

# The Next Big Thing

## A qualitative study on how strategic leaders of incumbent firms identify new opportunities

*By Tuva Brännström (41838) and Rim Reslan (41833)*

### Abstract

In today's dynamic and volatile business environment, incumbent firms need to constantly rethink their value proposition and be flexible in adjusting their businesses to shifting market conditions through innovation. Leaders at the highest level of incumbent firms, i.e., strategic leaders, have been suggested to play a key part in driving and promoting innovation. Recognizing this, scholars have called for more research on the initial stages of the innovation process, especially on the role of strategic leaders. This study addresses this call for research by exploring how strategic leaders of incumbent firms identify new business opportunities with strategic importance and significant value potential using a qualitative research method based on 21 semi-structured interviews. Our findings highlight that strategic leaders identify new business opportunities by engaging in four distinct discovery behaviors – observing, questioning, experimenting, and idea networking. Moreover, this study contributes to previous research by showing that strategic leaders leverage their team when engaging in these different behaviors. As strategic leaders strive to expand their capability to identify new opportunities, they are involved in the discovery behaviors directly by themselves and indirectly through their team. However, to leverage their team, strategic leaders need to establish psychological safety. The findings of this study reinforce the importance of strategic leaders using their team as a sparring partner to identify new opportunities.

**Keywords:** innovation, strategic leader, incumbent firm, opportunity recognition, team

**Supervisor:** Professor Roberto Verganti, Department of Entrepreneurship, Innovation and Technology

# Acknowledgements

*Stockholm, May 2022*

First, we want to take this opportunity to extend our warmest gratitude to our interview participants for their excitement and willingness to participate in this study, despite being busy top leaders. This study would not have been possible without them.

Furthermore, we would like to express our deepest appreciation to our academic supervisor, Roberto Verganti, Professor at the Department of Entrepreneurship, Innovation, and Technology, for his inspiration and valuable guidance.

Finally, we would like to thank our family and friends for their never-ending support and cheering on us during our final semester at the Stockholm School of Economics.

Thank you,

Tuva Brännström      Rim Reslan

# Glossary

<b>Innovation</b>	Innovation is defined as “the multi-stage process whereby organizations transform ideas into new/improved products, services, or processes, to advance, compete and differentiate themselves successfully in their marketplace” (Baregheh et al., 2009, p. 1334).
<b>Front-end of innovation (FEI)</b>	FEI refers to the initial stages of the innovation process (Eling & Herstatt, 2017), comprising idea generation and idea elaboration (Cortes & Herrmann, 2021; Perry-Smith & Mannucci, 2017).
<b>Strategic leader</b>	Strategic leaders are defined as the board of directors, chief executive officers (CEOs), top management teams, and/or business unit heads (Cortes & Herrmann, 2021; Kurzahls et al., 2020). In this study, we specifically refer to strategic leaders as CEOs and top managers with the title vice president or director.
<b>Team</b>	The team refers to the people working closest to the strategic leader, primarily direct reports.
<b>Incumbent firm</b>	Incumbent firms are defined as existing firms established in their industry or market and aged more than 20 years.
<b>Opportunity</b>	Opportunity refers to all types of ‘big ideas’ with strategic importance and significant value for a firm (Wyrski et al., 2021).
<b>Opportunity recognition</b>	Opportunity recognition is the search for and the discovery of opportunities (Miller, 2007; Sarasvathy et al., 2003; Vogel, 2017).

# Table of Contents

<b>1</b>	<b>INTRODUCTION .....</b>	<b>1</b>
1.1	PURPOSE AND RESEARCH QUESTION.....	2
1.2	EXPECTED CONTRIBUTION.....	2
1.3	DEFINITION OF SCOPE.....	2
<b>2</b>	<b>LITERATURE REVIEW AND THEORETICAL FRAMEWORK .....</b>	<b>3</b>
2.1	INNOVATION.....	3
2.1.1	<i>Front-end of Innovation.....</i>	<i>3</i>
2.2	STRATEGIC LEADERS .....	5
2.2.1	<i>Strategic Leaders Discretionary Influence on Innovation.....</i>	<i>5</i>
2.2.2	<i>Strategic Leaders Architectural Influence on Innovation.....</i>	<i>6</i>
2.3	OPPORTUNITY RECOGNITION .....	8
2.3.1	<i>Opportunity Recognition in the Context of Entrepreneurs .....</i>	<i>8</i>
2.4	RESEARCH GAP.....	9
2.5	THEORETICAL FRAMEWORK .....	11
<b>3</b>	<b>METHODOLOGY .....</b>	<b>13</b>
3.1	METHODOLOGICAL FIT .....	13
3.2	RESEARCH DESIGN .....	13
3.3	DATA COLLECTION METHOD .....	14
3.3.1	<i>Interview Sampling.....</i>	<i>14</i>
3.3.2	<i>Interview Guide .....</i>	<i>15</i>
3.3.3	<i>Interview Conduct .....</i>	<i>16</i>
3.3.4	<i>Ethical Considerations and Implications.....</i>	<i>17</i>
3.4	DATA ANALYSIS METHOD.....	19
3.5	QUALITY CONSIDERATIONS.....	20
3.5.1	<i>Credibility.....</i>	<i>20</i>
3.5.2	<i>Dependability.....</i>	<i>20</i>
3.5.3	<i>Confirmability.....</i>	<i>20</i>
3.5.4	<i>Transferability .....</i>	<i>21</i>
<b>4</b>	<b>EMPIRICAL DATA.....</b>	<b>22</b>
4.1	BACKGROUND AND CONTEXT .....	22
4.2	QUESTIONING TO GAIN NEW PERSPECTIVES .....	22
4.2.1	<i>Adopting a Challenger Mindset .....</i>	<i>23</i>
4.2.2	<i>Identifying Value-Adding Opportunities .....</i>	<i>23</i>
4.3	INDIVIDUAL OBSERVATIONS .....	24
4.3.1	<i>Newsletters, Podcasts, and Social Media .....</i>	<i>24</i>
4.3.2	<i>Team Meetings .....</i>	<i>24</i>
4.4	OBSERVING THROUGH THE ORGANIZATION .....	25
4.4.1	<i>Insights from the Team.....</i>	<i>25</i>
4.4.2	<i>Insights from Market Intelligence Units.....</i>	<i>26</i>
4.5	OPPORTUNITY VERIFICATION .....	26
4.5.1	<i>Experiment to Narrow Down the Number of Opportunities .....</i>	<i>27</i>

4.5.2	<i>Cheap Testing through Trial-Failure-Iterations</i>	27
4.6	ORGANIZATIONAL RESOURCES	28
4.6.1	<i>Leverage the Team to Test an Idea</i>	28
4.6.2	<i>Innovation Units</i>	28
4.7	INTERNAL NETWORKING	29
4.7.1	<i>Team as a Source for New Inspiration</i>	29
4.7.2	<i>Co-develop New Ideas with the Team</i>	30
4.7.3	<i>Connect with People in the Global Organization</i>	30
4.7.4	<i>Get New Perspectives from Board of Directors</i>	31
4.7.5	<i>Leverage Strategic Partnerships</i>	31
4.8	EXTERNAL NETWORKING	32
4.8.1	<i>Meet with People Outside of the Industry</i>	32
4.8.2	<i>Attend Diverse Professional or Academic Conferences</i>	33
4.8.3	<i>Interact with Customers</i>	33
4.8.4	<i>Use Network of Personal Connections</i>	34
<b>5</b>	<b>ANALYSIS</b>	<b>35</b>
5.1	QUESTIONING	35
5.1.1	<i>Questioning to Gain New Perspectives</i>	35
5.2	OBSERVING	36
5.2.1	<i>Individual Observations</i>	36
5.2.2	<i>Observing through the Organization</i>	36
5.3	EXPERIMENTING	37
5.3.1	<i>Opportunity Verification</i>	37
5.3.2	<i>Organizational Resources</i>	38
5.4	IDEA NETWORKING	38
5.4.1	<i>Internal Networking</i>	39
5.4.2	<i>External Networking</i>	40
<b>6</b>	<b>DISCUSSION</b>	<b>41</b>
6.1	ROLE OF THE TEAM	41
6.2	PSYCHOLOGICAL SAFETY	42
6.3	ENHANCED THEORETICAL FRAMEWORK	43
<b>7</b>	<b>CONCLUSION</b>	<b>44</b>
7.1	ANSWER TO THE RESEARCH QUESTION	44
7.2	THEORETICAL CONTRIBUTION	44
7.3	PRACTICAL IMPLICATIONS	45
7.4	LIMITATIONS AND FUTURE RESEARCH	45
<b>8</b>	<b>REFERENCES</b>	<b>47</b>
<b>9</b>	<b>APPENDICES</b>	<b>56</b>
	APPENDIX A: INTERVIEW GUIDE	56
	APPENDIX B: DATA STRUCTURE	57
	APPENDIX C: STRATEGIC LEADERS' INVOLVEMENT IN INNOVATION	58

## List of Figures

<i>Figure 1: Entrepreneurial opportunity recognition by Dyer et al. (2008)</i> .....	9
<i>Figure 2: Visualization of the research gap across the three research domains</i> .....	10
<i>Figure 3: Theoretical framework inspired by Dyer et al. (2008)</i> .....	12
<i>Figure 4: Excerpt from the data structure</i> .....	19
<i>Figure 5: Enhanced theoretical framework</i> .....	43

## List of Tables

<i>Table 1: Overview of the interview participants</i> .....	18
<i>Table 2: Overview of how the leader uses the team for opportunity recognition</i> .....	42

# 1 Introduction

Today's business environment is dynamic and fast-paced (Binns et al., 2022). To manage such a turbulent environment, incumbent firms need to constantly rethink their value proposition and be flexible in adjusting their businesses to shifting market conditions (Christensen, 1997). Moreover, growth is a necessary element for the success of most businesses that hinge on the identification of new opportunities to grow and secure the conditions for growth (Cortes & Herrmann, 2021; van den Ende et al., 2015).

Innovation is a key source of growth, and incumbent firms that fail to understand the importance of innovation risk falling behind or – in some cases – not even surviving (Binns et al., 2022). The innovation process involves the identification and selection of opportunities that can be developed into an innovation project (Sukhov et al., 2021) – a crucial phase of the process termed by scholars as the front-end of innovation (FEI) (Eling & Herstatt, 2017; Kock et al., 2015).

Strategic leaders, referred to as CEOs and other top managers (Cortes & Herrmann, 2021; Kurzhals et al., 2020), are central decision-makers regarding FEI processes. They hold an instrumental role in identifying new business opportunities and setting the firm's strategic direction (Cortes & Herrmann, 2021; Eggers & Kaplan, 2009; Hambrick & Mason, 1984; Yadav et al., 2007). Historically, incumbent firms that mainly focus on short-term results become victims of disruption. Nokia is only one of many firms that have faced this path (Binns et al., 2022). In the late 2000s, Nokia dominated the mobile phone market with >40% market share. However, only five years later, Nokia was outperformed by new entrants and other incumbent firms, which was mainly caused by the CEO and other top managers' detrimental influence on innovation (Vuori & Huy, 2016).

Yet, given the importance strategic leaders of incumbent firms have on FEI, *how* they identify new opportunities has not been properly explored in research (Cortes & Herrmann, 2021; Eling & Herstatt, 2017; Verganti et al., 2020), even though every leader needs to think about doing new things. Instead, the identification of new opportunities has mainly been a dominant research stream in the entrepreneurship field. How entrepreneurs identify new ideas for venture creation has intrigued scholars for decades (Baron, 2006; Dyer et al., 2008; Kirzner, 1973; Schumpeter, 1942). However, strategic leaders' influence on innovation in incumbent firms is increasingly drawing researchers' attention. In light of this, scholars urge for more attention and knowledge on how strategic leaders identify opportunities for their firm's strategic agenda (Cortes & Herrmann, 2021; Verganti et al., 2020).

Therefore, this thesis explores how strategic leaders of incumbent firms pursue opportunity recognition, an activity positioned at the beginning of the FEI process, using a qualitative research method based on 21 semi-structured interviews.

## 1.1 Purpose and Research Question

This study focuses on the topic of how strategic leaders identify opportunities for their firm's strategic agenda. Former conceptual contributions to the FEI literature lack insights from entrepreneurship or strategy and organization literature, although the concepts are relevant to the topic at hand. For example, opportunity recognition is a central concept in the entrepreneurship field (Dyer et al., 2008; Miller, 2007; Sarasvathy et al., 2003; Vogel, 2017), and the role of strategic leaders in incumbent firms is mainly researched in strategy and organization literature (Cortes & Herrmann, 2021; Kurzhals et al., 2020). It is evident in the innovation literature that especially the role of strategic leaders in incumbent firms is underresearched regarding how they find new opportunities.

Thus, the purpose of this study is to explore how strategic leaders in incumbent firms identify new opportunities and set new strategic directions for the firm and contribute to the FEI literature by answering the following research question:

*How do strategic leaders of incumbent firms identify new opportunities?*

Specifically, we aim to address the theoretical gap in the innovation literature by combining concepts from the domains of strategy and organization (*strategic leaders of incumbent firms*) and entrepreneurship (*identification of new opportunities*) by collecting and analyzing empirical data at this intersection.

## 1.2 Expected Contribution

By answering the research question, we aim to contribute to FEI literature (Eling & Herstatt, 2017; O'Brien, 2020; Verganti et al., 2020) through an empirical study about the role of strategic leaders at that early stage. By recognizing strategic leaders' vital role in influencing innovation (Cortes & Herrmann, 2021) and applying a theoretical lens from the entrepreneurship literature (Dyer et al., 2008), we seek to unlock new insights on how they identify new opportunities. Besides theoretical contributions, this study has the potential to be valuable for practitioners. Strategic leaders may use the findings of this study to gain inspiration on activities that can contribute to spotting new opportunities relevant to their firm.

## 1.3 Definition of Scope

This study explores how strategic leaders identify new opportunities of strategic relevance for the firm. It does not focus on the innovation output, i.e., any specific type of innovation, such as business model innovation or product innovation. Furthermore, the study does not aim to say anything about whether the strategic leaders or the respective firms are successful or unsuccessful. The strategic leaders in this study can only be considered successful in the sense that they have reached a CEO or other top-level position in a well-established profitable firm based in Sweden or internationally.



## 2 Literature Review and Theoretical Framework

The following chapter will set the scene by defining innovation in a general context and then review the literature on FEI. Next, strategic leaders are introduced in the context of innovation, followed by a review of opportunity recognition taking an entrepreneurial lens. Finally, the chapter concludes with the research gap and the theoretical framework that is used to guide our data collection and analysis.

### 2.1 Innovation

Innovation is key to confronting a vast majority of the world's issues and challenges. It is a strategic tool for organizations to tackle some of their most pressing challenges, for example, related to sustainability (Adams et al., 2016), digital transformation (Warner & Wäger, 2019), and new customer expectations (Thomke & von Hippel, 2002). Across research disciplines, the definition of innovation varies considerably (Baregheh et al., 2009). Building on the variety of definitions, Baregheh et al. (2009) propose a general definition of innovation for businesses regardless of organizational and disciplinary context:

“Innovation is the multi-stage process whereby organizations transform ideas into new/improved products, services or processes, to advance, compete and differentiate themselves successfully in their marketplace” (Baregheh et al., 2009, p. 1334).

Innovation processes often involve multiple people across different hierarchical levels in the organization. Therefore, the identification and implementation of ideas hinge on how successfully individuals of the organization manage each stage (Boeddrich, 2004).

#### 2.1.1 Front-end of Innovation

The first stages of the innovation process are also known as the front-end of innovation (FEI). FEI is characterized as a “fuzzy,” informal, unstructured, and chaotic process where ideas and problems emerge and develop (Eling & Herstatt, 2017; Kock et al., 2015). The concept of FEI is not new – its importance for the success of new product innovation was recognized over 30 years ago (Cooper & Kleinschmidt, 1987). Typical FEI activities include generating, screening, and evaluating ideas for innovation (Khurana & Rosenthal, 1998; Reid & De Brentani, 2004). What sparks the FEI process is either the identification of problems or opportunities (Wyrski et al., 2021). For example, problems could relate to market or customer needs, and opportunities could be the application of new technology (Norman & Verganti, 2014).

In the research stream of problem-centered innovation, Verganti et al. (2020) divide the process into two steps, problem-finding and problem-solving. Problem-finding is defined as a collective sensemaking process to delineate which problems make sense to address (Verganti et al., 2020; von Hippel, 1994), which essentially is the ability to identify problems that are of strategic importance for the firm (Baer et al., 2013). On the other hand, problem-solving is the generation, evaluation, and selection of alternative solutions (Baer et al., 2013).

In the research stream of opportunity-centered innovation, the process comprises the involvement of ideas (Lawson & Samson, 2001; Mendoza-Silva, 2021; van den Ende et al., 2015), and the most common conceptualizations define the stages as linear and comprise idea generation, idea elaboration, idea championing and idea implementation (Hansen & Birkinshaw, 2007; Perry-Smith & Mannucci, 2017; Salerno et al., 2015). Innovative products, services, and processes are based on the identification of opportunities (Wyrski et al., 2021), which depends on managers' ability to sense, shape, and seize opportunities and transform them into novel solutions in organizations, ultimately contributing to a firm's competitive advantage (Teece, 2007). This study adopts Perry-Smith and Mannucci's (2017) definition of FEI as idea generation and idea elaboration. The resulting idea(s) from FEI will be those receiving further attention and investment in the later stages of the innovation process.

The importance of FEI has increasingly caught the attention of scholars in both problem-centered and opportunity-centered fields. Verganti et al. (2020) highlight that problem-finding becomes an even more crucial step with the emergence of organizations powered by Artificial Intelligence. Problem-finding is argued to be mainly a human activity, while problem-solving can largely be delegated to algorithms and machines (Verganti et al., 2020). Hence, identifying which problem should be addressed is a core activity in strategic decision-making to create valuable solutions (Baer et al., 2013; Norman & Verganti, 2014; Verganti et al., 2020). However, little is known about how problem-finding occurs, particularly on a more strategic level. Therefore, it is important to expand our understanding of this field using new theoretical lenses (Verganti et al., 2020). Additionally, the need for more research on FEI is also highlighted by scholars in opportunity-centered innovation (Eling & Herstatt, 2017; O'Brien, 2020; Salerno et al., 2015; Wyrski et al., 2021).

