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# Balancing the Paradox of Exploration and Exploitation in a Digital Business Unit

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## PREFACE

This thesis concludes my Master of Science degree in Industrial Economics and Technology Management at the Norwegian University of Science and Technology (NTNU), within the specialization of Innovation and Entrepreneurship (TIØ4945).

The findings of this thesis build on the theoretical findings from a literature review conducted Fall 2016, and the empirical material collected Spring 2017. The empirical data was collected through a single case study on a digital business unit of Storebrand ASA, a Norwegian firm in the financial services sector.

First of all, I would like to express my sincere gratitude to my academic supervisors, Professor Lise Aaboen and PhD Candidate Dag Håkon Haneberg at the Department of Industrial Economics and Technology Management, for always being at disposal for guidance, and their thorough and constructive feedback.

Second, I would like give thanks to my contact person in the case company, Jostein Chr. Dalland, for allowing me to conduct my research in Storebrand, and to all the 10 leaders in Storebrand ASA participating in this study for their time and genuine interest in the study. Also, a huge thanks to my father for always being just a phonecall away.

Finally, I would like to thank my TIØ4180 Innovation Management and Strategy professor Alf Steinar Sætre for bringing in Harvard Business School professor Clayton Christensen as a guest speaker on the theory of disruption and the customer's job to be done (Fall 2016). This lecture, as well as professor Sætre's own lecture on ambidextrous organizations, sparked my eagerness to learn more about innovation and leadership in large organizations and for writing my Master's thesis on this topic.

## ABSTRACT

The purpose of this thesis is to understand how the paradox of exploration and exploitation is balanced in a digital business unit of a mature firm. Gaining balance between these two contradicting demands has been shown critical to the long-term success and survival of the firm. Despite widespread research on this topic, questions remain unanswered as to how firms achieve this balance in practice. The purpose is approached by taking the managerial and business unit levels of analysis into consideration, as well as by observing interaction effects between these levels of analysis. Thus, three research questions were formulated:

- RQ1: How is the paradox of exploration and exploitation balanced at the business unit level of Digital Business Development?
- RQ2: How is the paradox of exploration and exploitation balanced at different managerial levels of Digital Business Development?
- RQ3: How do the managerial and business unit levels influence each other in the balancing of the paradox of exploration and exploitation?

These research questions formed the basis of a case study of a digital business unit of a mature firm in the financial services sector in Norway: Digital Business Development in Storebrand ASA. In fulfilling the purpose, it is described how the different antecedents interact and complement one another in the business unit's pursuit of organizational ambidexterity. Since the analysis incorporates multiple managerial levels and levels of analysis, this thesis contributes to the research on ambidexterity in organizations spanning multiple levels. In concluding the thesis, it is found that the combination of ambidextrous efforts at the managerial and business unit levels lead to a comprehensive understanding of how the paradox is balanced in the business unit, which provides a holistic perspective on balancing the paradox of exploration and exploitation.

Key findings include how exploration and exploitation can be combined in business units, even in teams, and how managers share the balancing of the paradox. However, several management functions are found to have similar leadership approaches to the paradox, which divides them into two groups: enablers and executors of ambidexterity. Furthermore, some team managers are found to be ambidextrous, but not all individuals of the unit are balancing the paradox of exploration and exploitation. This contributes to the research stream of individual ambidexterity, and contradicts the perspectives of both structural and contextual ambidexterity which respectively argue that paradox tensions belong to either all individuals of the organization or to the top managers only.

Finally, when observing interaction effects between the applied levels of analysis, I identify relationships between transformational and transactional leadership behaviors and exploration/exploitation outcomes. The identified inverted U relationships between transformational leadership and exploration and exploitation have not previously been shown empirically. This contributes to the research stream of ambidextrous leadership by furthering the understanding about how leaders balance the paradox of exploration and exploitation in practice, and how different leadership behaviors affect innovation outcomes in organizations.

## SAMMENDRAG

Denne masteroppgaven har som formål å forstå hvordan paradokset mellom utforskning og utnyttelse (*exploration* og *exploitation*) balanseres i en digital forretningsenhet. Å oppnå balanse mellom disse to motstridende prosessene har vist seg å være avgjørende for organisasjonens langsiktige suksess og overlevelse. Dette er konseptuelt enkelt, men praktisk vanskelig. Selv om forskningen på området er utbredt, mangler det forståelse på hvordan organisasjoner, og særlig ledere, gjør dette i praksis. Problemstillingen undersøkes fra flere hold, og integrerer perspektiver på ledelsen og organiseringen av forretningsenheten, Digital Forretningsutvikling i Storebrand ASA. Det ble derfor formulert tre forskningsspørsmål:

1. Hvordan balanseres paradokset mellom utforskning og utnyttelse på forretningsenhetsnivå i Digital Forretningsutvikling?
2. Hvordan balanserer de ulike ledelsesnivåene i Digital Forretningsutvikling paradokset mellom utforskning og utnyttelse?
3. Hvordan påvirker disse analysenivåene hverandre i balanseringen av paradokset mellom utforskning og utnyttelse?

