

## **Integrated Reporting and Strategic Decision-Making**

Investigating how integrated reporting influences managers'  
integrated thinking in strategic decision-making

YEVGENIYA LOOIJ  
NELLY GATETE

**SUPERVISOR**  
Andreas Erich Wald

**University of Agder, 2023**  
Faculty of Business and Law  
Department of Economics

## **Abstract**

Senior executives are faced with more difficult strategic choices as a result of complex, dynamic markets, increased climate risk, and a shift in investor focus toward sustainability issues. The idea of "business as usual" is no longer appropriate, and businesses now need to consider a variety of factors when making decisions. The purpose of this thesis is to examine how managers' strategic decision-making can be aided by integrated reporting and, more importantly, integrated thinking. The existing literature regarding integrated reporting and its impact on strategic decision-making is carefully evaluated in order to identify areas where more research is needed. Ultimately, a framework is suggested that can connect integrated reporting and strategic decision-making by means of the idea of integrated thinking. A group of 9 senior executives from various industries and countries were interviewed to gather their opinions on the value of integrated reporting and the elements that are crucial for top managers to consider when making strategic decisions. As well as how integrated information affects their integrated thinking during strategic decision-making. The resulting data was analyzed using the twin-slate approach in grounded theory. The study has found that integrated reporting promotes integrated thinking, and that integrated thinking is also influenced by a number of other factors. Additionally, top executives that engage in integrated thinking take a more comprehensive approach to making strategic decisions.

*Keywords: Integrated Reporting, Integrated Thinking, Strategic Decision-Making*

## Preface

This master's thesis is the culmination of our studies at the University of Agder's School of Business and Law, where we focused on the field of Business Administration.

We would like to express our gratitude to several individuals who have played an instrumental role in helping us complete our thesis. Firstly, we would like to acknowledge our supervisor, professor Andreas Erich Wald, whose expertise and guidance were invaluable throughout the writing process, assisting us through the ups and downs of the project. Additionally, we would also like to extend our thanks to all of the respondents who generously provided us with the information necessary to complete our thesis. Their contributions were highly valued, and we are grateful for the time and effort they put into our study. We are also grateful to all the lecturers we have had at the University of Agder, whose collective knowledge and insight have laid the foundation that made this paper possible. The competence we have gained from the University of Agder is greatly appreciated. Finally, we would like to thank our family and friends for their unwavering support and encouragement during our final semester. They motivated and cheered us on, which helped us get through the challenges we faced.

Kristiansand, Norway, 30.05.2023

A handwritten signature in black ink, appearing to read 'e.b. Looij', written in a cursive style.

---

Yevgeniya Looij

A handwritten signature in black ink, reading 'Nelly Gatete', written in a cursive style.

---

Nelly Gatete

# Table of Contents

1 INTRODUCTION .....	1
1.1 Topic and Research Question.....	1
1.2 Relevance, Purpose and Objectives of the Study .....	2
2 LITERATURE REVIEW .....	4
2.1 Historical Background for Integrated Reporting .....	4
2.1.1 Reporting of non-financial information.....	4
2.1.2 Reporting of sustainability information .....	5
2.1.3 The making of the integrated reporting framework .....	6
2.1.4 The adoption of the integrated reporting framework .....	7
2.2 The Integrated Reporting Framework.....	9
2.2.1 Fundamental concepts of IR.....	10
2.2.1.1 Value creation, preservation or erosion for the organization and others .....	10
2.2.1.2 Capitals.....	10
2.2.1.3 Process through which value is created, preserved, or eroded .....	11
2.2.2 Guiding principles .....	12
2.2.4 Integrated Thinking .....	14
2.3 Strategic Decision-Making.....	16
2.3.1 Strategic Decisions.....	16
2.3.2 IR's Influence on Strategic Decision-Making .....	17
2.3.3 Strategic Decision-making Process.....	20
2.3.4 The role of information in the strategic decision-making process .....	22
3 METHODOLOGY .....	23
3.1 Research Philosophy .....	23
3.2 Research Approach .....	24
3.3 Research Method .....	26
3.4 Data Collection .....	28
3.4.1 Selection process of the primary data.....	28
3.5 Data Analysis .....	34
3.5.1 Grounded theory approach.....	34
3.5.2 Research process .....	38
3.5.3 Research quality .....	40
4 RESULTS AND DISCUSSION .....	42
4.1 IR Framework and its Influence on Top managers' Integrated Thinking.....	44

4.2 The Influence of Integrated Thinking on the Strategic Decision-Making .....	48
4.2.1 Drivers of IT.....	48
4.2.2 Integrated thinking in strategic decision-making.....	51
4.3 Outcomes of Integrated Thinking on Strategic Decision-Making .....	57
4.4 Summary of Results and Discussions .....	60
5 CONCLUSION.....	65
5.1 Summary .....	65
5.2 Practical Contributions.....	67
5.3 Limitations and Suggestion for Future Research .....	68
6 REFERENCES .....	71
APPENDIX.....	83

## List of Figures

Figure 1: The value creation process (Integrated Reporting, 2021) .....	11
Figure 2: The strategic decision-making process (Mitzberg et al., 1976) .....	21
Figure 3: The abductive research process (Kovács & Spens, 2005).....	26
Figure 4: Twin slate approach of Grounded theory (Murphy et al., 2017).....	38
Figure 5: Coding process (Choi et al., 2018).....	39
Figure 6: Mind map of the research (developed by authors) .....	42
Figure 7: The influencing factors of top managers' Integrated Thinking in the SDMP .....	61

## List of tables

Table 1: Guiding principles (Integrated Reporting, 2021).....	14
Table 2: Overview of the respondents .....	32
Table 3: Summary of the topics and themes derived from the interview guide .....	43

## List of Abbreviations

ESG	Environmental, Social and Governance
IR	Integrated Reporting
IRF	Integrated Reporting Framework
KPI	Key Performance Index
IT	Integrated Thinking
SDs	Strategic Decisions
SDM	Strategic Decision-Making
SDMP	Strategic Decision-Making Process
TM	Top Manager

# 1 INTRODUCTION

## 1.1 Topic and Research Question

These days, businesses have to adjust to much more complicated and volatile environments. There is a rising awareness that the resources that feed organizations are finite, and that sustainability challenges are strongly tied to their long-term performance (IIA, 2022). In addition, climate change is altering company operations and providing both direct and indirect threats. Many investors now give extra weight to environmental, social, and governance (ESG) factors and climate change concerns because they expect these factors to play a major role in the development of wealth in the future (Warren, 2020). As a result, investors are demanding that companies reveal their practices for managing climate risk, such as the measures and targets they use and the extent to which climate change is accounted for in the business strategy (Warren, 2020). Because of this, more and more corporations are adopting the corporate reporting framework known as Integrated Reporting. In order to address the short-term profit focus that led to the 2008 financial crisis, the Integrated Reporting framework was created. The framework demands business to disclose how they utilize their resources to create, preserve and erode value over the short, medium and long term (Integrated Reporting, 2021). This is done, among other things, by outlining how a firm uses its resources and engages with the outside world, as well as presenting the impact of the firm's activities. By presenting a comprehensive view of the company's value creation story, the framework aims to enhance transparency and accountability with stakeholders, as well as assist investors in more effective capital allocation decisions (Integrated Reporting, n.d.a). Integrated reporting also seeks to improve business decision-making by encouraging integrated thinking, which is an understanding of the relationships and interdependencies between a company's resources, functions, operations, and external environment. Integrated thinking is believed to lead to integrated decision making and actions that consider the creation, preservation, and erosion of value over time (Integrated Reporting, 2021).

In our thesis, we are exploring whether integrated reporting stimulates integrated thinking and how this affects managers' strategic decision-making. Our interest in this subject stemmed from its potential to shed light on the transformative power of integrated reporting frameworks in

shaping top managers' thinking. We were drawn to this topic because it delves into a relatively unexplored area of research, and we were excited about the opportunity to contribute to both academic knowledge and practical insights. An in-depth examination of the vast amount of literature on the subject of integrated reporting and integrated thinking in strategic decision-making, it was concluded that there is no overarching or unifying theory that explains it (Velte & Stawinoga, 2017; Jayasiri et al., 2022). Regardless of important research carried out by Esch et al. (2018) who conducted an empirical analysis to investigate how the inclusion of sustainability indicators and a more advanced integrated reporting system affect the decision-making process of companies toward sustainable practices, the strategic significance of the IR framework and disclosures has not been given enough attention in the strategic management literature (Jayasiri et al., 2022). Furthermore, while there is increasingly more research on integrated thinking, there are few studies that have tried to investigate integrated thinking levels, processes, and drivers (Malfronte & Peleira, 2020). This has resulted in a gap in research on this particular area. There is also, to our knowledge, a lack of studies on the effects of integrated thinking on the strategic decision-making process of managers, despite the fact that studies have shown that integrated thinking promotes better decision-making (CGMA, 2016). After careful examination and reflection (Moolman et al., 2016; Malfronte & Peleira, 2020; Steyn, 2014; Feng et al., 2017; La Torre, 2019; Esch et al., 2019; Maroun et al., 2022), our research question is as follows:

*How does the implementation of an integrated reporting framework stimulate and influence top managers' integrated thinking in strategic decision-making?*

## **1.2 Relevance, Purpose and Objectives of the Study**

The potential benefits of integrated reporting in improving strategic decision-making make it a valuable area of research for both academics and practitioners. By advocating a more holistic and consolidated reporting system, integrated reporting can potentially enhance integrated thinking in strategic decision-making procedures and promote more sustainable and ethical business practices. In August 2022, the IR framework was consolidated with the IFRS foundation (IFRS, 2022). This was following the promise made at COP26 to combine staff and resources to support the international sustainability standards board's (ISSB) work to create a



global baseline of sustainability disclosures that focus on the needs of investors and the financial markets (IFRS, 2022).

Given that many researchers in the field of integrated reporting, as well as the IFRS foundation are motivated by a desire to see improvement and a worldwide extension of integrated reporting, as well as the development of integrated thinking that leads to integrated decision-making, there has been limited research on top managers' integrated thinking and the factors that influence and form this way of thinking in strategic decision-making. Responding to request for more research that involves reporting organizations (Citroen, 2011; Burke and Clark, 2016; Esch et al., 2019), this study sheds light on the drivers that form top management's integrated thinking in the strategic decision-making. Specifically, it considers how top managers see the importance of integrated thinking and what are the driving factors toward holistic strategic decision making.

This thesis aims to explore the relationship between integrated reporting, integrated thinking, and strategic decision-making, and to identify the potential benefits and challenges associated with adopting these approaches within organizations. By delving into this subject, our research aspires to unravel the mechanisms through which integrated reporting frameworks stimulate integrated thinking among top managers, thus shedding light on the interplay between integrated reporting and strategic decision-making. By examining this relationship, we aim to provide valuable insights into how organizations can effectively leverage integrated reporting to drive strategic change, align with sustainable practices, and navigate complex challenges. Based on the limitations of previous studies by the scale of one country (Steyn, 2014; Guthrie et al., 2017; Feng et al., 2017; Sibghatullah, 2018; Esch et al., 2019; Myeza et al., 2023), our research provides an international scope.

The current research is guided by the following objectives:

1. To comprehend top managers' perspectives on the implementation of integrated reporting and its impact on integrated thinking.
2. To discover the drivers that contribute to integrated thinking in strategic decision-making.
3. To assess the outcome of integrated thinking on strategic decision-making.

Overall, these objectives are designed to provide a better understanding of the relationship between integrated reporting, integrated thinking, and strategic decision-making, with a focus

on the main drivers of top managers' integrated thinking in the strategic decision-making process.

## **2 LITERATURE REVIEW**

### **2.1 Historical Background for Integrated Reporting**

Integrated reporting (IR) has become an increasingly popular approach to corporate reporting, as it seeks to provide a more comprehensive and holistic view of a company's performance. However, the roots of integrated reporting can be traced back to various corporate reporting initiatives that emerged in the 80s and 90s. These initiatives aimed to address the limitations of traditional financial reporting and provide a more comprehensive understanding of a company's value-creation potential. In this chapter, we will explore the history and evolution of integrated reporting, examining the various factors that have shaped its development, beginning with reporting of non-financial information.

#### **2.1.1 Reporting of non-financial information**

Reporting has long been a part of the life of a business (Baron, 2014). Reporting is how a business communicates its performance to stakeholders, primarily investors, and financial reporting can be traced as far back as the 15<sup>th</sup> century (Beaver, 2021). Non-financial reporting, on the other hand, dates back to the 19<sup>th</sup> century, with the disclosure of non-financial elements increasing over the last two decades as firms have come to realize their accountability for issues that are not financial (Baron, 2014). The primary cause of the rise in the popularity of non-financial information reporting has been attributed to the transition from a traditional economy to one based on knowledge and intangible resources (Simoni, 2021). Intangible resources are non-physical assets such as goodwill, brand recognition, patents, and trademarks. Financial statements did not sufficiently account for these intangible assets, despite the fact that they played a larger role in the generation of value for businesses, because accounting principles permitted only identifiable and quantifiable intangible assets to be represented (Simoni, 2021).

This resulted in a loss of informational power for the conventional financial statement. Aboody and Lev (2000) argued that the inadequate depiction of non-financial items caused information asymmetry which could result in abnormal earnings for knowledgeable investors.

The rising demand for corporate social responsibility is another factor in the growth of non-financial information in corporate reporting. The public requested greater transparency into how firms conduct themselves as well as increased accountability for the consequences of their activities (Baron, 2014). This came about because of scandals that had demonstrated how businesses could harm the environment and society, as well as intergovernmental cooperation initiatives like the Brundtland Commission in 1987 and the Rio de Janeiro Earth Summit in 1992, which placed a greater emphasis on the effects of human socio-economic activities on the environment (UN, n.d.).

### **2.1.2 Reporting of sustainability information**

The UN General Assembly established the World Commission on Environment and Development (WCED) in 1983 to develop a global agenda for change toward sustainable development in response to growing concerns about the degradation of the natural environment and human resources and the effects of that degradation on economic and social development (Banerjee et al., 2022). WCED, which later came to be known as the Brundtland Commission after Gro Harlem Brundtland, who was the commission's chair and the then-prime minister of Norway, made an effort to comprehend the relationship between social equity, economic growth, and environmental issues and to develop policy solutions that integrate all three aspects (Banerjee et al., 2022.). The committee issued Our Common Future Report in 1987, which introduced the concept of "sustainability development" (WCED, 1987). This concept was described as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED, 1987). Sustainable development was brought to the forefront by the commission and their publication of Our Common Future served as inspiration for a number of other collaborations, including the 1992 Rio Earth Summit, which acknowledged that in order for sustainability development to occur, we must reevaluate how we produce, consume, live, and work, as well as how we make decisions (UN, n.d.). The concept's development and growing popularity put pressure on businesses to acknowledge their impact on society beyond financial performance, and in the 1990s an increasing number of

companies began disclosing information on environmental and social matters that were affecting the company in their financial reports (Nishitani et al., 2021). Eventually, companies began to publish this information in a separate report, and in 2000 the Global Reporting Initiatives (GRI) released the first global framework for sustainability reporting. (Global reporting, n.d.) This framework would provide a common language for organizations to report their impacts (Global Reporting, n.d.).

The emergence of sustainability reports has several benefits for society, including motivating companies to take steps to lessen their negative impacts and improve their positive impact on the environment and society. For instance, numerous businesses have put in place programs to enhance worker health and safety and aid charitable endeavors because of this. The companies themselves have benefited from sustainability reports as well, as promoting their sustainable initiatives has a beneficial impact on how shareholders and other stakeholder groups, such as customers, view them. Furthermore, corporate social responsibility has been linked to better financial performance (Ioannou & Serafeim, 2010). Sustainability reports do, however, have its shortcomings such as: (1) A third party is not required to verify the reports. As a result, the information included in the reports may be misleading and can result in "greenwashing" (Pucker, 2021). (2) It is difficult to compare sustainability reports and the performance of one organization to another since there are so many different reporting frameworks, standards, and indicators (Pucker 2021). (3) Sustainability reports are often disconnected from financial reports. So, while sustainability reports offer insightful data about a company's environmental, social, and governance (ESG) performance, they frequently fail to make the connection between this performance and the company's financial performance (De Villiers et al., 2016). This makes it more difficult to establish the link between business operations and their impact on society.

### **2.1.3 The making of the integrated reporting framework**

In reaction to the global economic crisis in 2008, The International Integrated Reporting Council (IIRC) was founded in 2010 by GRI and the Prince of Wales accounting for the sustainability initiative (Integrated Reporting, n.d.a). The objective of the council was to create a reporting system that showcased the organization's capacity to generate value in the short, medium, and long term (Aicpa, n.d.). They believed doing so would counteract the short-

termism focus that had led to the financial crisis (Integrated Reporting, n.d.a). Unlike the traditional financial and sustainability reports, the integrated report would provide both financial and non-financial information and insight into the resources that a business uses, as well as how the firm interacts with the resources and the external environment to create, preserve, and erode value over the short, medium, and long term (Integrated Reporting, 2021). Combining financial and non-financial information would provide a comprehensive view of the company's value creation and its impact, thus resolving the shortcomings of sustainability reports who failed to demonstrate this link (De Villiers et al., 2014). The beginnings of IR can be traced back to GRI. Although GRI's primary focus was non-financial reporting, it prepared the path for the incorporation of ESG issues into corporate reporting standards, as well as the tone for disclosing information about an organization's efforts to balance its economic, social, and environmental goals (De Villiers et al., 2014). In 2013, the IIRC released the Integrated reporting framework (IRF) defining the guiding principles. A revised version was published in 2021 (integrated reporting, n.d.b.).

#### **2.1.4 The adoption of the integrated reporting framework**

Since the publication of the integrated reporting framework, over 2 500 firms worldwide have implemented it (Integrated Reporting, n.d.a.). Researchers have examined the motivations for adopting IR, which still remains a voluntary disclosure framework, and different management theories have been used to describe the motivations for adopting the framework. In this part, we will present how the stakeholder theory, legitimacy theory, and institutional theory explain the motives for adopting the framework.

##### **Stakeholder theory**

Stakeholder theory is a management theory that suggests that businesses should take into account the interests and welfare of all stakeholders, rather than solely focusing on shareholders. Stakeholders are “any group or individual who can affect or is affected by the achievement of a corporation's purpose” (Freeman, 1984, p. 46). This includes customers, suppliers, the community, the government, and so on. The theory thus highlights the significance of environmental, social, and governance aspects in business decision-making (Harrison et al., 2015). Stakeholder theory is divided into two branches: normative and

management (Fernati et al., 2019). According to normative stakeholder theory, an organization should serve all stakeholder interests, whereas management stakeholder theory states that organizations can be expected to "manage" their stakeholders to ensure the greatest outcomes for the business (Fernati et al., 2019). Integrated reporting is closely related to stakeholder theory in that the framework asserts that a firm's value creation is dependent on the relationship it forms with its external environment and that financial performance alone does not provide a complete picture of the value of a company. Thus, the framework encourages and engages businesses to consider and enhance their relationships with their stakeholders. Case studies on the adoption of IR also indicate that stakeholder engagement is a major driver for the adoption, which is compatible with the normative branch of stakeholder theory (Steyn 2014; Fernati et al., 2019).

## **Legitimacy theory**

According to the legitimacy theory, the organization conducts activities that comply with societal boundaries and standards (Deegan et al., 2002). As a result, in order to gain and maintain legitimacy, the organization strives to operate responsibly and sustainably. Legitimacy theory has been used to explain the motivations behind corporate social responsibility and sustainability reporting where stakeholders, especially investors' perception of the firm, have pushed this agenda. As previously mentioned, IR asserts that value creation depends on the relationship with the external environment, furthermore, as investors are voicing their wishes for companies to take on the IRF (ACCA, 2013), the implementation of integrated reporting can be motivated by an organization's effort to build legitimacy with stakeholders. While the earliest adopters of IR were not motivated by legitimacy reasons (Melloni & Stacchezzini, 2014), a newer study on Tokyo-listed companies revealed that the motivation to adopt the framework varied by industry. Mining and utility companies appeared to have legitimizing motivations, whereas companies in less environmentally harmful industries appeared to be motivated to shift to IR as a transparency and accountability tool to increase shareholder value (Nishtani et al., 2021).

## **Institutional theory**

According to the institutional theory of organizations, institutions are at the core of an organization's design and conduct and complying with institutionalized expectations is viewed as a means of gaining legitimacy, reducing uncertainty, and increasing the intelligibility of an organization's actions and activities (Berthod, 2018). The idea acknowledges that organizations do not operate in a vacuum and must deal with a variety of external forces such as cultural differences, legal constraints, and so on (Berthod, 2018.). Similarly, to the other theories, institutional constraints from external stakeholders such as investors, regulators, and non-governmental organizations might encourage corporations to embrace this framework in order to demonstrate their organization's commitment to sustainability and social responsibility. Encouraging regulatory progress toward integrated reporting has been made in countries such as Australia, New Zealand, and Japan (Pinto, 2022). In all three countries, Integrated reporting is becoming increasingly popular, with 79% of Australian firms listed on the ASX 200 using it (Integrated Reporting, 2020). In New Zealand, 21% of organizations are doing the same (KPMG, 2022), whereas in Japan, 88% of corporations listed on the Nikkei 225 and 70% on the JPX Nikkei 400 have adopted the framework as well (KPMG, 2020). While these countries' legislation may explain the adoption trend, motivation may also originate from other sources. For example, increasing transparency and trust with investors is more likely to be the primary motivation for publicly traded companies.

## **2.2 The Integrated Reporting Framework**

Integrated reporting is defined as “A process founded on integrated thinking that results in a periodic integrated report by an organization about value creation, preservation or erosion over time and related communications regarding aspects of value creation, preservation or erosion” (Integrated Reporting, 2021). The integrated reporting framework was developed in order to help businesses communicate their value creation story to stakeholders in a concise and connected manner through the issuing of an integrated report (Integrated Reporting, 2021). The framework is based on three key concepts: capitals, value creation for the organization and others, and the company's value production process (Integrated Reporting, 2021). The

framework furthermore presents guiding principles and content elements that companies should follow in the preparation of the report. In this section, we will present the key components of the IRF and how it can help organizations create long-term value.

## **2.2.1 Fundamental concepts of IR**

### **2.2.1.1 Value creation, preservation or erosion for the organization and others**

The meaning of "value" has shifted over the last two decades as organizations can no longer focus only on profit. As a result, the term "value" has come to include a wide range of factors, such as the company's reputation, customer relationships, employees, etc. IRF recognizes two categories of value: value created for the company and value created for others (Integrated Reporting, 2021). An organization's ability to produce, preserve, and erode value for itself is related to the value it creates, preserves, or erodes for others (Integrated Reporting, 2021). Interaction, activities, and relationships between the company and others, such as suppliers and customers, enable this. The IRF lifts these relationships so that firms can recognize the impact of their activities on others, as well as the impact others have on their ability to create value. The IRF states that the organization shall disclose in its report the interactions, relationships, and activities that affect the organization's ability to create value (Integrated Reporting, 2021). Because the IRF does not require the firm to report harm that affects entities outside the firm if there is no additional effect on the firm, Flower (2015) argues that IR prioritizes investors over other stakeholders and encourages shareholder-centric value creation. Thomson (2015) agrees with Flower and elaborates on Flower's position that IR should instead account for all the unsustainable implications of an organization's activities in order to encourage more sustainable value creation.

### **2.2.1.2 Capitals**

One major critique of corporate reports has been that there is not a clear indication of what is and is not material to the company's business, which puts a limit on the usefulness of the report (Baron, 2014). The IRF categorizes 6 capitals that are material for value creation in an organization: financial, manufactured, intellectual, human, social, and relationship and natural capital (Integrated Reporting, 2021). The framework, however, recognizes that organizations



depend on various forms of capital and do not require organizations to adopt these specific categories of materials (Integrated Reporting, 2021). The capitals play the initiation role of the value creation process, and they are increased, decreased, or transformed through business activities. Furthermore, they can be interdependent, where the increase of one, increases the other one as well or where the increase of one will decrease the other capital. For example, employee training, which improves human capital, will reduce financial capital, at least in the short term. An integrated report should according to the IRF disclose the capitals that it uses or affects (Integrated Reporting, 2021).

### 2.2.1.3 Process through which value is created, preserved, or eroded

As previously mentioned, IR aims to communicate how a company creates value in the short, medium, and long term. To do this, the IRF lifts 7 content elements that the report should include to explain this process. These are: (1) Organizational overview and external environment, (2) business model, (3) risks and opportunities, (4) strategy and resource allocation, (5) performance, (6) outlook, and (7) governance. Figure 1 depicts how the IRF views the value creation process.