With this, we have recognized the need for more research on FEI. However, what constitutes a problem versus an opportunity is still elusive, as identifying a problem can also be viewed as an opportunity. This further reinforces the notion of FEI as "fuzzy," being an uncertain and ambiguous process (Simms et al., 2021; Stevens, 2014). Therefore, for clarity in this study, we make no distinctions between the two concepts and use the term opportunity as all types of 'big ideas' with strategic importance and significant value for a firm (Wyrski et al., 2021).

Specifically related to FEI, the role of strategic leaders has received little attention (Cortes & Herrmann, 2021). Instead, the dominant literature stream on the innovation process focuses primarily on product innovation (Eling & Herstatt, 2017; O'Brien, 2020). Moreover, design thinking is an established method for approaching FEI (Liedtka, 2015; Verganti et al., 2021), which highlights the role of framing and sensemaking for project managers (Kutsch et al., 2021; Sanz-Llopis & Ostermann, 2020). Hence, current research mainly focuses on people with less strategic responsibility, often product managers and design thinkers (Magistretti et al., 2021), who are directly involved in innovation.

## 2.2 Strategic Leaders

Strategic leaders have been described as the firm's principal decision-makers that steer the company toward the path to success (Cortes & Herrmann, 2021; Herrmann & Nadkarni, 2014; Mihalache et al., 2014; Tripsas & Gavetti, 2000) and play a key role in driving and promoting innovation (Finkelstein et al., 2009). Previous research has defined strategic leaders as the board of directors (BODs), chief executive officers (CEOs), top management teams (TMTs), and/or business unit heads (Cortes & Herrmann, 2021; Kurzhals et al., 2020).

Cortes and Herrmann (2021) describe two main research streams on how strategic leaders influence innovation, which they term *discretionary* and *architectural influence*. Studies on discretionary influence suggest that strategic leaders directly affect the firm's innovation process by actively contributing with their own ideas and influencing innovation outcomes through their power to make strategic decisions (Cortes & Herrmann, 2021; Hambrick & Mason, 1984). On the other hand, studies on architectural influence focus on how strategic leaders enable innovation by encouraging and supporting their subordinates to pursue innovation (Cortes & Herrmann, 2021).

### 2.2.1 Strategic Leaders Discretionary Influence on Innovation

Multiple theoretical lenses have been applied to strategic leaders' discretionary influence on innovation. The two most prominent theoretical lenses are upper echelons theory (Cortes & Herrmann, 2021; Hambrick & Mason, 1984; Hambrick, 2007; Kurzhals et al., 2020) and agency theory (Eisenhardt, 1989; Kurzhals et al., 2020). Upper echelons theory suggests that strategic leaders influence innovation outcomes, meaning the direction and future of the firm, through strategic decision making (Hambrick & Mason, 1984; Hambrick, 2007). Upper echelons theory has primarily been used to outline the characteristics of CEOs and TMTs and their impact on innovation (Barker & Mueller, 2002; Talke et al., 2011). Agency theory describes the relationship between BODs and CEO from a principles and agents' point of view and focuses mainly on innovation outcomes in relation to CEO compensation and ownership (Balkin et al., 2000; Eisenhardt, 1989). Hence, existing theoretical lenses within discretionary influence do not properly address *how* individual leaders identify new opportunities.

A large body of researchers analyzes strategic leaders' characteristics in the context of innovation. It has been found that strategic leaders influence innovation activities directly by, for example, demographic characteristics, cognitive characteristics, and personality characteristics (Cortes & Herrmann, 2021). In addition, interactions in and between TMTs and BODs have been found to be important for innovation outcomes (Alexiev et al., 2010; Heyden et al., 2017; Sierra-Morán et al., 2021; Talke et al., 2011). Furthermore, the social ties of top executives, which enable outside sources of knowledge, both intra-industry and extra-industry, have been shown to affect the firm's strategic choices as well as foster innovation (Geletkanycz & Hambrick, 1997; Heavey & Simsek, 2013).

Several studies have used demographic characteristics as proxies for leaders' cognitive frames (Hambrick, 2007). For example, age (Barker & Mueller, 2002) and length of tenure (Zahra, 2005), gender (Wu et al., 2021), and educational background (Loukil et al., 2020) have been shown to influence innovation activities in firms. Specifically, older CEOs have a reduced willingness to embrace new ideas and organizational changes (Barker & Mueller, 2002). Regarding gender, female chief technology officers have been shown to be more innovative, in terms of patent counts and patent citations, than their male counterparts (Wu et al., 2021). Also, CEOs with a science or engineering degree, in contrast to business and management-educated CEOs, are more prone to R&D spending (Loukil et al., 2020).

Strategic leaders' cognitive characteristics, which concern the process of searching for information and knowledge, have also been explored (Li et al., 2013; Yadav et al., 2007). For example, innovation outcomes have been shown to depend on CEOs temporal focus, meaning their attention to perceptions of the past, present, and future (Nadkarni & Chen, 2014) and attention to certain technologies or product development processes (Calantone et al., 1995; Eggers & Kaplan, 2009). For instance, one study found that changes in CEOs' attention to fiber-optic technologies were associated with more patenting activities in this field (Kaplan, 2008).

Strategic leaders' personality characteristics have also been explored. For example, CEO proactiveness, including networking, problem-solving and feedback-seeking behaviors, have been positively associated with innovation activities (Kiss et al., 2021). Also, narcissistic CEOs are more prone to be more open to disruptive innovations (Gerstner et al., 2013) and achieve a higher rate of new product introductions (Kashmiri et al., 2017). Finally, hubristic CEOs tend to disregard risks and challenges when pursuing innovative opportunities (Tang et al., 2015).

While some studies on strategic leaders' discretionary influence have been on an individual level, confirming strategic leaders' important role in the innovation process, most studies on FEI are focused on TMTs (Cortes & Herrmann, 2021). For example, it has been researched how TMTs selection of information and search intensity influences innovation outcomes (Li et al., 2013). In addition, Heavey and Simsek (2013) found that smaller TMTs are more likely than larger ones to engage in identifying new opportunities. Further, the influence of higher levels of education and national diversity on TMTs ability to recognize opportunities and interpret available information has been researched (Boone et al., 2019; Srivastava & Lee, 2005).

### **2.2.2 Strategic Leaders Architectural Influence on Innovation**

Since strategic leaders are embedded in an organizational context, other well-established theories have been used within the research stream on *architectural influence* (Cortes & Herrmann, 2021). Studies have, for example, leveraged leadership theory to investigate the relationship between different types of leadership styles and innovation (Elenkov et al., 2005; Osborn & Marion, 2009). The most studied leadership style in relation to innovation

has been transformational leadership (Elenkov et al., 2005; Jansen et al., 2009; Jung et al., 2008; Kang et al., 2015; Osborn & Marion, 2009).

In a study by Chen et al. (2014), transformational CEOs positively impacted corporate entrepreneurship by their ability to encourage employees to go beyond established routines and pursue new business ideas. Other studies have explored the CEOs role in establishing a culture that encourages middle managers to support and facilitate the upward movement of novel ideas coming from lower levels of the organization (Burgelman, 1983; Burgelman & Grove, 2007). Overall, transformational CEOs strengthen their employees' intrinsic motivation, which is an important enabler for creativity and new ideas (Jansen et al., 2009; Kang et al., 2015). It is common for studies within the architectural research stream to address the leaders' indirect influence on innovation.

Researchers have shown that strategic leaders indirectly can influence the FEI in several ways. For example, they can influence it through resource allocation, by determining organizational structures or processes (Barker & Mueller, 2002; Hirst et al., 2011; Miller et al., 1982; Wei & Ling, 2015) and through culture or perceptions of norms and values (Barker & Mueller, 2002; Elenkov et al., 2005). It is crucial to create an environment for psychological safety where it is encouraged and safe to propose new ideas instead of a climate where suggesting an idea will lead to being mocked, penalized, or ignored (West, 1990). Since much work in today's organizations occurs in collaboration with others, organization literature has recognized psychological safety as a critical aspect of understanding how people collaborate to achieve mutual goals. Strategic leaders facilitate psychological safety by creating a climate where speaking up, questioning the status quo, and suggesting new ideas are valued and encouraged (Edmondson, 1999; Edmondson, 2003; Edmondson & Lei, 2014). Especially in FEI, it has been argued to be important to establish a culture that spurs new ideas among employees while setting the right direction. For leaders, it becomes a balancing act of promoting innovative ideas and prioritizing the ones that are most aligned with the firm (van den Ende et al., 2015).

To summarize, research on strategic leaders' *discretionary*- and *architectural influence* on innovation has received scholars' attention in some aspects. For instance, strategic leaders' direct influence on innovation has been explored through their demographic, cognitive, and personality characteristics, as well as the interactions in and between TMTs and BODs. Strategic leaders' indirect influence on innovation has also been explored. For example, it has been found that leadership styles and their influence on innovation through resource allocation and establishing a context in which ideas are encouraged, and risk-taking and creativity are promoted. However, the leader's perspective on *how* they identify new opportunities remains largely unexplored in these research streams.

Recently, scholars have argued that there is a need for more research that contributes to our knowledge of how strategic leaders affect innovation processes in general (Kurzahls et al., 2020) and their influence on FEI in particular (Cortes & Herrmann, 2021). Specifically, an

important research opportunity lies in applying a wider range of theoretical lenses to further explore the relationship between strategic leaders and innovation (Kurzahls et al., 2020).

## 2.3 Opportunity Recognition

The literature on entrepreneurship has been the most prominent in outlining how individuals identify and shape opportunities (Baron, 2006; Dyer et al., 2008; Lanivich et al., 2022). Scholars have referred to this activity as *opportunity recognition* (Miller, 2007; Sarasvathy et al., 2003; Vogel, 2017).

### 2.3.1 Opportunity Recognition in the Context of Entrepreneurs

Two dominant views of how opportunities are detected among entrepreneurs exist (Alvarez & Barney, 2007). Kirzner (1973) argues that entrepreneurs have different access to information if they are alert enough to discover previously unnoticed opportunities, while Schumpeter (1942) suggests that entrepreneurs use exogenous or endogenous knowledge and information to create novel opportunities. Nevertheless, opportunity recognition is a catalyst for entrepreneurial processes, and a long, intriguing question in entrepreneurship has been why and how some individuals recognize opportunities and transform them into novel ideas (Eckhardt & Shane, 2003; Vogel, 2017).

How entrepreneurs recognize opportunities has been conceptualized into three distinct processes. First, *opportunity recognition* refers to how the entrepreneur exploits a previously unrecognized opportunity by connecting dispersed information through matching known products with existing demand. Second, *opportunity discovery* begins either with a known supply and proceeds in search of an unknown demand or a known demand that drives the search for an unknown supply. Third, *opportunity creation* refers to the entrepreneur's creation of both supply and demand (Miller, 2007; Sarasvathy et al., 2003). Like Dyer et al. (2008), we will use opportunity recognition as an overarching term to refer to all three innovation processes since incumbents likely engage in all of them, and their strategic leaders often have experience from all of them.

Dyer et al. (2008) recognized the lack of research on *how* opportunity recognition occurs and specifically how individuals identify opportunities. Based on their empirical study, which compared senior executives in large organizations with entrepreneurs who have founded innovative ventures, Dyer et al. (2008) developed a theory comprising four behavioral patterns, *questioning*, *observing*, *experimenting*, and *idea networking* through which individuals acquire information (Figure 1). The study suggests that the likelihood of identifying opportunities depends on the individual engagement in the discovery behaviors. As visualized in Figure 1, questioning enhances the other three behaviors. Through a survey with closed-ended questions, Dyer et al. (2008) found that entrepreneurs engaged in these behaviors more intensely than senior managers.

In the model by Dyer et al. (2008), the authors also found two cognitive patterns: a *bias against the status quo* and *associational thinking*. Bias against the status quo refers to a desire to

change the world or do something completely new. Furthermore, new information and ideas emerging from the discovery behaviors were often catalysts for associational thinking, a pattern recognition skill to draw connections between unrelated fields. The discovery behaviors presented in Dyer et al. (2008) will serve as a foundation for the theoretical framework of this study and will therefore be presented in greater detail in section 2.5.

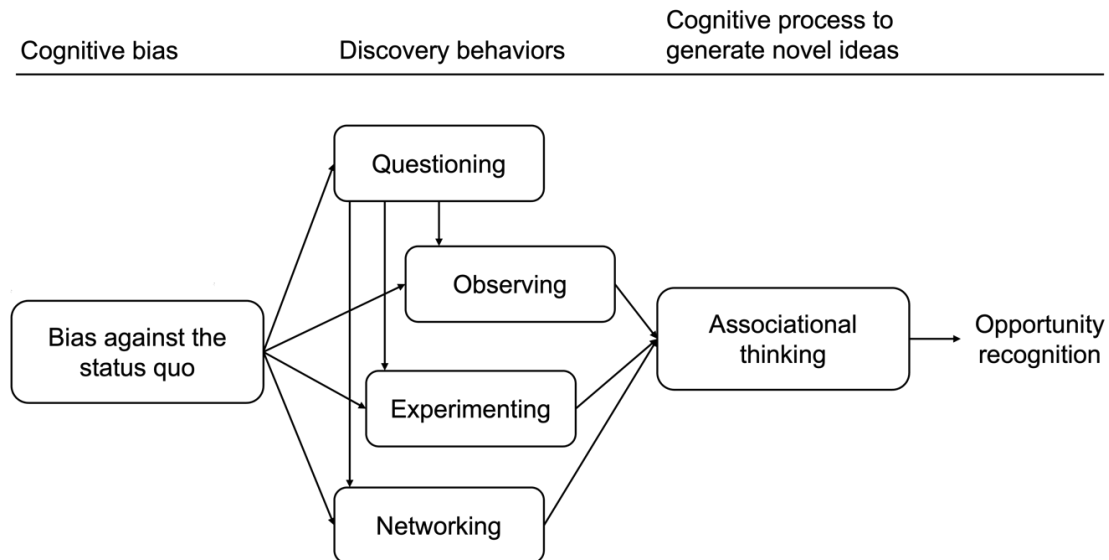


Figure 1: Entrepreneurial opportunity recognition by Dyer et al. (2008)

When thinking about the search for new opportunities, literature and practice consider entrepreneurs by default. Yet, we argue it is critical for leaders of incumbent firms to also search for new opportunities to survive in today’s volatile business environment (Binns et al., 2022; Christensen, 1997; Cortes & Herrmann, 2021).

## 2.4 Research Gap

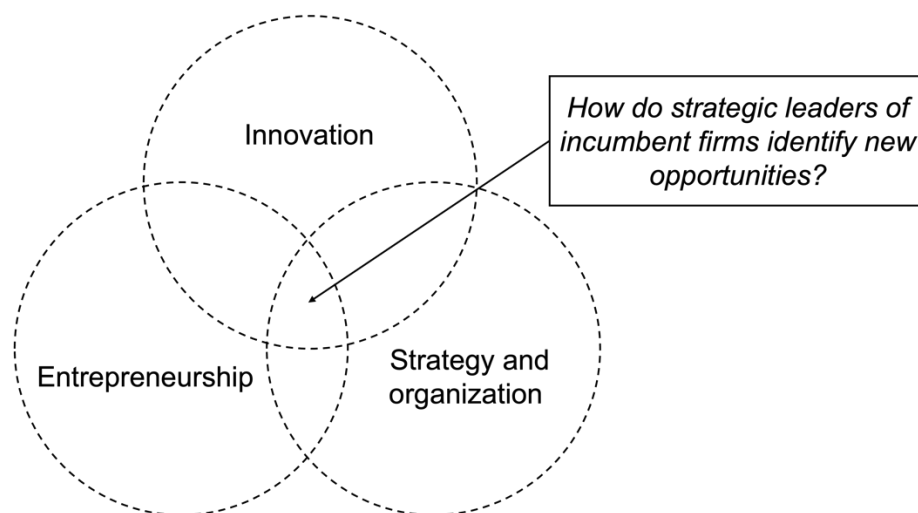
After reviewing the extant literature on innovation (*FEI*), strategy and organization (*strategic leaders of incumbent firms*), and entrepreneurship (*opportunity recognition*), we found that the three different literature streams lacked interdisciplinary discussions about the topic at hand. Thus, this study lies at the intersection of innovation, strategy and organization, and entrepreneurship research.

The innovation literature, which is central in describing how organizations transform ideas or concepts into new or improved products, services, or processes, has called for more research on the initial stages of the innovation process (Eling & Herstatt, 2017; O'Brien, 2020; Salerno et al., 2015; Verganti et al., 2020), especially the role of strategic leaders (Cortes & Herrmann, 2021). The identification of opportunities has mainly been explored from the viewpoint of individuals in lower levels of organizations, such as product managers and design thinkers (Kutsch et al., 2021; Magistretti et al., 2021). Hence, less attention has been given to individuals in top management.

In the strategy and organization domain, there is research on several aspects of strategic leaders' architectural and discretionary influence on the innovation process in incumbent firms (Cortes & Herrmann, 2021). However, how strategic leaders identify new opportunities has not been adequately explored. Most literature focuses on discipline-specific knowledge, primarily based on theories that were developed in relatively stable environments of the last century (Eisenhardt, 1989; Hambrick & Mason, 1984). However, today's leaders face turbulent environments and need to act like entrepreneurs when identifying new opportunities and setting the strategic agenda for their organization (Binns et al., 2022). Thus, we recognize the need to look beyond existing literature streams and draw from concepts from a different field to get a nuanced understanding of the topic, which is why we turn to the entrepreneurship literature.

As illustrated earlier, how entrepreneurs identify new opportunities is already a well-explored topic in the entrepreneurship literature (Alvarez & Barney, 2007; Baron, 2006; Dyer et al., 2008; Vogel, 2017), which is why we acknowledge that applying entrepreneurial concepts to understand how strategic leaders in incumbent firms identify opportunities can uncover new insights that are valuable to both researchers and practitioners. Thus, to contribute to the FEI literature, we need to look beyond discipline-specific research by borrowing concepts from entrepreneurship literature and applying them to strategic leaders of established organizations.

