new clients. The model can have several features, such as scoring the integrated reports based on the complexity and this can result in a score range from 0 to 100. In addition, other elements can be added such as the economic benefits in terms of market evaluation and liquidity.
- In response to my first sub-question, researcher can make use of the existing data set in this study as a baseline and can perform additional analyses to find other potential readability measures which can be used to determine complexity of an integrated report in conjunction with the assessment of an expert. Furthermore, the influence of visual communication can be analysed.
- At this moment there is only one organization that makes use of the principles of <IR> Framework in order to prepare an integrated report. Therefore, additional research can be performed once there are more organizations who make use of this convention to see whether our findings still hold.
- In the field of qualitative research, more interviews can be conducted in the future with auditors or individuals working in the sustainability department within other big four companies. This can be useful to see if other big four companies differ in terms of their perception or have another approach for assessing integrated reports. In addition, interviews can be held with female auditors to see whether they have the same perspective regarding readability of an integrated report.

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Appendix 1 – Literature review

Appendix 1.1 Quality Characteristics and definitions of technical material

Easy to use
1. Task orientation: "A focus on helping users do tasks that are associated with a product or tool in relation to their jobs". 2. Accuracy: "Freedom from mistake or error; adherence to fact or truth". 3. Completeness: "The inclusion of all necessary parts – and only those parts".
Easy to understand
1. Clarity: "Freedom from ambiguity or obscurity; the presentation of information in such a way that users understand it the first time". 2. Concreteness: "The inclusion of appropriate examples, scenarios, similes, analogies, specific language, and graphics." 3. Style: "Correctness and appropriateness of writing conventions and of words and phrases".
Easy to find
1. Organization: "A coherent arrangement of parts that makes sense to the user". 2. Retrievability: "The presentation of information in a way that enables users to find specific items quickly and easily". 3. Visual effectiveness: "Attractiveness and enhanced meaning of information through the use of layout, illustrations, color, typography, icons, and other graphical devices".

Table 27 Quality characteristics and definitions of technical material, Source: Hargis et al. (2004)

Appendix 1.2 Definitions of other possible quality characteristics of technical information

Characteristic	Definition
Conciseness	Brevity, succinctness; saying a lot in a few words
Consistency	Using the same elements or content where appropriate; agreement or logical coherence among parts.
Preciseness	Clear expression; correctness to a fine degree.
Readability	Ease of reading words and sentences.
Relevance	Appropriateness to a subject.
Simplicity	Freedom from complexity.

Table 28 Other possible quality characteristics of technical information, Source: (Hargis et al., 2004)

Appendix 2 – Data Analysis

Appendix 2.1 – South Africa – JSE stock exchange readability scores period 2017 – 2019

		2017								
		Flesch Reading Ease			Flesch Kincaid			Gunning Fog Index		
Industry	n	Mean	Std. D	Variance	Mean	Std. D	Variance	Mean	Std. D	Variance
Basic Materials	39	39,84	3,36	11,27	9,78	0,55	0,31	11,32	0,89	0,80
Consumer Goods	17	39,08	2,25	5,06	10,07	0,39	0,15	11,84	0,72	0,52
Consumer Services	37	40,21	2,86	8,17	9,75	0,42	0,18	11,56	0,74	0,55
Financials	96	39,59	3,67	13,47	9,85	0,67	0,44	11,43	0,91	0,83
Health Care	8	35,67	2,75	7,58	10,33	0,37	0,13	11,75	0,54	0,29
Industrials	54	38,04	4,52	20,41	10,04	0,66	0,43	11,72	1,06	1,12
Oil & Gas	5	38,07	1,63	2,66	9,94	0,22	0,05	11,36	0,23	0,05
Technology	12	37,69	2,87	8,24	10,12	0,47	0,22	11,70	0,37	0,13
Telecommunications	6	39,22	2,36	5,55	10,05	0,76	0,58	12,12	0,80	0,64
Utilities	2	38,23	0,06	0,00	10,62	0,14	0,02	12,46	0,47	0,22
Totaal	**276**	**39,13**	**1,00**	**1,00**	**9,91**	**0,15**	**0,02**	**11,56**	**0,20**	**0,04**