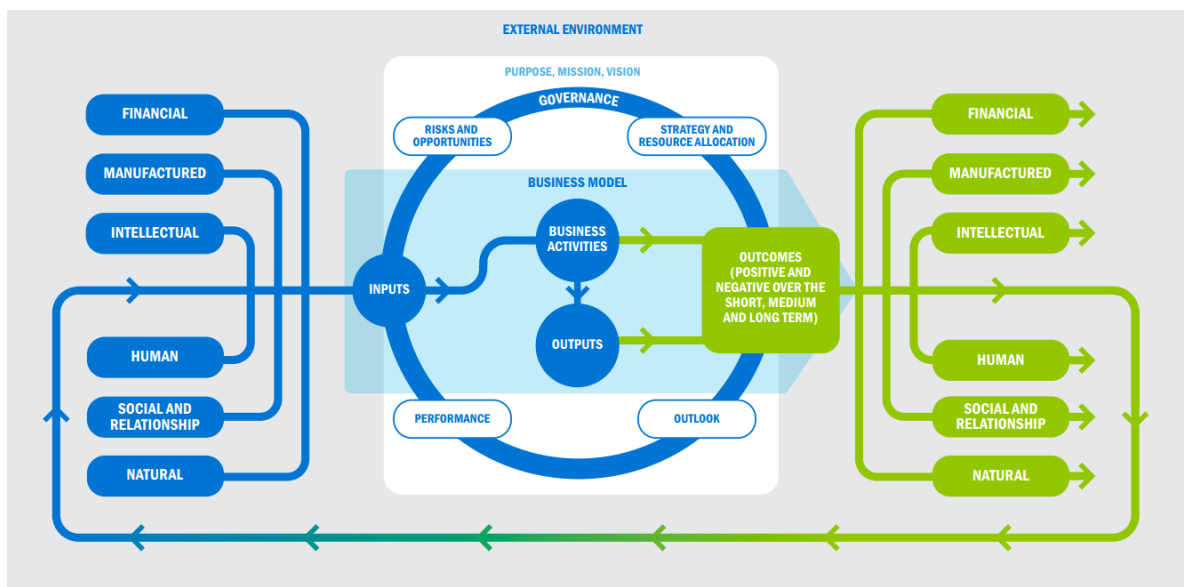


Figure 1: The value creation process (Integrated Reporting, 2021)

At the core of every business is its business model. A business model “describes the rationale of how an organization creates, delivers, and captures value” (Osterwalder & Pigneur, 2015). Utilizing the capitals, the business model transforms them into outputs and outcomes. Because

integrated reporting must reflect value generation in the medium and long term. Companies must report on how resilient their business model is, what opportunities and risks are affecting the business's ability to create value, how the governance structure supports the ability to create value, to what extent the organization is achieving its strategic objectives, and what challenges and uncertainties the organization is likely to face (Integrated Reporting, 2021). Reporting on all of these elements will according to IR, help investors make more efficient and productive capital allocation decisions, as well as foster integrated thinking, decision-making, and activities within organizations that focus on long-term value development (Integrated Reporting, 2021).

### **2.2.2 Guiding principles**

The IRF is a principle-based framework. The purpose of this approach is according to IR “to strike an appropriate balance between flexibility and prescription that recognizes the wide variation in individual circumstances of different organizations while enabling a sufficient degree of comparability across organizations to meet relevant information needs” (Integrated Reporting, 2021). Because of its intentions to provide a balance between flexibility and prescription, the IR framework is principles-based rather than founded on a more rule-based approach with established standards, measurements, or disclosures. This allows the framework to adapt to the great range of specific circumstances of distinct businesses, which a rule-based approach wouldn't be able to. The guiding principles together with the fundamental concepts, and content elements govern the content of an integrated report and help businesses to determine how to best express their value-creation process in a meaningful and transparent manner (Busco et al., 2013).

As illustrated in Tab. 1, The IRF presents 6 guiding principles, which underpin the preparation of an IR. These are: Strategic focus and future orientation, connectivity of information, stakeholder relationships, materiality, conciseness, reliability and completeness, consistency, and comparability (Integrated Reporting, 2021). The purpose of an IR is to communicate the organization's strategy and ability to generate value in the short, medium, and long terms. The principle of *strategic focus and future orientation* concerns this goal. The principle emphasizes that the organization must disclose the elements that may affect its capacity to generate value over time, such as risks, opportunities, and dependency on the external environment (Integrated Reporting, 2021). *The connectivity of information* underlines the need for the integrated report

to present a comprehensive picture of the interdependencies and relationships among the variables that affect an organization's capacity to generate value over time (Integrated Reporting, 2021). This principle is essential for making sure that IR presents a complete picture of how an organization creates value. It is also closely related to integrated thinking (Busco et al., 2013), which we will discuss in more detail in the following section. *Stakeholder relationships* emphasize the value of having a good relationship with the organization's stakeholders as value is created through relationships, interactions, and activities with others (Integrated Reporting, 2021). Insights into the type and scope of an organization's relationships with key stakeholders, as well as how and to what extent those relationships take into account those stakeholders' needs and interests, are the main focus of the principle (Integrated Reporting, 2021). Applying the principle will also help organizations better understand what matters to their stakeholders, which can help them, among other things, better understand how their stakeholders view value, spot risks, and opportunities, and develop and evaluate strategy (Integrated Reporting, 2021).

The organization should only disclose information regarding issues that have an impact on its capacity to create value, according to the *materiality* principle (Integrated Reporting, 2021). The term "material matter" refers to factors that significantly affect or have the potential to significantly affect an organization's strategy, governance, performance, or prospects (Integrated Reporting, 2021). Given that organizations may have multiple kinds of material issues, IRF requires that they order these issues in terms of their significance in terms of their known or potential impact on value creation (Integrated Reporting, 2021).

The organization must present only relevant information in a clear and understandable manner when seeking *conciseness*. Furthermore, additional details should be supplied separately.

Regarding the principle, *reliability and completeness*, senior management, and those in charge of governance are responsible for reviewing the report and using their judgment to decide whether the information is sufficiently reliable to be included (Integrated Reporting, 2021). Moreover, a complete IR must contain all relevant information, both good and bad. The final principle is *consistency and comparability*, which states that information should be presented in a way that is consistent over time and that ideally allows for comparison with others (Integrated Reporting, 2021). In order to improve comparability, organizations can, for instance, use industry or national benchmarks, present data as ratios, or report quantitative indicators that are used by organizations that perform similar activities (Integrated Reporting, 2021).

Strategic focus and future orientation	An integrated report should provide insight into the organization's strategy, and how it relates to the organization's ability to create value in the short, medium and long term, and to its use of and effects on the capitals.
Connectivity of information	An integrated report should show a holistic picture of the combination, interrelatedness and dependencies between the factors that affect the organization's ability to create value over time.
Stakeholder relationships	An integrated report should provide insight into the nature and quality of the organization's relationships with its key stakeholders, including how and to what extent the organization understands, takes into account and responds to their legitimate needs and interests.
Materiality	An integrated report should disclose information about matters that substantively affect the organization's ability to create value over the short, medium and long term.
Conciseness	An integrated report should be concise.
Reliability and completeness	An integrated report should include all material matters, both positive and negative, in a balanced way and without material error.
Consistency and comparability	The information in an integrated report should be presented: (a) on a basis that is consistent over time; and (b) in a way that enables comparison with other organizations to the extent it is material to the organization's own ability to create value over time.

Table 1: Guiding principles (Integrated Reporting, 2021)

## 2.2.4 Integrated Thinking

Imbedded in the Integrated report framework is integrated thinking (IT). Integrated thinking is defined as “the active consideration by an organization of the relationships between its various operating and functional units and the capitals that the organization uses or affects. IT leads to integrated decisioning and actions that consider the creation of value over the short, medium, and long term” (Integrated Reporting, 2021). The long-term goal of the IRF is to have integrated thinking become ingrained in how companies conduct their business (Integrated Reporting, 2021). According to Churet and Eccles (2014), integrated reporting makes up only the tip of the IR framework iceberg, whereas integrated thinking makes up rest of it. The importance of IT in the framework can be recognized by the description of IR as "a process based on integrated thinking".

The main goal with integrated thinking is to help businesses focus on the connections and interactions between their capitals and other elements required for value creation in order to gain a comprehensive understanding of the value creation process and to support integrated, forward-thinking decision making (Busco et al., 2013). Key features of integrated thinking include:

- Understanding the connections and interdependencies between an organization's resources and functions
- Identifying and addressing the needs and interests of important stakeholders
- Understanding how an organization's operations, performance, and outcomes relate to its capitals (past, present, and future)
- How the company adapts its business model to deal with the risks and possibilities the external environment brings (Integrated Reporting, 2021).

The IRF sees IR as an outcome of IT, Piermattei and Venturini (2016) agree, stating that IR and IT have a "chicken and egg" relationship in which IT came first and IR is an extension of it. Adams (2017) holds a similar perspective and refers to the organization as a "natural integrated thinker". Since integrated thinking is also regarded as being essential to the creation of IR, it must first (Adams, 2017). On the other hand, Perego et al. (2016) claim that as an organization thinks about the connection between the capitals, it uses and the various operating and financial units while preparing an integrated report, it may realize that a more comprehensive approach across the organization is required. This is in line with a study by Guthrie et al. (2017), which examined public sector organizations and discovered that the adoption of integrated reporting caused organizations to build internal processes that encourage integrated thinking. Similarly, to this, a case study by Busco et al. (2017) discovered that the company's adoption of the integrated reporting framework, which promotes a holistic approach to value creation, was the driving force behind the implementation of integrated thinking.

Although there are differing views on whether integrated reporting leads to integrated thinking or vice versa, there seems to be a consensus that integrated thinking is a useful tool and an important managerial skill. The value reporting foundation (2022) states that integrated thinking results in actions that take into account the creation, preservation, or degradation of value across the short, medium, and long term. Professor Mervyn King, a former IIRC board

member, described integrated thinking as a strategic tool that will aid management in bringing order to the excessively complicated environment that businesses must operate in today's world (Integrated Reporting, 2019). A poll of 300 managers revealed that managers who thought in an integrated manner made better decisions than those who did not (CGMA, 2016). Their organizations also outperformed those of managers who did not engage in integrated thinking (CGMA, 2016). Studies on integrated thinking have generally yielded positive results, with research demonstrating that it is a useful tool for creating and implementing a circular economy strategy (Barnabè and Nazir, 2021), allocating the resources that the organization possesses (Herath et al., 2021), and coordinating the strategy of the organization with stakeholder interests (Busco et al., 2021). Integrated thinking has also faced criticism, particularly because the definition of the concept is broad and thus can be interpreted in a variety of ways (Feng et al., 2017). Another critique of integrated thinking is that there is no formal guide on how firms can adopt it, making it more difficult for stakeholders to judge whether and how much businesses are employing it (Malfronte & Pereira, 2020).

## **2.3 Strategic Decision-Making**

Effective strategic decision-making is essential for any organization looking to stay ahead of the competition and achieve long-term success. This process requires leaders to gather relevant data and information, analyze alternative courses of action, consider risks and potential consequences, and choose the path that offers the most promise for achieving desired outcomes (Mitzberg et al., 1976). One of the goals of integrated reporting is to stimulate integrated thinking which in turn will result in integrated decision-making. In this section, we will explore what strategic decision-making is, how IR influences it, as well as the key steps involved in the strategic decision-making process.

### **2.3.1 Strategic Decisions**

The means by which organizations accomplish their goals is through their strategy. The military world's concept of strategy was adopted in business management in the late 1950s

(Papadakis & Barwise, 1998, p.17). Comparative analysis of cases showed that similar firms in the same industry performed at different levels because they managed their activities and committed resources in different manners in relation to the market (Papadakis & Barwise, 1998, p.17). The word strategy was thus used to describe the choice of activities and resources that were most important in affecting the firm's performance (Papadakis & Barwise, 1998, p.18). SDs are the choices the organization makes to reach its objectives and for many reasons, making SDs is one of an organization's most important tasks (Citroen, 2009). Among other things, Strategic decisions can give the organization a competitive advantage. They demand a significant investment of resources (Papadakis & Barwise, 1998, p.5). They also often have long-lasting effects and are typically difficult to reverse (Hickson et al., 2003). Additionally, SDs frequently involve complex issues that carry a high risk of uncertainty and can result in changes to the organizations' structures as well as operational procedures (Hickson et al., 2003).

The organization develops and implements the SDs that will affect the long-term performance through strategic decision-making (Bhushan & Rai, 2004, p.4). The most valuable contribution TM can make to any company is success in strategic decision-making (SDM), and high-performing organizations are distinguished from other companies by the standard of their SDs (Rogers & Blenko, 2006). To help managers make the best decisions, a number of tools have been developed. These are strict financial tools like the benefit-cost ratio and net present value, which help managers make profitable SDs (Bhushan & Rai, 2004, p.6). Additionally, tools like the SWOT analysis and the Balanced Scorecard, take into account both financial and non-financial factors and support executives in making decisions that consider metrics other than just financial metrics.

### **2.3.2 IR's Influence on Strategic Decision-Making**

According to the IRF, IR can help firms make better decisions, and a CGMA poll revealed that 79% of businesses that have applied the framework reported improved decision-making (CGMA, 2016). Other studies show that businesses with a high level of integrated reporting perform better overall in terms of sustainability than businesses with little to no evidence of integrated reporting or with low to medium evidence (Omran et al., 2021). The IRF aims to support decision-making and actions that focus on the creation over the short, medium, and long term and how IR influences decisions has been a subject in several studies.

Studying the relationship between IR and the composition of a business's investor base, Serafeim (2015) discovered that firms actively engaging in IR have a more long-term oriented investor base. According to Serafeim, this is due to the fact that IR offers more details about a firm's long-term strategy, which is important for determining the firm's value (Serafeim, 2015). An investor base with a long-term orientation will, as a result, encourage managers to focus on making long-term decisions in order to meet investors' expectations. Following the adoption of IR, managers' strategic decisions are also heavily influenced by stakeholders besides investors. Investigating the influence of IR on corporate tax avoidance for listed companies in South Africa, Donkor et al. (2022) found that IR quality is negatively associated with the level of corporate tax avoidance. This result suggests that IR influences companies' decisions to align with stakeholders' interests. Shireba & Nakano (2022) on the other hand, investigated the impact of IR on real activity manipulation by analyzing a large sample of Japanese IR and non-IR organizations to see if the introduction of IR impacted this behavior. Real activity manipulation refers to actions that deviate from normal operational practices in order to deceive some stakeholders into believing that financial reporting targets have been fulfilled in the usual course of operations (Roychowdhury, 2006). This is for example, "earning management," in which managers change financial reports to deceive stakeholders about the company's economic performance (Roychowdhury, 2006). According to the study, firms did not engage in that type of conduct after the implementation of IR (Shireba & Nakano, 2022). The study also revealed that the effect of IR on real activities manipulation increases over time (Shireba & Nakano, 2022). Implementation of IR and the consideration of multiple stakeholders can thus lead to better corporate behavior and decision-making.

Through surveys, CGMA highlights neglected areas that might help firms to enhance their decisions (CGMA, 2016). Overlooked factors include learning from prior outcomes, breaking down silos, engaging stakeholders, and ensuring different viewpoints are heard (CGMA, 2016). CGMA argues that organizations must reconsider the significance of these elements and integrate them more effectively into their decision-making process. Breaking down silos, for example, will result in a higher degree of exchange of information and insights, as well as the involvement of people with the necessary knowledge and experience from various business units and functions in decision-making (CGMA, 2016). Looking at previous outcomes, on the other hand, will prevent managers from repeating past mistakes, they will also learn from earlier successes (CGMA, 2016). While a larger emphasis on involvement with external stakeholders will lead the firm to create a broader perspective on stakeholder value, assisting



in ensuring the organization's strategy is long-term sustainable (CGMA, 2016). The IRF requires firms to report on their outcomes and encourages stakeholder engagement as well as the breakdown of organizational silos, as such, employing the IRF can drive the firm to respond to and reflect on these overlooked elements, leading to better decision-making.

According to the conventional viewpoint promoted by the resource-based theory, firms' resources drive value development. However, a more recent perspective contends that having resources does not automatically result in value creation; rather, it is what a firm does with its resources and how it does so that generates value (Herath et al., 2021). The top management's leadership position as an organization's leader is crucial in this process. IT draws attention to how resources are dependent upon each other, which encourages managers to think more broadly and make decisions that take into account the resources the company has available, how those resources are interdependent, as well as the issues, opportunities, and challenges of the external business environment. Herath et al. (2021) investigated how the CEO's IT perspective influences how the six capitals are managed to create value. The study interviewed CEOs and discovered that the manager with a broad IT view took a more holistic approach to all six capitals, which was reflected in the firm's objectives, strategy, and performance methods. Furthermore, the company had a more long-term perspective on value creation (Herath et al., 2021). On the other hand, the company, with a CEO with a narrow IT perspective, concentrated primarily on the key capitals. The company had a more business-as-usual attitude for value creation where operational efficiency was at the core, and there was little emphasis on the externalities caused by their business (Herath et al., 2021). The study has its limitations, which include only interviewing two managers. The study's findings are however consistent with a poll, in which 72% of the executives who responded said that integrated thinking had led to enhanced decision-making, amongst other things, leading to a more efficient allocation of resources (Saica, 2015). Aside from capital orchestration, managers report that IT has assisted them in locating overlooked risks and opportunities (Busco et al., 2013), seeing how the company's different strategies can work together to create value (ACCA, n.d.), creating new strategies (Integrated Reporting, n.d.a.), resulting in more efficient decision-making.

According to the literature on the influence of IR and IT on decision-making, IR and IT influence managers' decision-making through stakeholders, information, and integrated thinking. As the implementation of IR results in more long-term investors, managers may need to change how they approach value creation to respond. This can be accomplished, for example, by increasing the emphasis on ESG or incorporating ESG into company strategy, as several

businesses employing IR have done (value report basis). IR can also have an impact on SDM by giving additional information that can help the manager in the making of strategic decisions. This includes cross-function information, as well as information on the outcomes of previous decisions. Finally, IT, which influences managers' strategic thinking, might modify how the manager approaches the process, for example, how they analyze which aspects are critical in the strategic decision, which information they collect as well as how they get this information.

### **2.3.3 Strategic Decision-making Process**

Making long-term decisions that have an impact on an organization's success is done through the strategic decision-making process (Bhushan & Rai, 2004, p.6). Analyzing internal and external factors, defining goals and objectives, and creating plans and strategies to reach those goals are usual steps in this process (Bhushan & Rai, 2004, p.9). Several strategic management studies argue that top managers make strategic decisions only after carefully analyzing all available options and consequences (Citroen, 2009). This method is also known as the "rational process". Mintzberg et al. (1976) explain this as a process that consists of three phases (Mintzberg et al., 1976). The first phase of the decision-making process is the identification phase where opportunities, problems, and risks are recognized, this is also the stage where relevant information is collected. Thereafter comes the development stage which consists of search and design, where the search is evoked to find ready-made solutions, while the design is used to develop custom-made solutions or to modify existing ones (Mintzberg et al., 1976). This part is the heart of the decision-making process and where the largest number of decision-making resources go (Mintzberg et al., 1976). Last in the decision-making process is the selection phase. According to Mintzberg et al. (1976), this stage is characterized as a multi-step and interactive procedure, encompassing a gradual exploration of various options and ultimately selecting the most favorable one.

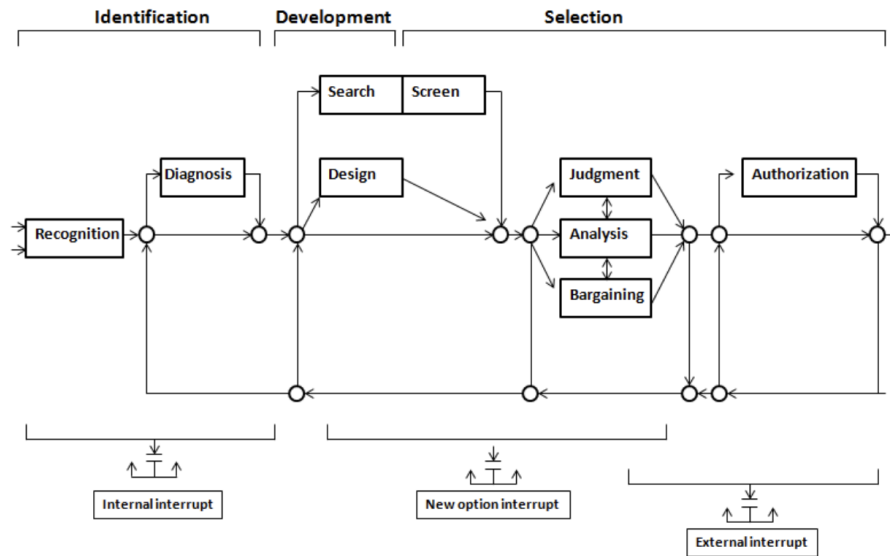


Figure 2: The strategic decision-making process (Mitzberg et al., 1976)

Strategic decisions often include a high level of risk and uncertainty, and thus require a thorough assessment of a broad range of factors, e.g., market trends, competition, financial resources, and organizational capabilities. In their model, Mitzberg et al. (1976) identify 6 factors that can influence this process: interruption, scheduling delays, timing delays and speedups, feedback delays, comprehension cycles, and failure cycles. Furthermore, how factors such as environmental factors, strategic-decision-specific traits, or decision-maker characteristics influence the SDMP have received significant attention (Elbanna et al., 2020). Environmental characteristics refer to the external environment of the organization (Elbanna et al., 2020). External influences like government agencies, customers, and suppliers can all have a significant impact on organizational activities, including their SDM. As stakeholder, legitimacy, and institutional theory demonstrate, organizations must consider their external environment in order to remain legitimate, earn trust, expand, and succeed. Studies on how management qualities affect the SDMs process have found that behavioral factors can alter the decision-making process. Flexibility, for example, declines with age, and consequently, resistance to change rises as well (Wiersema & Bantel, 1992). Educational background is another behavioral factor that has been shown to have an impact on the process, with studies indicating that highly educated managers are more likely to seek more thorough information (Papadakis et al., 1998). Regarding the decision-specific characteristics, Papadakis et al. (1998) found that decision-specific characteristics such as uncertainty around the

decision, the anticipated impact of the decision, or the threat component of it, strongly influenced the decision-making process (Papadakis et al., 1998). This finding is consistent with the findings of Fredrickson (1985), who observed that when decisions are seen as threats rather than opportunities, the DMP becomes more comprehensive (Fredrickson, 1985).

### **2.3.4 The role of information in the strategic decision-making process**

The decision-making process relies notably on information and making decisions requires having access to sufficient information that allows managers to make the best choice possible given the circumstances (Citroen, 2009). The rational process assumes that complete information is available for the manager (Citroen, 2009). This includes information about factors influencing the organization, such as competition, markets, technology, and the societal environment, that explains the significance of the viable alternatives for the decision to be made and is necessary for deciding the specifics of these possibilities (Citroen, 2009).

Citroen (2011) conducted a study in which executives were asked to explain their decision-making process. All of the CEOs interviewed used information to provide a reasoning for the decision they took (Citroen, 2011). The managers also stated that the decision-making process most times began under uncertain conditions and moved towards more certainty once sufficient, relevant, and reliable information was collected (Citroen, 2011). The decision-making processes usually began with a preparation phase in which the issue was defined, decision objectives were established, and an initial amount of information on relevant environmental issues was reviewed (Citroen, 2011). The phase thereafter consisted of locating and investigating more information, however on internal and external factors. Based on the information collected and reviewed decision alternatives were specified and thereafter to those that have a real chance to succeed (Citroen, 2011).

The type of information that managers are given has a significant impact on the decisions that they make as well. Relevant information typically improves the accuracy of decisions, whereas irrelevant information may make it more difficult to identify relevant information and reduces the decision-making performance (Majid & Chaudhry, 2006). Decision-makers also tend to make more sustainable decisions when both financial and non-financial information is offered (Esch et al., 2019). Decision-makers who are given integrated financial and non-financial

information, however, tend to make even more sustainable choices than those who are given unlinked financial and non-financial information (Esch et al., 2019).

### **3 METHODOLOGY**

This chapter focuses on explaining the philosophy, methodology, and research methods taken in the study, as well as the reasoning behind the choice of these methods. Additionally, the chapter covers the process of data gathering, the methodology used in conducting the literature review, and the structure of the interview guide. The chapter ends with a summary highlighting the key elements of the research process.

#### **3.1 Research Philosophy**

Research paradigm refers to a set of philosophical principles that shape the way scientific investigations should be carried out. These principles are informed by an understanding of the essential nature of knowledge, existence, and reality (Collis & Hussey, 2013, p. 43).

The approach taken in this study falls under the *interpretivist paradigm*, which views reality as something that is created and shaped by social processes. Interpretivists hold the belief that social reality is subjective due to it being constructed by social processes, and their approach emphasizes gaining a deep understanding of the complexity of social phenomena. On the other hand, positivists hold that social reality is objective and external to the researcher, and their focus is on measuring social phenomena to develop theories based on empirical research. Essentially, the positivist paradigm assumes that social phenomena remain unaffected by the investigation, and that research is conducted in order to study a reality that has an objective and factual structure (Collis & Hussey, 2013, p. 43).

The interpretivist paradigm is an appropriate approach for the study of top managers' integrated thinking in the strategic decision-making process for several reasons.

Firstly, the research carried out in the interpretivist paradigm seeks to comprehend a particular phenomenon within a specific context. The context in which the study takes place can influence the subject being investigated, and the aim of this research is to develop theories rather than

test hypotheses. Also, by employing the interpretive paradigm, researchers can gain a more profound understanding of the topic and engage more closely with it (Collis & Hussey, 2013, p. 47). An interpretivist paradigm is focused on understanding the context in which individuals and groups operate, and in our study strategic decision-making is highly dependent on the external environment, including political, economic, social, and technological factors, as well as the internal context of the organization. An interpretive approach allows us to explore the complex relationships between these various contextual factors that are included in the integrated reporting framework and how they influence top managers' thinking in the strategic decision-making process.