Disse forskningsspørsmålene formet grunnlaget for en case-studie av en digital forretningsenhet i et modent selskap i den norske finanssektoren. Gjennom å oppfylle formålet for oppgaven gis en beskrivelse av hvordan de ulike faktorene som påvirker *ambidexterity* (evnen til å være like god på å utforske nye forretningsmuligheter og utnytte eksisterende ressurser) påvirker og komplementerer hverandre. Siden analysen både tar for seg flere ledelsesnivåer og analysenivåer, bidrar denne oppgaven til forskningsfeltet om *ambidexterity* som strekker seg over nettopp flere nivåer. Dette er blitt etterspurt i tidligere arbeid, som følge av at det mangler forståelse rundt hvordan paradokset balanseres i praksis. Derfor søker denne oppgaven å belyse hvordan ulike måter å balansere paradokset på kan kombineres på ulike nivåer i organisasjonen.

En pågående diskusjon i dette forskningsfeltet er om individer kan være *ambidextrous*, dvs. om hvilke medlemmer av organisasjonen som kan holde to tanker i hodet samtidig om å både utforske og utnytte. Et av mine nøkkelfunn er at enkelte teamledere greier dette, og at det har innflytelse på hvilken type innovasjonsaktiviteter teamene deres utfører. Dette motstrider eksisterende teorier, da det ifølge strukturperspektivet på *ambidexterity* (representert av f.eks. O'Reilly & Tushman, 2011) kun er topplederne som kan balansere paradokset, mens det kontekstuelle perspektivet (f.eks. Gibson & Birkinshaw, 2004) sier at alle medlemmene av organisasjonen kan ha disse ferdighetene.

Et annet nøkkelfunn er at flere ledelsesnivåer har de samme innfallsvinklene til hvordan paradokset balanseres, og jeg deler dem derfor inn i to kategorier: muliggjørere og gjennomførere av *ambidexterity*. Til slutt, når jeg ser på samhandlingseffektene mellom analysenivåene, finner jeg nye sammenhenger mellom ledelsesatferd og innovasjonsaktiviteter. For eksempel har det ikke tidligere blitt vist hvordan *transformational leadership* både positivt og negativt påvirker både utforskning og utnyttelse. Derfor bidrar denne masteroppgaven også til forskningsfeltet om *ambidextrous leadership*, som har blitt stadig mer populært i senere år. Jeg bidrar til økt forståelse om hvordan ledere balanserer paradokset i praksis og hvordan ulik oppførsel kan ha ulik påvirkning på innovasjonsutfall i organisasjoner.

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Chapter 1

# INTRODUCTION

*This thesis investigates how the paradox of exploration and exploitation is balanced in a digital business unit of a mature firm in the financial services sector of Norway.*

Exploration and exploitation is considered a fundamental tension at the heart of a firm's long-term survival, and researchers argue that the key to success is organizational ambidexterity. This is the theory on how firms can explore and exploit simultaneously - that is, how firms can compete in current and emerging markets. In James March' terms, " firms need to engage in sufficient exploitation to ensure its current viability and, at the same time, devote enough energy to exploration to ensure its future viability." (March, 1991, p.72). This is difficult, because in current markets, efficiency, control, and incremental improvement are prized, and success comes from exploitation of existing competencies and technologies. In emerging markets - it is a different game: flexibility, autonomy, and experimentation are needed in order to navigate an uncertain environment with agility.

The last twenty years have witnessed an explosion of interest in theory and research on this topic. Conceptual work has been complemented with large-scale empirical qualitative and quantitative studies providing evidence that ambidexterity is associated with enhanced performance (He & Wong, 2004; Gibson & Birkinshaw, 2004), especially for mature companies in dynamic environments (O'Reilly & Tushman, 2011; Raisch & Birkinshaw, 2008). However, while conceptually easy, ambidexterity is difficult to achieve in practice - and despite the increasing interest in the concept, several research issues remain unexplored, ambiguous, or vague (Raisch et al. 2009).

Ambidexterity literature is mainly divided into two research streams: structural ambidexterity (differentiation) and contextual ambidexterity (integration). Structural ambidexterity describes a specific organizational architecture where exploration and exploitation are separated in space, i.e. differentiated into business units, and emphasizes the senior leaders' role in managing these inconsistent alignments to achieve synergies between them (e.g. O'Reilly & Tushman, 2004). Contextual ambidexterity emphasizes cultural components of the organization, and addresses how managers create an organizational context to support both exploration and exploitation within the same business unit (e.g. Gibson & Birkinshaw, 2004). Recent research suggest there is value in combining approaches to ambidexterity, viewing structural and cultural mechanisms as complementary (Lubatkin et al, 2006) thus approaching the paradox by integration *and* differentiation (Andriopoulos & Lewis, 2009) - but this line of research is underdeveloped.

Most ambidexterity research span a single level of analysis at the firm or business unit level. Authors therefore call for multi-level studies, both spanning multiple organizational levels (Andriopoulos & Lewis, 2009) and multiple levels of analysis (Jansen et al. 2009). Furthermore, macro level studies have left the field quiet on what managers do in practice to balance the paradox, but integrating ambidexterity and dynamic capabilities perspectives has been pointed out as a promising lense to view the practical implications of balancing the paradox (O'Reilly & Tushman, 2013; Vahlne & Jonsson, 2017). Similarly, recent research is looking at specific leadership behaviors and how they influence exploration and exploitation activities among followers (Rosing et al, 2011; Zacher et al, 2011), which also has provided more practical insights.