Table 29 JSE-listed companies readability scores 2017

		2018								
		Flesch Reading Ease			Flesch Kincaid			Gunning Fog Index		
Industry	n	Mean	Std. D	Variance	Mean	Std. D	Variance	Mean	Std. D	Variance
Basic Materials	39	39,02	3,23	10,41	9,85	0,60	0,36	11,36	1,04	1,08
Consumer Goods	19	38,10	3,55	12,63	10,17	0,65	0,42	12,01	0,91	0,83
Consumer Services	37	40,70	6,29	39,55	9,66	1,12	1,25	11,39	1,43	2,06
Financials	102	39,65	6,39	40,80	9,82	1,11	1,23	11,40	1,33	1,78
Health Care	9	35,83	3,23	10,46	10,31	0,45	0,20	11,79	0,48	0,23
Industrials	52	38,52	3,41	11,60	9,98	0,61	0,38	11,75	0,98	0,97
Oil & Gas	6	38,85	3,69	13,61	9,82	0,53	0,28	11,17	0,71	0,50
Technology	14	37,03	2,70	7,28	10,24	0,47	0,23	11,75	0,53	0,29
Telecommunications	6	37,53	2,29	5,25	10,26	0,73	0,53	12,08	1,00	1,00
Utilities	2	39,57	0,78	0,62	10,09	0,28	0,08	11,47	1,36	1,84
Totaal	**286**	**39,08**	**1.08**	**1.17**	**9,90**	**0,17**	**0,03**	**11,54**	**0.22**	**0.05**

Table 30 JSE-listed companies readability scores 2018

		2019								
		Flesch Reading Ease			Flesch Kincaid			Gunning Fog Index		
Industry	n	Mean	Std. D	Variance	Mean	Std. D	Variance	Mean	Std. D	Variance
Basic Materials	37	38,77	3,15	9,90	9,87	0,54	0,30	11,41	0,85	0,72
Consumer Goods	19	38,85	2,29	5,24	10,06	0,38	0,15	12,01	0,66	0,44
Consumer Services	35	41,24	7,47	55,82	9,56	1,36	1,86	11,36	1,67	2,78
Financials	99	39,28	5,87	34,49	9,84	1,01	1,02	11,41	1,27	1,60
Health Care	9	35,15	3,07	9,42	10,33	0,33	0,11	11,82	0,71	0,50
Industrials	48	39,43	7,79	60,73	9,85	1,30	1,70	11,62	1,54	2,38
Oil & Gas	6	38,48	3,14	9,88	9,94	0,38	0,15	11,35	0,53	0,28
Technology	14	36,26	2,87	8,25	10,31	0,45	0,20	11,89	0,82	0,67
Telecommunications	6	38,05	2,22	4,94	10,13	0,69	0,47	12,02	0,90	0,81
Utilities	2	41,44	4,71	22,18	9,48	1,40	1,96	11,55	1,56	2,44
Totaal	**275**	**39,14**	**1,28**	**1,63**	**9,87**	**0,19**	**0,04**	**11,53**	**0,21**	**0,04**

Table 31 JSE-listed companies readability scores 2019

Appendix 2.2 – Netherlands - AEX stock exchange period 2016 – 2019

		2016								
		Flesch Reading Ease			Flesch Kincaid			Gunning Fog Index		
Industry	n	Mean	Std. D	Variance	Mean	Std. D	Variance	Mean	Std. D	Variance
Basic materials	1	41,10	-	-	10,80	-	-	12,40	-	-
Chemistry	2	37,70	1.41	2	10,2	0	0	11,85	0,21	0,05
Retail & wholesale	0	-	-	-	-	-	-	-	-	-
Financial serviceproviders	3	39,87	2,56	6,54	10,0	0,42	0,17	11,73	0,64	0,41
Healthcare	1	35,9	-	-	10,7	-	-	12,3	-	-
Technology	1	37,7	-	-	10,0	-	-	11,9	-	-
Telecommunications	1	41,6	-	-	9,7	-	-	11,8	-	-
Total	**9**	**39,03**	**1,87**	**3,51**	**10,18**	**0,36**	**0,13**	**11,92**	**0,25**	**0,06**