Secondly, the interpretivist paradigm is a useful approach for understanding the complex and subjective nature of strategic decision-making, particularly regarding the role of top managers in integrating various factors and perspectives (Langley, 1999).

Thirdly, the interpretive paradigm emphasizes the importance of communication in shaping individuals' and groups' understanding and interpretation of the world (Gergen, 2015). In the context of strategic decision-making, top managers apply integrated thinking to communicate their ideas and perspectives, negotiate differences, and make sense of complex issues with the whole range of stakeholders.

Overall, the interpretive paradigm provides a useful framework for studying how the integrated reporting framework stimulates and forms top managers' integrated thinking in strategic decision-making because it allows us to explore the subjective experiences, contextual factors, and communication strategies that shape their decision-making.

## **3.2 Research Approach**

When it comes to conducting research, various approaches can be employed, and these are deductive, inductive, and abductive reasoning.

According to Collis & Hussey (2013, p. 7), deductive reasoning involves a process of moving from general statements or theories to specific observations or conclusions. In this approach, the researcher begins with a theoretical framework, which is used to formulate a hypothesis or set of hypotheses. The hypotheses are then tested through empirical data collection and analysis, with the aim of either confirming or refuting the original theory.

In inductive research, a theory is formulated based on empirical reality observation. The reliance on inductive reasoning is based on the belief that substantial knowledge can be gained through practical experience. This is the opposite of the deductive method as the inductive approach consists of drawing broad, general conclusions from specific instances. The process of moving from individual observation and data collection to general laws or patterns is known as moving from specific to general (Collis & Hussey, 2013, p. 7).

The objectives of utilizing an inductive method are to: (a) summarize raw textual data into a concise format; (b) establish a connection between the research objectives or evaluation and the final findings obtained from the raw data; and (c) create a theory outlining the fundamental patterns or processes that are present in the raw data. In other words, inductive analysis involves a close examination of raw data and further constructing concepts, themes, or a framework through the researcher's interpretation (Thomas, 2006).

*Abductive reasoning* focuses on finding appropriate theories or explanations to fit empirical observations, which is referred to as "theory matching" or "systematic combining" by Dubois and Gadde (2002).

The foundational beliefs of an abductive research process are twofold: 1) that research participants are knowledgeable individuals who can reflect on their own experiences, and 2) that as researchers, we can effectively integrate insights derived from the field with our interpretations, including theoretical frameworks, to create new concepts that aid in achieving a more comprehensive understanding of the research phenomenon (Corley & Gioia, 2013).

To decide which method is more appropriate for current research, it can be noted that the theories and conclusions will largely be derived from the collected data and empirical evidence which is a defining feature of an inductive study. Nonetheless, we will rely on the theoretical framework of this study to guide the direction and development of valid theories. Therefore, it can be argued that this study takes an abductive approach, where both existing literature and empirical findings will play a role in generating new or improving existing theories and concepts. Additionally, given that this study employs the grounded theory method, which will be extensively elaborated on subsequently, an abductive approach will facilitate a continuous back-and-forth movement between prior literature and emerging data (Dubois and Gadde, 2002), which is a crucial attribute of grounded theory as "an iterative system" (Chun Tie et al., 2019).

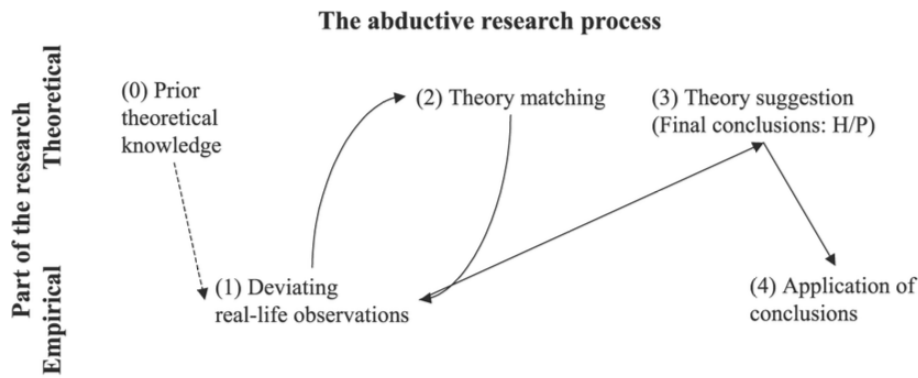


Figure 3: The abductive research process (Kovács & Spens, 2005)

To conclude, the deductive method aims to create testable propositions by deriving them from existing theories, while the inductive method employs a "grounded theory" approach, as proposed by Glaser and Strauss in 1967, whereby theories are generated from collected data in a systematic manner. The chosen in this study abductive approach is not a mix of inductive and deductive approaches. It has similarities with an inductive approach that relies on grounded theory, however, it is based on systematic combining when data collection and theory development occur concurrently, resulting in a cycle of learning (Taylor et al., 2002; Kovács & Spens, 2005), and it focuses primarily on enhancing current theories rather than originating novel ones. According to Alvesson and Sköldbberg (1994), abduction is primarily concerned with enhancing comprehension of a novel phenomenon, whereas the goal of induction, in traditional terms, is to derive generalizations from empirical evidence (Kovács & Spens, 2005). To clarify, an abductive approach makes modifications in the basic approach framework due to unforeseen empirical discoveries, as well as theoretical understandings obtained through the process (Dubois and Gadde, 2002).

### 3.3 Research Method

The implementation of an integrated reporting framework is not only changing the reporting process by combining financial and non-financial data (Jensen & Berg, 2012), but it has an impact on organizational processes such as integrated thinking and corporate behavior (Hoque,



2017). According to these assumptions and being led by the interpretivism paradigm, the implementation of a qualitative approach is the most appropriate in our research.

Qualitative research is often better suited for investigating complex phenomena, such as in the current study that aims to reveal the viewpoints of top-level managers and examine their approach to using combined information to validate future strategic decisions (Esch et al., 2019). Qualitative research allows this situation for a more in-depth and nuanced exploration of the topic, at the same time providing high validity in data (Collis & Hussey, 2013, p. 130). Qualitative research utilizes non-numerical information, such as interview transcripts, focus group discussions, and observations, instead of relying on numerical data and statistical analysis like quantitative research. This type of data can provide a rich, detailed picture of people's attitudes, beliefs, and experiences, which is particularly useful for investigating topics that are difficult to quantify (Bougie & Sekaran, 2020). In the case of integrated thinking and integrated reporting, a qualitative approach helps us gain a deeper understanding of how strategy makers think about and approach these concepts. For the investigation of this phenomenon, we choose interviews as the data collection method due to their higher reliability when compared to other methods, like surveys (Allan, 2003). Through interviews with top managers of the organizations, we as researchers can explore the holistic way of thinking, as well as challenges and opportunities they face when integrating thinking comes to reporting and strategic decision-making, and gain insights into how they make decisions about which information to include in their reports and how to apply this information in the organization's strategy in perspective of value creation over time. Additionally, through observation and analysis of integrated reporting, we can gain a better understanding of how this stimulates top managers integrated thinking in strategic decision-making. Taking into consideration the geographical scope of the study, which is international, we conducted online interviews by use of Microsoft Teams. Semi-structured interviews were employed in this investigation since they are highly beneficial in exploring complex phenomena of behaviors or viewpoints (Clifford et al., 2016). Furthermore, semi-structured interviews are helpful in obtaining current and past information from individuals who have knowledge about a particular phenomenon which is also well-suited for the grounded theory approach which will be expanded upon in the section dedicated to research methodology (Gioia et al., 2012). Nine interviews were carried out with top managers of different companies around the world. The number of interviews conducted satisfied the process of theoretical saturation, which will also be elaborated on in the research methodology section (Murphy et al., 2017).

Overall, the adoption of a qualitative approach with a semi-structured interviews method in the examination of the senior manager's understanding and their application of integrated thinking and integrated reporting leads to a more comprehensive and in-deep understanding of the subject and offers a valuable perception of how top executives handle these concepts during the strategy formation process.

Within the interpretivist paradigm, researchers may not want to be constrained by existing theories, or there may not be any relevant theories to draw upon. As a result, the researcher may conduct their investigation in order to identify and describe various patterns that they observe in the data, or to develop a new theory that provides an explanation for the phenomenon being studied (Collis & Hussey, 2013). By applying the abductive approach with systematic combining (Dubois and Gadde, 2002), the qualitative method allows us to be dynamic which is not possible in quantitative research (Bansal & Corley, 2011). Considering the scarce research on the relationships between the fields of integrated reporting and integrated thinking in strategic decision-making, this paper is of an exploratory nature. The objective of this type of investigation is to identify patterns and themes and generate, rather than test, a theory. The emphasis in exploratory research is on acquiring an understanding and knowledge of the subject matter for further, more in-depth examination at a later stage (Collis & Hussey, 2013).

## **3.4 Data Collection**

### **3.4.1 Selection process of the primary data**

The current study adheres to interpretivism, which gives us the possibility to analyze a small sample, potentially over an extended duration (Collis & Hussey, 2013, p.49). Our approach to selecting samples was based on a deliberate and strategic selection method known as purposive sampling (Eisenhardt, 1989). Purposive sampling is a non-probability sampling method that involves selecting participants based on specific characteristics or attributes that are deemed relevant to the research question. Eisenhardt (1989) proposed a purposive sampling approach that involves selecting samples that are particularly informative or critical to the research objective. According to Eisenhardt (1989), purposive sampling is particularly useful in exploratory research or in samples where the sample size is limited. The approach involves

selecting cases based on theoretical sampling criteria, which are based on the researcher's understanding of the research problem, the research context, and the research question. The purposive sampling approach, according to Eisenhardt (1989), involves a deliberate and strategic selection of samples that can help to uncover critical insights and patterns in a research study. By selecting samples based on theoretical sampling criteria, researchers can ensure that their sample is informative and relevant to their research question, even when the sample size is limited.

Additionally, our approach to sampling is integrated with the maximum variation sampling technique (Patton, 1990, p.172). Maximum variation sampling is a qualitative research methodology that selects diverse cases to investigate a phenomenon or research question. This technique identifies patterns and commonalities across the sample, and captures complexity and diversity, generating grounded theories. Overall, maximum variation sampling is a scientific method to purposively select a diverse range of cases for investigating research questions or phenomena. By selecting cases that represent extreme or diverse variations in the characteristics of a population, researchers can gain a deeper understanding of the phenomenon and generate theories that are grounded in the data (Patton, 1990, p.172).

In the current selection process, we applied four criteria. First, we selected a sample of companies that have utilized an integrated reporting framework for a minimum of two years. The list of these companies is available on the IFRS Foundation website (Integrated Reporting Database, 2023). Second, we selected the senior managers and heads of controlling departments as our interviewees since they hold a crucial role in providing support for decision-making within a company. It was our expectation that people in these positions possess significant expertise in corporate decision-making processes and the type of information, whether financial or non-financial, required to support such decisions. Third, in order to prevent any potential bias towards a particular industry, we examined several different industries. Fourth, to prevent our study from being overly restricted in scope, we included a range of respondents in different positions. Therefore, our sample consisted of managers who focused on various types of value-creation capital (e.g., the Director of Sustainability, the Head of Strategy Development and Alignment, and the Head of Investor Relations).

The geographical scope of the study on the implementation of the integrated reporting framework and its impact on top managers' integrated thinking in strategic decision-making is international which allows us as researchers to gain a broader understanding of the subject

matter. In this case, the chosen geographical locations of the United Kingdom, Europe, Scandinavia, the USA, Bermuda, and South Africa were chosen for several reasons. The choice of such scope was based on these regions because of their diverse corporate cultures, early adoption of the integrated reporting framework, established economies and infrastructures, which can provide a solid basis for the more comprehensive and nuanced, comparative, and in-depth analysis of the topic at hand.

### **3.4.2 Semi-structured interviews and interview guide construction**

In this study, an interview is used as a research method because this is the best way to collect data for our type of problem statement. As known, business is a social phenomenon (Weber, 2009). Integrated thinking and the strategic decision-making process must be made by people. The principle behind using inductive reasoning in this research is that a lot of knowledge can be gained from personal experiences. Thus, people who have the necessary experience who we are looking for and who are the target group in the research are senior managers. Moreover, the fact that interviewed people represented companies from different countries around the world could provide us with more diverse points of view and responses.

The study was designed to use a semi-structured and open-ended interview format, which was anticipated to yield a significant amount of information to investigate the research questions (Beatty & Willis, 2007). The questions need to be open-ended and designed to prompt unstructured responses, which will encourage discussion. In semi-structured interviews, each participant is asked all the questions in a consistent order, and the data is analyzed systematically on a per-item basis. We asked the same set of questions to every interviewee in a systematic manner, and since the questions are semi-structured this allowed us to have some flexibility to deviate slightly from the standard script (McIntosh & Morse, 2015). According to Yin (2014), allowing participants to express themselves freely using their own words during an interview provides an opportunity to focus on issues that may not have been initially considered during the development of the interview or the research question. As McIntosh and Morse (2015) noted, the combination of being able to replicate results while also maintaining flexibility leads to the acquisition of relevant, up-to-date, and extensive data. Baumbusch (2010) suggests that because semi-structured interviews do not follow a fixed set of questions, it is important to create an interview guide in order to gather data that is relevant to the research

questions. The participants were made aware of the topic and goals of the study, but they were not provided with any questions from the interview guide. This was done to avoid them giving scripted responses which could compromise the reliability and validity of the research (Saunders et al., 2019).

The interview protocol was created based on an initial examination of the relevant literature on the embedding of an integrated reporting framework and integrated thinking principles associated with the direction of integrated thinking in the strategy creation process. After conducting a pre-test of the interview guide, the questions were restructured in a way that was easy for interviewees to follow. The interview questions were designed to highlight the significance of a holistic approach with integrated financial and non-financial information in the decision-making process, with an emphasis on integrated thinking and long-term value creation.

Seven senior managers and two executive directors were interviewed. The uniformity of the interview questions, along with the extensive knowledge and experience of the interviewees, enables us to obtain comprehensive data even with a smaller number of interviews (Guest et al., 2006). The interview sessions spanned four weeks and had a total duration of approximately 7.5 hours. At the beginning of each interview, the participants were asked if they would allow the conversation to be recorded and only proceeded with the interview once permission was granted. The manager was given an information and consent form that outlined the research's purpose. An agreement was reached not to disclose the name of the company or the name of the interviewee in this paper.

<b>Company</b>	<b>Position title</b>	<b>Country</b>	<b>Years of producing IR</b>
Company A	Partner - Strategy and Sustainability, Value, and Impact	UK	3 years
Company B	Executive director	South Africa	11 years
Company C	CEO	Poland	8 years
Company D	CEO	Norway	2 years
Company E	Executive Head for Stakeholder Affairs, Chairman of the Board for the Impact Catalyst	South Africa	11 years

Company F	CSO (sustainability)	USA	3 years
Company G	CSO (sustainability and IR)	Norway	2 years
Company H	Head of Strategy Development and Alignment	UK	9 years
Company I	CFO	Bermuda	3 years

Table 2: Overview of the respondents

The interview guide in the current study was comprised of three distinct sections, each containing three open-ended questions.

The first part of the interview guide directed us to ask questions related to how the implementation of integrated reporting affected any modifications within the organization. The following questions were asked at the beginning:

1. When and why did your company adopt the Integrated Reporting framework?
2. Has the implementation of Integrated Reporting assisted you in identifying new ways of allocating resources and creating value? Could you give an example, please?

These first questions were oriented on the historical information about the company's business process and change in the strategy creation process after the implementation of the Integrated Reporting framework. The reason why these questions were given priority was that the responses to them relied on the information shared and deliberated by senior executives earlier in their work. The commonly recognized principle in interviewing is that the initial questions in an interview are crucial as they establish the tone of the conversation. These initial questions have the potential to encourage participants to be more forthcoming, at ease, and provide more genuine answers (Adler, 2007). Moreover, the answers to these questions give a strong basis for a furthermore in-deep conversation.

The second section of the interview guide consisted of questions relating to Integrated thinking. According to Herzig et al. (2016), the model for integrated thinking is still developing and not many companies have reached the full embedding of it, that is why a specific focus was given to investigating how senior managers interpret the notion and the nature of integrated thinking. After gaining an understanding of it, the interview process continued to identify the way how top managers perceive the changes in integrated thinking through the implementation of integrated reporting and do they recognize a positive shift or admit the negative fact of the

integrated thinking movement. In the second segment of the interview guide, the subsequent questions were posed:

1. Has integrated reporting been a driver towards achieving integrated thinking? Could you give an example, please?
2. Has the organization derived benefits from integrated thinking? What has changed after you have moved further on from IR to Integrated thinking?

A third section of questions was formulated to broaden the interviews, concentrate more on our research objectives and gather enough information. This part of the interview guide consisted of inquiries directed toward the participants regarding factors that stimulate top managers' integrated thinking and the influence of the integrated way of thinking on business as a whole:

1. Has the Integrated Reporting framework's implementation and embedded Integrated thinking resulted in any changes in the strategy of the organization?
  - a. Has it resulted in any changes in the strategic decision-making process?
  - b. Has it changed how the organizations approach its capital?
  - c. Has it enabled you to identify new risks and opportunities?
  - d. Has it helped to overcome organizational silos?
  - e. Has it encouraged stakeholders' engagement?
  - f. Has it encouraged a more holistic and long-term perspective in value creation?
  - g. Has it improved information quality (more comprehensive, relevant, transparent) for stakeholders and for the top management?
2. In which types of strategic decisions is the consideration of integrated information beneficial?
3. Do you feel and in which way the integrated thinking and embed Integrated reporting give your company a sustained competitive advantage?
4. Can you say that the business benefits outweigh the efforts and time used to embed the integrated reporting? In which way?

This segment aimed to initiate a dialogue to identify factors that form managers' integrated thinking in the strategic decision-making process. Demonstrating the achievement of integrated thinking through sustained competitive advantage and other business advantages could serve as evidence of its successful development and implementation. In addition, the sub-questions aimed to comprehend whether the adoption of integrated reporting resulted in a fresh perspective on creation, preservation, and diminution value through a comprehensive

examination of the six capitals, recognition of new risks and opportunities, enhanced allocation of resources, overcoming organizational silos, achieving a greater collaboration with internal and external stakeholders, better balance between financial and non-financial information, improving the quality of the information, and subsequently, alterations to the strategy.

Upon the completion of the interviews, the participants were given an opportunity to raise any questions or make any comments they wished to. Saunders et al. (2019) suggest that a way to indicate the conclusion of an interview is to permit the interviewee to provide feedback or inquire about any relevant issues that have not been addressed. The subsequent inquiry was posed:

- Would you like to add some information about what you think is necessary from your point of view?

Asking open-ended questions about how top managers approached issues related to the implementation of integrated reporting and how this stimulated their integrated thinking, specifically those relevant to their role in creating strategy, results in more meaningful participation and detailed responses. This approach allows participants to express their experiences and understanding in their own words. Additionally, semi-structured interviews with opened-end answers give the possibility to gather a wide variety of data (McIntosh & Morse, 2015).

## **3.5 Data Analysis**

### **3.5.1 Grounded theory approach**

Several types of qualitative data analyses are built on an inductive approach. Among them is grounded theory (Glaser & Strauss, 1967). Grounded theory is a non-linear, systematic process, that demonstrates the relationship between the fundamental methods of grounded theory and the repeated and comparative actions. The purpose of grounded theory is to develop substantive theories based on data that has been gathered and analyzed through comparative analysis in a systematic manner (Chun Tie et al., 2019).



The Grounded theory, which was initially created for sociological studies, has undergone further evolution and has been adapted in a wide range of other fields, among them management (Murphy et al., 2017). Moreover, grounded theory is a methodology applied in situations where a particular phenomenon is not adequately addressed or is novel within a specific area of research (Murphy et al., 2017). The subject of this research: the influence of integrated reporting on top managers' integrated thinking in strategic decision-making, has received insufficient attention in prior research and is considered an understudied area. Consequently, the grounded theory approach is deemed appropriate for our analyses. Corley (2015) stated that Grounded Theory methodologies of researching organizations have demonstrated themselves as among the most effective methods of investigation available for studying contemporary organization and organizing, especially those involving change. It corresponds to our research where we investigate the embedding of holistic thinking in strategic processes that leads to changes in organizations.

Since 1967 (Glaser & Strauss, 1967) the grounded theory approach has been divided into various methodological schools, and there are differences in how these scholars have put the principles of grounded theory into practice (Gioia et al., 2012; Murphy et al., 2017, Rheinhardt et al., 2019). The current study with its interpretivist paradigm foundation consistent with Corley's (2015) views about the philosophical paradigm of the grounded theory. He promotes a research approach where the investigators immerse themselves as "insiders" in the phenomenon being studied, interact with the individuals experiencing it, and strive to comprehend it from their point of view. This contrasts with the positivist paradigm, which involves being an "outsider" and maintaining a detached stance (Corley, 2015). However, as we apply abductive reasoning, in a way of "systematic combining" (Dubois & Gadde, 2002) of deductive and inductive methods, this is supposed to be contradictory to the grounded theory nature (Corley, 2015). Our research aligns with Murphy's et al. (2017) assertion that grounded theory is not purely an inductive approach, despite its apparent use of observation to develop theories. Grounded theory is instead based on four fundamental principles that set it apart from a straightforward inductive exercise. Murphy et al. (2017) outlined four steps in the grounded theory approach, namely, emergence, constant comparison, theoretical sampling, and theoretical saturation. Emergence refers to the researchers' willingness to consider new data that arise during the research and analysis process. The constant comparison involves regularly comparing the new data with existing literature and previous data. Theoretical sampling is the process of selecting data sources that are relevant and have the potential to contribute to

extending, validating, or correcting the developing theory. Finally, data collection and analysis continue until the emerging theories are saturated, which means that the data is comprehensive, and any new data obtained will not be redundant. For maintaining high-quality grounded theory research, the act of writing memos is a critical analytical process. These memos serve as a repository for ideas that have been developed and recorded during the process of engaging with data. Therefore, memos serve as introspective and explanatory compositions that create a detailed record of the ideas, events, and cognitive processes that arise during the research process and as the analyst's thinking evolves. They are important documentation of the research that allows for a thorough examination of the historical record (Chun Tie et al., 2019).

Various methods for conducting grounded theory have emerged that are intact with and correlate abductive reasoning, among them are the Gioia approach and Tabula Geminus or twin-slate approach, which are interesting for our study as they are featured in numerous high-ranking management publications (Murphy et al., 2017).

The Gioia methodology, also known as the Gioia approach, is a rigorous and systematic approach to qualitative research that involves a five-stage process, including data collection, coding, categorizing, theorizing, and writing. All these stages are iterative and involve a back-and-forth process of data collection and analysis. One of the key features of the Gioia methodology is the use of multiple coders to analyze the data which helps to ensure the reliability and validity of the findings by reducing the potential for bias and subjectivity. Interviews are one of the methods of collecting data that is rich and detailed, allowing for a deep understanding of the phenomenon under study. The methodology also emphasizes the importance of developing clear and concise definitions for each category and subcategory in order to ensure that the analysis is consistent and accurate. After coding, categorizing, and making connections between the categories and themes identified in the data, the stage of comparing the findings with previous literature to identify similarities and differences takes place. This allows for a more comprehensive understanding of the phenomenon under study and helps to situate the research within broader literature (Gioia et al., 2012). Murphy et al. (2017) add that the Gioia approach also emphasizes the need for reflexivity and transparency throughout the research process. The main idea of this approach is to have a “blank slate” that involves being aware of one's own biases and assumptions from previous literature and theories and being transparent about the research methods and findings. However, it is important to note that the Gioia approach emphasizes the importance of remaining open to the data throughout the entire research process, including during the literature review stage (Gioia et al., 2012).

The alternative method is the twin slate method, which shares many similarities with the Gioia approach, but it differs in its focus and process. While the Gioia approach is a more structured and sequential approach to grounded theory, the "twin slate" approach is a more collaborative and open-ended approach that emphasizes multiple perspectives and interpretations. According to Pratt (2008), who conducted a survey of qualitative researchers in the management field, a significant dilemma they faced was the requirement to simultaneously deviate from and closely integrate with established theory. He further stated that qualitative research must acknowledge and utilize established theory while also creating something unique by separating from it. These findings provided a foundation for the development of a Tabula Geminus, or "twin slate", or "both/and" approach to coding and theorizing established on grounded theory (Kreiner, 2016).

The twin slate approach is a simultaneous approach that involves two researchers working together to code and analyze the data independently. Each researcher creates their own set of codes, or "slates," and then compares their codes to identify patterns and themes that emerge from the data (Murphy et al., 2017). The twin slate method employs a coding technique where both the open and axial coding approaches are used concurrently to identify first-order codes and second-order themes. These are recorded in a coding dictionary throughout all stages of analysis (Rheinhardt et al., 2018). This approach focuses on developing multiple perspectives and interpretations of the data, rather than a single theory as in Gioia's approach. The twin slate approach is considered to be more efficient and effective since it enables the researchers to quickly recognize the topics that have been previously studied (integration of existing literature on the early stage) and enables the authors to concentrate on areas that have greater potential for developing theories (Murphy et al., 2017).