To summarize, this study aims to explore how strategic leaders in incumbent firms identify opportunities, which is arguably not only the most uncertain, iterative, and unstructured step of the innovation process but also critical as it sets the direction for the upcoming innovation stages (Cortes & Herrmann, 2021).



*Figure 2: Visualization of the research gap across the three research domains*



## 2.5 Theoretical Framework

Based on the existing literature and the identified research gap, we have put together a theoretical framework to guide the data collection and analysis in the subsequent chapters (Figure 3). Closest to what we want to investigate is the entrepreneurial model of opportunity recognition by Dyer et al. (2008). They, as previously mentioned, examine how entrepreneurs recognize innovative and novel business ideas and the extent to which these entrepreneurs' behavioral patterns differ from senior executives in large companies. The study resulted in a theoretical model which delineates the behavioral patterns which are particularly salient in entrepreneurs' ability to discover new opportunities (Dyer et al., 2008).

After two initial mock interviews with strategic leaders of incumbent firms, we recognized that the behavior patterns outlined by Dyer et al. (2008) could serve as a suitable framework for this study. The model by Dyer et al. (2008) was deemed appropriate as it takes an individual perspective on how opportunities are identified, as well as already having been applied to strategic leaders, although with the purpose of comparing them with entrepreneurs. Instead of focusing on how senior executives differ from entrepreneurs as Dyer et al. (2008) did, we aim to dig deeper into *how* strategic leaders engage in the different discovery behaviors. More specifically, the behaviors leading to opportunity recognition are *questioning*, *observing*, *experimenting*, and *idea networking*.

The first behavior, *questioning*, relates to asking questions to get to the root of a problem and challenge others' fundamental assumptions and the status quo of existing business and processes. The authors suggest that asking questions without observing, experimenting, and idea networking will unlikely lead to the discovery of new opportunities. Dyer et al. (2008) found that entrepreneurs are more prone to question the status quo, while executives were more focused on incrementally improving existing processes.

The second behavioral pattern, *observing*, refers to intense observation in novel situations and ordinary encounters by observing the world around them and asking questions. Many entrepreneurs have founded companies from simple observations, such as listening and looking around in different environments. The authors suggest that entrepreneurs more frequently observe than managers in large organizations, especially through consumers and end-users.

The third behavior, *experimenting*, refers to holding convictions at bay and having a hypothesis-testing mindset by engaging in new activities, exposing oneself to new environments, and searching for new information. Essentially, it entails the search for new ideas through experimenting. Again, the results showed that entrepreneurs more frequently experiment than managers.

The last behavior, *idea networking*, entails building and maintaining diverse social networks to get outside inputs, either by discovering and testing new ideas or to get new perspectives. Dyer et al. (2008) found that entrepreneurs engaged in this behavior more frequently than managers in large organizations.

The original framework also includes two cognitive patterns: *associational thinking* and a *bias against the status quo* (Dyer et al., 2008). For the purpose of this study, both patterns are excluded from our theoretical framework. *Associational thinking* is a cognitive skill of how new knowledge is understood and categorized, which does not adequately explain the underlying actions in how strategic leaders identify new opportunities. Also, Dyer et al. (2008) did not measure the degree to which individuals engage in associational thinking, thereby not if the behaviors are even correlated with associational thinking. Dyer et al. (2008) outlined a desire to change the status quo as the main differentiator between entrepreneurs and senior executives. We investigate *how* strategic leaders engage in opportunity recognition, not *if* they do it. The desire to change the status quo is not an important factor for how they identify new opportunities but a pre-condition. Therefore, we focused on the *how* by looking at the related activities and reduced the model to the outlined behaviors.

Moreover, based on the initial mock interviews and literature review, we adapted the model to be more tailored to strategic leaders since they are different from entrepreneurs by being part of an organizational context. Therefore, they likely have access to resources that entrepreneurs might not have. The organizational context was not outlined in the Dyer et al. (2008) model. However, we argue that it could be an important aspect of understanding how strategic leaders identify opportunities. Therefore, as this study is explorative, we have not specified the organizational context beforehand.

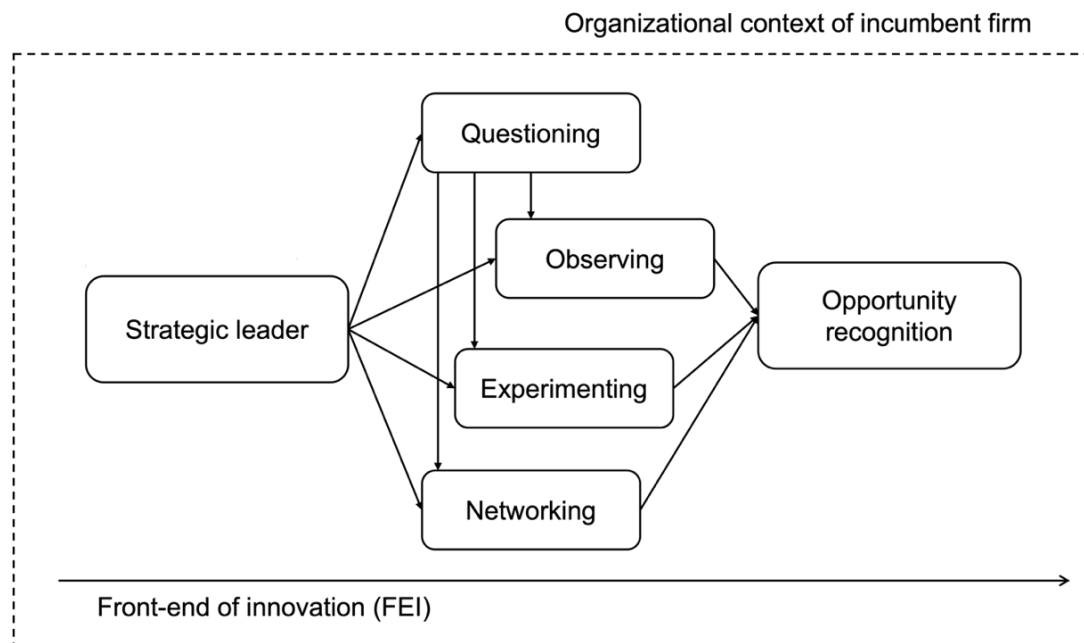


Figure 3: Theoretical framework inspired by Dyer et al. (2008)

## **3 Methodology**

The following section describes this study's methodological choices to best address the research question. First, our philosophical standpoint is introduced together with the methodological fit and research design. Second, the process of our data collection and method for the analysis are discussed in detail. Finally, the chapter ends with a critical evaluation of the study's quality. Throughout the study, we use a variety of wording – leaders, participants, respondents, and interviewees when referring to the strategic leaders.

### **3.1 Methodological Fit**

This thesis takes a relativist perspective, which is the study of social phenomena concerning humans' beliefs and behaviors as an outcome of individuals' creative and constructive abilities and social context (Easterby-Smith et al., 2018). We assume that the reality of how strategic leaders identify new opportunities is personally and subjectively constructed. Therefore, this study follows a constructionist point of view to understand how strategic leaders identify new opportunities from a subjective standpoint informed by their lived experiences and the meanings they attach to them.

Furthermore, this study is conducted with an exploratory purpose, aiming to shed light on an insufficiently researched area by investigating how strategic leaders of incumbent firms identify new opportunities (Easterby-Smith et al., 2018). A qualitative method was considered most appropriate because this field is in its infancy, and we want to explore and ultimately establish a more profound understanding of the specific topic (Bell et al., 2019). In addition, the qualitative method further enables the development of new theoretical concepts stemming from real-world observations (Bell et al., 2019; Korstjens & Moser, 2017).

In line with our philosophical assumptions, we believe that the immediate contact between the researchers and participants allows us best to investigate how leaders identify new opportunities (Easterby-Smith et al., 2018). Hence, we decided to conduct interviews as it enabled us to capture new high-quality insights and ultimately contribute to future research in this developing field.

### **3.2 Research Design**

Qualitative interviews allow researchers to comprehend the participants' lived experiences and viewpoints to develop an understanding of phenomena that can hardly be discovered with alternative methods (Easterby-Smith et al., 2018). Specifically, the outcome of the interview process involves a mutual understanding between the interviewer and respondents on the situational context and world views (Easterby-Smith et al., 2018). Furthermore, the chosen approach of interviews allows for comparing and contrasting findings from each respondent, i.e., each strategic leader and their unique contexts.

This study relies on an abductive approach, a form of reasoning that begins with an observation or phenomena derived from previous research. It then moves iteratively between established theory and empirical data, seeking to develop explanations for new findings (Alvesson & Sköldbberg, 2017; Dubois & Gadde, 2002). Earlier literature on FEI, strategic leaders, and opportunity recognition were therefore used to guide the development of the research question, selection of interviewees, as well as data collection and analysis. However, as it was not the purpose of this study to confirm the existing theory, the research question and initial framework remained open for changes to allow emerging insights from the data collection. Thus, we continuously moved back and forth between our theoretical framework and our collected empirical observations to derive insights and discover new patterns. We also went back to selected interview participants for follow-up interviews to iterate on new insights that emerged.

### **3.3 Data Collection Method**

This section describes how empirical data was collected to answer the research question. First, our selection process of the interviewees is outlined. Second, we describe the interview guide as a helpful tool for the semi-structured interviews, followed by a description of the interview conduct. Finally, we reflect upon the ethical considerations and implications taken to ensure the authenticity of the study.

#### **3.3.1 Interview Sampling**

One of the main questions regarding the study's interview sampling was whether to include strategic leaders from one specific industry or to go broader and include strategic leaders from several different industries. Indeed, how strategic leaders identify new opportunities might differ depending on the industry. Moreover, since the research question is positioned in a developing field and the purpose was explorative, we aimed to provide new insights and a deeper understanding of the field. Hence, we decided to include strategic leaders from various industries and contribute to future research by looking at the topic broadly.

The interview sampling followed a purposive approach, a form of non-probability sampling strategy with the criteria for inclusion of people most relevant for answering the research question (Bell et al., 2019; Easterby-Smith et al., 2018; Guest et al., 2006). Access to strategic leaders proved to be a challenging task – contact information was difficult to find, and they often had a tight schedule to fit an interview with us. To find suitable candidates, we scanned our own network, received support from the Stockholm School of Economics alumni board, and searched for and reached out to people by sending them messages on LinkedIn and by emails found on company websites.

We only reached out to people relevant to our sample criteria – working for large incumbents and having titles as either CEO, vice president, or director. After initial interviews, the study relied to some degree on snowball sampling. Interviewees were asked if they knew someone in their network with a similar role that would be willing to participate.

However, the most successful strategy to get hold of participants proved to be by a direct message through LinkedIn, as only two leaders emerged from snowball sampling.

All interviewees had a profile on LinkedIn, which was used to confirm their compliance with the sample criteria. Furthermore, incumbent firms were defined as existing firms established in their industry or market and aged more than 20 years. Table 1 provides an overview of the interview participants, encompassing pseudonyms of interviewee, title, leadership experience, the industry of the firm, as well as the date and length of each interview.

The final data sample includes 21 strategic leaders with between 10-30 years of leadership experience. They work for incumbent firms, ranging from large global corporates to market-leading Swedish firms. Furthermore, all strategic leaders were involved in front-end innovation and responsible for setting their entire firm's or business unit's strategic agenda.

### **3.3.2 Interview Guide**

Primary data was collected through semi-structured interviews. An interview guide was developed to ensure all relevant questions were asked during each interview session (Bell et al., 2019). The interview guide consisted of a relatively informal outline of questions and was considered a guide for discussion and creating meaningful dialogue rather than a manuscript. The research approach was tested through two pilot interviews with experienced strategic leaders of incumbent firms before conducting the study in its entirety.

During these pilot interviews, which lasted around 45 minutes, the research question and front-end innovation, as well as the draft of the guide, were discussed to gain useful insights about how to pose questions in an efficient way and to ensure all questions were appropriate and clear enough to the interviewee (Rowley, 2012). However, the interview guide was continuously adapted throughout the data collection process to ensure that new emerging insights from previous interviews were incorporated. Additionally, during the interviews, we were flexible in terms of timing when certain questions would be asked. When necessary, we asked additional follow-up questions outside the interview guide to ensure a correct and thorough understanding of how the interviewees viewed their social world (Bell et al., 2019).

To encourage rich answers from the interviewees as well as ensure that the data focused on the context of our research question, the interview guide was structured around three parts: a) opening questions, b) opportunity recognition c) concluding questions. The opening questions focused on collecting basic background information and allowed us to understand the participants from their point of reference by asking how they are involved in innovation within their company. It also allowed us to become more familiar with the participants.

The second part focused on questions related to opportunity recognition. Here, the interviewees were required to reflect and provide examples of an innovative idea they had identified and driven that has been of strategic significance for their current company. If they could not think about an example in their current role or company, they were also free

to describe examples from previous roles as strategic leaders in other incumbent firms. Most participants provided more than one example, and we then chose which story to explore further. Again, we dug deep into the context and actions involved to identify the idea.

The interview guide also included questions related to the dimensions of our theoretical model, namely questioning, observing, experimenting, and idea networking. We carefully listened for actions linked to the dimensions. If the interviewees did not mention their engagement in any dimension in their stories, we asked open-ended questions about examples of how they usually engage in that behavior. Furthermore, the interview guide also included more general questions about their engagement in the dimensions when identifying new opportunities and their respective importance. See Appendix A for the complete interview guide.

### **3.3.3 Interview Conduct**

After selecting participants, we started each interview with information regarding the anonymity and confidentiality of the respondent and their company to ensure that the participants felt safe and could speak freely about the topic. To build rapport, we also highlighted that there were no right or wrong answers to the questions and that they had the right to withdraw at any time (Shenton, 2004).

Throughout the report, we refer to each participant using pseudonyms. We recorded the interview with the participant's consent and transcribed the material afterward. All 25 interviews, including the four follow-up interviews, ranged from 30 to 70 minutes in length (Table 1), and the total interview data corresponded to 1160 minutes of audio recording. As we reached saturation, we stopped interviewing, yet we had not set a fixed limit for the number of participants beforehand. Specifically, saturation depends on the researcher's interest and results from careful sampling and perceived data quality (Guest et al., 2006). We conducted four follow-up interviews with the first participants to dig deeper into new insights that emerged halfway through the data collection.

Due to leaders' limited availability and the covid-19 pandemic, we conducted the interviews using Teams, a video-conferencing platform. Although online interviews come closest to a personal face-to-face conversation, they come with the challenges of establishing rapport, missing important body language, and the risk of the participants getting distracted during the interview (Bell et al., 2019). We always had our videos on to address this, which also made the participants put on their video cameras. The video interviews allowed us to observe face and body expressions as part of the conversation's course. Further, this set-up enabled us to expand our geographical reach as participants were able to be flexible in their location. For instance, several of our interviewees were abroad when participating in the study. Based on this, we argue that we were able to obtain a deep understanding of the participants' perceptions through video interviews.

The semi-structured interview guide allowed us to shift focus and add or omit questions depending on the interview's course. We applied laddering up-and-down techniques to

navigate the interviews and asked for examples to underline their elaborations and ensure rich empirical data (Easterby-Smith et al., 2018). Both authors were present during 21 of the 25 interviews, and we took turns leading the interviews. While one researcher took the lead, the other took notes and made sure nothing was missed by asking follow-up questions. This method is preferred as multiple investigators can enable broader perspectives and strengthen the confidence of the empirical data (Velardo & Elliott, 2021). We had to split up for four interviews due to an overlap in the interviews caused by the leaders' limited availability. We aligned interview techniques before by jointly conducting several interviews prior.

We conducted the interviews in Swedish and English, depending on the participant's native language or preference. This flexibility ensured that language barriers would not affect the richness of the responses (Baumgartner, 2012). In addition, the interviews were transcribed in the conducted language to ensure that the context did not get lost. The chosen quotes in the result section were also checked with a peer researcher to provide correct and accurate translation while securing the original context (Hambleton, 1993).

### **3.3.4 Ethical Considerations and Implications**

In terms of ethical considerations, all interviewees were informed about the purpose of the study before giving their consent to voluntary participation, with the possibility to opt out at any time (Bell et al., 2019; Easterby-Smith et al., 2018). Furthermore, we asked all participants for approval before each interview regarding audio recording for transcribing purposes. As for the handling of data, all information about the interviewees has been treated with anonymity and confidentiality, and the gathered information has been used exclusively for the purpose of the thesis.

Anonymity and confidentiality were ensured to increase the truthfulness of the study, as the participants could speak more freely and openly about their subjective experiences of identifying new opportunities, which in turn allowed for richer empirical insights which benefit the subsequent analysis (Bell et al., 2019). More specifically, we used pseudonyms to replace participants' names with fake identifiers to separate personal information from the data. Furthermore, we refrained from disclosing detailed descriptions of the participants' roles or companies and only revealed high-level information required to set the context to ensure the study's trustworthiness (Bell et al., 2019).