Table 32 AEX-listed companies readability scores period 2016

		2017								
		Flesch Reading Ease			Flesch Kincaid			Gunning Fog Index		
Industry	n	Mean	Std. D	Variance	Mean	Std. D	Variance	Mean	Std. D	Variance
Basic materials	1	42,20	-	-	10,30	-	-	12,20	-	-
Chemistry	2	37,3	1,70	2,88	10,25	0,07	0,01	11,8	0,57	0,32
Retail & wholesale	0	-	-	-	-	-	-	-	-	-
Financial serviceproviders	3	40,26	2,23	4,96	9,87	0,31	0,09	11,8	0,36	0,13
Healthcare	1	35,7	-	-	10,7	-	-	12,4	-	-
Technology	2	38,85	1,63	2,64	10,25	0,21	0,00	12,5	0,00	0,00
Telecommunications	1	42,6	-	-	9,6	-	-	11,6	-	-
Total	**10**	**39,36**	**2,20**	**4,82**	**10,12**	**0,32**	**0,10**	**12,02**	**0,34**	**0,12**

Table 33 AEX-listed companies readability scores 2017

		2018								
		Flesch Reading Ease			Flesch Kincaid			Gunning Fog Index		
Industry	n	Mean	Std. D	Variance	Mean	Std. D	Variance	Mean	Std. D	Variance
Basic materials	1	40,80	-	-	9,90	-	-	11,60	-	-
Chemistry	2	37,6	0,57	0,32	10,25	0,21	0,05	11,9	0,28	0,08
Retail & wholesale	0	-	-	-	-	-	-	-	-	-
Financial serviceproviders	4	40,18	4,40	19,40	10,03	0,83	0,69	12	0,95	0,9
Healthcare	0	-	-	-	-	-	-	-	-	-
Technology	2	39,6	1,70	2,88	10,05	0,92	0,84	12,15	0,64	0,41
Telecommunications	1	40,3	-	-	9,7	-	-	11,4	-	-
Total	**10**	**39,62**	**1,12**	**1,25**	**10,03**	**0,16**	**0,03**	**11,91**	**0,24**	**0,06**

Table 34 AEX-listed companies readability scores 2018

		2019								
		Flesch Reading Ease			Flesch Kincaid			Gunning Fog Index		
Industry	n	Mean	Std. D	Variance	Mean	Std. D	Variance	Mean	Std. D	Variance
Basic materials	1	38,60	-	-	10,50	-	-	12,20	-	-
Chemistry	2	37,5	0,42	0,18	10,35	0,35	0,13	12,05	0,35	0,13
Retail & wholesale	1	38,60	-	-	10,50	-	-	12,20	-	-
Financial serviceproviders	3	40,07	4,41	19,44	10,17	1,00	1,00	12,17	1,21	1,46
Healthcare	1	34,6	-	-	11	-	-	12,9	-	-
Technology	2	40,2	2,83	8,00	10,25	1,20	1,45	12,45	1,20	1,45
Telecommunications	1	41,4	-	-	9,6	-	-	11,3	-	-
Total	**11**	**38,98**	**1,90**	**3,63**	**10,30**	**0,33**	**0,11**	**12,19**	**0,38**	**0,15**

Table 35 AEX-listed companies readability scores 2019

Appendix 3 - Interview questionnaires

Appendix 3.1 - Large assurance firm 1

Introduction

1. Asking for permission to record to interview. This call recording will only be used to listen to the interview and analyze what has been told for research purposes. Furthermore, the data will be stored and processed anonymously and will not be traceable to the interviewee and client.
2. Round of introduction
3. Function
4. Gender:
5. Industry/sector:
6. Purpose of the interview:
7. Background information regarding the research