Researchers disagree about who owns the tensions that emanate from the paradox. Advocates of structural ambidexterity (e.g. O'Reilly & Tushman) argue that only senior managers hold the tensions between exploration and exploitation, and that this is not to be left to the discretion of lower-level managers or employees. Contextual ambidexterity research, on the other hand, argues that all individuals can, and should be encouraged to, make independent decisions about when and how much to explore and exploit. An extension of this research debates whether individuals can be ambidextrous, or if this task is reserved for just a few selected, top managers.

## 1.1 PURPOSE

Literature on why ambidexterity is desirable is widespread. However, my argument is that what is needed in present day ambidexterity literature is a more holistic perspective on how managers balance the paradox of exploration and exploitation in practice, acknowledging that ambidexterity is a nested concept spanning multiple organizational levels (Birkinshaw & Gupta, 2013). Therefore, the purpose of this thesis is *to understand how the paradox of exploration and exploitation is balanced at multiple levels in a digital business unit of a mature firm.*

In order to fully understand how the paradox of exploration and exploitation is balanced in the business unit, I first investigate its organizational alignment - how the structural, cultural, and human resources are aligned to implement the strategy. I then look at how managers manage these alignments and behave to foster organizational ambidexterity. At last, I investigate how these levels of analysis interact, that is, how the different managers and organizational alignments influence each other in balancing the paradox. Thus, my

multiple level analysis includes not only investigating managers of different organizational levels, but looking at different levels of analysis: the business unit level and the managerial level. By also observing the interaction effects between these levels, I will be able to create a holistic view of how the paradox is balanced in practice.

This thesis contains in-depth case research on a business unit in a mature firm of the Norwegian financial services sector, Storebrand ASA. The reason why this sector was chosen is that it faces rapid changes, mainly caused by the digital transformation. The digital transformation both implies a need to cut costs and improve efficiency (exploitation) and to apply new technologies to capture new business opportunities (exploration). I chose a mature firm as these are the ones proven to benefit the most from ambidextrous strategies (Raisch & Birkinshaw, 2008), as focusing efforts on both exploration and exploitation has been shown to help overcome structural and cultural inertia. The business unit that was chosen as the case, Digital Business Development (DBD) is a recently established (1.1.2017) business unit with a focus on digital innovation. Lastly, for my multi-level analysis I chose a Norwegian firm, as Norwegian organizations are known to have flat hierarchies (Hofstede, 2017).

## 1.2 RESEARCH QUESTIONS

First, I investigate how the paradox is balanced at the business unit level, that is, addressing the design choices supporting the simultaneous pursuit of exploration and exploitation. This forms the basis of research question one: **RQ1: *How is the paradox of exploration and exploitation balanced at the business unit level of Digital Business Development?***

Second, I investigate multiple managerial levels, to understand how the different managers act to balance the paradox. I include the managerial levels of top, middle, team, and HR, as ambidexterity is not about a single leader at the top, but distributed - like the tensions - across multiple managerial levels (Probst et al. 2011). Andriopoulos and Lewis (2009) proposed that a multilevel approach is vital to manage the nested tensions. Therefore, my second research question is: **RQ2: How is the paradox of exploration and exploitation balanced at different managerial levels of Digital Business Development?**

To address RQ2 I develop the concept of *leadership approaches to ambidexterity* which comprises the leader's chosen balancing mode, dynamic capabilities, and leadership behaviors. The research lenses of dynamic capabilities and leadership behaviors have been identified as the most promising to describe managers ambidexterity in practice (O'Reilly & Tushman, 2013).

Third, and lastly, I investigate the interaction effects between the business unit and managerial levels of analysis, with the aim to understand how the leadership behaviors of the different leaders affect the exploration and exploitation activities in the business unit. Thus: **RQ3: How do the managerial and business unit levels influence each other in balancing the paradox of exploration and exploitation?**

Addressing RQ3 will, by investigating the moderating effects of organizational and managerial antecedents of ambidexterity, further enhance the understanding of how firms pursue exploratory and exploitative innovation (Jansen et al. 2009).

By answering these three research questions, I will gain insights into how ambidexterity can be built into a firm, and how the different leaders address the challenges posed by simultaneous exploration and exploitation. The different levels of analysis, and the interaction effects between them, will comprise a holistic view of how the paradox of exploration and exploitation is balanced in DBD, thus fulfilling the purpose of the thesis.

## 1.3 STRUCTURE OF THE THESIS

This introduction has motivated the research of ambidexterity in a digital business unit of a mature firm. Chapter 2 provides a theoretical introduction to the different perspectives on ambidexterity, and how literature says that this can be achieved in organizations. Then, in Chapter 3, the research methodology is presented, followed by a case description using empirical data in Chapter 4, which will be analyzed in light of the presented theory, in Chapter 5. This chapter consists of three parts, each addressing one research question. Chapter 6 discusses the findings from the analysis in a larger theoretical context, seeking to evaluate whether the purpose was fulfilled and how the findings contribute to the theory. The concluding chapter, Chapter 7, summarizes the contribution of the thesis, points at limitations of the study, and suggests theoretical and practical implications of the findings, as well as avenues for further research.