Table 1: Overview of the interview participants

#	Name	Role	Leadership experience	Industry	Date 1 <sup>st</sup> interview (dd.mm.yy)	Length 1 <sup>st</sup> interview (h:mm)	Date 2 <sup>nd</sup> interview (dd.mm.yy)	Length 2 <sup>nd</sup> interview (h:mm)
1	Julia	CEO	+ 10 years	Exports and Trade	10.03.22	0:41	19.04.22	0:34
2	Alex	Director	+ 30 years	Manufacturing	12.03.22	0:59	20.04.22	0:35
3	Maria	Director	+ 20 years	Pharma	18.03.22	0:54		
4	Tobias	Director	+ 20 years	Automotive	24.03.22	0:56	13.04.22	0:30
5	Carl	Vice President	+ 20 years	ICT	25.03.22	0:45	11.04.22	0:31
6	Robert	CEO	+ 15 years	Internet	25.03.22	0:44		
7	Samuel	CEO	+ 15 years	Retail	25.03.22	0:41		
8	Emma	CEO	+ 15 years	Consumer Goods	29.03.22	0:38		
9	Anna	CEO	+ 10 years	Retail	01.04.22	0:37		
10	Jonas	Director	+ 10 years	Manufacturer	01.04.22	0:53		
11	Tommy	CEO	+ 15 years	Consumer Goods	03.04.22	0:52		
12	Agnes	Vice President	+ 20 years	Shipping	04.04.22	0:45		
13	Sanna	Director	+ 10 years	ICT	07.04.22	0:36		
14	Richard	CEO	+ 15 years	Pharma	08.04.22	0:54		
15	Hanna	Vice President	+ 15 years	MedTech	11.04.22	0:49		
16	Peter	Vice President	+ 10 years	Pharma	19.04.22	0:44		
17	Magnus	CEO	+ 20 years	Renewables and Environment	19.04.22	0:50		
18	Felix	Director	+ 10 years	Food Retail	19.04.22	1:10		
19	Tim	Director	+ 30 years	Building	22.04.22	0:57		
20	Elsa	Director	+ 10 years	Manufacturing	29.04.22	0:55		
21	Lena	Vice President	+ 10 years	Consumer Goods	05.05.22	0:50		



### 3.4 Data Analysis Method

The data analysis phase was approached in parallel with the data collection. After each interview, we discussed and wrote down observations and insights during a debrief. The overlapping data collection and analysis process facilitated the saturation of emerging insights. In addition, it allowed us to be flexible in adjusting the theoretical framework and interview guide as new insights emerged (Dubois & Gadde, 2002). We transcribed the interviews within 48 hours, and each transcript yielded between 10-12 pages using 12-point font and single line spacing. In total, we had around 270 pages of transcribed text. Thus, analyzing in parallel to collecting data was essential to keep up with the rich empirical material.

We used a thematic analysis method for categorizing qualitative data through emerging themes that are considered important to the research phenomenon (Edmondson & McManus, 2007). A thematic content analysis was chosen as it can provide a rich and detailed account of the data by understanding different perspectives and finding similarities by identifying, analyzing, and reporting patterns within qualitative data (Braun & Clarke, 2006). Furthermore, it is a helpful method for managing rich empirical material due to its clear structure (Braun & Clarke, 2006).

The process started with each researcher examining the transcripts independently to safeguard from subjectivity and biases to ensure the quality of the study as per researcher triangulation (Bell et al., 2019; Lincoln & Guba, 1985). We used a color-coding technique to mark testimonies and added insights to an excel sheet containing supporting quotes, first order and second order codes, and themes. After that, we compared and discussed codes, merged similar categories, and grouped them into relevant themes, as exemplified in figure 4. The process was highly iterative, and we went back and forth between the transcripts, codes, and themes several times to ensure that all insights were captured and presented in a structured yet creative way. The full data structure can be found in Appendix B.

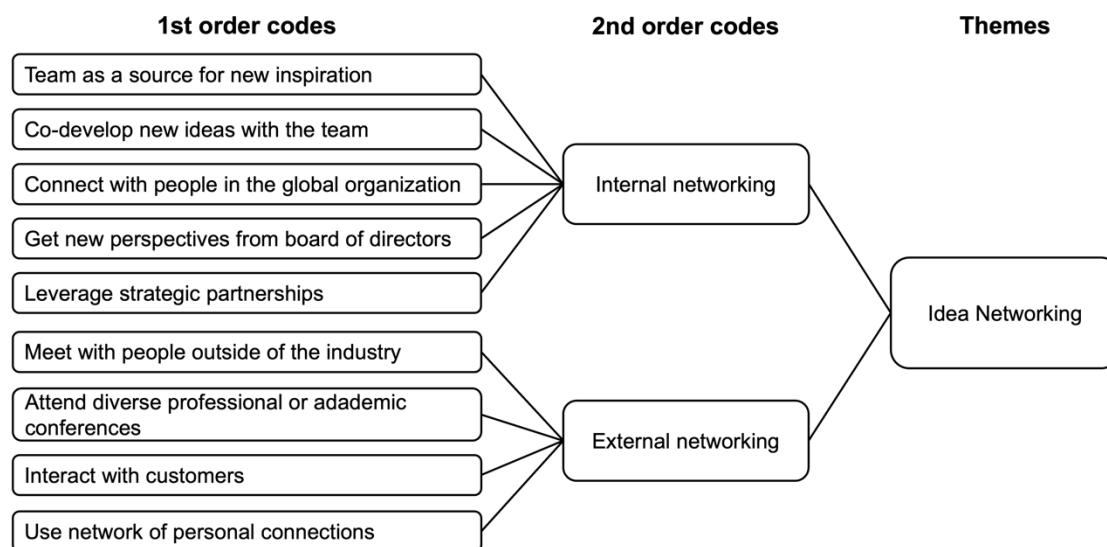


Figure 4: Excerpt from the data structure

## 3.5 Quality Considerations

This study follows Lincoln and Guba's (1985) four dimensions of designing a trustworthy study with qualitative criteria. By evaluating the *credibility*, *dependability*, *confirmability*, and *transferability* of this study, we reflect on and discuss its quality (Bell et al., 2019; Korstjens & Moser, 2018; Lincoln & Guba, 1985).

### 3.5.1 Credibility

As the phenomenon of opportunity recognition was studied from the perspective of strategic leaders, credibility becomes imperative. Credibility in qualitative research concerns the extent to which the result of a study is consistent with the reality in the research field (Bell et al., 2019; Lincoln & Guba, 1985). Credibility was strengthened by the diverse interviewee characteristics, which enabled us to capture multiple perspectives on the phenomenon in practice. Our interviewees were chosen to feature a wide variety in industry, background, age, and gender. At the beginning of each interview, we emphasized that there were no right or wrong answers to encourage the participants to talk about their experiences more freely (Shenton, 2004).

Finally, to reduce the risk of interpretation bias, we validated our interpretation of the data with three interviewees to ensure that the abstraction captures and accurately reflects their experiences. This process followed the member checking technique (Lincoln & Guba, 1985). Although we would have preferred to validate our interpretations of the data with all strategic leaders, this was not possible due to their limited availability.

### 3.5.2 Dependability

Dependability describes the extent to which the study would provide similar results if it were repeated under similar circumstances (Bell et al., 2019; Lincoln & Guba, 1985). To ensure dependability, we have provided a detailed description of all the steps and procedures of the research process and provided insights into the decisions we made, as well as making relevant material available in Chapter 9 (Appendices). Furthermore, we had regular check-ups with our supervisor throughout the research process to get another viewpoint on our methodology and the interpretation of the data.

### 3.5.3 Confirmability

Confirmability refers to the study's neutrality and the degree to which empirical evidence draws from the participants' experiences and perceptions without the influence of the researchers' opinions and values (Bell et al., 2019; Lincoln & Guba, 1985). We acknowledge that our role as researchers can influence how the study is conducted and convey that this study was conducted without any personal agenda and vested interest that would tilt the results (Bell et al., 2019; Shenton, 2004). To mitigate potential biases, we engaged in reflexivity by regularly discussing how our role as researchers might affect research decisions and results (Shenton, 2004).

Furthermore, to establish neutrality, we reviewed the interview guide with an external researcher to check if any questions were biased. Additionally, we conducted two pilot interviews to eliminate any leading questions and instead opted for open questions, where the interviewee could reason freely. Overall, we have made a significant effort to transparently describe the rationale behind theoretical, methodological, and analytical choices throughout the study, to provide a better understanding of our decision-making. Lastly, the use of researcher triangulation further reduced the risk of interpretation bias (Lincoln & Guba, 1985).

### **3.5.4 Transferability**

Transferability implies the extent to which a study's findings can be applied to other settings or groups (Bell et al., 2019; Korstjens & Moser, 2018; Lincoln & Guba, 1985). While quantitative research aims for statistically generalizable results, this has never been our objective. Instead, we strive to provide thick description of a phenomenon, namely how leaders of incumbent firms identify new opportunities. While maintaining anonymity, the ambition throughout the study has been to provide a detailed and rich description of the participants and the research process and its context to enable others to judge the transferability of our findings to their specific settings (Bell et al., 2019; Korstjens & Moser, 2018; Lincoln & Guba, 1985).

## 4 Empirical Data

The following section presents the results of the interviews with strategic leaders. First, we describe the background and context of our empirical data and then outline the findings according to our first and second-order codes to present the data transparently. Finally, we present the data aggregated across all strategic leaders to provide the reader with a straightforward yet insightful overview of the empirical findings.

### 4.1 Background and Context

All strategic leaders described that they are involved in innovation and responsible for finding new opportunities with strategic relevance for their firm. However, their innovation context varied. See Appendix C for an overview of examples of how the leaders are involved in innovation. In addition, all leaders are part of an organizational context and explained that they have multiple teams around them.

A recurring topic mentioned across all strategic leaders was the importance of their team in finding new opportunities. For example, Emma, an experienced leader that has been driving several digital transformation initiatives across incumbent firms, expressed it as:

“I usually don’t find all new opportunities myself. For me, the key has been working with people and finding the right talent with specific skills [...] It’s important with different backgrounds, but they must also be humble and team players. This is when innovation happens.” (Emma)

As the organizational structures of the incumbent firms and the positions of the strategic leaders varied, naturally, the team around them varied. However, when summarizing what the leaders said, they had between 5-20 direct reports but had, on average more than hundreds of people in their domain or as indirect reports. The strategic leaders described their team as the people working closest to them, primarily direct reports. As part of this organizational context, they highlighted the multiple resources to support them in finding new opportunities.

When reflecting on the biggest challenges of doing something new, all respondents’ answers were similar to Tommy, the CEO of a global beauty company present in more than 30 markets, description:

“It is always convenient to do as you have always done. The bigger the company is, the question is why we should change when things are going so well. It’s the biggest challenge with innovation, to bring my employees onto change, to make them understand that we cannot live on old merits.” (Tommy)

### 4.2 Questioning to Gain New Perspectives

All respondents emphasized the challenge of questioning the status quo since it is comfortable to continue the same trajectory as before. The respondents stated that they

tried to adopt a challenger mindset to overcome this challenge. Furthermore, they said they used questioning to identify value-adding opportunities.

### **4.2.1 Adopting a Challenger Mindset**

The most prominent way the respondents questioned the status quo of their business was by adopting a challenger mindset by actively trying to take another perspective different from the most dominant one. For example, Samuel, the CEO of a leading Swedish beauty retail chain, and Tobias, a director responsible for finding new opportunities within sustainable transportation, shared their view:

“I always try to have a challenger mindset – you cannot think like everyone else; you have to think differently, turn, twist, question, and see things from other perspectives.” (Samuel)

“In discussions, I take on the role that no one else takes. Suppose there is someone who speaks from our company’s traditional perspective. In that case, I can take the buyer’s perspective or the city of Stockholm’s perspective – how can it be valuable for them? Then you discover things that don’t work.” (Tobias)

The respondents did not only question their teams and others in the organization, but their team also questioned the strategic leaders. This was encouraged and welcomed by all respondents. Magnus, CEO of a recycling company, highlighted that he did not want any yes-sayers around him:

“I never want yes-sayers around me [...] It should be friction, different points of view because that is when you make the best decisions.” (Magnus)

Many strategic leaders also highlighted the importance of having people with different backgrounds in their team and creating an inclusive environment as a basis for asking and receiving challenging questions. For example, Agnes, vice president of a shipping company and involved in setting strategic initiatives, expressed it as:

“Diversity is key for meaningful exchange in my team, but it does not add much if you do not have an inclusive environment. It must be allowed to question and challenge each other.” (Agnes)

### **4.2.2 Identifying Value-Adding Opportunities**

There were some instances where strategic leaders mentioned another form of questioning that stimulates new perspectives, namely by questioning previously identified ideas from their team. The strategic leaders highlighted that the team usually has many views and opinions on which ideas to pursue, and questioning is used to evaluate whether the idea is value-adding enough to be of importance. This was exemplified by Richard, an experienced CEO in the pharma industry:

“To be completely honest, I feel that this company is completely bubbling with innovations, whichever direction I turn to – its project teams, business developers and

lots of people with titles that I don't know the meaning of [...] The problem when you have too much innovation is you can't do any of it 100 percent [...] What I'm doing right now is that I'm trying to collect all the initiatives, and that's more than a hundred, and I'm trying to prioritize them [...] and I'm forcing people quite early in the process to describe what problem we are trying to solve here, if it matters, and how we create value. It's so easy otherwise that you have lots of intelligent people in a room at the head office who come up with super cool stuff, but no one wants to use it [...] But then of course there is disappointment, there are many project managers and business owners who have their pets or their babies that they have worked with and want to get higher up in the priority list, then you have to deal with them as well." (Richard)

## **4.3 Individual Observations**

All strategic leaders mentioned that they individually engaged in various activities that spurred their thinking around new ideas.

### **4.3.1 Newsletters, Podcasts, and Social Media**

Several strategic leaders said that newsletters received through email were valuable sources of new inspiration. Some also used LinkedIn to read articles, while others followed interesting people online or expressed that they enjoyed listening to podcasts. For example, Anna, who has led the digital transformation of a leading retail chain in Sweden, explained:

"I read a lot and keep my eyes open for interesting newsletters. I also follow the tech world even though I work in retail because I have that background." (Anna)

Furthermore, Maria, a CEO who was involved in setting the strategic agenda for an organizational transformation of a global pharma company, mentioned:

"I read newsletters; I do not have time to read much. But some letters provide stimulus. I also follow people on LinkedIn. You try to pick up the latest, and then find things you want to explore, and then I look for podcasts around topics to learn more." (Maria)

Tommy mentioned that he was involved in innovation on a detailed level despite being the CEO. He stood out by using other social media to keep up with consumers' latest trends and opinions. He expressed it as:

"I get a lot of inspiration from what is shared on Instagram by influencers. But also, celebrities because we are in fashion/beauty, [...] it can be anything from what hair colors are trending, hairstyles, colorings, styling methods, but also on ingredient level, if it is trendy with vegan or sustainable products [...]. Social media has made it very easy to do research myself, because you get a pretty good sense of what's going on this week, and I do not always have time to read a lot of long, heavy market research reports" (Tommy)

### **4.3.2 Team Meetings**

Around a fourth of the respondents said that team meeting, where they can listen in on conversations and interactions among their colleagues, provided occasions for reflection and inspiration for new ideas. Maria and Agnes said:

“I can sit in a meeting and get ten new ideas to write down. I need to pick a few and prioritize them, otherwise it can stress the people around me.” (Maria)

“I get a lot of energy and inspiration when I’m visiting our different business units and see what we are doing and listen in on meetings [...]. A few weeks ago, I was in Holland to see what is happening there.” (Agnes)

## **4.4 Observing through the Organization**

Besides individual observations, all strategic leaders stated that they also get information about new opportunities from their team. In addition, around half of the respondents also stated that they get information from other departments or market intelligence units in their organization responsible for spotting and compiling market insights.

### **4.4.1 Insights from the Team**

Receiving insights from colleagues in the organization who work more closely with the customers than themselves was deemed essential for all strategic leaders to get new ideas. Richard and Tommy expressed it as:

“I’m a friend of decentralized governance – I listen to those who are closest to the business and reality, this is usually where the best innovations emerge, because they are the ones who are out there where things do not work, they see the need for new treatment methods for certain target groups that we are not helping today. It is our Pharmacy Managers who see what customers need, and what needs we cannot meet today. So, for me it is very important that ideas come from below.” (Richard)

“We have salespeople who are out and about meeting our customers, they come in with a lot of feedback. I meet with the salespeople sometimes, but they can also email me saying, for example “why have we not developed this product?” [...] There are a lot of opinions also internally, which I have to filter through if it is relevant or if it is just someone who has an opinion.” (Tommy)

Peter, vice president of a global pharma company, clarified:

“Depending on which innovation you are looking for, we have different teams working on different issues. For example, we have a team that works with scouting of digital solutions.” (Peter)

Furthermore, strategic leaders said they encourage and expect their team to go out and observe the world and share their insights with them. Per, that hired a team of seven people to lead the digitalization of a major Swedish food retail chain, explained:

“Everyone in my team has the task of looking outside our company to understand what is happening. It is so easy to get stuck into what is happening here and now. We set

aside time when we have meetings to talk about things that happen outside. E.g., everyone in my team has maybe three areas outside our company that they think extra about and what it can mean for us, then we go through these parts together.” (Per)

Most of the respondents also reflected on the importance of being open to new ideas. They emphasized that it is the leader’s responsibility to ensure that the employees are encouraged to share insights from observations with the leader and team. Agnes and Lena described:

“To get other perspectives and ideas from my employees, I must make my team feel that I am interested in it and open to it. It’s not that complicated, as long as you are curious and want to hear what someone else says.” (Agnes)

“Some years ago, we did an innovation project with very competent people. Some of these people had strong ideas about the direction of this project, which created the feeling that everything was set in stone and others didn’t dare to challenge this direction. One woman in the team had really good insights from customers, but she didn’t share it with us until I had a 1-on-1 with her some weeks later. This was unfortunate, and I never want to make my employees hesitate to share their thoughts directly with everyone.” (Lena)

#### **4.4.2 Insights from Market Intelligence Units**

Apart from using their team or colleagues around the organization to observe, around half of the strategic leaders said that they rely on getting new insights from market intelligence units, which are departments responsible for scanning markets or industries for consumer- and technological trends. Richard described it as:

“I have a department that is responsible for external monitoring, analysis and market research and they keep an eye on what is happening not only in Sweden, but also in the US.” (Richard)

These market intelligence units often scanned for inspiration and trends outside the core market, which was considered important by the strategic leaders in maintaining a broad perspective. Thus, these units were viewed by the respondents as a way to increase their capability to look for cross-industry and cross-border insights.

“If we only look at our existing markets, we only follow our current competitors – we must look beyond our geography. If something in other markets is not in ours, then it is a leapfrog. For example, we early went into live shopping in the Nordic countries, but this has been around in Asia for several years. So, it was something we had seen, now the technology came here and then we jumped at it.” (Samuel)

### **4.5 Opportunity Verification**

Almost all strategic leaders highlighted that they use experiments to verify opportunities to assess whether they should be modified, discarded, or taken into the next step in the innovation process. These indications are outlined below.