Interview questions

1. When did you start with your current position and what activities do you perform?
    a. At which clients do you currently perform the audit activities with regard to Integrated Reporting?
    b. What is your experience in Integrated Reporting?
    c. What distinguishes an Integrated Report in comparison to already established corporate reporting, such as the annual reporting?
    d. Which aspects does the audit department assess when it comes to an Integrated Report? (examples are connectivity of information, correctness, completeness etc.)
        i. What are the most important elements?
        ii. How can you determine that the information contained in the Integrated Report is actually reliable and correct?
    e. Which Integrated Reports are considered by you as a well-integrated report?
        i. Could you explain to me what the reason is?
        ii. How important is readability considered at a well-integrated report?
        iii. What distinguishes a report in comparison to other Integrated Reports that are evaluated as less integrated?
        iv. Is there a difference in size when it comes to reports that are evaluated as well-integrated or less integrated?
        v. What are the structure and elements that are commonly used in well-integrated reports?
        vi. Which parts should receive more attention when it comes to integrated reports?
        vii. Is there a particular sequence that is desirable and potentially could increase the readability?
    f. How can readability of Integrated Reports be measured?
        i. What makes an Integrated Report readable?
        ii. What do you consider as readability?
        iii. Which variables/criteria can be influenced when it comes to increasing the readability of an Integrated Report?
        iv. How important is readability versus other criteria? (for example, correctness, completeness)
        v. To what extend does jargon influence readability in report narratives?
        vi. To what extend should the content of integrated reports be written in a formal or non-formal way?
    g. For which audience do customers prepare their Integrated Reports?
        i. To what extend do content writers take into account that the report narratives are tailored to the target audience?

ii. Which criteria or best practices does the large assurance firm use to support this?
iii. How are these criteria assessed?
iv. How accessible should an Integrated Report be? As an example, you could think of people who are color blind or people who are in a possession of a small screen.

2. The integrated report is currently being prepared by the customer. Can you explain to me what the process is that the customer has to go through?
    a. During this process, does the large assurance firm provide any support for the preparation of the integrated report?
    b. How are the texts of an Integrated Report written?
        i. Who writes these report narratives?
        ii. Are they edited by several people?
        iii. Does the large assurance firm offer quality criteria when writing the texts for an Integrated Report?
        iv. If this is not the case, is the customer responsible for this matter?
    c. How is the balance determined between textual information and visual information?
        i. Does determining the balance also affect the structure / navigation of an Integrated Report?
        ii. To what extent is the balance of textual and visual information taken into account when assessing an Integrated Report?
    d. What role does technology play when it comes to Integrated Reporting?
        i. What types of technology can be used to support an Integrated Report?
    e. One of the activities of an auditor is to prepare audit reports with findings, assessments and proposals for improvement. Does this also apply to an Integrated Report?
    f. Which ICT systems do you currently use for documenting, checking and testing the Integrated Report?
        i. Are there aspects in the IT system that can be improved in order to better serve the customer?
            a) If so, what are they?
            b) If not, how do you see this in the future?
    g. As an auditor you are primarily focused on the controls and assessment of standards. Does the large assurance firm currently use the IIRC (international Integrated Reporting Council) corporate reporting norm?
        i. If this is the case, which standard is the most important one?
        ii. If this is not the case, which standard do you currently use and what is the reason for choosing this standard?
        iii. What are the applicable guidelines that you use when making an assessment of the Integrated Report?
        iv. How does the large assurance firm maintain knowledge with regards to internal and external regulations?
        v. How does the large assurance firm keep up with the current developments in the field of assurance?
        vi. As a company, how do you ensure that the customer complies with the guidelines that has been prescribed?
        vii. How is the improvement of actions assessed on the basis of the previously performed audits?
        viii. Are there problems that you encounter as an auditor when you are monitoring and assessing an Integrated Report?
        ix. How effective are the Integrated Reports created by the customers?
            a) What kind of improvements could they apply in order to improve the quality of the Integrated Report?
            b) How important is readability when it comes to Integrated Reporting?

Ending

- After completing this interview, do you still feel that I have missed certain information?
- Do you have relevant information that has not been included in these interview questions?
- What did you think of this interview?