In the current study, we will apply the twin slate approach, as we can use the existing literature to inform our coding and analysis of the data. This can help us identify patterns and themes that are consistent with existing theories or highlight new themes that require further exploration. By incorporating the existing literature, we can develop a more comprehensive and nuanced understanding of the data and its relationship to existing theories in a more time-effective way. The Grounded theory twin slate approach is illustrated in Fig.3 (Murphy et al., 2017).

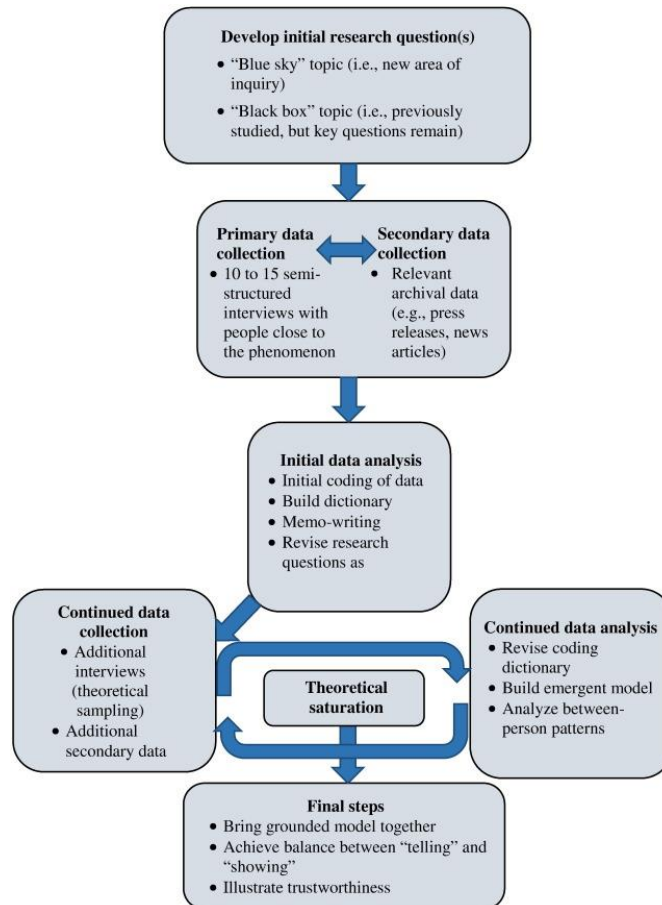


Figure 4: Twin slate approach of Grounded theory (Murphy et al., 2017)

### 3.5.2 Research process

The initial phase of carrying out the investigation involves creating the research framework and developing a clearly stated research question. Gioia et al. (2012) suggest that in order to uncover fresh insights and theories about a subject when utilizing the grounded theory approach, it is crucial to meticulously explore the existing literature. In this research, following the initial interest in the integrated reporting framework, integrated thinking, and strategic decision making the pertinent literature was comprehensively examined.

To answer our research question, we utilized a twin slate approach to analyze the responses gathered from our semi-structured interviews. By continuously comparing the data collected and analyzed with existing literature, it was possible to distinguish between previously discussed ideas and new findings emerging from the study. The process of constantly

comparing the collected data with existing literature during data collection and analysis helped to identify previously discussed concepts as well as new findings in the study.

According to Murphy et al. (2017), the process of data collection extends until theoretical saturation is achieved, denoting a point where no new categories are observed, and the existing categories are exhaustively explored and saturated with data. The point of theoretical saturation represents a crucial milestone in qualitative research, as it suggests that the data collected is sufficient to address the research question or objective. In this particular study, the point of theoretical saturation was reached during the last two interviews with top managers, as no significant new information emerged. We grouped the interview questions into three overarching themes: “Integrated reporting”, “Influence of IR on Integrated thinking” and “Influence of IR on top managers’ IT in SDM process”. Each of our questions was assigned a purpose beforehand to explore our research question in light of the existing literature.

During the interview we made audio recordings, after conducting interviews, we transcribed them and then applied the constant comparison method to code the data. This study has utilized two steps approach to coding which involves open-axial coding, and selective coding. We followed grounded theory techniques, as outlined by Strauss and Corbin (1998), by employing a manual coding process to derive codes from the transcripts in an inductive manner. With the twin slate approach, we employed a simultaneous open and axial-coding approach, where both first-order codes and second-order themes were identified concurrently and documented in a coding dictionary during all phases of analysis, starting from the first interview coded (Rheinhardt et al., 2018).

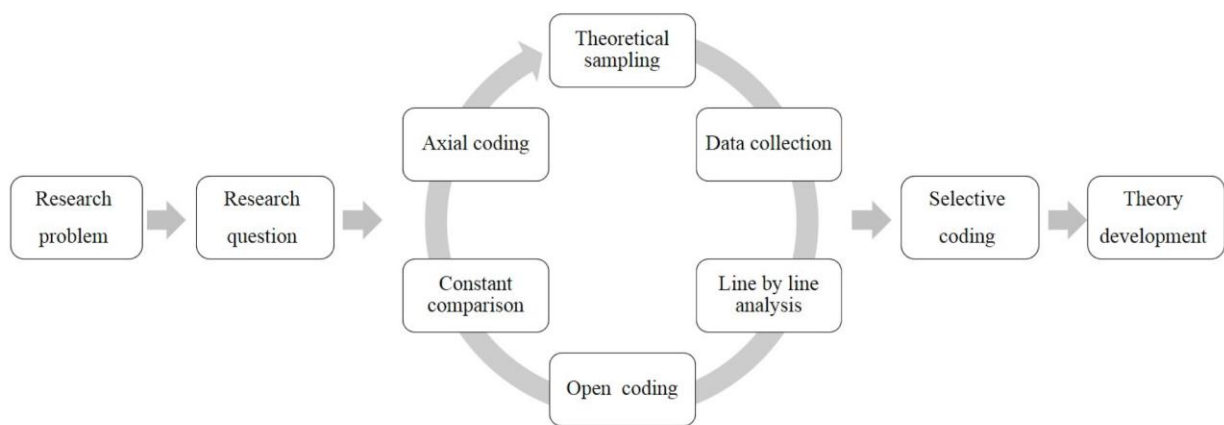


Figure 5: Coding process (Choi et al., 2018)

By employing the twin slate method, the codes we named by utilizing terminology from the existing literature (Murphy et al., 2017). Kreiner's method involves explicitly utilizing theory from the outset in order to enhance analytical flexibility and improve efficiency. This is because the Tabula Germinus approach necessitates that grounded theorizing should integrate both data and pre-existing theories, or the 'twin slates' (Rheinhardt et al., 2018; Kreiner, 2016). The identification of themes through the comparison of data served as a foundation for theoretical sampling, enabling us to further explore and expand our understanding of the desired category in subsequent interviews. By investigating the desired categories in greater depth, we could avoid objectivity and bias (Corbin & Strauss, 1990), and more fully understand the perspectives of our interviewees.

The last step in the coding process is selective coding. This stage involves generating definitive core categories, which pinpoint the primary concepts and phenomena of the study and establish the links between all the research (Corbin & Strauss, 1990).

### **3.5.3 Research quality**

To evaluate the quality of the study, it is important in qualitative grounded research to focus on the validity (or accuracy) of the method during both data collection and analysis (Murphy et al., 2017). In order to determine the validity of qualitative findings, it is necessary for researchers to ensure that their work is "trustworthy" and that they are accurately representing the reality they are describing. To establish such trustworthiness or rigor, researchers often use four criteria: credibility, dependability, transferability, and confirmability (Murphy et al., 2017). By doing so, this guarantees that the results presented from the current study accurately reflect the concept of top managers' perception of integrated thinking in strategic decision-making and are representative of the truth.

To ensure the credibility of the results, it was necessary to verify the validity and "trustworthy" of the information presented. This was accomplished by interviewing experienced managers who were knowledgeable about the topic under investigation. Additionally, the selection of participants was purposeful, with specific criteria that had to be met in order to qualify for the study, which further reinforces the credibility of the findings. Furthermore, the evaluation of data interpretation's credibility should not be based on fixed criteria such as the number of

interviews conducted or the use of data tables. Instead, credibility should be assessed subjectively by individual readers, rather than determined by a rigid, fixed approach (Rheinhardt et al., 2018). Finally, the semi-structured interviews were conducted in a conversational manner, which enabled us to continuously reflect on our comprehension as the interview progressed. Additionally, we were able to seek clarification and examples from the participants regarding important topics that were brought up. The participants' confirmation and illustration helped to verify the accuracy (validity) of our interpretation. (Yin, 2014).

To ensure the reliability (dependability) of the research, a thorough examination and comparison of a range of authors and research was conducted. The study relied on various sources, particularly research that was regularly cited and consistently reliable, to reinforce its reliability. As a result, the outcomes were subject to an impartial interpretation and evaluation (Murphy et al., 2017). Top of Form Moreover, the implementation of the twin slate approach improves the reliability of the analysis by increasing inter-rater reliability, which is the degree to which different coders agree on the codes they assign to the data. By comparing their codes and reconciling any differences, the researchers can increase the reliability of the analysis.

The notion of transferability is frequently regarded as an essential element for establishing rigor in qualitative research and is sometimes viewed as the qualitative equivalent of the quantitative concept of generalizability (Rheinhardt et al., 2018). To address the transferability of this study, potential avenues for future research were examined and outlined, offering a foundation for subsequent researchers. This was achieved by elucidating the topics and outcomes under discussion, thereby providing readers with a more comprehensive understanding of how the findings might be valuable to others (Murphy et al., 2017).

In terms of confirmability, it was ensured by establishing a well-organized framework for conducting the research, which not only facilitates replication of the study by others but also enhances transparency by documenting every step and detail involved in generating the findings. Moreover, to reinforce the confirmability aspect, supplementary details were included in the appendix. In addition, visual aids such as figures and a comprehensive explanation of the relationships were employed to effectively integrate the theoretical framework with the data collected (Murphy et al., 2017).

In addition, by having two researchers independently coded the data, the twin slate approach increases the rigor of the analysis. This is because having two researchers independently coded the data reduces the likelihood of individual biases or preconceived notions influencing the

analysis. By comparing their codes, the researchers can identify patterns and themes that emerge from the data. This process enhances the validity of the analysis by ensuring that the themes and patterns are grounded in the data and not just the researchers' interpretations (Rheinhardt et al., 2018). The summary regarding the utilized research methods is represented in Fig. 5.

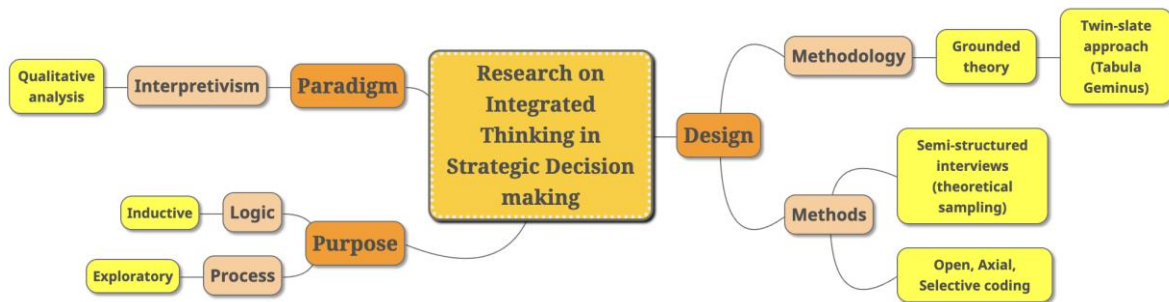


Figure 6: Mind map of the research (developed by authors)

## 4 RESULTS AND DISCUSSION

The aim of this study is to investigate the impact of integrated reporting on the integrated thinking of senior managers during the strategic decision-making process. The research question that guided the study was:

*How does the implementation of the integrated reporting framework stimulate and influence top managers' integrated thinking in strategic decision-making?*

In this chapter, the data collected from in-depth, semi-structured interviews are presented. The main focus is to present the key findings that were identified and organized using the twin slate approach for coding. The manner in which the findings are presented is in line with the structure of the interview guide and is also consistent with the themes identified in the literature review. The presentation is organized into two themes, which are illustrated in Table 3. To enhance the clarity and coherence of the presentation, the findings and discussion of them have been integrated into a single chapter. This approach was adopted to simplify the interpretation of the data and facilitate a more comprehensive analysis of the results.



Topic	Theme
<ul style="list-style-type: none"> <li>• When and why did your company adopt the Integrated Reporting framework?</li> <li>• Has the implementation of Integrated Reporting assisted you in identifying new ways of allocating resources and creating value?</li> <li>• Has integrated reporting been a driver toward achieving Integrated thinking?</li> <li>• Has the organization derived benefits from integrated thinking? What has changed after you have moved further on from IR to Integrated thinking?</li> </ul>	<p style="text-align: center;">The Integrated Reporting Framework and its Influence on top managers' Integrated thinking</p>
<ul style="list-style-type: none"> <li>• Has embedded Integrated thinking resulted in any changes in the strategy of the organization? <ul style="list-style-type: none"> <li>a. Has it resulted in any changes in the strategic decision-making process?</li> <li>b. Has it changed how the organizations approach their capital?</li> <li>c. Has it enabled you to identify new risks and opportunities?</li> <li>d. Has it helped to overcome organizational silos?</li> <li>e. Has it encouraged stakeholders' engagement?</li> <li>f. Has it encouraged a more holistic and long-term perspective in value creation?</li> <li>g. Has it improved information quality (more comprehensive, relevant, transparent) for stakeholders?</li> </ul> </li> <li>• In which types of strategic decisions is the consideration of integrated information beneficial?</li> <li>• Do you feel and in which way the integrated thinking and embed Integrated reporting give your company a sustained competitive advantage?</li> <li>• Can you say that the business benefits outweigh the efforts and time used to embed the integrated reporting? In which way?</li> </ul>	<p style="text-align: center;">The influence of Integrated Thinking on Strategic Decision-Making</p>

Table 3: Summary of the topics and themes derived from the interview guide

## 4.1 IR Framework and its Influence on Top managers' Integrated Thinking

The purpose of adopting the integrated reporting framework was the starting point for the investigation into the first research topic, which examines the extent to which integrated reporting fosters integrated thinking. According to our findings, there are two key reasons why businesses use the framework: (1) to enhance transparency, accountability, and trust with stakeholders and (2) to evolve.

More than half of the respondents answered that they produced the integrated report for accountability and transparency and trust reasons. Company A for example expressed that their company produces the IR to be more transparent for their stakeholders:

*“We have a lot of stakeholders that want to understand what our company is doing and how we are creating value for society... Clients want to know; our employees want to know that they are working for a firm with a purpose. So, it's for that reason that we published these reports” (Company A, Partner Strategy and Sustainability, Value and Impact).*

Company E shares the same view, however, further elaborates on this by saying:

*“...the report also provides a perspective on the degree of risks and opportunities on issues which previously not sufficient attention was given to them, such as social and environmental issues. And what investors are wanting to see is the extent to which we are proactive and managing these issues rather than waiting to hear when the incident has happened and they've had no foresight or insight on those issues and those issues when they occur, then tend to affect their investments” (Company E, Executive Head for Stakeholder Affairs, Chairman of the Board for the Impact Catalyst).*

Therefore, the preparation and release of the reports were to be transparent to investors regarding the risks that the company faces, how those risks are being managed, how they are maximizing their opportunities, and how much emphasis is being placed on ESG in order to demonstrate that their strategy is in line with the needs of their stakeholders.

Integrated reporting is also a means of taking accountability and building trust with stakeholders, as one manager phrased it:

*“By reporting on a range of non-financial indicators, such as environmental and social impacts, our company demonstrates the commitment to sustainable and responsible practices, which help to build trust with customers, investors, and other stakeholders” (Company C, CEO).*

One interviewee mentioned that the adoption of IRF had been because it was a requirement. However, the interviewee goes on to say that although implementing the IR framework is mandatory, the company supports the intent of the framework regarding enhanced accountability, transparency and meaningful information flow to enhance trust”.

IR aims to enhance transparency, accountability, and trust with stakeholders (Integrated Reporting, n.d.a). By providing a more comprehensive reporting of a company's performance and impact, including both financial and non-financial factors, and by reporting on environmental, social, and governance (ESG) factors alongside traditional financial metrics, stakeholders will have more information on a company's value creation, their commitment to sustainability and long-term strategy. This is beneficial for stakeholders, who are increasingly interested in understanding a company's broader impact beyond just financial performance (Warren, 2020). Transparency and accountability in corporate reporting have numerous benefits, both for the company and its stakeholders. Firstly, it helps to build trust between the company and its stakeholders, including customers, investors, and employees. This trust can lead to increased loyalty, investment, and a positive reputation (Crane, 2018). Secondly, it can help the company to identify and address issues within the company, such as unethical practices, poor financial performance, or environmental concerns (IIA, 2022). This can lead to improved decision-making, operational efficiency, and risk management. Finally, transparent and accountable reporting can help to ensure compliance with laws and regulations, reducing the risk of legal action or reputational damage. On the other hand, a lack of transparency and accountability can lead to a loss of trust among stakeholders, reducing the organization's legitimacy and limiting access to support and resources (Crane, 2018).

Three of nine companies' integrated reports came as a means or result of evolving the business. The manager for company G, for example, reveals that:

*“Our CEO came back from the World Economic Forum with a vision that Integrated reporting was something that would take the company further in terms of sustainability, which has been very well-established at the company since, 2015 or so” (Company G, CSO - sustainability and IR).*

The multi-capital approach model promoted by IR enables organizations to understand how they use various financial and non-financial factors to produce value, as well as the effects of this use. Increasing the awareness of non-financial issues might open the way for a shift in attitudes toward long-term thinking, which may result in positive social and environmental results. (Guthrie et al., 2017). Moreover, the approach also encourages the organizations to see the relationship and interdependency of the different factors which leads to integrated thinking. This may increase the attention given to non-financial factors in managerial decisions.

For company F, the adoption of IR came as a result of transforming their business in a more sustainable direction. For the company, it was, therefore, important to communicate with stakeholders about how this new business model would create value. This follows the intention of integrated reporting which is, through creating integrated reports, a company can communicate how the business creates value in the short, medium and long term (Integrated Reporting, n.d.a.).

The respondents mentioned that adopting the framework had its difficulties, one of which was deciding which material issue to concentrate on. One manager described this challenge as follows:

*“We have a lot of material issues, probably too many, but it's hard to take things out and as more issues rise to prominence, and mostly for good reasons by all means, but it also means that there is a lot to focus. Both in terms of resources and information to put out into the world. I think our last annual report is around 260 pages. It's a lot of information” (Company G, CSO – sustainability and IR).*

Other respondents also raised the issue of keeping the report concise, with the CEO of Company D pointing out that their unfinished report was already close to 100 pages, and the manager of Company H stating that there is generally a challenge in getting the integrated report down to size and communicating everything sufficiently.

Corporate reporting in general, including sustainability reports, has come under scrutiny for containing a lot of information that is irrelevant to stakeholders (Baron, 2014). The integrated reporting framework materiality guideline emphasizes that organizations should focus on revealing data that is most relevant to their stakeholders and long-term value growth (Integrated Reporting, 2021). By focusing on important topics rather than overwhelming stakeholders with irrelevant data, organizations can give stakeholders a full picture of their operations and performance by publishing an integrated report that adheres to the framework's materiality and

conciseness guidelines. Several of the respondents, however, found that only reporting on their material issues still led to long reports. Including too much information can lessen the significance of important information and make it harder for stakeholders to determine what is crucial (KPMG, 2013). As well as long reports also take a lot of time to read, which increases the likelihood that important details will be missed or disregarded (KPMG,2013). Another challenge noted was that making the report was time-consuming and required a lot of resources. As a result, smaller enterprises with fewer resources, as well as businesses in developing countries, may be hesitant to implement the framework. (Bananuka et al., 2019).

The respondents concluded that, despite its difficulties, the framework's business benefits outweigh the time and effort required to create it. Benefits include improved stakeholder trust, a better overview of the business activities and their impacts, and integrated thinking. As one respondent commented:

*“Obviously, if you start breaking down value creation, start reporting, and set out the metrics target, it helps to get to more integrated thinking” (Company A, Partner Strategy and Sustainability, Value and Impact).*

Another respondent commented likewise that the implementation of IR had led to the company thinking in the integrated matter, however, that IR was alone not sufficient to achieve integrated thinking. He elaborated on this by saying:

*“Integrated thinking requires a cultural shift within an organization, where stakeholders across the organization are encouraged to consider the interconnectedness of their activities and work towards a shared vision of creating long-term value. While integrated reporting can provide a framework for communicating the results of this process, it is ultimately up to the organization to embrace and embed integrated thinking into its culture and operations” (Company B, Executive Director).*

Another respondent agreed with this view that IR was not alone sufficient to achieve integrated thinking, however, the development of an integrated report reinforced integrated thinking, and its release meant that the company would be held publicly accountable and thus had to think and act in an integrated manner.

In conclusion, the integrated reporting framework was implemented by all the businesses that were interviewed in order to address a demand that the framework satisfies. Whether it was to increase stakeholder transparency, accountability, and trust or to develop and integrate

sustainability into their company strategy. The implementation of the report had additional advantages, such as promoting integrated thinking and a more comprehensive picture of the business. The results of the interviews demonstrate that integrated reporting is indeed influencing integrated thinking. Additionally, the development of an integrated report is causing organizations to recognize the connection between their functions and capitals which is promoting more integrated thinking (Perego et al., 2016). This is consistent with the study of Guthrie et al. (2017) and Busco et al. (2017) in which IT came as a result of implementing IR.

## **4.2 The Influence of Integrated Thinking on the Strategic Decision-Making**

### **4.2.1 Drivers of IT**

Integrated thinking is an approach that requires considering a range of factors, both internal and external, that have an impact on holistic and systems thinking in the strategic decision-making process at C-level. Answering our research question and following our objectives, we identified various factors as drivers of top managers' integrated thinking.

One of these drivers is the stakeholders' needs. The phenomenon of "stakeholders' needs" refers to the various groups or individuals who have an interest in the activities and outcomes of an organization, such as employees, customers, suppliers, shareholders, and the wider community. The needs and expectations of these stakeholders are becoming increasingly important to top managers in their strategic decision-making process. One such example is provided by our respondent about the customer's feedback and its importance for SDMP:

*“We have a team called the customer research and Insights Team, who are constantly going out and asking our members what they think. We do quite a lot of setting up online communities for people to input. So, we're getting a lot of feedback through them. We do it increasingly and we're trying to identify patterns through data that influence further decision-making processes” (Company B, Executive Director).*

The limited and imbalanced focus on non-financial aspects of value creation during strategic decision-making is perceived as a driving force behind the adoption of integrated thinking. Sibghatullah's (2018) case study findings concluded that balancing financial and non-financial information has a significant impact on corporate decision-making, additionally informing the external environment (various groups of stakeholders) was found to be a significant moderator in the relationship between balancing financial and non-financial information with organizational decision-making. In our research, there was a shared opinion that companies must pay attention to intangible information and find the balance between financial and non-financial capital. One respondent argued:

*“We do integrated reporting and implement integrated thinking because these are the important means of engaging with stakeholders on non-financial issues that may very seriously impact the business decision-making and business strategy. We find, so-called, champions who motivate and put forward a case for consideration of non-financial issues into strategic decisions and operational decisions” (Company E, Executive Head for Stakeholder Affairs, Chairman of the Board for the Impact Catalyst).*

Senior executives must widen their focus within the strategic decision-making process beyond financial value to include the creation of value in areas such as human, client, financial, and societal welfare. Moreover, they should strive to identify opportunities for creating synergies by adopting a multi-capital approach. In other words, the necessity to include non-financial aspects is a major driver of top managers' integrated thinking. Support of this is found in the paper of Socea (2012) who points to the significance of intangible information for strategic decision-making, particularly in market economy conditions where managers need to understand and apply modern management techniques to gain competitive advantages and survive in challenging environments. In line with this, the participant argues:

*"Integrating financial and non-financial information is an art. In the past, we only reported on financial and operational performance, which didn't consider resource usage. To broaden our focus and see things holistically, we need to include sustainability, responsible mining, and social issues" (Company E, Executive Head for Stakeholder Affairs, Chairman of the Board for the Impact Catalyst).*

And this finds support from another respondent:

*“Integrated thinking drives us to combine our financial and non-financial capitals and integrated value chain in the natural way of business. This is beneficial for our internal and external stakeholders. We are much better prepared for risks and changes in the environment by including non-financial factors in our business model and accounting for it in the strategic decision-making processes” (Company B, Executive Director).*

Another driver of integrated thinking is a commitment to legal and regulatory requirements for transparency and reporting. The respondent from Company B notes:

*“...our company is committed to solid corporate governance standards and being a good corporate citizen...” and continues: “As a Johannesburg Stock Exchange-listed company we are obliged to respective listing requirements and King IV recommendations.” (Company B, Executive Director).*

Although the Integrated Reporting framework is voluntary for companies, it is evident that there is a discernible trend wherein both large corporations and small and medium-sized enterprises (SMEs) are proactively engaging in integrated thinking and strategizing by devoting their resources towards adhering to laws governing transparency and openness, as well as meeting the Environmental, Social, and Governance (ESG) requirements. As one of the respondents from a medium-sized enterprise elucidated:

*“As an old company since 1855, we comply with transparency laws and report on environmental issues. Our process integrates ESG into the annual report. When buying buses, we ensure transparency by tracing the origin of the textiles and suppliers, verifying compliance with regulations and ethical standards” (Company D, CEO).*

Remuneration policies are an important tool for aligning the interests of top management with the long-term goals of the company. From our data we discovered that companies incorporate ESG factors into their remuneration policies willing to achieve sustainable growth and long-term success. This is because these policies incentivize top management to prioritize the long-term interests of the company over short-term gains. Incentives such as bonuses and compensations have been a common tool utilized to align managerial interests with the interests of the organization. In a study, investigating the impact of ESG-based compensation policies



on corporate behavior towards different stakeholders and long-term value creation, Baraibar-Diez et al. (2019) found that sustainable compensation policies can manage the behavior of corporate directors and align their welfare with that of the "common good," resulting in socially responsible firms. One interviewee supported and explained this with an example:

*"Our key managers have an incentive-based system focused on financial and ESG points. Good performance can add up to 10% on top of bonuses, while poor ESG performance can result in a deduction of up to 10%. Severe ESG issues, such as oil spills, can cause all bonuses to be forfeited and significantly impact management" (Company D, CEO).*

According to the findings of this study the implementation of integrated thinking has enabled companies to integrate material, environmental, and social issues into their remuneration policy. Another representative admitted that their incentive system is in line with the integration of important long-value creation non-financial factors:

*"...we have advanced to the point where non-financial issues have reached our remuneration policy, including ESG and social issues such as safety, carbon emissions reduction, energy, and water efficiency, which make up 25% of the score. The remaining 75% is a combination of operational and financial performance indicators" (Company E, Executive Head for Stakeholder Affairs, Chairman of the Board for the Impact Catalyst).*

#### **4.2.2 Integrated thinking in strategic decision-making**

In recent years, there has been a growing awareness of the need for businesses to adopt a more holistic approach to their operations and strategic decisions. Integrated thinking, which involves the incorporation of environmental, social, and governance (ESG) factors into the decision-making process, has emerged as a key strategy for companies looking to succeed in today's rapidly changing business environment. Papadakis et al. (1998) argue that SDMP is "multidimensional in nature" and hence, it is rather complicated to provide a comprehensive list of the main factors that impact the process of formulating strategic choices. Since our study specifically aims to investigate the influence of IR on top managers' IT in SDM, our research provides the most influencing outcomes in this context. Our findings support the shift toward long-term value creation by determining factors such as long-term perspective through a new

approach to resource allocation, the establishment of new KPIs, risk and opportunity assessment, full access to integrated information, innovation, and a holistic approach to strategic decision-making.