Chapter 2

# THEORY

Harvard Business School professor Clayton Christensen's influential book, *The Innovator's Dilemma* (1997), addresses the problem of how the successes of a company may be obstacles in the face of disruptive changes - *the success trap*. Firms naturally favor exploitation as it has greater certainty of short-term success, even though they know that they need to explore new business opportunities to avoid being rendered irrelevant by changes in the competitive environment (O'Reilly & Tushman, 2016). Exploration may be downright scary, as its results, if positive, can cannibalize existing revenue streams. This is *The Innovator's Dilemma*, and it explains why many mature organizations fall prey to changes in markets and technology.

Since the publication of this book, a substantial amount of research and writing about the impact of disruption has established a widespread agreement that, in order to both bring new knowledge into the organization and capitalize on it in the marketplace, firms need to find ways to exploit and explore, to pursue incremental and radical innovation - simultaneously. This has been named organizational ambidexterity. What remains unsettled is *how* firms should become ambidextrous, and the answer is not simple.

This chapter demonstrates how the field of organizational ambidexterity has evolved over time. The content of this chapter is based on an extensive literature review (Haugen & Larssen, 2016) conducted during Fall 2016, where literature on ambidexterity in larger organizations (250+ employees) of changing environments was prioritized. In this thesis, I maintain a management focus, therefore I exclude literature about the cognitive processes of top management teams (Lubatkin et al. 2006; Smith & Tushman, 2005). In order to explain the practical implications of the paradox of

exploration and exploitation, I elaborate on ambidextrous leadership and the research stream integrating ambidexterity literature and dynamic capabilities perspectives.

## 2.1 EXPLORATION AND EXPLOITATION

In 1978, Abernathy suggested that “a firm's ability to compete over time is rooted not only in its ability to increase efficiency, but also in its ability to be efficient and innovative simultaneously” (Benner & Tushman 2003, p. 238). Abernathy (1978) named this tension between efficiency and innovation the Productivity Dilemma, which today is analogous to the paradox of exploration and exploitation (March, 1991), and again to Clayton Christensen's *Innovator's Dilemma* (Christensen, 1997). Other words used interchangeably with exploration and exploitation are alignment and adaptability (Gibson & Birkinshaw, 2004) and flexibility and efficiency.

Abernathy (1978), Christensen (1997), and March (1991)'s reasoning underscore that exploration and exploitation are difficult to align. March (1991) argued that exploration and exploitation were unable to co-exist in an organization, as they compete for resources. Despite viewing the exploration and exploitation as mutually exclusive, March (1991) argues that the pursuit of one at the exclusion of the other can threaten the system survival and prosperity of the firm. He elaborates that too much exploration at the expense of exploitation breeds chaos, and too much exploitation at the expense of exploration leaves the firm lethargic. This makes exploration and exploitation a paradox: they cannot coexist - but they must coexist. A paradox is defined as two contradictions that is theoretically impossible but perhaps practically possible to combine (O'Reilly & Tushman, 2008).

Later research however argues that the combination of exploration and exploitation is favorable (Cao et al. 2009). Today, there is widespread agreement about this in the innovation management field: firms need to find the right balance between combining exploration and exploitation. However, this is difficult for organizations to do in practice, as the products born of exploration are often in direct competition with existing products, and create futures quite different from the past (Smith & Tushman, 2005).

### **2.1.1 Defining Exploration and Exploitation**

Exploitation emphasizes efficiency, refinement, choice, execution, selection, control, implementation, certainty, and variance reduction, whereas exploration is captured by terms such as search, discovery, variation, play, autonomy, flexibility, and innovation (March, 1991). Exploration involves experimenting with new alternatives of doing business, which may or may not give positive returns. Exploitation on the other hand, involves refining and extending existing competencies, with positive, proximate, and predictable returns.

The literature on the paradox of exploration and exploitation can be classified into one of two categories (Gupta, Smith, Shalley, 2006): (1) as two forms of innovation, where exploration represents radical innovation and exploitation represents incremental innovation (e.g. March, 1991), and (2) as two forms of organizational knowledge, where exploration is associated with the creation of new knowledge, whereas exploitation hones and extends existing knowledge (e.g. Andriopoulos & Lewis, 2009).

Furthermore, Benner and Tushman (2003) argue that exploitation involves improvement in existing technological compo-

nents and follows the current technological trajectory, while exploration involves a change of technological trajectory. Similarly, He & Wong (2004) view explorative innovation as activities aimed at entering new product-market domains, and exploitative innovation as “activities aimed at improving performance in existing domains” (p.483). These perspectives align well with the definition of the paradox as balancing two forms of innovation.

### **2.1.2 Defining innovation**

Following the definition of the paradox above, it makes sense to provide a definition of the forms of innovation associated with exploration and exploitation: radical and incremental. There are many ways to define innovation, and there is no unitary definition of the concept. The most common description, however, is that innovation consists of the creation and the implementation of an idea (Van De Ven, 1985). Van De Ven (1985) developed a management perspective that defines the process of innovation as “the development and implementation of new ideas by people who engage in transactions with others over time within an institutional context” (p.3).