### 4.5.1 Experiment to Narrow Down the Number of Opportunities

Several strategic leaders stated that they start by searching broadly for opportunities and then use experiments to understand which opportunities are worth focusing on. For example, concerning a recent product launch, Carl, a vice president working with early stages of innovation in a global ICT firm, described:

“Everything that has the potential to be an opportunity for the company within our strategy is something that we work with. The opportunity space here was an interesting technological tool. We asked ourselves, how can we leverage more functions and features on top of that and how can we bring sustainability elements from our strategy into it, so basically packing these elements into one opportunity area and say: “What could be solved by putting this opportunity space in there,” and then we had at least 15-20 different ideas around it that we tested in the market before we started to build a project team around it to understand which one of these ideas would be interesting from the customer side.” (Carl)

Another example was described by Samuel:

“An initiative that I started was an innovation lab where I quickly wanted to test new technology in physical stores and in our e-commerce. We lined up 20 different ideas, which my team and I came up with” (Samuel)

### 4.5.2 Cheap Testing through Trial-Failure-Iterations

A recurring element mentioned regarding the characteristics of the experiments was that they were cheap, conducted in a short time horizon, and frequently iterated in a trial-failure manner. Robert, the CEO of an online marketplace, explained:

“There are so many ideas – the challenge is to prioritize them and find the right ideas to focus on. You need to have many ideas that you cheaply and relatively fast can test to find one good one.” (Robert)

Carl shared that he had developed a lean methodology around experiments to understand consumer behavior and actions, for example, by building fake landing pages with products that do not exist and measuring the willingness to buy from consumers.

“We made that process of first contact with reality very efficient and very cheap meaning that we can have a lot of ideas coming through and only the things that are validated through experiments at this stage, we bring that forward and start to test even further in more detail. [...] Everything we put through the model has been validated from the customer and market demand point of view. [...] We do that in iterative stages and some of the cases we do have 40, 50, 60 different variations of tests and experiments before we get it right. [...] we don’t take decisions unless we have clear decision points and data points from customers. [...] A rule thumb that I put forward is that you have 50 SEK in budget, and you have 12 hours to do the first test.” (Carl)

## 4.6 Organizational Resources

Strategic leaders stated that they leveraged organizational resources to experiment – both their teams and innovation units that could test new ideas.

### 4.6.1 Leverage the Team to Test an Idea

All strategic leaders mentioned they were mainly involved in innovation on a more conceptual level and that they rarely worked on an operational level and conducted experiments themselves. Instead, the leaders said they primarily leveraged their team to design and conduct experiments. Either the team autonomously identified which ideas to test and performed the experiments themselves, or the strategic leaders delegated which ideas were worth experimenting with.

Alex, an experienced director who said he “works with things that don’t exist” by developing new technology that they patent and commercialize via licenses, expressed it as:

“I am always encouraging experimenting, we have hired people that are “that way”, people that are interested and have those skills – they can make an idea into a prototype.” (Alex)

The majority of the respondents highlighted that creating an environment that encourages experimentation was essential. However, one interviewee stood out from the response pattern by sharing that keeping employees motivated and engaged has been challenging. Elsa, a director, working with manufacturing, mentioned:

“We have struggled with getting ideas from employees. A big part of my work has been encouraging the team to do new things and be autonomous in testing new ideas for innovation. [...] I want them to feel empowered, and I do my best to guide them and encourage them during regular check-ins, and I have also been overlooking our processes for innovation. It has become better but is still a work in progress.” (Elsa)

Furthermore, Sanna, a director leading the data transformation of a global ICT firm by seeing the opportunities data can have, said:

“My team are the ones going and doing the prototyping and testing, when I first started this, I didn’t have a team, so I was testing everything myself, now as we are getting more and more people, and we are talking about hundreds, the team is going out doing tests, coming back, providing input and so forth.” (Sanna)

### 4.6.2 Innovation Units

Apart from mentioning that they leveraged the team to conduct the experiments, there were instances where they shared how they took help from specific innovation units in the organization that had the capabilities conduct experiments.

Jonas, director of a leading manufacturing firm, who was involved in applying a new technology that disrupted the industry, described it as:

“We had an innovation unit where we did short 24-hour studies to quickly investigate different technology areas that could improve our product portfolio – which we used for this specific case. We experimented on the weight of our products and saw the potential of using this new technology. After a few prototypes we saw that this technology worked well. Although it was our engineers who did the case itself so I really should not take any credit for it. [...] I provided guidance and insights.” (Jonas)

## 4.7 Internal Networking

All strategic leaders mentioned that they have an internal network in their organization, consisting of their own team, colleagues’ part of the global organization, board of directors and strategic partnerships. The leaders highlighted that they use their internal network to get new inspiration and access to multiple sources to discuss new opportunities with.

### 4.7.1 Team as a Source for New Inspiration

All respondents acknowledged their team as a source of new inspiration. Sanna described how they bring in interns to get new perspectives on customer pain points.

“Every six months, we bring in interns who are super smart Ph.D. type of students that are data scientists, and then we put them on these complex future-oriented projects. The purpose is to incubate lots of new ideas.” (Sanna)

Furthermore, strategic leaders shared that depending on the situation, they go to different people within their team. All strategic leaders mentioned that they like to be around creative people, as the leaders view themselves as more structured and logical in their roles. Julia, a CEO who has been leading a financial turnaround by initiating and driving innovative initiatives that have received international media coverage, said she had one person that she usually went to because she showed creative height in her thinking.

“I am not super creative in that way. The creativity in these examples come from one person. (Name) was a prior team member, who had a completely ingenious thinking which I learned a great deal from.” (Julia)

Anna highlighted some specific characteristics she appreciates from people in her team, while Carl outlined that he tries to go to the newest hired in the team:

“There are some great UX people and product owners in my team that I get a lot of inspiration from. They have a helicopter view of problems and always come with creative and new perspectives to a situation. [...] I like to exchange perspectives with them.” (Anna)

“I want to be around diverse people—it’s a disaster if they think like me. I usually talk with the newest hired person to get new perspectives because they have a fresh perspective.” (Carl)

Several strategic leaders explained how they never strive to be the smartest person in the room. This is exemplified by Emma:

“I have very smart people around me – it’s not like I sit and think about new ideas all the time. Usually, new ideas come from the engaged team players I have hired, who have spotted something new somewhere. My responsibility is to say, “I believe in this – let’s go for it.” [...] I exchange a lot with the team, we have built a strong trust platform, so I have several people that I talk to and discuss new ideas with.” (Emma)

#### **4.7.2 Co-develop New Ideas with the Team**

Strategic leaders also explained how they co-develop ideas with the team, usually this happens when the leader proposes an interesting area or an own idea to the team. Then, the team develops the proposal further and comes back to the leader with an even better idea. For example, Alex and Sanna expressed it as:

“I always have a lot of own ideas. A very good way can be to place an own idea, and then some colleague or the ones working with the project comes up with a better idea. That’s perfectly fine because that’s a way to challenge and find something better. Based on my first idea, we have something better in the end. I have done this numerous times. [...] You must do it in a “correct” way; it must be allowed to come up with better ideas. It’s not like they have to do what I say, it should just spur the teams to be creative or get in the right direction.” (Alex)

“I find that in my team, I can easily go with any idea I have, explain that idea, and quite often those people will take it and build on it, and then I find out that they have had some conversations and I come back, and they will surprise me. In my organization, my team is really good at picking up on those small ideas that just emerge through conversations and together solving problems.” (Sanna)

Furthermore, all strategic leaders stated that they had some specific individuals in the company that they turned to for building on ideas. These individuals were often described as people showing strategic height in their thinking. Maria, for example, described:

“I know some real thinkers in my team, so when I have an idea and want it to be developed further, I go to them [...] it is not only intelligence that is important, but also the ability to see the bigger picture and understand all the parts in the puzzle. So many get stuck in their own bubble.” (Maria)

#### **4.7.3 Connect with People in the Global Organization**

Frequently the respondents mentioned interactions with colleagues from other countries as a source to exchange perspectives and get new ideas. For example, Tim, an experienced director, working with digitalizing the conservative building industry, expressed it as:

“Over the past years, we have become much more transparent in sharing what we do between countries. For example, we document what is going on in the different countries, and we have not done that before. If we are about to do something new in Sweden, we can see if anyone else has done the same thing before. If I find something interesting, I reach out to that person directly to connect and hear more.” (Tim)

Lena, who is part of the ideation process around the setting of the strategy of a global leading consumer goods firm, described:

“I have a network across the globe, in America, Mexico, Colombia, France, and so on – there are strategy people in every function and business area. They do not formally report to me, but they work with me. I exchange a lot with these people, and we have interaction structures, where we share strategies between countries.” (Lena)

#### **4.7.4 Get New Perspectives from Board of Directors**

Around half of the respondents, primarily those with the title CEO mentioned the board of directors as a source of inspiration. The participants describe board members as people who have an external perspective on the internal organization and as a good source to exchange viewpoints. Richard and Julia, two experienced CEOs, described it as:

“I have a lot of exchange with the board [...] they are usually older people who jump around between lots of board commitments and who have a helicopter perspective, and then you can hear some things that can be interesting. I have had the privilege of having fantastic, experienced board members, who are maybe 60-70 years old; they are constantly out and watching the outside world. They often come up with ideas and say, “you should go into this; this can be an idea for (company).” They are an important source of inspiration and innovation for me.” (Richard)

“The executive committee, chairman, and vice chairman are all business leaders, so I often ask them, “does this feel good?” They were not involved operationally, but they are a good sparring partner who asks the right questions to provoke new perspectives.” (Julia)

#### **4.7.5 Leverage Strategic Partnerships**

A typical pattern among the respondents was that they mentioned how they work with various levels of partnerships with other firms. For example, some stated that they hired external companies to conduct market- or trend analyses. Others shared how strategic partnerships with external firms outside of their area of expertise foster new ideas.

“We work with strategic partnerships in different areas of expertise. It can be startups or big tech dragons like (company). We have also done think tanks where we have invited twenty companies because we have an idea or practical problem that we want help in finding solutions for and then we use their innovation ability to apply their different techniques and let them come up with different proposals.” (Tim)

The respondents emphasize networking as key to identifying relevant partnerships. Often, the strategic leaders mentioned that someone in the team has an idea or area they want to explore, and then they begin to look for relevant partnerships based on that idea.

For example, one respondent described how they did a joint venture with a startup incubator to get access to startups within their industry to bring in new perspectives, but also how they recently did a partnership with one of the largest tech companies:

“We did an innovation project together with the tech giant linked to a problem they wanted to explore – how to reduce the waste of fruit and vegetables using their technology. We had workshops with store employees, people from the tech company, and people from my team on how to approach this with our shared expertise.” (Felix)

## 4.8 External Networking

All strategic leaders mentioned several external networking behaviors, from meeting people outside of their industry, attending conferences, and interacting with customers to personal connections, which were found to contribute to new perspectives and spark new ideas. However, a handful of participants expressed limited time for external networking due to their focus on family and work.

### 4.8.1 Meet with People Outside of the Industry

According to all strategic leaders, meeting with people outside their industry is something they prioritize and describe as a key activity to get new inspiration. Around half of the respondents further emphasize how their team gives input on the most exciting people to connect with. Hanna, director in a global and listed MedTech company, explained:

“I have always had mentors throughout my career but also mentees whom I think give a lot of new perspectives. Also, my job is very external. [...] I often eat lunches with people outside of my ordinary network. I try to have at least 1-2 external things a week that I do. [...] People in my team help with insights about which panel discussions I should attend or, for example, just last week my colleague suggested a knowledgeable professor I should have lunch with, which has happened many times.” (Hanna)

Meeting other leaders from different industries but also students are described as another source of inspiration, as exemplified by Agnes:

“I’m part of a mentorship program, where I get energy from meeting leaders outside of my ordinary network but also to connect with students in the program.” (Agnes)

Another frequently occurring example is meeting with entrepreneurs to get new inspiration. Felix describes how his encounter with an entrepreneur led to a new perspective resulting in a new business initiative for the food retail company he is working for:

“I was meeting with an entrepreneur that had sold off his company and had a lot of free time to think [...]. It’s interesting to exchange ideas with a person that has the time to understand what the food system means from a sustainability perspective and which transformations need to be done. Then you must translate all these sometimes-crazy ideas into what we at (company) can do, which can be frustrating. I asked him to break down the ideas for me in terms of concrete actions. [...] We met a week later, and he brings out a hand drawn picture of a tornado that was completely green with (company) in the middle. Then he says that (company) should be like a tornado. It didn’t become so much easier for me what to do. But it was the starting point for new perspectives, and when me and my team broke down what the tornado meant for (company), we ended up creating an innovation platform.” (Felix)

## 4.8.2 Attend Diverse Professional or Academic Conferences

All respondents highlighted external forums such as fairs, conferences, and events as sources for new perspectives.

“I’m part of a lot of external forums, and I also teach. I’m a lecturer at (University), so I get a lot of inspiration from students. Innovation comes from the exchange with people, and you start to see what types of common challenges you have, but you also start to see how they have solved it or look at it from a different perspective.” (Sanna)

Almost half of the respondents said they use fairs as a time and cost-efficient way to meet many potential customers and get new perspectives on the market. In addition, the team is seen as an important resource for finding the best fairs to attend and exhibit on.

“People from my team, often the ones working with market and sales, visit fairs to evaluate which ones are relevant for us to attend and which ones we should exhibit on. They are basically searching for the best fairs. I don’t have time to do this myself, so it’s essential to have a great team so I can focus on the more strategic areas.” (Alex)

Peter, who works in a traditional and science-heavy industry, highlights the importance of attending medical science conferences.

“Innovation often takes place outside our walls, so listening to what is happening around us is essential. I make sure to follow science and think about development needs by, for example, attending congresses and scientific meetings.” (Peter)

## 4.8.3 Interact with Customers

All strategic leaders expressed that they try to interact with customers whenever possible, yet they acknowledged they do not have as much time for it as they wish. On some occasions, the strategic leaders explained that they visited customers on-site, which enabled them to interact with the customer to understand behaviors and needs and spot patterns that eventually lead to finding new opportunities. For example, Tobias shared how he came up with a new sustainable commercial product that recently was delivered to customers:

“The solutions contain the future batteries and electrical machines. [...] We showed the concept to some initial customers who expressed that they had that need for it [...] I identified this opportunity through dialogues with customers, we talked about their real needs and so on. There are lots of sources for information, and when I do such rounds with several customers, I start to find patterns among what the customers say. When we could quantify the need, then we can move on to the next step.” (Tobias)

Furthermore, Robert highlighted customer meetings as a source for new insights:

“I’m very externally-oriented and usually attend customer meetings to hear what customers say because many new insights come from these interactions – so that’s important for me.” (Robert)

Peter also highlighted that unmet patient needs or challenges in the healthcare industry are best discovered through direct patient or hospital visits and interactions with the end customers using a specific product or service. Furthermore, strategic leaders mentioned that when meeting customers, they often were accompanied by someone in their team.

“I try to meet with patients and healthcare providers as much as possible, be out and hear, ask, what are your pain points, where do you see needs? I usually bring one or two colleagues with me to discuss about the needs” (Peter)

#### **4.8.4 Use Network of Personal Connections**

All leaders mentioned that another source for new perspectives and ideas is interacting with friends, family, old classmates, and colleagues from previous roles. Leaders shared how they have developed an extensive network throughout their careers and have different people to turn to depending on the situation.

It was mentioned how people in different industries and companies are useful to exchange with to get new perspectives. Anna and Jonas expressed it as:

“I have a network of people in e-commerce that I have built up over my career, so I often call those I know are good and at the forefront and ask how they think and work to learn from them.” (Anna)

“I like to meet a lot of meet people to get out of my bubble. I have the privilege of having many friends in the startup world and a vast network of people who do different things. I often get inspiration from learning what friends do in other industries; many things can also be applied to our situation.” (Jonas)

Others highlighted the support from their close friend and family as an important source of inspiration and to talk about whatever was on their mind.

“I studied graphic design, and before I started with this work, so I’m a very creative person. [...] I say that because my partner is also creative, and he is a person that also works a lot with innovation and products, so my partner is a very important person in my life that inspires me a lot.” (Sanna)

“Outside of work, I have a few friends within similar areas, we often exchange a lot. I also talk with my husband about everything, you know just sitting at the kitchen table and debriefing after a long day. He usually has many good inputs.” (Emma)



## 5 Analysis

The following chapter analyzes the empirical findings in relation to the study's theoretical framework to understand how strategic leaders of incumbent firms identify new opportunities. The analysis is based on the four dimensions of opportunity recognition: questioning, observing, experimenting, and idea networking.

### 5.1 Questioning

Strategic leaders reported that the propensity to ask future-oriented questions that challenge the status quo of the incumbent firm's business was essential to finding new opportunities. Furthermore, the leaders highlighted that they asked questions frequently, and the most prominent way to do so was by adopting a challenger mindset to identify value-adding opportunities.

#### 5.1.1 Questioning to Gain New Perspectives

As shown in the empirical findings, the strategic leaders expressed that taking an opposing standpoint from the firm's dominant logic was necessary to challenge fundamental assumptions during discussions with their team. Moreover, the strategic leaders viewed adopting a challenger mindset as a conscious act, spurring innovative thinking and creative output. Hence, the strategic leaders were aware of the importance of questioning to find opportunities that create value for the firm in a novel way.

Strategic leaders did not only question their team, but the team conversely questioned the leader. As Magnus highlighted – he did not want yes-sayers around him. Additionally, strategic leaders view the diversity, in terms of different backgrounds and experiences of the people around them, as a key aspect that stimulates questioning around new opportunities. Therefore, how strategic leaders build their teams around them can impact the extensiveness of questioning. Only having diverse people was not enough. As Agnes pointed out, it needs to be allowed and encouraged to share opinions and thoughts about someone else's ideas. This can be linked to psychological safety, termed by Edmondson (1999), which strategic leaders highlighted as important to stimulate questioning on a collective level.