Appendix 3.2 - The Large Banking Firm

Introduction

1. Asking for permission to record to interview. This call recording will only be used to listen to the interview and analyze what has been told for research purposes. Furthermore, the data will be stored and processed anonymously and will not be traceable to the interviewee and client.
2. Round of introduction
3. Function
4. Gender
5. Industry/sector
6. Purpose of the interview
7. Background information regarding the research

Interview questions

1. The banking firm started with publishing the first integrated report in 2015. What was the reason for the firm to choose for the framework of IIRC?
    a. Does the banking firm use other frameworks or standards besides the IR framework?
    b. What are the aspects that the banking firm pays attention to when drawing up an integrated report? (think about connectivity of information, correctness and integrality)
    c. What do you think should be improved in Integrated Reporting?
    d. As an organization, have you run into any issues regarding Integrated reporting?
    e. What distinguishes an Integrated Report from existing reports such as annual reporting?
    f. How important is readability within banking firm?
        i. What do you understand by readability?
        ii. How does the banking firm ensure that the information contained in an integrated report is readable for all stakeholders?
        iii. Which structure and elements does the banking firm use to draw up an integrated report?
        iv. How is the balance determined between textual information and visual information?
        v. Which variables / criteria do you apply when it comes to increasing the readability of an integrated report?
        vi. Does the banking firm pay attention to the degree of passive words, jargon, etc. when drawing up an integrated report?
        vii. When drafting the integrated report, who is responsible for writing the texts?
            1. How does the banking firm ensure that the texts that are written also match the target group (stakeholders)?
            2. What does the banking firm pay attention to when it comes to the accessibility of an Integrated report? (think of giving options to view certain chapters, watching integrated report on mobile devices or being color blind)?
        viii. How is the technology within the banking firm used to establish / foster Integrated Reporting?
            1. What types of technology can be used to support an integrated report?
            2. Which ICT systems do you currently use to prepare an integrated report?

3. Are there aspects or technologies that can be improved in the current infrastructure / system to better serve the stakeholders?

ix. The IIRC website describes that receiving assurance based on the IR framework has made a major contribution to understanding the core elements of integrated reporting and improving the quality of the integrated annual review. What are these core elements of an integrated report?
    1. What steps did the banking firm have to take to perform the assurance based on the IR framework?
    2. What is the reason for the banking firm to perform the assurance based on the IR framework?
    3. Has performing assurance based on the IR framework also yielded benefits that are perceived by the stakeholders of the banking firm?

2. Based on the IIRC website, you can read that you are currently co-chair of the International Integrated Reporting Council, where you are a member of a special interest group with a clear focus on "Integrated Thinking and Strategy".
    a. What important insights have you come to since joining this group?
    b. There is talk about world leaders in the area of integrated thinking. Which organization or individuals are characterized by the IIRC as world leaders and why?
    c. The group is working on a shared understanding of integrated thinking that is globally relevant for building organizations that are future-fit. Can you describe this shared understanding for me?

Appendix 3.3 – Sesame Tool

Introduction

1. Requesting for permission to record the interview. The call recording will only be used to listen to and analyze the interview. Furthermore, the results will be processed anonymously and cannot be traced to the person.
2. Round of introduction
3. Function
4. Age
5. Industry/sector
6. Purpose of the interview

Interview questions

1. What is the reason and purpose for developing the Sentiment Analysis (Sesame Tool)?
    - Are there any other purposes for the Sentiment Analysis besides the audit activities?
    - Is the Sentiment Analysis only used for traditional reporting or also Integrated Reporting?
    - Is the balance of textual information and visual information included in the analysis?
2. What are the problems that you currently face in terms of using the Sentiment Tool?
    - What can be improved?
3. What are the variables that can be used to gain deeper insight into the corporate reporting?
4. When does the Sentiment Analysis tell you whether the analyzed text has a negative or positive sentiment?
    - What aspects of corporate reporting does the tool assess to get either a positive or negative sentiment?
5. How does it work in terms of user interface?
    - What are the steps that the user needs to follow in order to get a positive or negative sentiment?
6. Is there currently a way to measure the readability of a corporate report?
7. The sentiment analysis makes use of cognitive analytics, which can be used for tasks, such as understanding not only the words in a text, but the full context of what is being written or spoken or recognizing objects in an image within large amounts of information. Could this also be used to enhance the readability of corporate reporting?
8. What kind of tools are there available for the advisory and audit department in terms of corporate reporting?
    - Are there currently other developments in terms of technology in the planning stages to enhance analysis of corporate reporting?
9. What does the audit department do once they get a result which is unbalanced in terms of the sentiment analysis?