One of the primary advantages of integrated thinking is that it encourages a long-term view of the strategy rather than focusing solely on short-term profits. In other words, integrated thinking implementation results in a balance of short-term and long-term goals during the SDM process. By incorporating multiple capitals and adopting innovative resource allocation methods, top managers are empowered to develop long-term strategies that ensure the company's competitive position in the long run. As one of the respondents stated:

*"By doing so (embedding integrated thinking), our company can create more sustainable and resilient businesses that deliver long-term value across all six capitals" (Company C, CEO).*

Furthermore, integrated thinking, coupled with IRF informs crucial elements of strategy-making, leading to holistic and forward-thinking decision-making processes. This statement is supported by another top manager:

*"With integrated thinking and using the long-term value framework, the Integrated Reporting Framework or Long-Term Value ... it does inform strategy-making capital allocation, investment appraisal, the way you communicate with stakeholders and innovation" (Company A, Partner Strategy and Sustainability, Value and Impact).*

By focusing on long-term value creation, companies can make better strategic decisions that take into account the interests of all stakeholders, not just shareholders. As one respondent noted:

*"By considering the six capitals, our company can better understand the full value it creates and the impacts it has on society as a whole" (Company C, CEO).*

Another participant contributes to this discussion:

*"Embedding integrated thinking in our strategic decision-making process has enabled us to align long-term thinking with ESG issues. This reinforces and strengthens our strategy in both*

*the short and long term, reflecting our outlook for the future" (Company E, Executive Head for Stakeholder Affairs, Chairman of the Board for the Impact Catalyst).*

The importance of measuring sustainability values lies in its ability to provide a comprehensive assessment of a company's performance beyond traditional financial metrics. This involves using investigative metrics and frameworks for long-term value creation.

We noticed that in the early stages of integrating IT into strategic decision-making, senior managers encountered a significant barrier in response to increasing external pressures. They were required to assess, implement, and report previously unmeasured factors, which proved to be time-consuming, resulting in delays that could have a negative impact on the long-term viability of strategic decisions. But, to improve decision-making, it is important to establish a correlation between financial and non-financial outcomes (Eccles & Krzus, 2010).

KPIs are a set of measures that are used to assess an organization's performance in specific areas. Although the IR framework doesn't present a set KPIs that organizations have to report on, the framework encourages business to measure financial and non-financial performance (Integrated Reporting, 2021). Some companies encounter difficulties in finding suitable metrics or developing them and can use that as an excuse to avoid the challenging analytical work that is necessary. However, under the IR framework the process of establishing KPIs based on non-financial outcomes becomes a catalyst for top managers integrated thinking in SDM. One of the selection criteria for the sample of participants in this study was organizations that have adopted IR for at least two years. The purposive nature of this selection provides a basis for positing that based on the previous outcomes, top managers in mutual collaboration with the whole organization establish new KPIs and scorecards that fills the existing gap, create an empirical foundation for decision-making and consequently, assist in concentrating efforts on the most crucial areas. A respondent explained:

*"One of the main reasons is because if we are to stay relevant, competitive, and trustful, we should be measuring the value that company delivers right to shareholders and wider society... We developed a set of investigative metrics, a long-term value framework, and ... we also report that it's called value realized as UI" (Company A, Partner Strategy and Sustainability, Value and Impact).*

Organizations that report their KPIs put additional pressure on themselves to perform in those areas because they are made public. The companies we spoke with developed new KPIs and used them to track progress and performance on non-financial aspects of the business. Top management saw to it that these new KPIs were incorporated into the business's overall strategy.

By taking an integrated approach to decision-making, top managers are better equipped to anticipate future risks and opportunities, distinguish between risks and opportunities, manage risks, and facilitate benefits from opportunities. This is because an integrated approach requires them to consider a wide range of factors, including financial, environmental, social, and governance issues, which can affect the organization's performance in the future.

As one respondent stated:

*"Integrated reporting has allowed us to identify new risks and opportunities, that were not previously evident, by taking a holistic view of our business. This enables us to identify and prioritize opportunities to value creation across all six capitals while managing risks and reducing negative impacts." (Company C, CEO).*

Especially in the conditions of the VUCA and under the fast changes, the Head of Strategy Development and Alignment (Company H) highlighted the importance of continuously monitoring for risk and opportunities and adapting the organization's strategy to stay ahead of the curve. She affirmed that:

*"The holistic view helps us to recognize new risks and new opportunities, and in the long-term as well. It's, of course, difficult to do in the unpredictable world we live in" (Company H, CSO - Head of Strategy Development and Alignment).*

Furthermore, improving the ESG scorecard or creating a new business model that places a strong emphasis on being socially responsible, through the implementation of the integrated report and integrated thinking helped our participants to reduce the risks both for the company and for the investors. Another participant confirmed:

*"...we are rewarded with in terms of improving scorecard, and what that means then is that the risk in a business and for an investor to invest in our company, we looked at it through the*

*lens of the ESG, it's less risky than another company, which is in our industrial sector affected by the same issues but not demonstrating the same response” (Company E, Executive Head for Stakeholder Affairs, Chairman of the Board for the Impact Catalyst).*

There was a shared opinion among our participants that innovation is a vital component of success in general. According to Eccles & Krzus (2010), in order to establish a sustainable strategy, innovation plays a critical role. One of the key areas where innovation is needed is the development of a novel business model that challenges senior management to adopt a more strategic, forward-thinking approach to the organization. By implementing such changes, the organization can create value, which is essential for generating new products, processes, and services that promote sustainability. This could entail the use of technologies to assess non-financial performance and merge financial and non-financial systems, the provision of models, tools, and consulting services to enhance comprehension of the connection between financial and non-financial performance, as well as recommendations for internal and external communications and stakeholder involvement (Eccles & Krzus, 2010). One of the respondents stated that:

*“We felt there was a need to innovate and that is what we did with the longer value framework, the embankment project, and the EPIC framework... So yes, it's about more accountability and transparency, but it's also about getting to integrated thinking” (Company A, Partner Strategy and Sustainability, Value and Impact).*

It is critical to collect integrated information from lower levels of the company and across different divisions to ensure effective and sustainable strategic decision-making. This is especially important in today's business environment, where organizations are increasingly expected to prioritize ESG considerations. In order to do so, we discovered that strategic decision-makers must have access to comprehensive and reliable data, which can only be obtained through an integrated approach to reporting and decision-making. One respondent supported this by saying:

*“If the integrated thinking approach is done properly, it does inform strategy-making capital allocation, investment appraisal, the way you communicate with stakeholders and innovation” (Company A, Partner Strategy and Sustainability, Value and Impact).*

We observed that the companies we investigated successfully apply an integrated thinking approach, which allows for the consolidation of information from various sources within the organization, providing top management with a comprehensive understanding of the organization's operations and the impact of its activities on the environment and society. Senior executives acknowledge that taking this approach enables them to make informed decisions that align with the organization's overall strategic objectives while also promoting sustainability and social responsibility. Supporting this statement one of the respondents says:

*"The holistic approach to the thinking directly translates into our financial and ESG performance and strategy formulation" (Company C, CEO).*

Another interviewee added to it:

*"...we send out (information) and, we have a person making the calls on top. So, one thing is that we send out the questionnaire and then secondly, we also talk with everyone about them. And from that, we also bring the information from our subsidiaries to get the focus on what we need for decision-making" (Company D, CEO).*

Therefore, integrating information from lower levels of the company and different subsidiaries is critical for organizations seeking to make sustainable strategic decisions in the modern business landscape.

To be able to recognize and account for all the factors that promote and drive integrated thinking in SDMP, not only internally but also externally, it is important for top management to participate in knowledge exchange with other companies and associations. Say it differently, to develop a better understanding and ability to think holistically, senior managers should obtain new knowledge and develop their skills of integrated thinking. One of the participants highlights the significance of social and relationship capital, underscoring that the partnerships and interactions among firms operating in identical industries can produce benefits for the sector as a whole. He described that as follows:

*"We're part of ESG practitioner groups such as the World Economic Forum and the World Business Council for Sustainable Development, which provide inspiration on integrated*

*thinking from around the world. We meet monthly and attend annual meetings where this is on the agenda. We also have useful dialogues with other companies in similar situations regarding ownership and size" (Company G, CSO).*

To conclude, in order to stimulate integrated thinking during the strategic decision-making process, integrated information is crucial. To give top management a thorough understanding of the organization's operations and the effects of its activities on the environment and society, organizations need to gather and combine information from various sources within the company. This strategy encourages sustainability and social responsibility while empowering senior executives to take well-informed decisions that are in line with the organization's overall strategic goals. Senior managers should engage in knowledge exchanges with other businesses and associations in order to learn new information and hone their integrated thinking abilities. This interaction can benefit the industry as a whole and stimulate fresh perspectives and methods for integrated thinking.

### **4.3 Outcomes of Integrated Thinking on Strategic Decision-Making**

All of the respondents agreed that integrated thinking results in a more comprehensive understanding of the value-generation process. Due to this, there have been some internal changes at the firm, and new strategic stances have been adopted. The manager of company B discusses how the integrated reporting structure had assisted his business in adopting a more comprehensive strategy for strategic decision-making that took both internal and external perspectives into account. He explains as following:

*"We have identified our groups' top risk and material matters, which has allowed us to prioritize our focus on areas that are more critical to our business" (Company B, Executive Director).*

The organization was also able to develop and produce KPIs that take into account a broad range of elements that have an impact on their business after IR was implemented. These KPIs are a crucial instrument for the management of the company's strategy. The management of

firm E discloses that this holistic viewpoint has sparked new discussion within the organization and a new strategic approach to their capitals, where the evaluation of risk has resulted in innovative and cost-effective ways of handling their essential resources:

*“The cost of resources, like water, is going up, as it's getting scarcer. Therefore, by using energy, water, and other natural resources more effectively, we can reduce the cost of securing those resources” (Company E, Executive Head for Stakeholder Affairs, Chairman of the Board for the Impact Catalyst).*

The manager adds that exhibiting a response to these issues had given the business an advantage because, when viewed through the ESG lens, investing in the company seemed less risky than doing so in a business that was dealing with the same problems but not exhibiting the same response. Applying a holistic viewpoint to company D's value creation process sparked a long-term value creation mindset that encouraged them to adopt a more sustainable approach, replace their assets with more environmentally friendly ones, and make sure their collaboration partners were in it for the long run as well.

Others have seen significant changes in their business strategy as a result of the value creation process's holistic approach. For instance, company C says that it has changed its business model and strategy after implementing IR. Following is how the manager explains it:

*“The changes, made in the organization’s structure, were in pursuance of the strategy to focus on core business and allocate the released capital to the development of the business areas that offer the greatest growth potential” (Company C, CEO).*

This also applied to Company B, which sold off its non-core businesses after implementing IR and integrated thinking. However, integrating non-financial metrics and integrated thinking into daily operations remained difficult. One CEO explains this challenge:

*"Financial is the one with the most daily concentration because that is simple. You get a monthly reporting, you see what's happening every day in the business and you get a feeling how will that impact the financials, while on most of the social factor's instance, it is more kind of a regular basis, but It's not on an everyday changing basis” (Company B, Executive director).*



The management of firm E explains that a lack of knowledge about how to apply these factors to daily operations is what makes it difficult. However, the company is looking for "champions" to inspire and present a case for taking non-financial issues into consideration when making operational and strategic decisions.

Breaking down silos is another difficulty, and several interviewees admitted that their organization still has silos. One manager argues that while "legacy issues" make it difficult to break down these silos because each function has historically had its own distinct tasks and possession of certain documents, integrated thinking is questioning these roles and the separation of the functions. According to one respondent, stronger cross-functional collaboration can be achieved by expressing the business vision, outlining its goals in depth, and rallying staff behind them.

As we have shown via our outcomes, there are many benefits to using a comprehensive approach when making decisions. First of all, taking a holistic approach to decision-making enables managers to be conscious of their actions and their consequences, which can help management avoid making poor choices (Donkor et al., 2022; Shireba & Nakano 2022). Second, a holistic strategy aids companies in developing a thorough awareness of their internal processes. Managers can find areas where efficiency can be increased, redundant processes can be avoided, and cross-functional collaboration can be encouraged by having a broad picture of the organization. Thirdly, this form of approach additionally assists companies in better comprehending their surrounding environment. Businesses can foresee changes and modify their strategy as necessary by having a thorough awareness of the external environment. They can use this to keep one step ahead of the competition and seize new chances. Fourthly, this strategy aids organizations in managing risk. Managers can discover potential risk areas by adopting a comprehensive picture of the organization. By recognizing and reducing these risks, businesses can preserve their assets and assure long-term sustainability, as we saw in the instance of firm E. Fifth, a comprehensive strategy also encourages innovation. Managers can find places where innovation might be encouraged by adopting an extensive view of the organization. This includes finding new sources of income, creating new goods or services, or optimizing current procedures, as illustrated in the instance of companies C and E. Finally, a comprehensive strategy enables companies to match their strategies to stakeholder expectations. Businesses can make sure that their strategies are in line with the expectations of

their stakeholders by adopting a stakeholder-centric strategy. Increased customer loyalty, better employee engagement, better supplier relationships, and improved reputation can all result from this.

In conclusion, businesses could benefit greatly from a thorough approach to strategic decision-making. Businesses can get a thorough grasp of their internal processes, external environment, and stakeholder expectations by adopting a broad perspective of the organization. Cost reductions, enhanced productivity, better resource management, and more innovation may result from this strategy. Additionally, it can assist businesses in risk management, effective strategy communication, and long-term sustainability.

## **4.4 Summary of Results and Discussions**

This paper explores the role and impact of integrated reporting on the integrated thinking of senior management in strategic decision-making. As a result of interviews and confirmation by previous studies, existing factors were confirmed, and new factors were identified that directly affect top managers' integrated thinking in the SDM process after the implementation of the integrated reporting framework. Our findings show that integrated reporting, more importantly integrated thinking, plays an important role in changing the way the SDM process is conducted, and strategies formulated with respect to long-term value creation. Top managers' perceptions of integrated thinking were not only positive but with a deep understanding of its undoubted necessity for being a sustainable, competitive, perspective, and progressive company. Despite challenges on the integrated thinking journey, many leaders recognize the potential for long-term opportunities by incorporating a multi-capital approach into their business models and the synthesis of financial and non-financial factors.

Based on our findings and on the general model of the strategic decision-making process suggested by Mintzberg et al. (1976), we established a possible connection between the various phases of the SDM process and determined factors of influence on the integrated thinking of C-level managers for each phase. The three main phases - Identification, Development, and Selection - form the core of our model. A visual representation of the model shows how the implementation of the IR framework influences the top managers' integrated thinking during the SDM process and can be found in Fig. 6. The information presented for each of these phases

and around them elaborates the factors that we found as the most significant drivers of top managers' integrated thinking in SDMP.

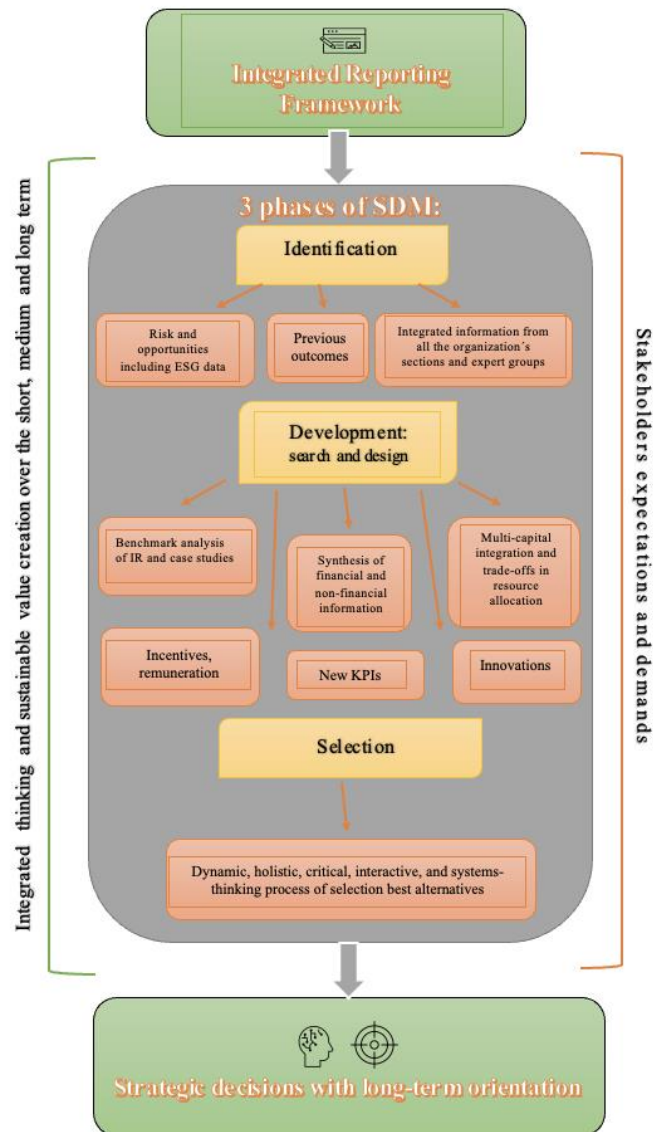


Figure 7: The influencing factors of top managers' Integrated Thinking in the SDMP

### 1<sup>st</sup> phase: Identification

In the identification phase, there should be a clear understanding of the organization's mission and values, a comprehensive analysis of the internal and external environment, and a strong sense of stakeholder engagement (Mintzberg et al, 1976). The top managers' integrated thinking in this phase of the strategic decision-making process was recognized as important to identify the relevant issues, opportunities, and challenges that the organization faces and to collect relevant integrated information. Our respondents showed a high level of awareness of the

importance of integrated thinking in SDMP. The drivers of risk and opportunities, including ESG data, previous outcomes, and integrated information from the organization's units and expert groups, have been found to influence top managers' integrated thinking during this phase. Moreover, as integrated thinkers, our interviewees attempt to look for factors that may not be immediately apparent but could be significant, what they would not do as traditional thinkers (Martin, 2007). In line with this, one of our respondents' notes:

*“Opportunities can come out of anywhere! So, it is important to not miss them. We talk and gather all kinds of information across the company, and we do a lot of analysis based on integrated thinking” (Company H, CSO - Head of Strategy Development and Alignment).*

## 2<sup>nd</sup> phase: Development

In the development stage of the strategic decision-making process, top managers are responsible for identifying and evaluating potential solutions to achieve their organization's goals and objectives (Mintzberg et al, 1976). The drivers of integrated thinking - synthesis of financial and non-financial information, multi-capital integration and trade-offs in resource allocation, benchmark analysis of integrated reports and case studies, incentives, and remuneration of top managers, new KPIs based on non-financial data, and innovation in business model and strategy – appeared in our research to have the most influencing role in guiding top managers' decision-making processes during this phase.

Firstly, the synthesis of financial and non-financial information enables top managers to make informed decisions that balance financial results with long-term sustainability and value creation. In the search stage, top managers look for ready-made solutions that provide short-term financial gains, but in the design stage, they develop custom-made solutions that take into account the organization's unique needs and challenges (Mintzberg et al, 1976). By synthesizing financial and non-financial information, senior managers evaluate the potential impacts of their decisions on stakeholders and the environment and make more sustainable and socially responsible choices.

Secondly, multi-capital integration and trade-offs in resource allocation allow top managers to consider the interdependencies between different types of capital - financial, natural, social, and human - when making decisions. In the search stage, top managers may prioritize financial

capital over other forms of capital, but in the design stage, they should consider the impacts of their decisions on the organization's other forms of capital. By balancing the trade-offs between different forms of capital, top managers make more holistic decisions that create long-term value for all stakeholders.

Thirdly, benchmark analysis of Integrated reporting and case studies enables top managers to learn from other organizations and identify best practices in sustainable and socially responsible decision-making. In the search stage, managers may look for ready-made solutions from similar organizations, but in the design stage, they develop custom-made solutions that align with the organization's unique values and goals. By benchmarking against peers and using case studies, top managers identify opportunities for improvement and develop more robust strategies that are aligned with stakeholder expectations and global sustainability challenges.

Fourthly, incentives and remuneration of top managers motivate them to integrate sustainability and social responsibility into their decision-making processes. In the search stage, top managers may prioritize short-term financial gains over long-term sustainability, but in the design stage, they need to consider the impacts of their decisions on stakeholders and the environment. By linking incentives and remuneration to sustainability and social responsibility performance, top managers can be motivated to make decisions that create long-term value for all stakeholders.

Fifthly, new KPIs based on non-financial data allow top managers to measure and report on the organization's sustainability and social responsibility performance. In the search stage, top managers may look for ready-made solutions that align with traditional financial KPIs, but in the design stage, they need to develop custom-made solutions that align with new non-financial KPIs. By measuring and reporting on non-financial KPIs, top managers develop more robust strategies that are aligned with stakeholder expectations and global sustainability challenges.

Finally, innovation in business model and strategy encourage top managers to develop solutions that integrate sustainability and social responsibility into the organization's operations and decision-making processes. In the search stage, top managers may look for ready-made solutions that align with traditional business models and strategies, but in the design stage, they are forced to develop custom-made solutions that align with innovative business models and strategies. By fostering a culture of innovation, top managers can encourage employees to develop solutions that integrate sustainability and social responsibility into the organization's operations and eventually into decision-making processes.

The results of the research revealed that these drivers prompt top-level executives to contemplate complex and interconnected relationships among variables and to approach issues holistically by analyzing how different elements interact and how decisions impact each other (Martin, 2007).

### 3<sup>rd</sup> phase: Selection

At the selection phase of the strategic decision-making process, top managers' integrated thinking is influenced by many factors: internal or external (stakeholders' expectations, for example) to the organization. Senior managers must continuously evaluate and refine their decision-making based on the changing internal and external environment. That is why the selection phase is a dynamic, holistic, interactive, and systems-thinking process that involves the investigation of alternatives based on an innovative approach (Mintzberg et al., 1976).

According to our results, senior executives concurred on an approach that aims to resolve conflicting ideas in a creative manner, generating novel solutions instead of choosing between two options, and settling for the best possible alternatives as would conventional thinkers choose to do (Martin, 2007).

Typically, each phase follows the previous one after the necessary information has been collected and analyzed. Nevertheless, according to our participants as well as referring to Mintzberg et al. (1976), there is a possibility of phases overlapping with each other, and decision-makers may need to revisit previous phases in case additional information is needed to be collected and revised to make a strategic decision. As one of the participants explained about this process:

*“... and that developed idea of going from us (top management) out to the subject matter experts and then from them out to their teams to gather input and back to the top again” (Company F, CSO - sustainability).*

Another participant admitted that SDMP based on integrated thinking is a systems-thinking, interactive, long-term oriented, and ongoing process where attention to all types of information, previous results, and scrupulous estimation of risks and opportunities is essential. He noted:

*“Now we are moving from the identification to the development phase where we collect financial and non-financial information, set rolling horizons and aspirations to identify potential areas of focus. Our senior managers need special competencies to focus internally*

*and externally... We prioritize holistically and recognize risks early on. Integrated thinking has been important to us for a long time and is essential in all strategic and operational processes” (Company I, CFO).*

To conclude, Socea (2012) argues that strategic decision-making is a complex process that involves a combination of a large amount of data, good experience, and professional knowledge. The current study’s findings give evidence and prove that under the integrated reporting framework the recognition of many factors that stimulate and form top managers’ integrated thinking in SDMP is required. The current study’s findings give evidence and prove that under the integrated reporting framework there is a better inclusion of C-level management in the integrated process of long-term value creation in the course of which new and significant factors appear shaping top managers’ integrated thinking in the Strategic Decision-Making process. The results suggest that the integrated reporting framework can stimulate and enhance integrated thinking in decision-making by encouraging managers to consider a broader range of issues and perspectives and be creative and innovative.