Innovations are often parsed into categories by the impact they have on markets and businesses (Christensen, 1997). Conceptually, innovation can be categorized into incremental and radical innovation. A third category, architectural innovation is sometimes also associated with exploration. This is defined as “minor improvements in which existing technologies or components are integrated to dramatically improve the performance of existing products or services” (O’Reilly & Tushman, 2016, p.17). These innovations are not based on significant technological advances, but are largely what Christensen refers to as disruptive: they begin by offering a cheaper alternative to a niche segment, and are not seen as a



threat by incumbents or competitors due to its lower quality - but if they improve fast enough, they will grab foothold among mainstream customers and then “the entire pricing structure for an industry can collapse (O’Reilly & Tushman, 2016, p.17). These conceptualizations of innovation are described in Table 1 below.

why firms need to explore new business models and opportunities - to avoid being disrupted (O’Reilly & Tushman, 2016).

### 2.1.3 Implications of the exploration-exploitation paradox

Exploration and exploitation are inherently different in terms of work processes, attitudes, and goal setting (O’Reilly & Tushman,

Type of Innovation	Synonyms	Definition	Associated with..
Incremental	Sustaining, Continuous	Changes existing solutions, refines existing knowledge, faster, cheaper, better.	Exploitation
Architectural	Modular, Disruptive	Creates new markets, new knowledge, capability destroying	Exploration
Radical	Discontinuous, Break-through	New business models, changes the rules of the game in industries	Exploration

**Table 1: Definitions of innovation**

Christensen (2016) has a different conceptualization of innovation, and divides exploitation, incremental innovation, into two categories: efficiency innovations and sustaining innovations. Efficiency innovations make more with less, cut costs, they increase the free cash flow of the firm. Sustaining innovations improve margins and increase market share in current segments, they make good products better, and can - to some extent - create net growth. According to Christensen, it is only the disruptive innovations that really create growth, and that many firms mistakenly believe efficiency innovations can create growth. Christensen explains that efficiency innovations create cash - slack resources - that can be invested into exploration, which can lead to discovering disruptive innovations (Christensen, 2016). This is

2004). They compete for resources which creates tensions throughout the organization: short-term and long-term priorities pull resources in opposite directions. The tensions emanating from the paradox are nested across organizational levels, which complicates the balancing act (Andriopoulos & Lewis, 2009). Researchers disagree as to who owns these tensions, and at which managerial level the tensions shall be solved, which has given rise to different research streams. Some researchers argue that exploration and exploitation decisions belong to the top and senior managers (e.g. O’Reilly & Tushman, 1996), while others claim it is the collective responsibility of the individuals of the organization to choose when to explore and when to exploit (e.g. Gibson & Birkinshaw, 2004). These lines of research will be presented in the next subchapter.

Exploration is "rooted in variance increasing activities, learning by doing, and trial and error" (Smith and Tushman, 2005, p.522). Therefore, exploration involves a certain degree of risk taking as returns of experimentation may be distant in time and not necessarily positive. Therefore, researchers suggest measuring the success of exploratory efforts in terms of milestones and outcomes instead of profit (Dutta, 2012). Exploration requires the organization to invest in uncertain alternatives and solutions aimed at emerging markets. This is made possible by some level of organizational slack, i.e. excess resources in terms of time and money, that allows the organization to experiment with new strategies (Nohria & Gulati, 1996). Achieving slack is not an easy task, as exploration and exploitation compete for scarce resources, and urgent pressures on profit margins tend to crowd out the allocation of resources to exploration. However, following Christensen (2016), efficiency innovations can generate cash to be spent on exploratory efforts.

Exploitation, on the other hand, emphasizes effectiveness and discipline. Short-term profits are achieved by cost reductions, more efficient ways of doing things, knowledge refinement and optimization of workflows. Exploitation relates to lean principles of reducing waste. As this section shows, exploration and exploitation have different key success factors and often compete for resources (e.g. March, 1991). Due to the inherently different natures of exploration and exploitation, unifying them in the organization is a difficult task (O'Reilly & Tushman, 2016).

## 2.2 DIFFERENT WAYS TO BALANCE THE PARADOX OF EXPLORATION AND EXPLOITATION

The question of how to find the balance between exploration and exploitation has puzzled researchers for decades. The discussion builds on a fundamental question: Can organizations survive in the face of change? There are two camps in this debate: organizational ecology, and organizational adaptation. Advocates of the ecological perspective believe that industries move through cycles of variation-selection-retention, which is arguably impossible for the individual firm to influence. Thus, organizational ecologists disagree that firms can change and survive over time. This bears resemblance to Darwin's evolutionary theory (Van De Ven & Poole, 1995). The research covered by this thesis, however, belongs to the other research stream; the one that discusses ways that firms can internalize the process of variation-selection-retention so that they can adapt to changing environments. If not an answer, ambidexterity research provides compelling insights about how firms can tackle changing environments.

The term organizational ambidexterity was introduced by Duncan in 1976, building on Burns and Stalker (1961) and Thompson (1967). Since then, as previously mentioned, the term organizational ambidexterity has caught the interest of researchers worldwide, causing an outpouring of both empirical and theoretical studies on the topic. I will in the following subsections present the different research streams in ambidexterity literature.

### 2.2.1 Sequential Ambidexterity

Duncan (1976) claimed that organizations need different structures to initiate and execute innovation, suggesting that organizations develop “dual structures” to sequentially pursue exploration and exploitation, and switching structures by the phase of the innovation process: organic structures to explore followed by mechanistic structures to exploit. This is now referred to as sequential ambidexterity.