When prioritizing projects, as Richard described, strategic leaders question their team to gain information on which opportunities to prioritize based on the most value they bring to the firm. As reported by the strategic leaders, team members simultaneously work with different opportunities, which then the leader needs to evaluate.

Moreover, this study finds that most leaders question while experimenting, observing, and idea networking. In each of these instances, strategic leaders question what other people say to them, which aligns with the findings of Dyer et al. (2008). However, what contrasts with the finding of Dyer et al. (2008) is that leaders in this study highlighted that they not only engage in questioning to incrementally improve existing processes, but also the status quo of their business or business unit by adopting a challenger mindset.

To conclude, interactions between the strategic leaders and the team facilitates questioning – the strategic leader can question and be questioned by their team, spurring thinking around new perspectives. Interestingly, this behavior had the least amount of empirical data, which further supports the finding that strategic leaders do not use questioning directly to find new opportunities but rather indirectly through the other discovery behaviors.

## **5.2 Observing**

All strategic leaders shared how they regularly observed through ordinary everyday encounters and more unique situations searching for new ideas. Similar to Dyer et al. (2008), the strategic leaders in this study expressed that observing is an individual endeavor. In addition, however, leaders reported that they also observe through their team and other organizational resources, giving them new information that spurs their identification of new opportunities.

### **5.2.1 Individual Observations**

Individual observation behaviors were explained by the strategic leaders as primarily involving reading newsletters, listening to podcasts, and following social media profiles. The chosen subject and activity were according to the respondents' interests, backgrounds, or preferences. For example, Maria listened to podcasts about the topics she was curious to learn more about. Even though working in retail, Anna followed the latest in the tech industry because she had that background. Tommy found it more convenient to scroll on Instagram instead of reading long market reports. Accordingly, individual observations were often associated with activities outside of the company. In relation to our theoretical framework, strategic leaders' individual observing behavior is somewhat constrained. Due to their limited time, they described that they rarely observe customers and end-users directly, which Dyer et al. (2008) also acknowledge.

### **5.2.2 Observing through the Organization**

Apart from individual observations, strategic leaders shared how they also observe through their team and, to some degree, also through specific departments in their organization. Strategic leaders tended to rarely observe how customers use their products or services by direct observations. Instead, the leaders relied on getting this information indirectly through their team. It was highlighted by, for example Richard and Tommy, that the team around the leader or market intelligence departments, as mentioned by Samuel, work much closer to the customer. Hence, they provide the leader with the latest customer needs or new market trends.

The respondents stated that they more frequently observe through their team than through market intelligence departments. For example, strategic leaders either gain new ideas from sitting in meetings and listening to what others say or exchanging with their team through dedicated meetings where everyone shares individual insights. Jointly, they elaborate on new opportunities and what this could mean for their business. This collective activity was

reported by Per, who encouraged his team to go out and observe the world and devoted time where they could discuss findings together. However, for this to happen, many strategic leaders mentioned the importance of creating a safe and trustful environment, for example, by always trying to be interested in listening to what team members had to say. It was described as necessary for their team to dare and feel safe about sharing observations – as exemplified by Lena. This description by the strategic leaders is similar to psychology safety (Edmondson, 1999). Given the limited time strategic leaders stated they had, the team was a vital asset for the leader by providing them with a regular stream of new observations.

To conclude, the leaders recognized the team as an important contributor to new insights. In their attempt to expand their capability to observe, strategic leaders stated that they use their team. This, as well, contrasts the finding of Dyer et al. (2008) by showing that observing is not only an individual activity but also a collective act.

## **5.3 Experimenting**

Strategic leaders engage in experimenting, holding assumptions at bay, and seek new information experientially through tangible experimentation rather than exploring the world intellectually. In contrast to Dyer et al. (2008), strategic leaders talked about experimentation as mainly a collective activity with their team, but sometimes also other corporate resources, in both finding ideas to experiment as well as the execution of them.

Moreover, the strategic leaders reported that their involvement in the innovation process was more conceptual. They viewed themselves as the primary decision-makers on whether an idea was important enough to be further pushed along the FEI process, and they thought experimentation was an effective data-driven method to determine that.

### **5.3.1 Opportunity Verification**

Strategic leaders viewed experimentation as a method to verify the value of a broad range of new ideas. The respondents identified – as Carl termed it, opportunities spaces, which could be technology-driven or market-driven wide-ranging areas of opportunities to further explore. A common denominator of these opportunity spaces is that they needed to relate to the firm's strategic outlook. Hence, strategic leaders explore a wide range of opportunities but are guided by their firm's strategy. Thereby the leaders highlighted that they consider mainly opportunities related to their current product and service offering.

Next, when an opportunity space has been identified, experimentation was used by the leaders to narrow down the number of opportunities to focus on finding the most promising one. Strategic leaders view experiments as a cost-effective method to acquire new information that can lead to the next big opportunity. Through an iterative process of trial and error, strategic leaders learn which ideas work and which do not work in the real world. In other words, experimentation was viewed as a tool for the strategic leader to navigate and steer their organization into the opportunities deemed the most promising. However, as mentioned by the leaders, experimentation requires both time and knowledge about how to

conduct them correctly and efficiently while using minimal resources. Therefore, when strategic leaders did not have those capabilities, they leveraged their organizational resources.

### **5.3.2 Organizational Resources**

Strategic leaders explained that they primarily leverage their team to get inspiration for new ideas to test and get an extended hand to conduct experiments. However, strategic leaders explained that they also leverage dedicated innovation units that provide them with ideas and/or resources to experiment. Additionally, the team could almost autonomously identify ideas and conduct experiments without any involvement from the strategic leader. As Alex highlighted – he encouraged his team to go out and experiment with new ideas, and he hired people explicitly with the competence and skills to experiment.

However, to gain access to the team as a resource, the strategic leaders thought it was important to encourage experimentation and create an environment where everyone in the team felt empowered enough to go out and test ideas they identified. This can also be related to psychological safety (Edmondson, 1999). It was viewed as essential that the interaction between the strategic leader and their team facilitate psychological safety. As expressed by Elsa, this was, for example, achieved through regular check-ins. The strategic leader gave input and coordinated which ideas to test while guiding and supporting the team throughout the experimentation process.

In sum, when strategic leaders strive to increasing their capability to experiment and find relevant opportunities, they use their team with the know-how and expertise to conduct the experiments. As opposed to Dyer et al. (2008), this study finds that experimenting is not only an individual activity but also a collective activity where the leader evaluates the result to verify whether the opportunity is important for the firm.

## **5.4 Idea Networking**

The strategic leader's networking behavior is twofold. First, they have an internal network as part of the organization. The respondents explained that they connect and get new perspectives through people in the team, the board of directors, the global organization, and strategic partnerships. In other words, they have an ecosystem of internal networking opportunities by being embedded in an organizational context.

Second, the leaders also described an external network by meeting with people outside of their industry, attending various professional or academic conferences, interacting with customers, and leveraging their network of personal connections. These two networking behaviors describe how leaders engage in idea networking. Yet, the empirical insights show that the team is an essential enabler for idea networking. The team is expanding the leaders networking capability by supporting both internal- and external networking activities.

### 5.4.1 Internal Networking

Strategic leaders expressed that they have various sources to get new inspiration and perspectives from within the internal networks of their organization. However, the team was considered an essential source of inspiration. While some leaders turned to specific persons, others exchanged with multiple people in the team to get new perspectives. Common characteristics of the people they turn to were exhibiting strategic height and creativity in their thinking and having a broad perspective on the company and trends. Or, as Carl expressed, he likes to talk to the newest hired person to get a new perspective. Others emphasized that they bring in interns and focus on getting the right team through recruiting engaged team players. Overall, the team is believed to inspire the leaders by elaborating on opportunities and positioning them in the context that better suits the firm.

Having engaged team players around the strategic leader was considered essential for co-developing new ideas. The strategic leaders highlighted their team as a sparring partner to discuss and build on opportunities that the strategic leader initially identified. Strategic leaders – as exemplified by Alex and Sanna – relied heavily on their team to pick up small ideas through conversations and develop them further. However, the team can also identify their own ideas and propose them to the leader. The respondents noted that it is important to have a good team dynamic, where everyone works well together and where it is allowed to come up with better or new ideas and challenge the leader. Hence, psychological safety among the team was seen as an enabler for co-developing ideas (Edmondson, 1999).

In a networking context, psychological safety was described by Alex as creating an environment where all ideas are welcomed, also bad ones, as they can trigger a good idea when working together. In other words, the leader must ensure that the team feels comfortable sharing new ideas or suggestions by lowering the barriers to suggesting ideas and having informal interactions with the team. The interviewees described that many new perspectives emerge through conversations with the team and working together. As part of the organizational context, strategic leaders also leverage the global organization by getting inspiration from other countries through knowledge-sharing.

While many leaders also got inspiration and new perspectives from interactions with the board of directors, this was described as a rather individual activity, with no to little team involvement. However, the team indirectly provided the leader with new perspectives and inspiration through co-developing ideas or through day-to-day interactions, which the leaders could discuss with the board of directors. Overall, exchanging vertically in the organization enables a wide variety of perspectives, which is beneficial for getting insights into all levels of the organization.

By interacting with as many people as possible in the organization, ranging from the newest hired over people in the global organization to experienced members of the board of directors, the leaders had access to many different sources of inspiration. Additionally, by leveraging strategic partnerships, the leader had another source to extract new perspectives

and ideas from another organization. The respondents acknowledged the team as a valuable resource to help the leader identify relevant strategic partnerships based on areas they wanted to explore. In strategic leaders striving to expand their capability to do internal networking, they leverage the support from the team, thereby increasing the number of new perspectives that could lead to the identification of new opportunities.

### **5.4.2 External Networking**

The strategic leaders reported several external networking behaviors. All strategic leaders actively connected with people outside the industry and saw it as an essential source of new inspiration and perspectives. The strategic leaders stated various sources of meetings, ranging from lunching with people, attending mentorship programs, sitting in panel discussions, but also meeting with entrepreneurs or students. Although networking was viewed as a rather individual activity, it was acknowledged that the team plays a crucial role in helping the leader identify the right people to connect with and find the best conferences or external events to attend. The respondents expressed that they had limited time. Therefore, the leaders leveraged their team to ensure effective and purposeful external happenings. For example, Alex described how his team actively searched for the best conferences to attend and Hanna highlighted her team as helpful in identifying new people to network with.

Interacting with customers was considered important for all strategic leaders. When the leaders meet customers, they are often accompanied by someone from their team. It was expressed as an opportunity to exchange perspectives and talk about what they have experienced. All strategic leaders explained that they had a solid network of personal connections that they had developed during their lives and careers. The respondents acknowledged that these people, who vary from old colleagues or classmates to family, are essential sources of new inspiration and perspectives, which ultimately can lead to the identification of new opportunities. According to the leaders, meeting up with friends from the startup world or connecting with family over dinner can all bring new perspectives. Compared to the other networking opportunities, which usually were in a professional context or with new people, these personal connections bring another facet to the mix. They were people outside of work, and the strategic leaders connected with them in a more informal and personal context – for example, with her husband at home, as exemplified by Emma. The leaders considered this an important change of context by connecting with people who might have a completely different viewpoint and are outside of their industry.

To conclude, while idea networking is described as an external activity by Dyer et al. (2008), this study finds that strategic leaders have both internal and external networks. This mix of networking possibilities was considered to unlock sources for new inspiration. Overall, the team can expand the network of a leader, and thus, putting together a good team can be an enabler for ensuring the best networking opportunities. Furthermore, most empirical data concentrate on idea networking, which could indicate that networking is the most common way for strategic leaders to identify new opportunities.

## 6 Discussion

The following chapter discusses the key findings from the analysis in light of previous literature. Thus, this chapter illustrates how the results contribute to the knowledge of the strategic leader's role in the FEI and how they identify new opportunities. Finally, it introduces modifications to our theoretical framework, which we present as the enhanced theoretical framework.

### 6.1 Role of the Team

Our findings align with Dyer et al.'s (2008) research on the four discovery behaviors – all strategic leaders engaged in questioning, observing, experimenting, and idea networking. However, in contrast to Dyer et al.'s (2008) research that compared entrepreneurs with strategic leaders, this study solely focused on *how* strategic leaders identify new opportunities, allowing us to go deeper into the related activities and unveil new findings that contribute to previous research.

Our most prominent finding is that leaders leverage their team to find new opportunities. For the strategic leader, these findings reinforce the importance of using the team as a sparring partner to identify new opportunities. The original model by Dyer et al. (2008) overlooks the team as an element. Dyer et al. (2008) argue that entrepreneurs are better at identifying new opportunities than senior executives in large organizations, as entrepreneurs engage in the four discovery behaviors to a larger degree. However, our findings show that strategic leaders have a team supporting them in all four behaviors, which complements their individual engagement in the behaviors. Thus, Dyer et al. (2008) disregard a vital dimension in their comparison of entrepreneurs and strategic leaders.

Dyer et al. (2008) used closed questions in their survey of discovery behaviors on an individual level which might have hindered the discovery of the team as an essential dimension in opportunity recognition. We argue that these inconsistent findings could be due to former research overlooking that strategic leaders are not isolated agents recognizing new opportunities. Instead, strategic leaders are part of an organizational context that makes them different from entrepreneurs. Indeed, strategic leaders can identify opportunities individually. However, for strategic leaders, new opportunities mainly arise from working collectively with their team.

Furthermore, the findings confirm the strategic leader's important role in FEI by their discretionary and architectural influence on innovation. The findings of strategic leaders' discretionary influence align with previous research on strategic leaders' role in the innovation process as contributors to new ideas in FEI (Cortes & Herrmann, 2021; Kurzhals et al., 2020). Moreover, the findings of strategic leaders' architectural influence also confirm their role of indirectly contributing to innovation through supporting and encouraging their team to identify opportunities, which is aligned with previous research (Elenkov et al., 2005; Jung et al., 2008; Kang et al., 2015; Osborn & Marion, 2009). Like Chen et al. (2014), the strategic

leaders in this study encourage their team to look for new opportunities, which previous research has shown to likely stimulate the team's intrinsic motivation and ultimately spur creativity and new ideas (Jansen et al., 2009; Kang et al., 2015). However, this study's main contribution to the current research on strategic leaders' role in FEI is how they leverage their team to increase their engagement in the four discovery behaviors to recognize new opportunities, which is outlined in Table 2.

*Table 2: Overview of how the leader uses the team for opportunity recognition*

<b>Behavior</b>	<b>How the leader uses the team</b>	<b>Example of actions</b>
Questioning	- Bottom-up and bottom-down questioning	- Questioning of leader and team (e.g., through daily interactions)
Observing	- Expanding capability to observe	- Market and industry scanning - Sharing insights with the leader
Experimenting	- Increasing capability to experiment and find relevant opportunities	- Conducting experiments - Knowledge exchange regarding experiments
Idea Networking	- A source for inspiration and new perspectives - Expanding internal- and external networking capabilities	- Sparring partner for new ideas - Building on the ideas of the leader - Identifying the most relevant internal- and external networking opportunities (e.g., people, partnerships, conferences)

## 6.2 Psychological Safety

Our findings indicate that psychological safety is an enabler for the team to support the strategic leader in finding new opportunities. Psychological safety has been well explored in the organizational literature by outlining how strategic leaders establish a culture to spur innovation by creating a safe environment where employees can suggest ideas freely (Edmondson, 1999; Edmondson, 2003; Edmondson & Lei, 2014; West, 1990). Our findings on how strategic leaders strive to create an environment where their team feels safe to question the status quo, suggest ideas, and raise their opinion are aligned with Edmondson's (2003) description of psychological safety. In addition, however, this study identifies the importance of psychological safety from the viewpoint of the strategic leader in the context of opportunity recognition. Therefore, psychological safety is an essential aspect for strategic leaders to acknowledge and attend to in their organization to unlock the team as a valuable contributor of new ideas. On that note, strategic leaders have a dual role of identifying new opportunities themselves (discretionary influence) and creating and facilitating an encouraging environment to expand their capability to find new opportunities with the help of the team (architectural influence) (Cortes & Herrmann, 2021). Hence, discretionary and architectural influence become activities for strategic leaders to balance.



## 6.3 Enhanced Theoretical Framework

Based on the analysis and discussion of the empirical findings, we have adjusted our original theoretical framework to better capture the role of the team around the strategic leader as well as psychological safety. Thus, the enhanced theoretical framework sheds light on new dimensions of the complexity of leaders' opportunity recognition behavior in incumbent firms, previously overlooked by the model by Dyer et al. (2008). Our findings of how strategic leaders identify new opportunities are visualized in Figure 5.

- (1) Strategic leaders can individually engage in the four discovery behaviors and find new opportunities, as Dyer et al. (2008) also acknowledged.
- (2) Strategic leaders have a team around them that they can leverage to get support for their discovery behaviors. Thus, the vertical lines represent how the team facilitates the leader's engagement in questioning, observing, experimenting, and networking, which ultimately can help the leader recognize new opportunities.
- (3) Additionally, the team can identify new opportunities by themselves and propose ideas to the strategic leaders. In this study, less focus has been put on the team identifying opportunities directly. However, as the theme occurred, we decided to outline it in the model.

Overall, the team extends the strategic leader's capability to pursue opportunity recognition by supporting the leader with the four behavioral patterns or directly proposing ideas to the leader. Finally, psychological safety ensured by the leaders is an enabler for the team to support the strategic leaders in finding new opportunities. Therefore, this has been outlined in the model as an important influence on the team's ability or willingness to help the leader in the discovery behaviors.