Appendix 3.4 – Large assurance firm 2

Introduction

1. Requesting for permission to record the interview. The call recording will only be used to listen to and analyze the interview. Furthermore, the results will be processed anonymously and cannot be traced to the person.
2. Round of introduction
3. Function
4. Age
5. Industry/sector
6. Purpose of the interview

Interview questions

1. The large banking firm made a first attempt in 2015 to produce an integrated report. Was this also the year for the assurance firm to deliver Assurance based on the <IR> Framework?
    a. If not, when did the large assurance firm start with providing <IR> Assurance and what was the reason for this?
    b. Are there currently, besides the banking firm, other customers who request assurance based on the <IR> Framework?
    c. What challenges encountered the large assurance firm in providing assurance on the basis of the <IR> Framework?
    d. What important insights has the large assurance firm discovered when providing <IR> Assurance?
    e. Which points of improvement could be implemented in your opinion (both from the customer perspective and the assurance provider)?
    f. What kind of feedback did you receive when granting <IR> Assurance?
    g. Has the large assurance firm noticed a difference among customers who currently do not yet apply assurance based on the <IR> Framework compared to an organization such as the large banking firm?
    h. What distinguishes an integrated report that is prepared on the basis of the <IR> Framework principles compared to other standards such as GRI?
2. Based on the interview which has been conducted with the large banking firm, the participant indicated that other questions are asked once an organization requests assurance based on the <IR> Framework. What kind of questions have been asked and how do they differ from other standards?
3. At which organizations does the large assurance firm currently perform the audit work activities related to integrated reporting?
    a. Does the large assurance firm notice a difference in the degree to which a report is integrated?
    b. Are there customers that the large assurance firm serves who are currently not preparing an integrated report and would like to make the transition to the <IR> Framework and thus also request assurance?
        - If so, what is keeping the customers for making that transition?
        - If not, what is the reason for this?
    c. Does the large assurance firm notice a difference when organizations prepare their report based on the <IR> Framework and has requested assurance on it?
        - Which Integrated Reports are assessed by the large assurance firm audit department as a well-integrated report?
4. Wat is your experience in integrated reporting?
    a. To what extent does Integrated Reporting add value for investors (reliability of information, degree of relevance, comprehensibility of integrated reports and comparability of integrated reports)?
    b. To what extent is readability taking into account when determining whether a report is properly integrated?
    c. What are the most important aspects when reviewing an integrated report?

5. What do you understand by readability definition?
    a. How can the readability of an integrated report be measured?
    b. What makes an integrated report readable?
    c. Does the large assurance firm also include the balance of an integrated report when providing assurance?
    d. How harmful is the use of jargon when creating an integrated report?
    e. How important is readability versus other criteria?
    f. Which variables/criteria can be influenced when it comes to increasing the readability of an integrated report?
    g. How is the balance determined between textual information and visual information?
    h. To what extend is the balance of textual and visual information taking into account when assessing an integrated report?
    i. How important is readability considered in an integrated report compared to other criteria, such as logical structure, conciseness and balance?
    j. How accessible should an Integrated Report be? Think of people who are, for example, color blind or people who have a small screen.
6. What structure or elements does the large assurance firm recommend for creating a well-integrated report?
    a. What criteria or best practices does the large assurance firm use to support the client in preparing an integrated report?
    b. Does the large assurance firm offer quality criteria when writing the texts for an integrated report?
7. What role does technology play when it comes to integrated reporting?
    a. To what extent does the large assurance firm use technology when providing assurance?
    b. What types of technology can be used to support an integrated report?
    c. How does the large assurance firm ensure that the audit department is aware of current developments in the field of integrated reporting?

Ending

a) After completing this interview, do you still feel that I have missed certain information?
b) Do you have relevant information that has not been included in these interview questions?
c) What did you think of this interview?