Punctuated equilibrium, a theory developed by Tushman, Newman & Romanelli (1986) is similar to Duncan’s dual structures, being sequential in nature. Organizations are said to move through longer periods of incremental innovation and continuous change, before frame-breaking change happens through radical innovation (Tushman et al., 1986).

However, given the complexity and pace of change faced by most organizations today, the consensus in the field is that organizations need to pursue both exploration and exploitation at the same time (e.g. O’Reilly & Tushman, 1996; Gibson & Birkinshaw, 2004). Current research therefore refers to ambidexterity as the way firms simultaneously explore and exploit.

The research field is mainly divided into two research streams: structural ambidexterity and contextual ambidexterity. Their primary dispute is to whom the tensions belong; structural ambidexterity argues that they belong to the top management (e.g. O’Reilly & Tushman 1996; 2004; 2011), while contextual ambidexterity argues that it is the collective responsibility of leaders and employees at all levels of the organization (e.g. Gibson & Birkinshaw 2004; Mom et al. 2007). These research streams are presented in the following two subchapters.

### 2.2.2 Structural ambidexterity

Most of the research on structural ambidexterity is conducted at the firm level, which is understandable as it deals with a specific organizational architecture. O’Reilly & Tushman (1996, 2004, 2008, 2011, 2016) are pillars within this field, and a so-called ambidextrous design is their proposed solution to the Innovator’s Dilemma. In essence, structural ambidexterity involves separating exploration and exploitation in different business units. The main argument for such separation in space is that exploration and exploitation require different structures, cultures, people, and processes (O’Reilly & Tushman 2004). Thus, it is the responsibility of the top management team to manage this structure, which is a complicated managerial task (O’Reilly & Tushman, 2008). Important duties for top managers are, according to O’Reilly & Tushman, to communicate a clear strategic intent and overarching vision, and consistently holding the units to different standards due to the nature of exploratory and exploitative activities. They find this organizational design to be more efficient than functional designs, unsupported teams, and cross-functional designs in terms of launching breakthrough products or services and improving existing business (O’Reilly & Tushman, 2004).

While the argument for ambidextrous organizational designs is compelling, most research discusses ambidexterity at the firm level and the function of top management leaders. Therefore, the development of research stream is excluded from the scope of this thesis. It may be though, that some of the mechanisms and some of the elements in structural ambidexterity theory are relevant to understand the empirical data. These elements are shortly summarized in Table 2 below.

Alignment Element	Exploitative	Exploratory
Strategic intent	Cost, profit	Innovation, growth
Critical Tasks	Operaitons, efficiency, incremental innovation	Adaptability, new products, radical innovation
Competencies	Operational	Entrepreneurial
Structure	Formal, mechanistic	Adaptive, loose
Controls, Rewards	Margins, productivity	Milestoens, growth
Culture	Efficiency, low risk, quality, customers	Risk taking, speed, flexibility, experimentation
Leadership role	Authoritative, top down	Visionary, involved

**Table 2: Exploitative and Exploratory Organizational Alignments (O'Reilly & Tushman, 2004)**

O'Reilly & Tushman (2013) admit that structural and contextual approaches may be complementary despite initially regarded as fundamentally different from each other. Raisch and Birkinshaw (2008) observed similarities between the “cultural components” of structural and contextual ambidexterity, such as the emphasis on a common strategic intent, trust, and an overarching vision and set of values. Some studies combine structural and contextual approaches, such as Andriopoulos & Lewis (2009) and Jansen, Tushman & Andriopoulos (2013). Jansen et al. (2013) found that successful ambidextrous firms started off with structural separation to initiate exploration and exploitation, then switched to contextual approaches and back to structural again. Lubatkin et al. (2006) argued for viewing the different modes of ambidexterity as complementary, but later research on this topic is scarce.

### 2.2.3 Contextual Ambidexterity

Most research on contextual ambidexterity is at the business unit level, which makes this research stream a more suitable candidate to explain the research problem of this thesis. Contextual ambidexterity is defined as

“the behavioral capacity to simultaneously demonstrate alignment and adaptability at a business unit level” (Gibson & Birkinshaw, 2004, p. 209). Gibson & Birkinshaw (2004) proposed that the exploration-exploitation tension could be resolved at lower levels in the organization, and that exploration and exploitation should exist within each business unit. With this, they offer an alternative perspective to structural ambidexterity.

The role of managers within contextual ambidexterity is to develop a high-performance organizational context by combining the dimensions of performance management and social support, in which individuals get to decide when to explore and when to exploit (Gibson & Birkinshaw, 2004). It is defined as the systems, processes and beliefs that shape individual level behavior in the organization (Burgelman, 1983). This organizational context emphasizes cultural elements, and the concept has similarities to both organizational culture and climate (Gibson & Birkinshaw, 2004). To describe the organizational context, Gibson and Birkinshaw built on Ghoshal and Bartlett (1994)'s behavior-framing attributes: discipline, stretch, support, and trust. Table 3 captures the definitions of these attributes.