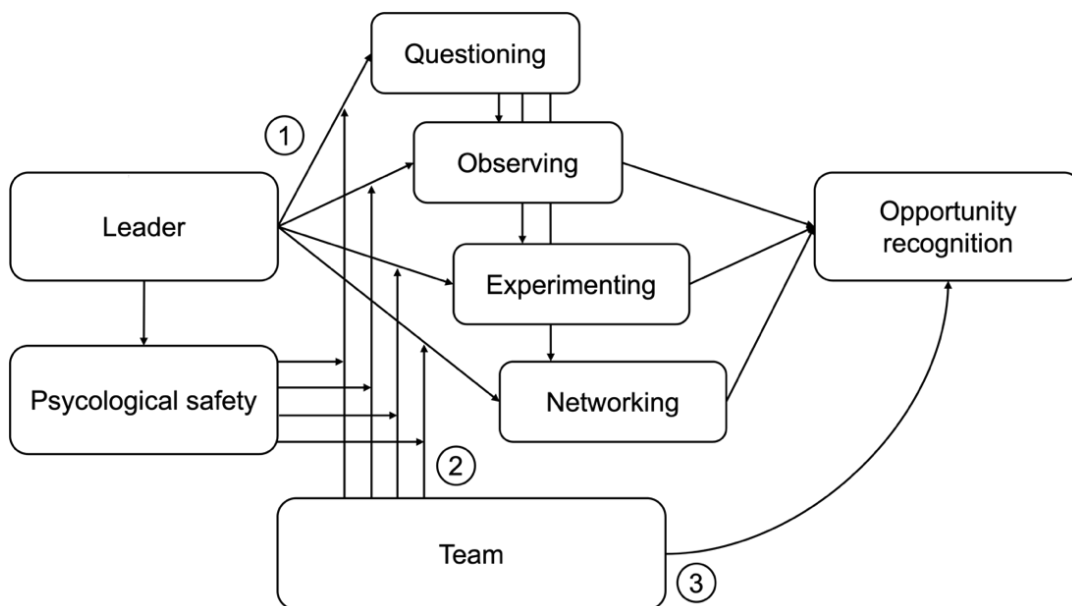


Figure 5: Enhanced theoretical framework

## 7 Conclusion

This chapter concludes with an answer to the research question and summarizes our key findings. After that, we outline the theoretical contribution and the practical implications for leadership and innovation. Lastly, we discuss the limitations of this study and reflect on the most intriguing opportunities for future research.

### 7.1 Answer to the Research Question

The purpose of our thesis was to contribute to FEI research by exploring how strategic leaders of incumbent firms identify new business opportunities. The following research question guided this objective:

*How do strategic leaders of incumbent firms identify new opportunities?*

Through a qualitative study, we interviewed 21 strategic leaders in incumbent firms from various industries. The findings show that strategic leaders identify new business opportunities by engaging in four discovery behaviors – observing, questioning, experimenting, and idea networking. In addition, the study delineates the related activities for how strategic leaders engage in each behavior. Our main finding is that strategic leaders leverage their team when engaging in these different behaviors. As strategic leaders strive to expand their capability to identify new opportunities, they are involved in the discovery behaviors directly by themselves and indirectly through their team. However, for this to happen, strategic leaders need to establish psychological safety in their team.

### 7.2 Theoretical Contribution

This study contributes to previous research in two important ways. First, we contribute to the FEI literature by answering the research calls from scholars on the need for more knowledge on strategic leaders' role in FEI (Cortes & Herrmann, 2021; Verganti et al., 2020). In doing so, this study combined three literature streams that lacked interdisciplinary discussions about this – innovation, strategy and organization, and entrepreneurship. In this intersection, we proposed new key linkages on how leaders identify new opportunities. By specifically drawing our theoretical framework from the entrepreneurship literature, this study unlocks new insights regarding the role of the team from the viewpoint of the strategic leader and contributes to FEI research on the different ways the strategic leader leverages the team. Thus, our focus on strategic leaders adds to previous research that has primarily focused on individuals in lower levels of organizations, such as project managers (Kutsch et al., 2021; Magistretti et al., 2021).

Second, this study extends the model of Dyer et al. (2008) by applying it in the context of strategic leaders in incumbent firms and thoroughly explores how they engage in opportunity recognition. We contribute to the innovation literature with concrete examples of *how* strategic leaders engage in each discovery behavior by providing rich empirical

insights. Furthermore, we argue that Dyer et al. (2008) missed the important role that teams play in supporting strategic leaders' behavior related to innovation as they utilized closed questions in their original work but did not include references to teams there. Our findings highlight that innovation is not an isolated one-person activity, and strategic leaders are part of an organizational context in which they rely heavily on their team. Thus, we also contribute new insight to the literature on opportunity recognition, which is a crucial activity in the FEI process.

### **7.3 Practical Implications**

Apart from theoretical contributions, this study has three implications for practitioners that can support them in finding new opportunities. First, we hope that practitioners in incumbent firms become more aware of specific discovery behaviors and related activities that contribute to opportunity recognition to adopt them consciously in their work as required. This should especially be enabled by our rich descriptions and examples from practice underpinning the general discovery behaviors.

Second, this study has raised awareness of the importance of leveraging the team to find new opportunities to further advance strategic leaders' capability to identify critical priorities for the incumbent's firm innovation agenda, which is essential for business growth and firm survival (Cortes & Herrmann, 2021; Eggers & Kaplan, 2009; Hambrick & Mason, 1984; Yadav et al., 2007). Our findings exemplify how strategic leaders can rely on their teams as an asset to find new opportunities. Hence, this study emphasizes the importance of putting together a good team that can support the strategic leader in finding new opportunities.

Third, in relation to leveraging the team around the leader, this study highlights the importance of establishing psychological safety to unlock the team as an important sparring partner. The leaders described psychological safety as essential for team engagement, and practitioners could use this insight to create an appropriate environment for opportunity recognition. Thus, these findings may aid practitioners in seeking new ways to engage their team in unleashing opportunities and ultimately increase strategic leaders' capability to spot the next big thing for their firm.

### **7.4 Limitations and Future Research**

While this study has presented several contributions, the methodological choices outlined in the study pose limitations that are important to discuss as they yield opportunities for future research.

First, this study only presents opportunity recognition from the viewpoint of strategic leaders. It, therefore, disregards other perspectives, such as the team or other people in the organization, which might perceive opportunity recognition differently. Further, even though the strategic leaders varied in backgrounds and experience, most were based in Sweden and worked for Swedish incumbents. Hence, future studies could test our research findings quantitatively to establish wider generalizability and potentially explore opportunity

recognition in one industry more exhaustively or even compare different industries. Alternatively, future studies could qualitatively explore opportunity recognition from other people's perspectives in incumbent firms by drawing from the enhanced theoretical framework.

Second, in line with our relativist perspective, we did not explore how strategic leaders most effectively can identify opportunities. Future studies could investigate which strategic leaders are more or less successful in identifying new business opportunities and the role of the team. Yet, this might come with the challenge of quantifying the value of an opportunity, as opportunities are an elusive and subjective concept. To further explore this, a potential interesting research avenue could be to conduct an experiment on how different business opportunities are perceived by individuals.

Third, this study explores strategic leaders' experiences with opportunity recognition through interviews during a short time frame. Strategic leaders reflected on their experiences from a retro perspective. Therefore, recall bias is a risk. Also, memory and accuracy in the respondents' descriptions could have been issues that future studies could address by taking a longitudinal ethnographic approach. Since opportunity recognition could be viewed as a sensemaking act, future studies could explore the role of sensemaking through a longitudinal ethnographic approach, as also highlighted by Verganti et al. (2020).

Finally, our enhanced theoretical framework acknowledges that psychological safety is important for the leader to leverage the team in finding new opportunities. From the leader's perspective in this study, it was seen as an enabler. However, we did not aim to investigate this factor's significance as it was out of scope for this study. Therefore, psychological safety's relation to opportunity recognition could serve as a fruitful research avenue.

## 8 References

- Adams, R., Jeanrenaud, S., Bessant, J., Denyer, D., & Overy, P. (2016). Sustainability-oriented Innovation: A Systematic Review. *International Journal of Management Reviews*, 18(2), 180-205.
- Alexiev, A. S., Jansen, J. J. P., Van den Bosch, F. A. J., & Volberda, H. W. (2010). Top Management Team Advice Seeking and Exploratory Innovation: The Moderating Role of TMT Heterogeneity. *Journal of Management Studies*, 47(7), 1343-1364.
- Alvarez, S. A., & Barney, J. B. (2007). Discovery and Creation: Alternative Theories of Entrepreneurial Action. *Strategic Entrepreneurship Journal*, 1(1-2), 11-26.
- Alvesson, M., & Sköldberg, K. (2017). *Tolkning och Reflektion: Vetenskapsfilosofi och Kvalitativ Metod*. Studentlitteratur.
- Baer, M., Dirks, K. T., & Nickerson, J. A. (2013). Microfoundations of Strategic Problem Formulation. *Strategic Management Journal*, 34(2), 197-214.
- Balkin, D. B., Markman, G. D., & Gomez-Mejia, L. (2000). Is CEO Pay in High-Tech Firms Related to Innovation? *Academy of Management Journal*, 43(6), 1118-1129.
- Baregheh, A., Rowley, J., & Sambrook, S. (2009). Towards a Multidisciplinary Definition of Innovation. *Management Decision*, 47(8), 1323-1339.
- Barker, V. L., & Mueller, G. C. (2002). CEO Characteristics and Firm R&D Spending. *Management Science*, 48(6), 782-801.
- Baron, R. A. (2006). Opportunity Recognition as Pattern Recognition: How Entrepreneurs "Connect the Dots" to Identify New Business Opportunities. *Academy of Management Perspectives*, 20(1), 104-119.
- Baumgartner, I. (2012). Handling Interpretation and Representation in Multilingual Research: A Meta-study of Pragmatic Issues Resulting from the Use of Multiple Languages in a Qualitative Information Systems Research Work. *Qualitative Report*, 84(17), 1-21.
- Bell, E., Bryman, A., & Harley, B. (2019). *Business Research Methods*. Oxford University Press.
- Binns, A., O'Reilly, C. A., & Tushman, M. (2022). *Corporate Explorer: How Corporations Beat Startups at the Innovation Game*. John Wiley & Sons.

- Boeddrich, H. (2004). Ideas in the Workplace: A New Approach Towards Organizing the Fuzzy Front End of the Innovation Process. *Creativity and Innovation Management*, 13(4), 274-285.
- Boone, C., Lokshin, B., Günter, H., & Belderbos, R. (2019). Top Management Team Nationality Diversity, Corporate Entrepreneurship, and Innovation in Multinational Firms. *Strategic Management Journal*, 40(2), 277-302.
- Braun, V., & Clarke, V. (2006). Using Thematic Analysis in Psychology. *Qualitative Research in Psychology*, 3(2), 77-101.
- Burgelman, R. A. (1983). A Process Model of Internal Corporate Venturing in the Diversified Major Firm. *Administrative Science Quarterly*, 28(2), 223-244.
- Burgelman, R. A., & Grove, A. S. (2007). Let Chaos Reign, then Rein in Chaos-repeatedly: Managing Strategic Dynamics for Corporate Longevity. *Strategic Management Journal*, 28(10), 965-979.
- Calantone, R. J., Vickery, S. K., & Dröge, C. (1995). Business Performance and Strategic New Product Development Activities: An Empirical Investigation. *Journal of Product Innovation Management*, 12(3), 214-223.
- Chen, Y., Tang, G., Jin, J., Xie, Q., & Li, J. (2014). CEOs' Transformational Leadership and Product Innovation Performance: The Roles of Corporate Entrepreneurship and Technology Orientation. *Journal of Product Innovation Management*, 31, 2-17.
- Christensen, C. M. (1997). *The Innovator's Dilemma: When New Technologies Cause Great Firms to Fail*. Harvard Business School.
- Cooper, R. G., & Kleinschmidt, E. J. (1987). New Products: What Separates Winners From Losers? *Journal of Product Innovation Management*, 4(3), 169-184.
- Cortes, A. F., & Herrmann, P. (2021). Strategic Leadership of Innovation: A Framework for Future Research. *International Journal of Management Reviews*, 23(2), 224-243.
- Dubois, A., & Gadde, L. (2002). Systematic Combining: An Abductive Approach to Case Research. *Journal of Business Research*, 55(7), 553-560.
- Dyer, J. H., Gregersen, H. B., & Christensen, C. (2008). Entrepreneur Behaviors, Opportunity Recognition, and the Origins of Innovative Ventures. *Strategic Entrepreneurship Journal*, 2(4), 317-338.
- Easterby-Smith, M., Thorpe, R., Jackson, P. R., & Jaspersen, L. J. (2018). *Management and Business Research* (6th ed.). Sage Publications.

- Eckhardt, J. T., & Shane, S. A. (2003). Opportunities and Entrepreneurship. *Journal of Management*, 29(3), 333-349.
- Edmondson, A. (1999). Psychological Safety and Learning Behavior in Work Teams. *Administrative Science Quarterly*, 44(2), 350-383.
- Edmondson, A. C. (2003). Speaking up in the Operating Room: How Team Leaders Promote Learning in Interdisciplinary Action Teams. *Journal of Management Studies*, 40(6), 1419-1452.
- Edmondson, A. C., & Lei, Z. (2014). Psychological Safety: The History, Renaissance, and Future of an Interpersonal Construct. *Annual Review of Organizational Psychology and Organizational Behavior*, 1, 23-43.
- Edmondson, A. C., & McManus, S. E. (2007). Methodological Fit in Management Field Research. *The Academy of Management Review*, 32(4), 1155-1179.
- Eggers, J. P., & Kaplan, S. (2009). Cognition and Renewal: Comparing CEO and Organizational Effects on Incumbent Adaptation to Technical Change. *Organization Science*, 20(2), 461-477.
- Eisenhardt, K. M. (1989). Agency Theory: An Assessment and Review. *The Academy of Management Review*, 14(1), 57-74.
- Elenkov, D. S., Judge, W., & Wright, P. (2005). Strategic Leadership and Executive Innovation Influence: An International Multi-Cluster Comparative Study. *Strategic Management Journal*, 26(7), 665-682.
- Eling, K., & Herstatt, C. (2017). Managing the Front End of Innovation – Less Fuzzy, Yet Still Not Fully Understood. *Journal of Product Innovation Management*, 34(6), 864-874.
- Finkelstein, S., Hambrick, D. C., & Cannella, A. A. (2009). *Strategic Leadership: Theory and Research on Executives, Top Management Teams, and Boards*. Oxford University Press.
- Geletkanycz, M. A., & Hambrick, D. C. (1997). The External Ties of Top Executives: Implications for Strategic Choice and Performance. *Administrative Science Quarterly*, 42(4), 654-681.
- Gerstner, W., Konig, A., Enders, A., & Hambrick, D. C. (2013). CEO Narcissism, Audience Engagement, and Organizational Adoption of Technological Discontinuities. *Administrative Science Quarterly*, 58(2), 257-291.
- Guest, G., Bunce, A., & Johnson, L. (2006). How Many Interviews Are Enough?: An Experiment with Data Saturation and Variability. *Field Methods*, 18(1), 59-82.

- Hambleton, R. K. (1993). Translating Achievement Tests for Use in Cross-national Studies. *European Journal of Psychological Assessment*, 9(1), 57-68.
- Hambrick, D. C. (2007). Upper Echelons Theory: An Update. *The Academy of Management Review*, 32(2), 334-343.
- Hambrick, D. C., & Mason, P. A. (1984). Upper Echelons: The Organization as a Reflection of Its Top Managers. *The Academy of Management Review*, 9(2), 193-206.
- Hansen, M., & Birkinshaw, J. (2007). The Innovation Value Chain. *Harvard Business Review*, 142(85), 121-130.
- Heavey, C., & Simsek, Z. (2013). Top Management Compositional Effects on Corporate Entrepreneurship: The Moderating Role of Perceived Technological Uncertainty: Top Management and Corporate Entrepreneurship. *The Journal of Product Innovation Management*, 30(5), 837-855.
- Herrmann, P., & Nadkarni, S. (2014). Managing Strategic Change: The Duality of CEO Personality. *Strategic Management Journal*, 35(9), 1318-1342.
- Heyden, M. L. M., Reimer, M., & Van Doorn, S. (2017). Innovating Beyond the Horizon: CEO Career Horizon, Top Management Composition, and R&D Intensity. *Human Resource Management*, 56(2), 205-224.
- Hirst, G., Van Knippenberg, D., Chin-Hui Chen, & Sacramento, C. A. (2011). How Does Bureaucracy Impact Individual Creativity? A Cross-Level Investigation of Team Contextual Influences on Goal Orientation–Creativity Relationships. *Academy of Management Journal*, 54(3), 624-641.
- Jansen, J. J. P., Vera, D., & Crossan, M. (2009). Strategic Leadership for Exploration and Exploitation: The Moderating Role of Environmental Dynamism. *The Leadership Quarterly*, 20(1), 5-18.
- Jung, D., Wu, A., & Chow, C. W. (2008). Towards Understanding the Direct and Indirect Effects of CEOs' Transformational Leadership on Firm Innovation. *The Leadership Quarterly*, 19(5), 582-594.
- Kang, J. H., Solomon, G. T., & Choi, D. Y. (2015). CEOs' Leadership Styles and Managers' Innovative Behaviour: Investigation of Intervening Effects in an Entrepreneurial Context. *Journal of Management Studies*, 52(4), 531-554.
- Kaplan, S. (2008). Cognition, Capabilities, and Incentives: Assessing Firm Response to the Fiber-Optic Revolution. *Academy of Management Journal*, 51(4), 672-695.