## **5 CONCLUSION**

This final section of the thesis gives a recap of the main discoveries and endeavors to address the research question: "How does the implementation of an integrated reporting framework stimulate and form top managers’ integrated thinking in the strategic decision-making process?". Additionally, it provides an understanding of the study's contributions and recommendations for potential future research in this field.

### **5.1 Summary**

*“The world we have created is a product of our thinking; it cannot be changed without changing our thinking.” Albert Einstein*

The objective of this study was to establish whether integrated reporting stimulates integrated thinking as well as the factors that influence the integrated thinking of senior managers during

strategic decision-making. Due to the limited studies on the phenomenon, qualitative research was deemed appropriate, and an exploratory research design was employed. Through the analysis of nine semi-structured interviews with executives from companies across the globe, it is expected that this thesis has achieved the intended outcome of providing deeper insight and understanding of the core of this master's thesis that is built upon research question: "How does the implementation of an integrated reporting framework stimulate and influence top managers' integrated thinking in the strategic decision-making? ".

The study investigated the extent to which the adoption of the integrated reporting framework fosters integrated thinking in top management. The findings reveal that most businesses use integrated reporting for accountability, transparency, and trust reasons. The integrated report helps companies to demonstrate their commitment to sustainable and responsible practices, which helps to build trust with customers, investors, and other stakeholders. Also, integrated reporting promotes a more holistic approach to decision-making and stakeholder engagement, which can lead to improved risk management, alignment of strategy and values, and long-term value creation. The adoption of the framework was also a result of evolving and transforming their business in a more sustainable direction, in which the framework's comprehensive reporting of a company's performance and impact, including both financial and non-financial factors and environmental, social, and governance (ESG) factors alongside traditional financial metrics puts pressure on companies to act sustainably. The main findings identified various drivers of integrated thinking, including stakeholders' needs, balancing financial and non-financial information, commitment to legal and regulatory requirements for transparency and reporting, and the incorporation of ESG factors into remuneration policies. The study found that the implementation of IR encourages top managers to pay attention to intangible information and try to find a balance between financial and non-financial capital to widen their focus beyond financial value to incorporate the generation of value in areas such as human, client, financial, and societal welfare. The study also found that companies incorporate ESG factors into their remuneration policies to push managers to focus on achieving sustainable growth and long-term success.

The results revealed that managers overall believe that integrated thinking leads to a more comprehensive understanding of the value-generation process. As a result, the organization can prioritize its focus on areas critical to its business and produce key performance indicators (KPIs) that take into account a broad range of elements impacting the business. The holistic viewpoint of IR has sparked new discussions within organizations and has resulted in new



strategic approaches to handling essential resources. Some companies have changed their business models and strategies after implementing IR. However, integrating non-financial metrics and integrated thinking into daily operations remained difficult due to a lack of knowledge about how to apply these factors. Breaking down silos was also challenging, and several interviewees admitted that their organization still has silos. Despite these challenges, a comprehensive approach to decision-making offers many benefits, including helping managers to be conscious of their actions and their consequences, developing a thorough awareness of internal processes, better comprehending the external environment, managing risk, encouraging innovation, and matching strategies to stakeholder expectations.

To conclude, the study explored the role of integrated reporting on the integrated thinking of senior management in the strategic decision-making process. The study's findings confirm that the implementation of integrated reporting and its function plays a vital role in changing the way strategic decisions are conducted and strategies formulated for long-term value creation. The research identified factors that directly affect top managers' integrated thinking in the strategic decision-making process after the implementation of the integrated reporting framework. As a resulting outcome, we established a possible connection between the phases of the strategic decision-making process and determined factors of influence on the integrated thinking of C-level managers for each phase. The factors of influence were a synthesis of financial and non-financial information, multi-capital integration and trade-offs in resource allocation, benchmark analysis of integrated reports and case studies, incentives, and remuneration of top managers, new KPIs based on non-financial data, and innovation in business models and strategies. The study concluded that top managers' perceptions of integrated thinking were not only positive but also showed a deep understanding of its undoubted necessity for being a sustainable, competitive, prospective, and progressive company. Despite challenges on the integrated thinking journey, many leaders recognize the potential for long-term opportunities by incorporating a multi-capital approach into their business models and the synthesis of financial and non-financial factors.

## **5.2 Practical Contributions**

Our research has practical implications that extend beyond academia. The findings from our study can inform organizations seeking to adopt integrated reporting frameworks, providing

them with evidence-based results on how these integrated frameworks can foster a more integrated thinking culture among top managers. Ultimately, we aspired to make a tangible impact by helping organizations embrace a more holistic, sustainable, and future-oriented approach to decision-making.

Interviewing top managers from different countries has enriched our research with diverse perspectives and opportunities for comprehension of how the Integrated Reporting Framework influences top managers' Integrated thinking in SDM process. Current research that involves participants from multiple countries can increase the generalizability of findings, making them more applicable to a broader range of contexts.

The importance of this research lies in its contribution to the understanding of the role of integrated reporting in promoting integrated thinking and decision-making. By identifying the drivers of integrated thinking, the study provides insights that can be used to enhance the effectiveness of the strategic decision-making process. The findings have practical implications for organizations that seek to improve their decision-making processes and enhance their sustainability performance.

### **5.3 Limitations and Suggestion for Future Research**

We have been studying the effect of integrated reporting on the integrated thinking of top, executive, and senior management in companies. This level of implementation focuses on those responsible for governance and strategic decision-making. Due to practical constraints in the research, the objectives of this study do not entail recognizing an exhaustive catalog of significant ideas or suggesting that the framework constructed for the examination is the sole possible explanation. From our study, we do, however, contribute to the literature in three ways. First and foremost, in order to close the research gap on integrated thinking (Malfronte & Peleira, 2020), we describe the factors that motivate integrated thinking, such as stakeholder needs, compensation structures, and integrated information. Furthermore, we add to the existing literature on the influence of integrated reporting on integrated thinking by demonstrating that integrated reporting indeed has a positive, stimulating impact on it. Lastly, we present the challenges that organizations face with implementing the framework as well as integrated thinking. The limitations of this study we faced were time constraints, few responses,

limited resources, and constraints with access to the contact information of the top management level that restricted the number of interviews that could be conducted. Of the 70 invitation emails sent to companies worldwide with further reminders and some calls, we managed to conduct nine interviews. As a result, the research may not encompass a comprehensive range of perspectives or cover every possible variation within the topic being studied. Furthermore, the research can only preliminarily propose that the results might offer supplementary insight into the evolving theory of integrated thinking in the domain of strategic decision-making.

Moreover, our research did not extend to the next level of middle management (IFRS Foundation, 2023). In other words, our findings provide the research of the impact of IR on integrated thinking on a strategic level but do not delve into the operational aspects of its implementation. However, integrated thinking is not restricted to board members or higher-level executives as it necessitates reconfiguring the organization to demand that all employees enhance their contribution to a more extensive and enduring value-creation concept (IFAC, 2015).

Future research can include examining the impact of IR on integrated thinking at all management levels. This could include studying how integrated thinking is implemented and integrated into the day-to-day operations of organizations, and what the benefits and challenges are at each level. The aim of future research would be to gain a more comprehensive understanding of the implementation of IT, and how it can be integrated into the operations and decision-making processes of organizations at all levels.

As our study was exploratory and qualitative in nature, our sample size was limited. Thus, further research is necessary to investigate these connections and utilize theoretical perspectives to elucidate them.

Another limitation of this work is that although the study had a global perspective including the regulatory context of the country, it provided a generalized examination of the top managers' integrated thinking phenomenon in the strategic decision-making process. Further research is needed to investigate the impact of integrated reporting on integrated thinking in strategic decision-making in different countries that can vary due to several factors.

One significant factor to consider in the research on the influence of integrated reporting on top managers' integrated thinking in strategic decision-making is the cultural context. Different countries have different values, norms, and expectations about corporate social responsibility, environmental performance, and stakeholder engagement. For instance, in countries such as

Japan and South Korea, where stakeholder engagement is highly valued, integrated reporting may have a more significant impact on strategic decision-making by promoting stakeholder dialogue and collaboration. In contrast, in countries where shareholder value is prioritized, integrated reporting may have a more limited impact on strategic decision-making, focusing mainly on financial performance.

Another factor is the level of stakeholder engagement, and the availability of information also varies across different countries and can affect the impact of integrated reporting on strategic decision-making. In countries where stakeholders are actively engaged in corporate governance, integrated reporting can provide valuable information to inform strategic decision-making. On the other hand, in countries where stakeholders have limited access to information and are less engaged, the impact of integrated reporting on strategic decision-making may be limited.

The size and industry of the companies under study can also affect the impact of integrated reporting on strategic decision-making. Smaller companies may have fewer resources to implement integrated reporting fully, while larger companies may have more significant impacts due to their size and influence. Additionally, the industry can also influence the impact of integrated reporting, as certain industries may be more susceptible to reputational risks associated with environmental or social issues.

Finally, the role of technology and data in integrated thinking and strategic decision-making process becomes more and more dominating. With advances in technology and the availability of new data sources, future research could explore how technology and data can be leveraged to support integrated thinking and decision-making.

## 6 REFERENCES

- Aboody, D., & Lev, B. (2000). Information Asymmetry, R&D, and Insider Gains. *The Journal of Finance*, 55(6), 2747–2766. <http://www.jstor.org/stable/222399>
- Accaglobal. (2013). *What do investors expect from non-financial reporting?* Accaglobal. <https://www.accaglobal.com/gb/en/technical-activities/technical-resources-search/2013/august/investors-and-non-financial-reporting.html>
- Adams, C. (2013, March 25). Materiality: financial reporting, sustainability reporting and integrated reporting. Drcaroladams. *Towards sustainable business*. <https://drcaroladams.net/materiality-financial-reporting-sustainability-reporting-and-integrated-reporting/>
- Adams, C. (2017). *Understanding Integrated Reporting, The concise guide to integrated thinking and the future of corporate reporting*. Routledge.
- Adler, L. (2007). *Hire with your head: Using performance-based hiring to build great teams*. John Wiley & Sons.
- Aicpa. International Integrated Reporting Council (IIRC). Aicpa. <https://us.aicpa.org/interestareas/businessindustryandgovernment/resources/sustainability/integratedreporting>
- Al-Htaybat, K., & Von Alberti-Alhtaybat, L. (2018). Integrated thinking leading to integrated reporting: case study insights from a global player. *Accounting, Auditing & Accountability*, 31(5), 1435–1460. <https://doi.org/10.1108/aaaj-08-2016-2680>
- Allan, G. (2003). A critique of using grounded theory as a research method. *Electronic journal of business research methods*, 2(1), pp.1-10. <https://academic-publishing.org/index.php/ejbrm/article/view/1168/1131>
- Alvesson, M. and Skoldberg, K. (1994). *Tolkning och Reflektion. Vetenskapsfilosofi och Kvalitativ Metod*. Studentlitteratur, Lund.
- Bananuka, J., Tumwebaze, Z., & Orobia, L. (2019). The adoption of integrated reporting: a developing country perspective. *Journal of Financial Reporting and Accounting*, 17(1), 2–23. <https://doi.org/10.1108/jfra-09-2017-0089>
- Banerjee, S., Gupta, S., & Koner, S. (2022). Impact of the Brundtland Commission on Select Climate Changing Variables: An Empirical Analysis. Doi: 10.4018/978-1-6684-4610-2.ch015.

- Bansal, P., & Corley, K. G. (2011). The Coming of Age for Qualitative Research: Embracing the Diversity of Qualitative Methods. *Academy of Management Journal*, 54(2), 233–237. <https://doi.org/10.5465/amj.2011.60262792>
- Baraibar-Diez, E., Odriozola, M. D., & Fernandez Sanchez, J. L. (2019). Sustainable compensation policies and its effect on environmental, social, and governance scores. *Corporate Social Responsibility and Environmental Management*, 26(6), 1457-1472. <https://doi.org/10.1002/csr.1760>
- Barnabè, F., & Nazir, S. A. (2021b). Conceptualizing and enabling circular economy through integrated thinking. *Corporate Social Responsibility and Environmental Management*, 29(2), 448–468. <https://doi.org/10.1002/csr.2211>
- Baron, R. (2014). *The evolution of Corporate Reporting for Integrated Performance*. OECD. <https://www.oecd.org/sd-roundtable/papersandpublications/The%20Evolution%20of%20Corporate%20Reporting%20for%20Integrated%20Performance.pdf>
- Baumbusch, J. (2010). Semi-Structured Interviewing in Practice-Close Research. *Journal for Specialists in Pediatric Nursing*, 15(3), 255–258. <https://doi.org/10.1111/j.1744-6155.2010.00243.x>
- Beatty, P., & Willis, G. (2007). Research Synthesis: The Practice of Cognitive Interviewing. *Public Opinion Quarterly*, 71(2), 287–311. <https://doi.org/10.1093/poq/nfm006>
- Berthod. (2018). *Institutional Theory of Organizations*. Springer. Doi:[10.1007/978-3-319-20928-9\\_63](https://doi.org/10.1007/978-3-319-20928-9_63)
- Bhushan, N. & Rai, K. (2004). *Strategic Decision Making: Applying the Analytic Hierarchy Process*. Springer.
- Bougie, R., & Sekaran, U. (2020). *Research methods for business: a skill-building approach* (8th edition). Wiley.
- Busco, C., Frigo, M., Riccaboni, A., Quattrone, P. (2013). *Integrated Reporting Concepts and Cases that Redefine Corporate Accountability*. Springer.
- Busco, C., Granà, F., & Achilli, G. (2021). Understanding integrated thinking: evidence from the field, the development of a framework and avenues for future research. *Meditari Accountancy Research*, 29(4), 673–690. <https://doi.org/10.1108/medar-04-2021-1263>
- CGMA. (2016). *JOINING THE DOTS*, Decision Making for a New Era. CGMA. <https://www.cgma.org/resources/reports/joining-the-dots.html>

- Choi, Y. S., Choi, H. Y., & O'Donnell, M. (2018). Disaster Reintegration Model: A Qualitative Analysis on Developing Korean Disaster Mental Health Support Model. *International Journal of Environmental Research and Public Health*, 15(2), 362. <https://doi.org/10.3390/ijerph15020362>
- Chun Tie, Y., Birks, M., & Francis, K. (2019). Grounded theory research: A design framework for novice researchers. *SAGE Open Medicine*. <https://doi.org/10.1177/2050312118822927>
- Churet, C., & Eccles, R. (2014). Integrated Reporting, Quality of Management, and Financial Performance. *Journal of Applied Corporate Finance*. 26. 10.1111/jacf.12054.
- Citroen, C. (2009). *Study of Strategic Decision-making Process, The role of information*. LAP LAMBERT Academic Publishing.
- Citroen, C. (2011). The role of information in strategic decision-making. *International journal of information management*, 31(6), 493-501. <https://doi.org/10.1016/j.ijinfomgt.2011.02.005>
- Clifford, N., French, S., Gillespie, T. W., & Cope, M. (2016). *Key Methods in Geography* (3rd edition). Sage publications.
- Collis, J., & Hussey, R. (2013). *Business Research is a practical guide for undergraduate & Postgraduate students* (4<sup>th</sup> edition). Palgrave Mcmillan.
- Corbin, J., & Strauss, A. (1990). Grounded theory research: Procedures, canons, and evaluative criteria. *Qualitative Sociology*, 13(1), 3–21.
- Corley, K. G. (2015). A Commentary on “What Grounded Theory Is . . .”: Engaging a Phenomenon from the Perspective of Those Living it. *Organizational Research Methods*, 18(4), 600–605. <https://doi.org/10.1177/1094428115574747>
- Crane, B. (2018). *Revisiting who, when and why Stakeholder Matter: Trust and Stakeholder Connectedness*. [https://digitalcommons.usu.edu/cgi/viewcontent.cgi?article=1367&context=manage\\_facpub](https://digitalcommons.usu.edu/cgi/viewcontent.cgi?article=1367&context=manage_facpub)
- De Alwis, G., Majid, S., & Chaudhry, A. S. (2006). Transformation in managers' information seeking behaviour: a review of the literature. *Journal of Information Science*, 32(4), 362–377. <https://doi.org/10.1177/0165551506065812>
- De Villiers, C., Rinaldi, L., & Unerman, J. (2014). Integrated Reporting: Insights, gaps and an agenda for future research. *Accounting, Auditing & Accountability*, 27(7), 1042–1067. <https://doi.org/10.1108/aaaj-06-2014-1736>

- De Villiers, C., Venter, E.R., & Hsiao, P.C.K. (2016). Integrated reporting: background, measurement issues, approaches and an agenda for future research. *Accounting & Finance*, 57(4), 937-959. Doi: 10.1111/acfi.12246
- Deegan, Craig. (2002). The Legitimizing Effect of Social and Environmental Disclosures – A Theoretical Foundation. *Accounting, Auditing & Accountability Journal*. 15. 282-311. Doi: 10.1108/09513570210435852.
- Deloitte. (2021). Digital Transformation and the Future of Corporate Reporting. Deloitte. <https://www2.deloitte.com/global/en/pages/finance/articles/future-of-corporate-reporting.html>
- Donkor, A., Djajadikerta, H. G., Roni, S. M., & Trireksani, T. (2022). Integrated reporting quality and corporate tax avoidance practices in South Africa's listed companies. *Sustainability Accounting, Management and Policy Journal*, 13(4), 899–928. <https://doi.org/10.1108/sampj-03-2021-0116>  
[https://www.researchgate.net/publication/358088665\\_Integrated\\_reporting\\_quality\\_and\\_corporate\\_tax\\_avoidance\\_practices\\_in\\_South\\_Africa's\\_listed\\_companies#fullTextFileContent](https://www.researchgate.net/publication/358088665_Integrated_reporting_quality_and_corporate_tax_avoidance_practices_in_South_Africa's_listed_companies#fullTextFileContent)
- Dubois, A., & Gadde, L. (2002). Systematic combining: an abductive approach to case research. *Journal of Business Research*, 55(7), 553–560. [https://doi.org/10.1016/s0148-2963\(00\)00195-8](https://doi.org/10.1016/s0148-2963(00)00195-8)
- Eccles, R. G., & Krzus, M. P. (2010). *One report: Integrated reporting for a sustainable strategy*. John Wiley & Sons.
- Eccles, R. G., Serafeim, G. (2013). The Performance Frontier: Innovating for a Sustainable Strategy: Interaction. *Harvard business review*. <https://hbr.org/2013/05/the-performance-frontier-innovating-for-a-sustainable-strategy>
- Eisenhardt, K. M. (1989). Building Theories from Case Study Research. *Academy of Management Review*, 14(4), 532–550. <https://doi.org/10.5465/amr.1989.4308385>
- Elbanna, M. (2010). *Making Strategic Decisions, A state of the Art Review and Empirical Evidence from a Cultural Perspective*. LAP LAMBERT Academic Publishing
- Esch, M., Schnellbacher, B., & Wald, A. (2019). Does integrated reporting information influence internal decision making? An experimental study of investment behavior. *Business Strategy and the Environment*, 28(4), 599–610. <https://doi.org/10.1002/bse.2267>



- Esch, M., Schulze, M., & Wald, A. (2019). The dynamics of financial information and non-financial environmental, social and governance information in the strategic decision-making process. *Journal of Strategy and Management*, 12(3), 314–329. <https://doi.org/10.1108/jsma-05-2018-0043>
- Farneti, F., Casonato, F., Montecalvo, M., & De Villiers, C. (2019). The influence of integrated reporting and stakeholder information needs on the disclosure of social information in a state-owned enterprise. *Meditari Accountancy Research*, 27(4), 556–579. <https://doi.org/10.1108/medar-01-2019-0436>  
[https://repository.up.ac.za/bitstream/handle/2263/71515/Farneti\\_Influence\\_2019.pdf?sequence=1&isAllowed=y](https://repository.up.ac.za/bitstream/handle/2263/71515/Farneti_Influence_2019.pdf?sequence=1&isAllowed=y)
- Feng, T., Cummings, L., & Tweedie, D. (2017). Exploring integrated thinking in integrated reporting—an exploratory study in Australia. *Journal of Intellectual Capital*.
- Flower, J. (2015). The International Integrated Reporting Council: A story of failure. *Critical Perspectives on Accounting*, 27, 1–17. <https://doi.org/10.1016/j.cpa.2014.07.002>
- Fredrickson, J. K. (1985). Effects of decision motive and organizational performance level on strategic decision processes. *Academy of Management Journal*, 28(4), 821–843.
- Freeman, R.E. (1984). *Strategic Management: A Stakeholder Approach*. Pitman.
- Gergen, K. J. (2015). An invitation to social construction. *An Invitation to Social Construction*, 1-272.
- Ghio, A., & McGuigan, N. (2020). A Life of Good Governance, Positive Activism, Accountability & Integrated Thinking: An Interview with Mervyn King. *Journal of Management Inquiry*, 29(4), 475–483. <https://doi.org/10.1177/1056492620901794>
- Gibassier, D., Rodrigue, M., & Arjaliès, D. L. (2016). From share value to shared value: Exploring the role of accountants in developing integrated reporting in practice. *IMA – ACCA Joint Research*.
- Gioia, D., Corley, K., & Hamilton, A. (2012). Seeking Qualitative Rigor in Inductive Research: Notes on the Gioia Methodology. *Organizational Research Methods*, 16(1), 15–31.
- Glaser, B. G, Strauss A. L. (1967). *The discovery of grounded theory: strategies for qualitative research*. Chicago. Aldine Publishing.
- Glaser, B. G., & Strauss, A. L. (2017). *The discovery of grounded theory: Strategies for qualitative research*. Routledge.

- Globalreporting. (n.d.). *Our mission and history*. Glovalreporting. <https://www.globalreporting.org/about-gri/mission-history/>
- Gómez, C. A., Ayala, C. P., Franch, X., López, L., Behutiye, W., & Martínez-Fernández, S. (2017). Towards an Ontology for Strategic Decision Making: The Case of Quality in Rapid Software Development Projects. In *Springer eBooks* (pp. 111–121). [https://doi.org/10.1007/978-3-319-70625-2\\_11](https://doi.org/10.1007/978-3-319-70625-2_11)
- Guest, G., Bunce, A., & Johnson, L. (2006). How Many Interviews Are Enough? *Field Methods*, 18(1), 59–82. <https://doi.org/10.1177/1525822x05279903>
- Guthrie, J., Manes-Rossi, F., & Orelli, R. L. (2017). Integrated reporting and integrated thinking in Italian public sector organisations. *Meditari Accountancy Research*, 25(4), 553-573.
- Harrison, J. S., Freeman, R., & De Abreu, M. C. S. (2015). Stakeholder Theory As an Ethical Approach to Effective Management: applying the theory to multiple contexts. *Revista Brasileira De Gestão De Negócios*, 858–869. <https://doi.org/10.7819/rbgn.v17i55.2647>
- Herath, R., Senaratne, S., & Gunarathne, A. D. N. (2021). Integrated thinking, orchestration of the six capitals and value creation. *Meditari Accountancy Research*, 29(4), 873–907. <https://doi.org/10.1108/medar-01-2020-0676>
- Herzig, C., & Schaltegger, S. (2016). The implementation of integrated thinking: An exploratory study. *Journal of Cleaner Production*, 136, 171-179.
- Hickson, D. J., Miller, S. C., & Wilson, D. (2003). Planned or prioritized? Two Options in Managing the Implementation of Strategic Decisions\*. *Journal of Management Studies*, 40(7), 1803–1836. <https://doi.org/10.1111/1467-6486.00401>
- Hoque, M. E. (2017). Why Company Should Adopt Integrated Reporting? *International Journal of Economics and Financial Issues*, 7(1), 241-248. <https://dergipark.org.tr/en/pub/ijefi/issue/32002/353181>
- Howard-Payne, L. (2015). Glaser or Strauss? Considerations for selecting a grounded theory study. *South African Journal of Psychology*.
- Hsieh, H. F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative health research*, 15(9), 1277–1288. <https://doi.org/10.1177/1049732305276687>
- IFAC (2015, November 3). *Creating value with integrated thinking. The Role of the Professional Accountant*. IFAC.