<b>Discipline</b>	Discipline induces members to voluntarily strive to meet all expectations generated by their explicit or implicit commitments. Discipline is established by setting clear standards of performance and behavior, by managers giving rapid and open feedback and applying sanctions with consistency.
<b>Stretch</b>	Stretch induces members to voluntarily strive for more ambitious objectives. Stretch is established when members of the organization share ambitions and a collective identity. Stretch has the ability to create personal meaning in contribution to organizational goals.
<b>Support</b>	Support induces members to lend assistance and countenance to others. Examples of support are when senior managers give priority to providing guidance and help to lower level employees, rather than exercising authority, and mechanisms that allow actors to access resources available to others, and freedom of initiative at lower levels.
<b>Trust</b>	Trust induces members to rely on the commitments of each other. Trust is established when decision processes are perceived as fair, and individuals are involved in these processes. Staffing positions with people who possess and are seen to possess required capabilities also contribute to the establishment of trust.

**Table 3: Behavior-framing attributes of organizational context**

Like other frameworks for organizational culture (e.g. Rao & Weintraub, 2013), Gibson and Birkinshaw's (2004) framework for contextual ambidexterity applies both soft and hard elements. The framework is divided into two dimensions: social support and performance management. The dimension of social support builds on Ghoshal and Bartlett (1994)'s "soft elements" of support and trust, while performance management is associated with the "hard elements" discipline and stretch. Gibson and Birkinshaw (2004) label the soft and hard elements as "the yin and yang" of organizations, and argue that finding the right balance between discipline and stretch, and support and trust, is the key to success.

Extending Ghoshal and Bartlett (1994)'s concept of organizational context to contextual ambidexterity, Gibson and Birkinshaw (2004) stress the mediating effect of contextual ambidexterity. They argue that it would be wrong to say that the mere presence of the four

behavior-framing factors leads to superior performance. In contrast, contextual ambidexterity is what leads to superior performance, and the capacity of contextual ambidexterity is developed through the interaction of the four behavior-framing factors (Gibson & Birkinshaw, 2004).

The hallmark of contextual ambidexterity is that decision making about tradeoffs between exploration and exploitation is shifted down to lower levels in the organization where, arguably, those tensions can be best resolved. (Birkinshaw et al. 2016).

Adler, Goldoftas and Levine (1999)'s Toyota case study has been regarded as an illustration of what contextual ambidexterity looks like, by for instance O'Reilly & Tushman (2013). In Adler et al. (1999)'s research workers that perform routine tasks like automobile assembly (exploitation), are also said to be exploring since they continuously alter their work processes to become more efficient. This is criticized by O'Reilly & Tushman (2013):

*“While it is conceptually easy to imagine how contextual ambidexterity might operate within a given setting or technological regime, it is harder to see how it would permit a company to adjust to disruptive or discontinuous changes in technologies and markets”* (p.12).

They further state that such decisions require senior managers to provide the resources and legitimacy to the new technology, which arguably cannot be left to the discretion of lower level employees. Kauppila (2010), who also belongs to the structural ambidexterity research stream agrees. He argues that Adler et al.’s (1999) research “(...) does not really consider how a firm can simultaneously conduct radical forms of exploration and exploitation. It simply assumes that exploratory knowledge is produced somewhere and is available for use” (p. 286). Therefore, execution disciplines for exploration are crucial to establish (O’Reilly & Tushman, 2016).

#### **2.2.4 Differentiation and Integration**

The balancing modes of differentiation and integration can be regarded as analogous to structural and contextual ambidexterity, respectively (Andriopoulos & Lewis, 2009). Whereas contextual ambidexterity and structural ambidexterity often describe the balancing mode of a firm, differentiation and integration can represent these balancing modes also at lower levels in the organization. Differentiation is therefore suitable to describe a business unit that balances the paradox of exploration and exploitation by task partitioning, i.e. having different groups or subunits devoted to exploration or exploitation (Gibson & Birkinshaw, 2004). Traditionally, ambidexterity research has tended to focus on either integration or differentiation, whereas more recent research arguments for the value of combining both and viewing them as complements (Andriopoulos & Lewis,

2009; Smith & Tushman, 2005). By combining structural and contextual approaches Andriopoulos and Lewis (2009) found that paradoxes are interwoven across organizational levels, thus managing paradoxes becomes the shared responsibility of multiple managerial and organizational levels.

However, there is ambiguity in the integration and differentiation concepts, as these are also described as practices to managing an ambidextrous organization. Integration involves leveraging resources across exploiting and exploring alignments or business units, depending on the balancing mode chosen. According to Lavine (2014), “integration involves trying to identify synergy or a learning stance based on trust, openness, and cultural sensitivity.” (p.201). Leveraging organizational assets across two inconsistent alignments is a difficult managerial task, as the chances of conflict, disagreement and poor coordination increase (O’Reilly & Tushman, 2008). Conversely, differentiation can involve diversifying the product portfolio to make it consist of both explorative and exploitative projects (Andriopoulos & Lewis, 2009). It is therefore important to note this difference between differentiation and integration as balancing modes and as leadership practices.

### **2.3 AMBIDEXTERITY IN PRACTICE**

The criticism towards both structural and contextual approaches to ambidexterity is the lack of explaining what managers actually do to solve the tensions created by the exploration-exploitation paradox (e.g. Probst et al., 2011). In recent years ambidexterity literature has moved from dual structures to dual leadership (Haugen & Larssen, 2016). Researchers conceptualize leadership processes as an independent antecedent of ambidexterity (e.g. Lubatkin et al., 2006), which provides practical insights to the ambidexterity challenges. As we will

see in this subchapter; dual leadership means vacillating between different leadership styles and leadership behaviors to foster both exploration and exploitation in followers.