- Kashmiri, S., Nicol, C. D., & Arora, S. (2017). Me, Myself, and I: Influence of CEO Narcissism on Firms' Innovation Strategy and the Likelihood of Product-harm Crises. *Journal of the Academy of Marketing Science*, 45(5), 633-656.
- Khurana, A., & Rosenthal, S. R. (1998). Towards Holistic "Front Ends" In New Product Development. *Journal of Product Innovation Management*, 15(1), 57-74.
- Kirzner, I. M. (1973). *Competition and Entrepreneurship*. University of Chicago Press.
- Kiss, A. N., Cortes, A. F., & Herrmann, P. (2021). CEO Proactiveness, Innovation, and Firm Performance. *The Leadership Quarterly*, 6(1), 101545.
- Kock, A., Heising, W., & Gemünden, H. G. (2015). How Ideation Portfolio Management Influences Front-End Success. *Journal of Product Innovation Management*, 32(4), 539-555.
- Korstjens, I., & Moser, A. (2017). Series: Practical Guidance to Qualitative Research. Part 2: Context, Research Questions and Designs. *European Journal of General Practice*, 23(1), 274-279.
- Korstjens, I., & Moser, A. (2018). Series: Practical Guidance to Qualitative Research. Part 4: Trustworthiness and Publishing. *European Journal of General Practice*, 24(1), 120-124.
- Kurzahls, C., Graf-Vlachy, L., & König, A. (2020). Strategic Leadership and Technological Innovation: A Comprehensive Review and Research Agenda. *Corporate Governance: An International Review*, 28(6), 437-464.
- Kutsch, E., Djabbarov, I., & Hall, M. (2021). How Managers Frame and Make Sense of Unexpected Events in Project Implementation. *International Journal of Project Management*, 39(5), 570-580.
- Lanivich, S. E., Smith, A., Levasseur, L., Pidduck, R. J., Busenitz, L., & Tang, J. (2022). Advancing Entrepreneurial Alertness: Review, Synthesis, and Future Research Directions. *Journal of Business Research*, 139, 1165-1176.
- Lawson, B., & Samson, D. (2001). Developing Innovation Capability in Organisations: A Dynamic Capabilities Approach. *International Journal of Innovation Management*, 5(03), 377-400.
- Li, Q., Maggitti, P. G., Smith, K. G., Tesluk, P. E., & Katila, R. (2013). Top Management Attention to Innovation: The Role of Search Selection and Intensity in New Product Introductions. *Academy of Management Journal*, 56(3), 893-916.

- Liedtka, J. (2015). Perspective: Linking Design Thinking with Innovation Outcomes through Cognitive Bias Reduction. *The Journal of Product Innovation Management*, 32(6), 925-938.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic Inquiry*. Sage Publications.
- Loukil, N., Yousfi, O., & Cheikh, S. B. E. N. (2020). Innovation Effort and CEO's Characteristics. *International Journal of Innovation Management*, 24(5)
- Magistretti, S., Ardito, L., & Messeni Petruzzelli, A. (2021). Framing the Microfoundations of Design Thinking as a Dynamic Capability for Innovation: Reconciling Theory and Practice. *Journal of Product Innovation Management*, 38(6), 645-667.
- Mendoza-Silva, A. (2021). Innovation Capability: A Systematic Literature Review. *European Journal of Innovation Management*, 24(3), 707-734.
- Mihalache, O. R., Jansen, J. J. P., Van den Bosch, Frans A.,J., & Volberda, H. W. (2014). Top Management Team Shared Leadership and Organizational Ambidexterity: A Moderated Mediation Framework. *Strategic Entrepreneurship Journal*, 8(2), 128-148.
- Miller, D., Kets de, M. F. R., & Toulouse, J. M. (1982). Top Executive Locus of Control and Its Relationship to Strategy-Making, Structure, and Environment. *Academy of Management Journal*, 25(2), 237-253.
- Miller, K. D. (2007). Risk and Rationality in Entrepreneurial Processes. *Strategic Entrepreneurship Journal*, 1(1-2), 57-74.
- Nadkarni, S., & Chen, J. (2014). Bridging Yesterday, Today, and Tomorrow: CEO Temporal Focus, Environmental Dynamism, and Rate of New Product Introduction. *Academy of Management Journal*, 57(6), 1810-1833.
- Norman, D. A., & Verganti, R. (2014). Incremental and Radical Innovation: Design Research vs. Technology and Meaning Change. *Design Issues*, 30(1), 78-96.
- O'Brien, K. (2020). Innovation Types and the Search for New Ideas at the Fuzzy Front End: Where to Look and How Often? *Journal of Business Research*, 107, 13-24.
- Osborn, R. N., & Marion, R. (2009). Contextual Leadership, Transformational Leadership and the Performance of International Innovation Seeking Alliances. *The Leadership Quarterly*, 20(2), 191-206.
- Perry-Smith, J., & Mannucci, P. V. (2017). From Creativity to Innovation: The Social Network Drivers of the Four Phases of the Idea Journey. *The Academy of Management Review*, 42(1), 53-79.

- Reid, S. E., & De Brentani, U. (2004). The Fuzzy Front End of New Product Development for Discontinuous Innovations: A Theoretical Model. *Journal of Product Innovation Management*, 21(3), 170-184.
- Rowley, J. (2012). Conducting Research Interviews. *Management Research Review*, 35(3), 260-271.
- Salerno, M. S., Gomes, L. A., Silva, D. O., Bagno, R. B., & Freitas, S. D. (2015). Innovation Processes: Which Process for Which Project? *Technovation*, 35, 59-70.
- Sanz-Llopis, J., & Ostermann, M. (2020). Innovation in Project Management through Framing and Challenge Redefinition. *International Journal of Managing Projects in Business*, 13(4), 745-766.
- Sarasvathy, S. D., Dew, N., Velamuri, S. R., & Venkataraman, S. (2003). Three Views of Entrepreneurial Opportunity. *Handbook of Entrepreneurship Research: An Interdisciplinary Survey and Introduction* (pp. 141–160.). Acs ZJ, Audretsch DB (eds).
- Schumpeter, J. (1942). *Capitalism, Socialism, and Democracy*. Harper & Row.
- Shenton, A. K. (2004). Strategies for Ensuring Trustworthiness in Qualitative Research Projects. *Education for Information*, 22(2), 63-75.
- Sierra-Morán, J., Cabeza-García, L., González-Álvarez, N., & Botella, J. (2021). The Board of Directors and Firm Innovation: A Meta-analytical Review. *Business Research Quarterly*, 17(1), 1-26.
- Simms, C., Frishammar, J., & Ford, N. (2021). The Front End in Radical Process Innovation Projects: Sources of Knowledge Problems and Coping Mechanisms. *Technovation*, 105, 102214.
- Srivastava, A., & Lee, H. (2005). Predicting Order and Timing of New Product Moves: The Role of Top Management in Corporate Entrepreneurship. *Journal of Business Venturing*, 20(4), 459-481.
- Stevens, E. (2014). Fuzzy Front-end Learning Strategies: Exploration of a High-tech Company. *Technovation*, 34(8), 431-440.
- Sukhov, A., Sihvonen, A., Netz, J., Magnusson, P., & Olsson, L. E. (2021). How Experts Screen Ideas: The Complex Interplay of Intuition, Analysis and Sensemaking. *Journal of Product Innovation Management*, 38(2), 248-270.
- Talke, K., Salomo, S., & Kock, A. (2011). Top Management Team Diversity and Strategic Innovation Orientation: The Relationship and Consequences for Innovativeness and

- Performance: Top Management Team Diversity and Strategic Innovation Orientation. *Journal of Product Innovation Management*, 28(6), 819-832.
- Tang, Y., Li, J., & Yang, H. (2015). What I See, What I Do: How Executive Hubris Affects Firm Innovation. *Journal of Management*, 41(6), 1698-1723.
- Teece, D. J. (2007). Explicating Dynamic Capabilities: The Nature and Microfoundations of (Sustainable) Enterprise Performance. *Strategic Management Journal*, 28(13), 1319-1350.
- Thomke, S., & von Hippel, E. (2002). Customers as Innovators: A New Way to Create Value. *Harvard Business Review*, 80(4), 74.
- Tripsas, M., & Gavetti, G. (2000). Capabilities, Cognition, and Inertia: Evidence from Digital Imaging. *Strategic Management Journal*, 21(10-11), 1147-1161.
- van den Ende, J., Frederiksen, L., & Prencipe, A. (2015). The Front End of Innovation: Organizing Search for Ideas. *Journal of Product Innovation Management*, 32(4), 482-487.
- Velardo, S., & Elliott, S. (2021). Co-Interviewing in Qualitative Social Research: Prospects, Merits and Considerations. *International Journal of Qualitative Methods*, 20, 1-7.
- Verganti, R., Dell'Era, C., & Swan, K. S. (2021). Design Thinking: Critical Analysis and Future Evolution. *Journal of Product Innovation Management*, 38(6), 603-622.
- Verganti, R., Vendraminelli, L., & Iansiti, M. (2020). Innovation and Design in the Age of Artificial Intelligence. *Journal of Product Innovation Management*, 37(3), 212-227.
- Vogel, P. (2017). From Venture Idea to Venture Opportunity. *Entrepreneurship Theory and Practice*, 41(6), 943-971.
- von Hippel, E. (1994). "Sticky Information" and the Locus of Problem Solving: Implications for Innovation. *Management Science*, 40(4), 429-439.
- Vuori, T. O., & Huy, Q. N. (2016). Distributed Attention and Shared Emotions in the Innovation Process: How Nokia Lost the Smartphone Battle. *Administrative Science Quarterly*, 61(1), 9-51.
- Warner, K. S. R., & Wäger, M. (2019). Building Dynamic Capabilities for Digital Transformation: An Ongoing Process of Strategic Renewal. *Long Range Planning*, 52(3), 326-349.
- Wei, L., & Ling, Y. (2015). CEO Characteristics and Corporate Entrepreneurship in Transition Economies: Evidence from China. *Journal of Business Research*, 68(6), 1157-1165.

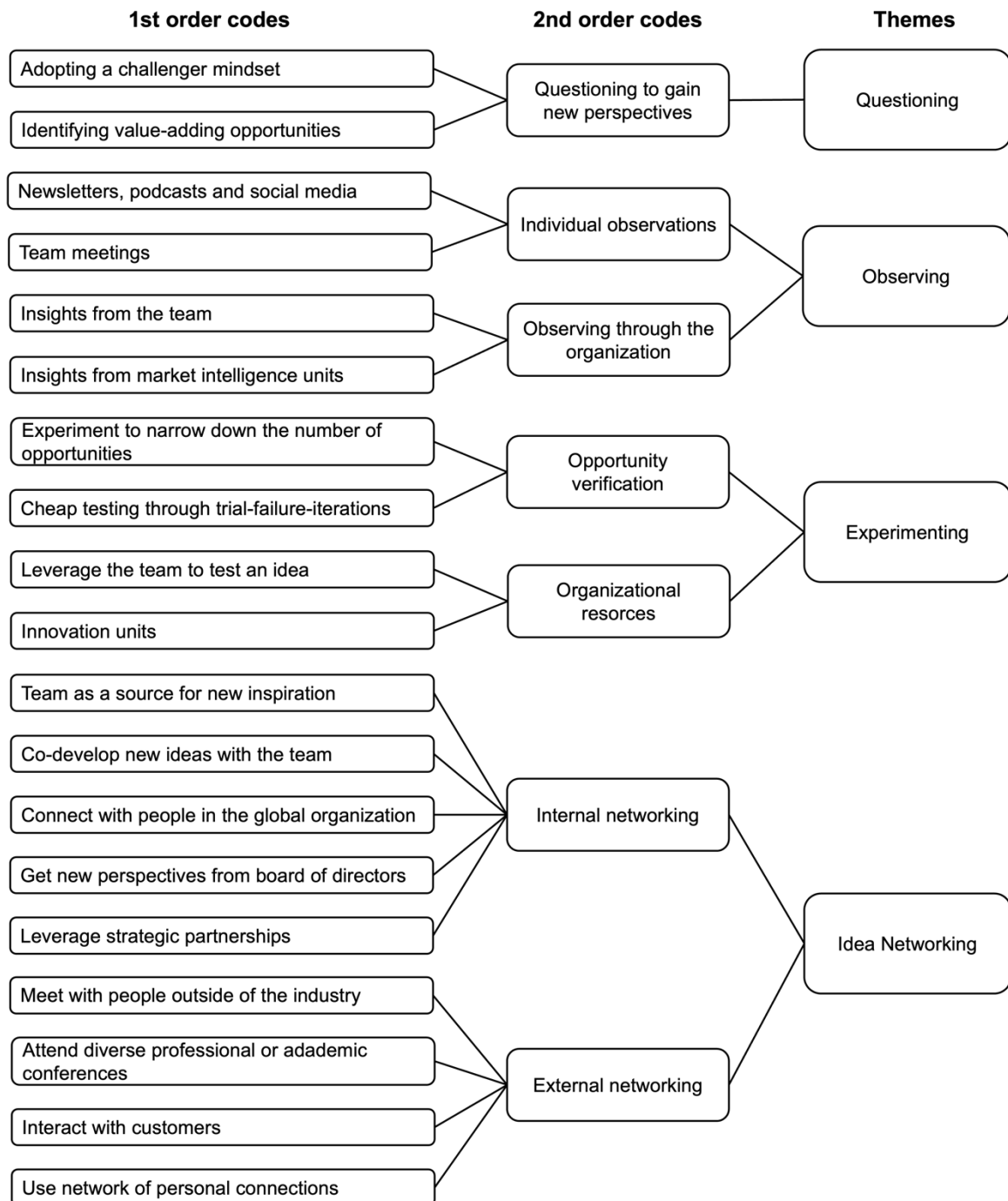
- West, M. A. (1990). The Social Psychology of Innovation in Groups. In M. A. West, & J. L. Farr (Eds.), *Innovation and creativity at work: Psychological and organizational strategies* (pp. 309–333). John Wiley & Sons.
- Wu, Q., Dbouk, W., Hasan, I., Kobeissi, N., & Zheng, L. (2021). Does Gender Affect Innovation? Evidence from Female Chief Technology Officers. *Research Policy*, 50(9), 104327.
- Wyrski, K., Röglinger, M., & Rosemann, M. (2021). Opportunity-led ideation: How to convert corporate opportunities into innovative ideas. *Creativity and Innovation Management*, 30(3), 523-541.
- Yadav, M. S., Prabhu, J. C., & Chandy, R. K. (2007). Managing the Future: CEO Attention and Innovation Outcomes. *Journal of Marketing*, 71(4), 84-101.
- Zahra, S. A. (2005). Entrepreneurial Risk Taking in Family Firms. *Family Business Review*, 18(1), 23-40.

## 9 Appendices

### Appendix A: Interview Guide

Interview section	Questions
<b>Opening questions</b>	<ul style="list-style-type: none"><li>- What is your name?</li><li>- What is your role at company x?</li><li>- How many years of leadership experience do you have?</li><li>- How are you involved in innovation in company x?</li></ul>
<b>Opportunity recognition</b> (Listen if they mention any of the discovery behaviors; questioning, observing, experimenting, idea networking – ask follow-up questions when needed)	<ul style="list-style-type: none"><li>- Please tell us about an innovative idea/initiative you have been identifying and driving that has been of strategic significance for the company?</li><li>- Please describe the details of the idea/initiative. In what ways was it valuable for the business?</li><li>- Please walk us through the actions involved in identifying the idea/initiative</li><li>- Are there any techniques you use or habits or skills you have developed to help you come up with innovative ideas?</li><li>- Did you have other opportunities at that time? Why did you go for this idea/initiative?</li><li>- What challenges have you experienced in your role when coming up with new ideas/initiatives? Please provide concrete examples</li></ul>
<b>Team</b> (Insight emerged after initial interviews – ask follow-up questions when needed)	<ul style="list-style-type: none"><li>- What role does the team have in helping you come up with new ideas? Please provide concrete examples</li><li>- For what different purposes do you use your team?</li><li>- Who is your team?</li><li>- How do you interact with your team? Please provide concrete examples</li></ul>
<b>Closing questions</b>	<ul style="list-style-type: none"><li>- Do you have any final reflections or opinions you would like to share?</li><li>- Any questions to the researchers or queries about this study?</li></ul>

## Appendix B: Data Structure



## Appendix C: Strategic leaders' involvement in innovation

#	Name	Description
1	Julia	She has led a financial turnaround in her current role by coming up with two innovative initiatives that recently received international media coverage
2	Alex	Working with developing new technology that the firm patent and commercialize via licenses, or as Alex described it – “I work with things that don’t exist”
3	Maria	Involved in the global process of designing and implementing an organizational transformation
4	Tobias	Responsible for finding new opportunities within sustainable transportation. Tobias expressed it as – “discovering previously unknown needs”
5	Carl	Working with early-stage innovation, as highlighted by Carl – “We basically look at opportunity spaces, we don’t look for solutions to begin with”
6	Robert	Responsible for setting the firms future strategic agenda, Robert described – “A big part of my job is to understand trends”
7	Samuel	He describes himself as a “driven and curious person who has been involved in many different entrepreneurial, growth and transformation journeys,” referring to his current and previous positions.
8	Emma	Having led several digital transformations across incumbent firms, Emma explained – “Everything is about finding opportunities, seeing patterns, and having courage”
9	Anna	Involved in digitalization, Anna highlighted – “I am responsible for innovation”
10	Jonas	Responsible for business growth by finding new opportunities, both disruptive and incremental, mainly through partnerships with external firms
11	Tommy	He described his involvement in innovation as follows – “I’m very much involved in a pretty detailed level in our innovation work despite the fact that I am the CEO”



12	Agnes	Part of the decision process around new initiatives, Agnes described it as – “Even though I am not involved in driving and taking personal responsibility, I am involved when we turn and twist ideas and challenge each other”
13	Sanna	Driving the data handling in the firm, she highlighted – “We want to become a data-driven organization [...] that in itself is very innovative”
14	Richard	Responsible for prioritizing new innovative initiatives, shared his view on innovation – “Our company needs to grow and innovate, either you grow, or you die”
15	Hanna	Described her involvement in innovation as – “both coming up with new products and new processes”
16	Peter	By being responsible for a product, Peter has an – “overall responsibility, everything from production, supply, commercial, launch plan and how we develop drugs.”
17	Magnus	He has a very broad responsibility for innovation, and described – “I’m involved in innovation everyday, from small continuous improvements to major projects and investments”
18	Felix	Involved in digitalization by developing the strategy and implementation of a digital transformation for a retail food chain in Sweden
19	Tim	Involved in digitalization, Tim shared – “The building industry is generally quite undeveloped, and it is not characterized by being innovative. Now, it is changing; with digitalization, it is possible to make big efficiencies with small means”
20	Elsa	She has a broad responsibility for innovation, and explained – “I’m responsible for looking into new ways for our firm to do things”
21	Lena	Looks into new business opportunities, Lena shared – “When it comes to the question of how we can develop our business into new fields, new categories, business areas or business models, that is where I’m part of the ideation. We look for white spots where we potentially could be more present”