[https://www.ifac.org/\\_flysystem/azure-private/publications/files/Creating-value-with-integrated-thinking-role-of-accountants.pdf](https://www.ifac.org/_flysystem/azure-private/publications/files/Creating-value-with-integrated-thinking-role-of-accountants.pdf)

IFRS (2023). *The Integrated Thinking Principles v.1.0*, IFRS. <https://www.integratedreporting.org/integrated-thinking/>

IFRS. (n.d.). *About the International Sustainable Standards Board*. IFRS. <https://www.ifrs.org/groups/international-sustainability-standards-board/>

IIA. (2022). *INTEGRATED THINKING AND SUSTAINABILITY: Applying Key Governance Tools and Frameworks*. IIA. [https://www.theiia.org/globalassets/site/content/research/white-papers/integrated-thinking-and-sustainability-applying-key-governance-tools-and-frameworks/integrated\\_thinking\\_and\\_sustainability\\_final.pdf](https://www.theiia.org/globalassets/site/content/research/white-papers/integrated-thinking-and-sustainability-applying-key-governance-tools-and-frameworks/integrated_thinking_and_sustainability_final.pdf)

Integrated Reporting. (2023). *Integrated thinking case studies*. Integrated reporting. <https://www.integratedreporting.org/case-studies-from-the-business-networks-integrated-thinking-strategy-group/>

Integrated Reporting. (2021, January). *International <IR> Framework*. Integrated reporting. <https://www.integratedreporting.org/wp-content/uploads/2021/01/InternationalIntegratedReportingFramework.pdf>

Integrated Reporting. (2022, August). *Transition to Integrated Thinking. Value Reporting Foundation. Integrated Thinking Principles*. Integrated reporting. <https://www.integratedreporting.org/wp-content/uploads/2022/07/VRF-ITP-GettingStartedGuide.pdf>

Integrated Reporting. (2022, September 27). *The growing momentum for integrated reporting: Part 1*. Integrated reporting <https://www.integratedreporting.org/news/the-growing-momentum-for-integrated-reporting-part-1/>

Integrated Reporting. (2019). *Integrated Thinking & Strategy: State of play report*. Integratedreporting.[https://www.integratedreporting.org/wp-content/uploads/2020/01/Integrated-Thinking-and-Strategy-State-of-Play-Report\\_2020.pdf](https://www.integratedreporting.org/wp-content/uploads/2020/01/Integrated-Thinking-and-Strategy-State-of-Play-Report_2020.pdf)

Integrated Reporting. (2020). *79% of Australian ASX200 companies adopt integrated reporting, KPMG study finds*. <https://www.integratedreporting.org/news/79-of-australian-asx200-companies-adopt-integrated-reporting/>

Integrated Reporting. (n.d.a.). *10 years of the IIRC*. Integrated reporting <https://www.integratedreporting.org/10-years/10-years-summary/>

- Integrated Reporting. (n.d.b.). *2020 Revision: IR Framework*. Integrated reporting.  
<https://www.integratedreporting.org/2020revision/>
- International Integrated Reporting Council. (2013). The International <IR> Framework.  
<https://integratedreporting.org/wp-content/uploads/2013/12/13-12-08-THE-INTERNATIONAL-IR-FRAMEWORK-2-1.pdf>
- Ioannou, I., & Serafeim, G. (2010). *What drives corporate social performance?: International evidence from social, environmental and governance sources*. Cambridge: Harvard Business School.
- Jayasiri, N. K., Kumarasinghe, S., & Pandey, R. (2022). 12 years of integrated reporting: A review of research. *Accounting and Finance*.  
<https://doi.org/10.1111/acfi.12958>
- Jensen, J., Berg, N. (2012), Determinants of traditional sustainability reporting versus integrated reporting: An institutionalist approach. *Business Strategy and Environment*, 21, 299-316.  
<https://doi.org/10.1002/bse.740>
- Kovács, G., & Spens, K. (2005). Abductive reasoning in logistics research. *International Journal of Physical Distribution & Logistics Management*, 35(2), 132–144.  
<https://doi.org/10.1108/09600030510590318>
- KPMG. (2013). *The future of corporate reporting: towards a common vision*. KPMG.  
<https://assets.kpmg.com/content/dam/kpmg/pdf/2013/02/future-of-corporate-reporting.pdf>
- KPMG. (2020). *Survey of Integrated Reporting in Japan 2020*. KPMG.  
<https://assets.kpmg.com/content/dam/kpmg/jp/pdf/2021/jp-integrated-reporting2020.pdf>
- KPMG. (2022). *Opportunity is passing us by*. KPMG  
<https://assets.kpmg.com/content/dam/kpmg/nz/pdf/2022/11/new-zealand-survey-of-sustainability-reporting-2022.pdf>
- Kreiner, G. E. (2015). *Tabula Geminus: A “Both/And” Approach to Coding and Theorizing*. Routledge eBooks.  
<https://doi.org/10.4324/9781315849072-46>
- Lai, A., Melloni, G., & Stacchezini, R. (2016). Corporate Sustainable Development: is ‘Integrated Reporting’ a Legitimation Strategy? *Business Strategy and the Environment*, 25(3), 165–177.  
<https://doi.org/10.1002/bse.1863>

- Langley, A. (1999b). Strategies for Theorizing from Process Data. *Academy of Management Review*, 24(4), 691–710.  
<https://doi.org/10.5465/amr.1999.2553248>
- Locke, E. A. (2007). The Case for Inductive Theory Building†. *Journal of Management*, 33(6), 867–890.  
<https://doi.org/10.1177/0149206307307636>
- Malafrente, I., & Pereira, J. (2021). Integrated thinking: measuring the unobservable. *Meditari Accountancy Research*, 29(4), 805–822.  
<https://doi.org/10.1108/medar-12-2019-0640>
- Maroun, W., Ecim, D., & Cerbone, D. (2022). Refining integrated thinking. *Sustainability Accounting, Management and Policy Journal*, 14(7), 1–25.  
<https://doi.org/10.1108/sampj-07-2021-0268>
- Mayring, P. (2000). Qualitative Content Analysis. *Forum Qualitative Social Research*, 1(2).  
<https://doi.org/10.17169/fqs-1.2.1089>
- Martin, R. M. (2007). How successful leaders think. *Strategic Direction*, 23(10).  
<https://doi.org/10.1108/sd.2007.05623jad.007>
- McIntosh, M., & Morse, J. M. (2015). Situating and Constructing Diversity in Semi-Structured Interviews. *Global Qualitative Nursing Research*, 2, 233339361559767.  
<https://doi.org/10.1177/2333393615597674>
- Mintzberg, H., Raisinghani, D., & Theoret, A. (1976). The Structure of “Unstructured” Decision Processes. *Administrative Science Quarterly*, 21(2), 246.  
<https://doi.org/10.2307/2392045>
- Moolman, J., Oberholzer, M., & Steyn, M. (2016). The effect of integrated reporting on integrated thinking between risk, opportunity and strategy and the disclosure of risks and opportunities. *Southern African Business Review*, 20(1), 600-627.
- Murphy, C., Klotz, A. C., & Kreiner, G. E. (2017). Blue skies and black boxes: The promise (and practice) of grounded theory in human resource management research. *Human Resource Management Review*, 27(2), 291-305.  
<https://doi.org/10.1016/j.hrmr.2016.08.006>
- Myeza, L., Ecim, D., & Maroun, W. (2023). The role of integrated thinking in corporate governance during the COVID-19 crisis: perspectives from South Africa. *Journal of Public Budgeting, Accounting & Financial Management*, 35(6), 52–77.  
<https://doi.org/10.1108/jpbafm-08-2022-0133>

- Nishitani, K., Unerman, J., & Kokubu, K. (2021). Motivations for voluntary corporate adoption of integrated reporting: A novel context for comparing voluntary disclosure and legitimacy theory. *Journal of Cleaner Production*, 322, 129027. <https://doi.org/10.1016/j.jclepro.2021.129027>
- Omran, M., Zaid, M., & Dwekat, A. (2021). The relationship between integrated reporting and corporate environmental performance: A green trial. *Corporate Social Responsibility and Environmental Management*, 28(1), 427–445. <https://doi.org/10.1002/csr.2059>
- Osterwalder, A., & Pigneur, Y. (2010). *Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers*. <https://academicjournals.org/journal/AJBM/article-full-text-pdf/BA71B6427744.pdf>
- Papadakis, V. M., Lioukas, S., & Chambers, D. W. (1998). Strategic decision-making processes: the role of management and context. *Strategic Management Journal*, 19(2), 115–147. [https://doi.org/10.1002/\(sici\)1097-0266\(199802\)19:2](https://doi.org/10.1002/(sici)1097-0266(199802)19:2)
- Papadakis, V. Barwise, P. (1998). *Strategic Decisions*. Springer Science + Business Media New York.
- Patton, M. Q. (1990). *Qualitative evaluation and research methods* (2nd ed.). Sage Publications.
- Perego P, Kennedy S, Whiteman G, A lot of icing but little cake? taking integrated reporting forward, *Journal of Cleaner Production* (2016).  
Doi: 10.1016/j.jclepro.2016.01.106
- Pinto. (2022). *Does innovation spur integrated reporting?* [PHD]. Instituto Universitario De Lisboa.
- Pratt, M. G. (2008). Fitting oval pegs into round holes: Tensions in evaluating and publishing qualitative research in top-tier North American journals. *Organizational Research Methods*, 11(3), 481-509.
- Pucker, P, K. (2021). *Overselling Sustainability Reporting*. hbr.org. <https://hbr.org/2021/05/overselling-sustainability-reporting>
- Rheinhardt, A., Kreiner, G., Gioia, D., & Corley, K. (2018). *Conducting and Publishing Rigorous Qualitative Research*. SAGE Publications Ltd. <https://doi.org/10.4135/9781526430212>
- Rogers, P., & Blenko, M. W. (2006). The high-performance organization: making good decisions and making them happen. *Handbook of Business Strategy*, 7(1), 133–142. <https://doi.org/10.1108/10775730610618747>

- Roychowdhury, S. (2006c). Earnings management through real activities manipulation. *Journal of Accounting and Economics*, 42(3), 335–370.  
<https://doi.org/10.1016/j.jacceco.2006.01.002>
- Saunders, M., Lewis, P., & Thornhill, A. (2019). *Research methods for business students*. Pearson Education Limited.
- Serafeim, G. (2015). Integrated Reporting and Investor Clientele. *Journal of Applied Corporate Finance*, 27(2), 34–51.  
<https://doi.org/10.1111/jacf.12116>
- Shirabe, Y., & Nakano, M. (2022). Does Integrated Reporting Affect Real Activities Manipulation? *Sustainability*, 14(17), 11110.  
<https://doi.org/10.3390/su141711110>
- Sibghatullah, A. (2018). Impact of integrated thinking and reporting on organisational decision making: Case study of public sector enterprises in Oman. *Arthatama*, 2(1), 50-63.
- Simoni, L.(2022). *Business models and corporate reporting, defining the platform to illustrate value creation*. Routledge.
- Socea, A.-D. (2012). Managerial decision-making and financial accounting information. *Procedia—Social and Behavioral Sciences*, 58, 47–55.  
<https://doi.org/10.1016/j.sbspro.2012.09.977>
- Steyn, M. (2014). Organisational benefits and implementation challenges of mandatory integrated reporting. *Sustainability Accounting, Management and Policy Journal*, 5(4), 476–503.  
<https://doi.org/10.1108/sampj-11-2013-0052>
- Strauss, A. L., & Corbin, J. (1998). *Basics of qualitative research: techniques and procedures for developing grounded theory*. Sage eBooks.  
<http://lib.tums.ac.ir/site/catalogue/61151>
- Task Force on Climate-related Financial Disclosures (2017). *Recommendations of the Task Force on Climate-related Financial Disclosures*.  
<https://www.fsb-tcfd.org/wp-content/uploads/2017/06/FINAL-2017-TCFD-Report-11052018.pdf>.
- Thomas, D. R. (2006). A General Inductive Approach for Analyzing Qualitative Evaluation Data. *American Journal of Evaluation*, 27(2), 237–246.  
<https://doi.org/10.1177/1098214005283748>
- Thomson, I. (2015). ‘But does sustainability need capitalism or an integrated report’ a commentary on ‘The International Integrated Reporting Council: A story of failure’ by



- Flower, J. *Critical Perspectives on Accounting*, 27, 18–22.  
<https://doi.org/10.1016/j.cpa.2014.07.003>
- United Nations (2015). *Transforming our World: The 2030 Agenda for Sustainable Development*.  
[https://www.un.org/ga/search/view\\_doc.asp?symbol=A/RES/70/1&Lang=E](https://www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1&Lang=E).
- United Nations. (n.d.). *United Nations Conference on Environment and Development, Rio de Janeiro, Brazil, 3-14 June 1992*. Un.  
<https://www.un.org/en/conferences/environment/rio1992>
- Velte, P., & Stawinoga, M. (2017). Integrated reporting: The current state of empirical research, limitations and future research implications. *Journal of Management Control*, 28(3), 275–320.  
<https://doi.org/10.1007/s00187-016-0235-4>
- Warren, B. (2020, May 19). *Why investors are putting sustainability at the top of the agenda*. EY.  
[https://www.ey.com/en\\_gl/power-utilities/why-investors-are-putting-sustainability-at-the-top-of-the-agenda](https://www.ey.com/en_gl/power-utilities/why-investors-are-putting-sustainability-at-the-top-of-the-agenda)
- WCED. (1987). *Report of the World Commission on Environment and Development: Our Common Future*. United Nations General Assembly.  
<https://sustainabledevelopment.un.org/content/documents/5987our-common-future.pdf>
- Simpson, G. M., Weber, M., Henderson, A. H., & Parsons, T. (1948). The Theory of Social and Economic Organization. *The Philosophical Review*, 57(5), 524.  
<https://doi.org/10.2307/2181723>
- Wiersema, M. F., & Bantel, K. A. (1992). Top Management Team Demography and Corporate Strategic Change. *The Academy of Management Journal*, 35(1), 91–121.  
<https://doi.org/10.2307/256474>
- Yin, R. K. (2014). *Case study research: Design and methods*. California, USA. London, UK. New Delhi, India. Singapore: Sage publications.



# APPENDIX

## A.1 Approval from the Norwegian Centre for Data Research

### Notification Form

Reference number 591632

### Which personal data will be processed?

- Photographs or video recordings of people
- Sound recordings of people

### Project information

#### Project title

Integrated reporting and strategic decision-making

#### Project description

The project is part of a master's thesis. The project's goal is to discover how the implementation of Integrated reporting stimulates top management's integrated thinking in strategic decision-making.

In order to do so, we are interviewing managers from companies that have implemented integrated reporting.

### Explain why it is necessary to process personal data in the project

The project is based on qualitative data in the form of interviews, it is therefore crucial for the collection and analysis of the data that we can record our participants so that the transcript is accurate and no important information is lost.

**External funding** Ikke utfyllt

#### Type of project

Student project, master's thesis

#### Contact information, student

Nelly Gatete, [nellyg98@hotmail.com](mailto:nellyg98@hotmail.com), tlf: 40748740

#### Data controller

##### Data controller (institution responsible for the project)

Universitetet i Agder / Handelshøyskolen ved UiA / Institutt for økonomi

#### Project leader (academic employee/supervisor or PhD candidate)

Andreas Erich Wald , [andreas.wald@uia.no](mailto:andreas.wald@uia.no), tlf: +4738141993

**Will the responsibility of the data controller be shared with other institutions (joint data controllers)?**

No

### **Sample 1**

#### **Describe the sample**

Managers in companies that have implemented integrated reporting

#### **Describe how you will recruit or select the sample**

The search for participants will take place on Google and the websites of the various companies.

We intend to contact the participant via phone and email.

Age 30 -75

#### **Personal data relating to sample 1**

- Photographs or video recordings of people
- Sound recordings of people

How will you collect data relating to sample 1?

Personal interview

Attachment

[Interview guide](#)

Legal basis for processing general categories of personal data

Consent (General Data Protection Regulation art. 6 nr. 1 a)

Information for sample 1

Will you inform the sample about the processing of their personal data? Yes

How?

Written information (on paper or electronically)

Information letter [Information letter.docx](#)

#### **Third Persons**

Will you be processing data relating to third persons? No

#### **Documentation**

##### **How will consent be documented?**

Electronically (email, e-form, digital signature)

### **How can consent be withdrawn?**

The participant may withdraw consent at any time by notifying the thesis writers or the supervisor verbally or in writing.

### **How can data subjects get access to their personal data or have their personal data corrected or deleted?**

Participants can request access to their personal information from the students. In the event that participants withdraw their consent, the information will be erased.

**Total number of data subjects in the project** 1-99

### **Approvals**

Will you obtain any of the following approvals or permits for the project? Ikke utfyllt

### **Processing**

#### **Where will the personal data be processed?**

- Physically isolated computer belonging to the data controller
- Computer belonging to the data controller

#### **Who will be processing/have access to the collected personal data?**

Student (student project)

#### **Will the collected personal data be transferred/made available to a third country or international organization outside the EU/EEA?**

No

### **Information Security**

#### **Will directly identifiable data be stored separately from the rest of the collected data (e.g. in a scrambling key)?**

Yes

#### **Which technical and practical measures will be used to secure personal data?**

- Personal data will be anonymized as soon as no longer needed
- Multi-factor authentication
- Personal data will be sent/transferred in encrypted form

#### **Duration of processing**

Project period 02.01.2023 - 01.06.2023

What happens to the data at the end of the project?

All data will be deleted (deleting raw data)

Will the data subjects be identifiable (directly or indirectly) in the thesis/publications from the project?

No

### **Additional information**

## A.2 Information letter and consent form

### Are you interested in taking part in the research project “*Integrated reporting and strategic decision-making*”?

#### Part I: Information

##### Purpose of the project

You are invited to participate in a research project where the main purpose is to examine how integrated reporting influence top and senior managers` integrated thinking in strategic decision-making processes. The study will rely on qualitative data gathered from interviews and is conducted as part of a master's thesis in order to provide more information about a reporting framework that is becoming more widely used. The following is the thesis's research question: How does the implementation of integrated reporting stimulate and shape top managers' integrated thinking in strategic decision-making?

##### Which institution is responsible for the research project?

University of Agder – School of Business and Law

##### Why are you being asked to participate?

You are invited to participate in this research project because we are of belief that your insights and experience can greatly contribute to our understanding and knowledge regarding whether the adoption of integrated reporting and integrated thinking has affected the strategic decision-making process that you are responsible for.

##### What does participation involve for you?

If you decide to participate in the project, you will need to attend an online interview. It will take between 20 and 30 minutes. The interview includes questions about the adoption of the integrated reporting framework and its impact on the strategic decision-making process.

##### Participation is voluntary

Participation in the project is voluntary. If you chose to participate, you can withdraw your consent at any time without giving a reason. All information about you will then be made anonymous. There will be no negative consequences for you if you chose not to participate or later decide to withdraw.

##### Your personal privacy – how we will store and use your personal data

We will only use your personal data for the purpose(s) specified here and we will process your personal data in accordance with data protection legislation (the GDPR). Access to personal information will only be available to students writing the master's thesis. A recorder provided by the UiA will be used to record the interview. The participants will not be recognized in the publication. The name will be replaced with a code and only the position of the participant and the firm's sector will be disclosed.

##### What will happen to your personal data at the end of the research project?

The planned end date of the project is 01.06.2023. After the end of the project, all personal data will be deleted. Until the project is finished, the personal data will be kept in UIA's OneDrive or TSD 2.0.

##### Your rights

So long as you can be identified in the collected data, you have the right to:

- access the personal data that is being processed about you
- request that your personal data is deleted
- request that incorrect personal data about you is corrected/rectified
- receive a copy of your personal data (data portability), and

- send a complaint to the Norwegian Data Protection Authority regarding the processing of your personal data

**What gives us the right to process your personal data?**

We will process your personal data based on your consent. Based on an agreement with the University of Agder – School of Business and Law, The Data Protection Services of Sikt – Norwegian Agency for Shared Services in Education and Research has assessed that the processing of personal data in this project meets requirements in data protection legislation.

**Where can I find out more?**

If you have questions about the project or want to exercise your rights, you may contact:

- Thesis supervisor, Andreas Erich Wald, mail: [andreas.wald@uia.no](mailto:andreas.wald@uia.no)
- Student, Nelly Gatete, mail: [nellyg18@uia.no](mailto:nellyg18@uia.no)
- Student, Yevgeniya Looij, mail: [yevgeniyal@student.uia.no](mailto:yevgeniyal@student.uia.no)
- Our Data Protection Officer: [personvernombud@uia.no](mailto:personvernombud@uia.no)

If you have questions about how data protection has been assessed in this project by Sikt, contact:

- email: ([personverntjenester@sikt.no](mailto:personverntjenester@sikt.no)) or by telephone: +47 73 98 40 40.

Yours sincerely,

Andreas Erich Wald  
*(Supervisor)*

Nelly Gatete and Yevgeniya Looij  
*(Students)*

**Part II: Consent form**

**I have read and understood the foregoing information**

**I have been given the opportunity to ask questions.**

**I give consent:**

- to voluntary participate in an interview.
- for information about me to be published in a way that I can be recognised by occupational title.
- for my personal data to be processed until the end of the project.

**Occupational title of Participant** \_\_\_\_\_

**Signature of Participant** \_\_\_\_\_

**Date** \_\_\_\_\_  
**(Day/Month/Year)**

## A.3 Interview guide

PART 1: Background Duration: 5 minutes	Key Outcomes
<p>Introduce yourself and thank interviewee for their interest and involvement:  <i>“Thank you very much for agreeing to participate in this study. Our names are Yevgeniya and Nelly, and we are master student at University in Agder, Norway.</i></p> <p>We are conducting a research project to understand how the implementation of integrated reporting influences on strategic decision making in your company.</p> <p>This research project will help us to understand how you, as a top manager, see the changes in your company after implementing the Integrated reporting framework: did it lead to Integrated thinking, and what kind of benefits if such derived from it? We are interested to know if this resulted in new ways of resource allocation and creating value and in which way it has influenced the strategic decision-making process.</p> <p><i>“Our interview will run for approximately 20-30 minutes.”</i></p> <ul style="list-style-type: none"> <li>• All the information and opinions given by you will be used only for research purposes and not for any other commercial use.</li> <li>• Please remember, there are no right or wrong answers. These answers reflect your opinions.</li> <li>• May I request you to read this information sheet carefully and provide your informed consent to participate in this study?</li> <li>• I will audio record our interview that is necessary part of the research method, as we must make transcripts of this interview for special coding process. All audio recordings will be kept anonymous and used only for this research project.</li> </ul> <p><i>“Do you have any questions before we begin?”</i></p>	<ul style="list-style-type: none"> <li>• Instruct respondents of the study's scope and purpose.</li> <li>• Give a general background to the research project.</li> <li>• Advise participants of ethical requirements.</li> </ul>
PART 2: The interview questions	Key Outcomes
<p><b>I. Introduction of IR</b></p> <ol style="list-style-type: none"> <li>1. When and why did you adopt the Integrated Reporting framework?</li> <li>2. Has the implementation of Integrated Reporting assisted you in identifying new ways of allocating resources and creating value? Could you give an example, please?</li> </ol> <p><b>II. The influence of IR on Integrated Thinking</b></p> <ol style="list-style-type: none"> <li>1. Has integrated reporting been a driver towards achieving Integrated thinking?</li> <li>2. Has the organization derived benefits from integrated thinking? What has changed after you have moved further on from IR to Integrated thinking?</li> </ol> <p><b>III. Strategic decision-making process with integrated thinking</b></p>	<ul style="list-style-type: none"> <li>• Show interviewees your professionalism and knowledge of subject and create an environment which encourages interviewee to share their thoughts and opinions without fear of judgment.</li> </ul>

<ol style="list-style-type: none"> <li>1. Has the Integrated Reporting framework's implementation and embedded Integrated thinking resulted in any changes in the organization? <ol style="list-style-type: none"> <li>a. Has it resulted in any changes in the strategic decision-making process?</li> <li>b. Has it changed how the organizations approach their capital?</li> <li>c. Has it enabled you to identify new risks and opportunities?</li> <li>d. Has it helped to overcome organizational silos?</li> <li>e. Has it encouraged internal and external stakeholders' engagement?</li> <li>f. Has it encouraged a more holistic and long-term perspective in value creation?</li> <li>g. Has it improved information quality for stakeholders and for the top management?</li> </ol> </li> <li>2. In which types of strategic decisions is the consideration of integrated information beneficial?</li> <li>3. Do you feel and in which way the integrated thinking and embed Integrated reporting give your company a sustained competitive advantage?</li> <li>4. Can you say that the business benefits outweigh the efforts and time used to embed the integrated reporting? In which way?</li> </ol> <p>Would you like to add some information that you think is necessary from your point of view?</p>	
--	--

## **A.4 Discussion Paper – Yevgeniya Looij**

### **Master's Programme in Business Administration**

#### **Competency goal: INTERNATIONAL**

##### **Introduction**

The present paper is an obligatory component of my master's thesis in Business Administration, which was carried out at the School of Business and Law, University of Agder. The purpose of this discussion paper is to present an overview of the research, the way it was conducted, and key findings of the thesis, with a focus on their relevance in an international context. In addition, the paper explores the impact of global trends and forces on the subject matter under investigation. Finally, the discussion paper summarizes the main points of the research and highlights its contribution to the field of business administration.

##### **Presentation of the thesis and its relevance for the Master study program in UiA**

Over the past decades, corporate reporting has undergone substantial transformations due to the rise of globalization in business. The emergence of the internet and subsequently social media has amplified the influence of stakeholder activism. Consequently, there has been a significant shift in views regarding who businesses should be answerable to, as well as the topics on which they should be held responsible (Adams, 2013). To maintain positive citizenship, uphold a favorable reputation, secure a competitive edge, and operate a sustainable business that generates long-term value for stakeholders, one must adopt an innovative, holistic, integrated approach to thinking and strategic planning. In this prospect, the Integrated reporting framework developed by the International Integrated Reporting Council (IIRC) came into being in 2013 (Integrated Reporting, 2021, p.1). The Integrated Reporting Framework is a process that promotes the use of a holistic approach to reporting founded on Integrated thinking, taking into account multiple forms of capital, oriented on long-term value creation, seeking to unify the realms of business, society, and the environment in which an entity conducts its operations, and encouraging its widespread implementation globally (IIRC, 2023). By disclosing information regarding economic, social, and environmental matters, a company can showcase that its operations align with societal values. This, in turn, can forestall or alleviate potential regulatory obligations that may restrict the strategic alternatives available to



the company, thereby enabling it to sustain its status and standing within society (Harmoni, 2013).

Upon initial examination, the research question of our thesis: "How does the implementation of integrated reporting stimulate and form top-level executives' integrated thinking in the context of strategic decision-making?" appears to be focused on the inward strategic processes of individual organizations. Nevertheless, the process of globalization, the imperative for sustainable development, ecological concerns, stakeholders' activism, the COVID-19 pandemic, the war in Ukraine, and the escalating prevalence of VUCA (volatility, uncertainty, complexity, and ambiguity) in the world collectively underline the recognition that the adoption of an Integrated Reporting framework and embedding of Integrated Thinking are increasingly essential in the strategic decision-making processes carried out by the C-suite executives on an international scale.

We can claim that the companies are individual agents and the way they choose to think is either integrated thinking or functionally separated deliberation, it is their own business and way to do it. However, it is not the case anymore. Here, the emphasis is not solely on being a productive, sustainable company with a good reputation/positive image, creating "a share value" and short-term financial gains, but rather on being a socially responsible corporate entity accountable for all the choices and actions are taken inside and outside of the company in the process of generating "a shared value" (Gibassier et al., 2016). The focus is on long-term considerations and acting in a manner that is not harmful and contributes positively to different stakeholders, to our shared future, and the planet - our shared home.

The master's thesis investigates the influence of the integrated reporting framework on top managers' integrated thinking in strategic decision-making, with an international geographical scope. This choice of scope enables us as researchers to gain a more comprehensive understanding of the subject matter. The regions of interest include the United Kingdom, Europe, Scandinavia, the USA, and South Africa, which were selected based on several factors such as their distinct corporate cultures, early integration of the integrated reporting framework, and well-established infrastructures and economies. The selection of these regions was made in light of the fact that they offer a solid foundation for conducting a more detailed, comparative, and in-depth analysis of the topic. The units of the research were top managers from different countries who can offer insights into their unique perspectives on business practices, management styles, and industry trends. Having a global perspective, we believe that this can provide a broader, more comprehensive understanding of the topic being researched.

More and more organizations across the globe are embracing the use of integrated thinking and reporting as a means of managing, planning, and reporting on their business activities in a holistic manner. Through the adoption of a multi-capital approach, organizations can provide stakeholders with a more interconnected perspective of their entity and share their value creation narratives in a manner that meets stakeholders' expectations for greater accountability, transparency, and informative data, promoting a holistic view (IIRC, 2023). In 2022, IIRC, reported that “the concept of integrated reporting has been embedded by over 2,500 companies in more than 70 countries” (Integrated Reporting, 2022).

In the research on the topic “Integrated Reporting and its influence on SDM process”, we interviewed senior managers of 9 companies from different countries and different continents. The results showed a common global tendency in the development and implementation of integrated reporting and integrated thinking. Based on the research conducted a major part of managers base their strategic decision-making on integrated thinking.

Integrated reporting and Integrated thinking are the processes that involve collaboration on all levels and between the operational and functional units of organizations to bring holistic information to the C-level executives for enabling strategic decisions (Integrated Reporting, 2022). Based on obtained knowledge throughout the master’s program in UiA, it is obvious to say that the integrated reporting and the integrated thinking approach has implications for all areas of business, including organizational economics, financial accounting, management control systems, strategy, financial statement analysis, equity valuation, sustainable capitalism, supply chain management, and others. King (Ghio & McGuiga, 2020) points out that in the current era, there is limited availability of resources but a growing need for goods due to the ongoing rise in population. Therefore, the traditional way of conducting business cannot continue as before. Instead, a shift is necessary from a concentration on financial capitalism, which has proven ineffective, to a focus on sustainable capitalism. This means that companies must prioritize a purpose beyond maximizing profit at any expense and instead aim to create value in a sustainable way. Integrated thinking requires a shift in management control systems from a short-term focus on financial performance to a long-term focus on sustainability and the broader impact of a company's activities on society and the environment. This requires the development of new performance metrics and incentives that align with the company's sustainable business strategy. Baraibar-Diez et al., (2019) suggest that utilizing sustainable compensation strategies can act as a directing force in promoting responsible conduct. Our findings in the research project support this statement and add: to attain objectives beyond monetary gain in strategic decision-making, top executives should be incentivized through

ESG-based compensation policies to pursue sustainable goals, thereby achieving the integration of non-financial aims.

Integrated reporting can help companies communicate their sustainable business strategy to stakeholders in a clear and coherent way (Eccles & Serafeim, 2013). By integrating financial and non-financial data into a business model based on a multi-capital approach or aligning business strategy with sustainable development objectives, companies can create long-term value for stakeholders and society. The findings in our research also show that such a holistic approach of integrated thinking to the capitals helps top management identify potential risks and new opportunities that may arise from sustainability trends and developments.

### **International trends and forces**

Integrated reporting founded on integrated thinking is a relatively new approach to corporate reporting and strategic planning that seeks to provide stakeholders with a holistic view of an organization's performance and assists in incorporating sustainable business methods into a company and establishing a basis for generating long-lasting value (International Integrated Reporting Council, 2013). Top and executive managers in organizations, who are responsible for making strategic decisions that impact the success and growth of their companies, are directly influenced by the international trends and forces that affect their industry and business environment. In an environment characterized by swift transformations, this comprehensive approach is gaining popularity among businesses globally. The following are some examples of how these trends and forces impact the senior managers' strategic decision-making process in the practice of integrated reporting and integrated thinking.

Firstly, companies are increasingly recognizing the importance of stakeholder engagement in their decision-making process. Stakeholders, including investors, customers, and regulators, have become increasingly concerned about the impact of corporate activities on society and the environment. This trend driving the adoption of integrated reporting is the growing demand for corporate transparency and accountability. Eccles and Serafeim (2013) argue that integrated reporting can enhance transparency and accountability by providing a structured and coherent way for companies to disclose non-financial performance information. The practice of integrated thinking aims to integrate stakeholder perspectives into a company's strategic decision-making process. This helps companies to better understand stakeholder expectations, interests, and concerns and align their strategies and actions accordingly (International Integrated Reporting Council, 2013).

Secondly, another trend driving the adoption of integrated reporting through integrated thinking is the growing recognition of the significance of incorporating sustainability into business strategy. The United Nations Sustainable Development Goals (SDGs) provide a framework for companies to align their business strategy with sustainable development objectives (United Nations, 2015). Adams (2017) argues that integrated reporting can help companies communicate how they are addressing sustainability issues and aligning their business strategy with sustainable development goals.

Thirdly, the adoption of the Paris Agreement on climate change is also driving the implementation of integrated reporting. The Task Force on Climate-related Financial Disclosures (TCFD) recommends that companies use integrated reporting to disclose climate-related financial risks and opportunities (TCFD, 2017). By disclosing this information in a structured and comprehensive way, companies can demonstrate their commitment to addressing climate risks and opportunities. Additionally, Integrated reporting through integrated thinking can influence strategic decision-making by encouraging companies to take a long-term view of their business activities. Moolman et al., (2019) argue that by integrating financial and non-financial information, companies can identify potential risks and opportunities that may not be apparent from a purely financial perspective. This can lead to more informed strategic decision-making that takes into account the broader influence of the corporate's activities on the environment and society.

Lastly, technology and digitalization have had a significant impact on the practice of integrated reporting and integrated thinking. Technology has made it easier for companies to collect and analyze data by addressing it to C-level management and to communicate with stakeholders. Digitalization has also increased transparency and accountability in corporate reporting, enabling stakeholders to access information more easily. These developments have influenced companies to adopt integrated thinking and reporting practices to better manage their data and communicate with their stakeholders (Deloitte, 2022).

## **Conclusion**

Given the challenges posed by financial and geopolitical crises, scarcity of natural resources, and a rapidly growing global population, coupled with the increasing importance of intangible assets that are not captured by traditional reporting, these issues are not only pertinent to individual organizations but are also of global concern. To facilitate effective strategic

decision-making in this context, the adoption of integrated reporting and the underlying philosophy of integrated thinking assumes paramount importance at the international level.

In other words, these days organizations are facing a growing number of complex and interconnected challenges that cross traditional boundaries and impact multiple stakeholders. These challenges include economic, social, and environmental issues that cannot be addressed in isolation, and require a more holistic and integrated approach to decision-making. By considering integrated information and adopting an integrated thinking approach to decision-making, organizations can ensure that their strategies are aligned with their goals, while also considering the broader impact they have on society and the environment. This helps organizations to make informed decisions that are sustainable and support long-term success. That is why integrated thinking in strategic decision-making is an important issue at the international level.

Additionally, the question of how Integrated Reporting stimulates top managers' integrated thinking in strategic decision-making is highly relevant in the context of contemporary business practices. Integrated Reporting is a framework that is gaining popularity among businesses globally, and its adoption is seen as a step toward a more sustainable and integrated approach to reporting. The results of our research provide some evidence that Integrated Reporting has the potential to improve decision-making processes and contribute to more sustainable and responsible business practices. However, integrated thinking as a holistic approach is essential in a strategic decision-making process with a long-term, sustainable value creation orientation. In conclusion, integrated reporting through integrated thinking represents an important development in corporate reporting and strategy development that is likely to become increasingly important in the years to come. Driven by international trends and forces, including the demand for corporate transparency and accountability, the recognition of the importance of sustainability in business strategy, and global processes such as the UN SDGs and the Paris Agreement, technology, and digitalization, integrated reporting can help Top management in the decision-making process and communicate their strategy and performance in a more comprehensive and transparent way.

## References

Adams, C. (2013, March 25). Materiality: financial reporting, sustainability reporting and integrated reporting. *Towards sustainable business*.

<https://drcaroladams.net/materiality-financial-reporting-sustainability-reporting-and-integrated-reporting/>

Baraibar-Diez, E., Odriozola, M. D., & Fernandez Sanchez, J. L. (2019). Sustainable compensation policies and its effect on environmental, social, and governance scores. *Corporate Social Responsibility and Environmental Management*, 26(6), 1457-1472.

<https://doi.org/10.1002/csr.1760>

Deloitte. (2022, June 28). How the CEO's leadership in digital transformation can tip the scales toward success.

<https://www2.deloitte.com/us/en/insights/topics/strategy/leadership-in-digital-transformation.html>

Eccles, R. G., Serafeim, G. (2013). The Performance Frontier: Innovating for a Sustainable Strategy: Interaction. *Harvard business review*.

<https://hbr.org/2013/05/the-performance-frontier-innovating-for-a-sustainable-strategy>

Ghio, A., & McGuigan, N. (2020). A life of good governance, positive activism, accountability & integrated thinking: an interview with Mervyn King. *Journal of Management Inquiry*, 29(4), 475-483.

Gibassier, D., Rodrigue, M., & Arjaliès, D. L. (2016). From share value to shared value: Exploring the role of accountants in developing integrated reporting in practice. *IMA (Institute of Management Accountants)–ACCA (The Association of Chartered Certified Accountants) Joint Research Report*.

IIRC (2023). Integrated thinking case studies.

<https://www.integratedreporting.org/case-studies-from-the-business-networks-integrated-thinking-strategy-group/>

Integrated Reporting. (2021, January). *International <IR> Framework*.  
<https://www.integratedreporting.org/wp-content/uploads/2021/01/InternationalIntegratedReportingFramework.pdf>

Integrated Reporting. (2022, August). *Transition to Integrated Thinking. Value Reporting Foundation. Integrated Thinking Principles*. Integrated reporting  
<https://www.integratedreporting.org/wp-content/uploads/2022/07/VRF-ITP-GettingStartedGuide.pdf>

Integrated Reporting. (2022, September 27). *The growing momentum for integrated reporting: Part 1*. Integrated reporting.  
<https://www.integratedreporting.org/news/the-growing-momentum-for-integrated-reporting-part-1/>

International Integrated Reporting Council. (2013). *The International <IR> Framework*.  
<https://integratedreporting.org/wp-content/uploads/2013/12/13-12-08-THE-INTERNATIONAL-IR-FRAMEWORK-2-1.pdf>

Moolman, J., Oberholzer, M., & Steyn, M. (2016). The effect of integrated reporting on integrated thinking between risk, opportunity and strategy and the disclosure of risks and opportunities. *Southern African Business Review*, 20(1), 600-627.

Task Force on Climate-related Financial Disclosures (2017). *Recommendations of the Task Force on Climate-related Financial Disclosures*.  
<https://www.fsb-tcfd.org/wp-content/uploads/2017/06/FINAL-2017-TCFD-Report-11052018.pdf>.

United Nations (2015). *Transforming our World: The 2030 Agenda for Sustainable Development*.  
<https://sustainabledevelopment.un.org/post2015/transformingourworld/publication>

## **A.5 Discussion Paper – Nelly Gatete**

Integrated reporting and integrated thinking in strategic decision-making have become increasingly important subjects in business and finance. These concepts are linked, with integrated thinking being an important component of integrated reporting and strategic decision-making being an important outcome of both. In this paper I will discuss how our thesis on integrated reporting, integrated thinking, and strategic decision-making relates to the theme: responsible.

When addressing firm actions, responsibility is a crucial concept to keep in mind, particularly given the increased risk posed by climate change in today's society. The degree to which one has control and authority over something or someone and the duty to take care of it, him, or her is referred to as responsible (Cambridge, n.d.). In the business world, responsibility is critical since organizations must adapt and evolve in order to remain competitive and sustainable. Integrated reporting, integrated thinking, and strategic decision making all help a corporation stay responsible in today's volatile business environment.

Integrated reporting is a holistic approach to corporate reporting that combines both financial and non-financial information to present a comprehensive picture of a company's performance. The purpose of integrated reporting is to give stakeholders a comprehensive picture of a company's financial, environmental, social, and governance (ESG) performance. Integrated reporting entails a shift away from traditional reporting, which focuses exclusively on financial data, and toward a more comprehensive approach that includes integrated financial and non-financial data such as ESG performance. Integrated reporting is significant to investors, customers, employees, and other stakeholders who require a thorough understanding of a company's activities since it provides a more complete view of a company's success.

Integrated thinking is an important part of integrated reporting. Integrated thinking involves examining the interdependence of multiple components of a business, such as financial, environmental, social, and governance factors (Integrated Reporting, 2021). This strategy encourages businesses to consider their operations holistically and the impact they have on stakeholders, the environment, and society. Integrated thinking further assists businesses in identifying dangers and possibilities that may not be obvious when only separate components of their operations are considered.



Strategic decision making is the process of making decisions that are suitable for a company's aims and objectives. Making strategic decisions requires a solid understanding of amongst other things, a company's resources, operations, and external environment. Companies may make informed strategic decisions with the help of integrated reporting and integrated thinking by examining the larger impact of their operations and the interrelationships between various elements of their business.

Since its release, the framework has been adopted by over 2500 companies. The framework was consolidated with IFRS in 2022, and IFRS is encouraging businesses to adopt this framework, enhancing its relevance. We sought to investigate and contribute to the existing, but limited, literature on integrated reporting and integrated thinking, and the impact these two have on managers' strategic decision-making. Our main goal was to find the drivers of integrated thinking, as this is the phenomenon that represents the most influential impact on strategic decision making, as well as there is a research gap in this area. According to the early research on integrated reporting, as well as our findings, the framework encourages more responsible business behavior in several ways:

1. Increasing transparency and accountability: Integrated reporting helps firms to be more transparent and accountable about their social and environmental effects. As a result, integrated reporting also enables stakeholders to make informed choices about a company's future by providing them with a comprehensive view of its business model, strategy, risks, opportunities, and performance (Integrated Reporting, n.d.a.). This boosts trust and confidence in the organization, which is critical for its long-term survival.

2. Improving a company's reputation: Integrated reporting can improve a company's reputation by demonstrating its commitment to responsible and ethical business practices. A company can separate itself from its competitors and position itself as a leader in sustainability by conveying its impact on society and the environment in a clear and simple manner. This can attract socially conscious investors, customers, and employees who want to work for organizations that share their beliefs (Serafeim, 2015).

3. Long-term value creation is supported by integrated reporting, which allows enterprises to examine the impact of their operations on society and the environment. Businesses can uncover risks and opportunities that may not be obvious in standard financial reporting by taking a comprehensive perspective of their value generation process. This helps them to make educated future decisions and produce long-term benefit for the stakeholders.

4. Meeting stakeholder expectations: Integrated reporting assists businesses in meeting their stakeholders' expectations by providing them with a thorough picture of the company's impact on society and the environment. Stakeholders are more aware of the need for businesses to operate responsibly and ethically, as well as to be accountable for their impact on the world around them (Warren, 2020), and Integrated reporting helps organizations to convey their effect to their stakeholders in a meaningful and relevant manner.

5. Promotes integrated thinking: by reporting on the value creation process, including how the business's various resources are used to create value and how this affects the external environment, businesses can understand the relationship and interdependence between resources and the external environment. This promotes a holistic perspective of the value creation process, which can lead to decisions that take into account various elements and the consequences of company output on these factors.

Sustainability and sustainable development have been recurring themes throughout the master's program. A significant and important subject as climate change is posing risks to our way of life, and it is an undeniable truth that we must modify how we create and consume. Investors are also considering ESG concerns when making investments (Warren, 2020), placing pressure on businesses to consider these matters when making decisions. Furthermore, regulatory bodies are putting pressure on businesses to address these challenges. Just last year, the Norwegian government enacted "Åpenhetsloven," which requires large Norwegian corporations to conduct due diligence examines in accordance with OECD criteria to ensure that no human rights valuation occurs in their operations (Lovdata, 2021). This includes also ensuring that their vendors do not violate human rights. While ESG is nothing new for business, and many have reported to consider these challenges, whether real or not, the effort that has been done has not been sufficient, as the current COP26 report discloses that we will most likely exceed the 1.5-degree target set in the Paris accord in 2015 (Loprespub, 2021). To alter our behavior, we must first change our thinking. And integrated thinking may be the necessary tool for driving this behavior change.

While our thesis did not expressly address how integrated reporting promotes sustainability and responsibility, there was an implicit assumption that the framework and integrated thinking would do so. However, in order not to limit our research too severely, we eventually settled on researching: *How does the implementation of an integrated reporting framework stimulate and influence top managers' integrated thinking in strategic decision-making?*

To answer our question, we questioned 9 managers about whether adopting integrated reporting led to integrated thinking and how integrated thinking has influenced their strategic decision making. Interviewing the managers provided greater insight into what businesses in various nations and industries were prioritizing, the risks they faced, and the steps they took to mitigate these risks. These provided us with a greater perspective on the problems and work being done in many industries, as well as how climate change is affecting their business. One manager, for example, described how water scarcity was putting a strain on their company. Furthermore, by questioning the managers, we were able to get some insight into the steps the company is taking to ensure long-term, sustainable growth. While some businesses changed their entire business model, others chose to use more ecologically friendly resources in their manufacturing. The managers saw integrated reporting first and foremost as a method to communicate to their stakeholders how they are incorporating ESG problems into their company plan to improve openness, accountability, and trust. They, however, also revealed that making the report did encourage integrated thinking.

The managers viewed integrated thinking positively and saw it as vital in this dynamic, changing world. Some acknowledged it for assisting them in recognizing potential risks and possibilities, while others claim it assisted them in reducing their negative impact. According to the general opinion, it resulted in a more holistic picture of the firm, which resulted in holistic decision making. According to Rotman (2010), "holistic decision-making encourages us to be aware of our actions and their impact on the whole; it ensures that we take responsibility and accept accountability for the decisions we make; and it empowers us to be a part of the ongoing process of change." Based on our findings, these appear to be correct, and given that the track we are on is not sustainable, integrated thinking and holistic decision making may be what can change this trend.

Organizations, on the other hand, must foster this way of thinking among employees and management. This can be accomplished by establishing incentives. According to our findings, monetary incentives are typically utilized to motivate integrated thinking in managers. The organization pushed managers to consider both financial and non-financial factors, as well as ESG factors while making decisions by linking bonuses to performance on ESG criteria. It can, however, be asked if it is managers' thinking that has to be changed, or shareholders' or the organization's thinking in general. A business-as-usual approach primarily focused on increasing revenues for the organization has led us to this point. While there is a greater emphasis on green growth today, which fosters economic growth that is compatible with

sustainability (Harris & Roach, 2017), numerous scholars contend that this will not stop the track we are on, and that decoupling, where we reduce the resources required to support economic growth while also minimizing ecological scarcity and environmental damage, is the only way to stop this (Hickel & Kallis, 2020). Is integrated thinking and integrated reporting a step toward sustainable development, or is it a diversion from what needs to be done? Because integrated reporting is an investor-focused framework, the latter could be correct. While most academics support integrated reporting, the current framework has been criticized for its shareholder-centric focus (Flower, 2015). However, integrated thinking has been shown to reduce poor behavior and also assist with circular economy activities and initiatives (Barnabè and Nazir, 2021). But there is currently a lack of research to assess whether or not these concepts contribute to sustainable development.

Integrated reporting is a relevant tool for businesses in today's world, where sustainability is increasingly important both for businesses and investors. Integrated reporting gives a complete view of a company's value generation by capturing the interdependencies between financial performance and social, environmental, and governance effects. This allows firms to examine the impact of their activities on society and the environment, improve transparency and accountability, enhance reputation, support long-term value development, and satisfy stakeholder expectations. For businesses that wish to demonstrate their commitment to responsible and ethical practices, as well as produce long-term value for all stakeholder's, integrated reporting is not only relevant, but a must. Integrated reporting also allows investors to make well-informed capital allocation decisions. In addition, the framework promotes and fosters integrated thinking inside businesses. This can result in integrated decision-making that creates long-term value. With increasing climate risk posing risks and affecting the way we live, there is a need for a mentality shift. When making strategic decisions, organizations must consider the influence they have on society and the environment; this is where integrated thinking can help. And, if integrated thinking is the management tool that will change how businesses conduct themselves, eventually leading to sustainable business behavior, it is important that the factors that drive it are identified. In our thesis we have aimed to identify these drivers, as well as build on existing literature on how integrated reporting influences integrated thinking, as well as how this affects managers' strategic decision making. By investigating this link, we hoped to provide insights into how businesses might effectively use integrated reporting to achieve strategic change, align with sustainable practices, and resolve complicated challenges.

## References

- Barnabè, F., & Nazir, S. A. (2021b). Conceptualizing and enabling circular economy through integrated thinking. *Corporate Social Responsibility and Environmental Management*, 29(2), 448–468. <https://doi.org/10.1002/csr.2211>
- Cambridge. (n.d). *Responsible*. Cambridge.  
<https://dictionary.cambridge.org/dictionary/english/responsible>
- Flower, J. (2015). The International Integrated Reporting Council: A story of failure. *Critical Perspectives on Accounting*, 27, 1–17. <https://doi.org/10.1016/j.cpa.2014.07.002>
- Harris, J. M., & Roach, B. (2017). Chapter 14. Greening the Economy. In *Environmental and Natural Resource Economics. A Contemporary Approach* (4th ed., pp. 374–405). Routledge.
- Hickel, J., & Kallis, G. (2020). Is Green Growth Possible? *New Political Economy*, 25(4), 469–486. Download Hickel, J., & Kallis, G. (2020). Is Green Growth Possible? *New Political Economy*, 25(4), 469–486.
- Integrated Reporting. (2021, January). *International <IR> Framework*. Integrated reporting. <https://www.integratedreporting.org/wp-content/uploads/2021/01/InternationalIntegratedReportingFramework.pdf>
- Integrated Reporting. (n.d). *10 years of the IIRC*. Integrated reporting <https://www.integratedreporting.org/10-years/10-years-summary/>
- Loprespub. (2021). Cop26: Negotiating for 1.5 Degrees Celsius. Hillnotes. <https://hillnotes.ca/2021/12/07/cop26-negotiating-for-1-5-degrees-celsius/>
- Lovdata. (2021). Lov om virksomheters åpenhet og arbeid med grunnleggende menneskerettigheter og anstendige arbeidsforhold (åpenhetsloven). Lovdata. <https://lovdata.no/dokument/NL/lov/2021-06-18-99>
- Rotman. (2010). *Holistic Decision Making*. Forbesindia. <https://www.forbesindia.com/article/rotman/holistic-decision-making/12822/1>
- Serafeim, G. (2015). Integrated Reporting and Investor Clientele. *Journal of Applied Corporate Finance*, 27(2), 34–51. <https://doi.org/10.1111/jacf.12116>
- Warren, B. (2020, 19 may). *Why investors are putting sustainability at the top of the agenda*. EY. [https://www.ey.com/en\\_gl/power-utilities/why-investors-are-putting-sustainability-at-the-top-of-the-agenda](https://www.ey.com/en_gl/power-utilities/why-investors-are-putting-sustainability-at-the-top-of-the-agenda)