### 2.3.1 Leaders as Linchpins for Ambidexterity

Although I am excluding the structural ambidexterity research stream from the scope of this thesis, I find it valuable to include O'Reilly & Tushman's more recent publishings in this chapter. Their 2016 book "Lead and Disrupt" is fundamentally about leadership and the leadership challenges in executing ambidextrous strategies. Here, structure becomes one of the strategic choices that leaders have to make, where the importance may be in explicitly stating where the tension between exploration and exploitation is located. O'Reilly & Tushman (2013) admit that although each of the modes of ambidexterity were initially proposed as separate ways to deal with the paradox, evidence now clearly suggests all three to be potentially viable. This opens up for different balancing modes than structural ambidexterity.

O'Reilly & Tushman (2016) articulated five leadership practices that are associated with effective strategic renewal, which are less about planning and more about execution: they are "about dialogue, participation, contexts, conversations, and commitment that leaders and their teams make to each other" (O'Reilly & Tushman, 2016, p. 239). "By definition, ambidextrous leaders execute exploration and exploitation strategies with contradictory time horizons and priorities - one optimizing profit, the other scaling business share" (O'Reilly & Tushman, 2016, p.210). These themes, given in Table 4 are relevant also in organizations that prioritize contextual ambidexterity, as they emphasize how leaders are dealing with the contradictions associated with exploring and exploiting.

- 1) Define a growth aspiration that connects emotionally
- 2) Treat strategy as dialogue, not a ritualistic, document-based planning process
- 3) Grow through experiments that teach you about the future as it emerges
- 4) Engage the leadership community in the work of renewal; engineer the process so that you create bottom-up pressure that is at least equal to the pressure coming from the senior team
- 5) Apply execution disciplines to the effort; don't be seduced by the idea that renewal can be a night job

**Table 4: Leadership practices for successful strategic renewal (O'Reilly & Tushman, 2016)**

Furthermore, one of the principles mentioned by O'Reilly & Tushman (2016) for successful ambidexterity is to practice consistently inconsistent leadership behaviors: Ambidextrous leaders demand profit and discipline with one unit while encouraging experimentation in another; support a strategy in one part of the business while also seeking to cannibalize it with another. (O'Reilly & Tushman, 2016, p.210.)

This illustrates the duality in balancing the paradox of exploration and exploitation, and it is an important point: exploration and exploitation require fundamentally different success measures and cultures. As previously mentioned, exploration is associated with profit and returns that are distant in time. Therefore, milestones or outcomes may be a better way of measuring exploration success (Dutta, 2012). If trying to force the same goals onto exploration efforts as exploitation, they are bound to be more exploitative in nature, as their goal focus will reside in the short term. Consistent inconsistency is therefore a key element in leading for ambidexterity.



Other researchers have elaborated on leadership and ambidexterity. While O'Reilly and Tushman (2004) described the role of senior managers in structurally ambidextrous organizations, later research has described leadership styles and leadership behaviors conducive to exploration and exploitation, with the aim to describe what managers do in practice to balance the paradox. Rosing, Bausch and Frese (2011), for instance, argued that ambidexterity research needs to stop concentrating on leadership roles and start explicating leadership behaviors that predict ambidextrous behavior in followers. Their argument is that leader roles generally include a broader cluster of behaviors and are less flexible - behaviors on the other hand are more specific and relatively flexible (Rosing et al. 2011). The next subchapter elaborates on these leadership behaviors.

### 2.3.2 Ambidextrous Leadership Behaviors

Mom et al (2007) sought to describe ambidexterity at the individual level of analysis by investigating managers' ambidexterity. This has given rise to a research tendency of ambidextrous leadership in recent years. Probst et al. (2011) and Mom et al. (2009) argued that ambidextrous leadership requires addressing tensions and managing contradictions throughout the organization and leading ambidextrous organizations is not about a single leader at the top but shared across hierarchical levels (top management, middle management, line management, HR management).

Traditionally, leadership has been associated with exploration, and management with exploitation (Bass, 1985; Yukl, 2009). Both practitioners and scholars acknowledge that both leadership and management is necessary for an organization to succeed over time. Examples of tasks

that managers perform, are to set clear objectives, establish control systems, create structures and processes to get work done, monitor compliance and solve problems. Leaders, on the other hand, provide direction and communicate a compelling vision, inspire and motivate people, and help the organization change by reallocating resources and changing systems and structures (O'Reilly & Tushman, 2016). In other words, management is about execution; leadership is about strategy.

Kauppila and Tempelaar (2016) used a different word for ambidextrous leadership - paradoxical leadership, which emphasizes the combination of strong managerial support and high performance expectations. This description of the responsibilities of ambidextrous leaders is in line with Gibson and Birkinshaw (2004)'s definition of contextual ambidexterity, where leaders shape an organizational context of strong social support and high performance management.

Rosing et al. (2011) articulated a set of behaviors argued to encourage exploration called opening leadership behaviors, and a set of behaviors that fosters exploitation called closing leadership behaviors. Leaders should develop temporal flexibility to switch between these behaviors over time, which means learning when to apply opening and closing behaviors.

According to Rosing et al. (2011), the uniqueness of opening and closing leader behaviors, as opposed to leadership styles and roles, lies in their sole focus on increasing and reducing variance in followers' behavior. This associates opening leadership behavior with exploration, as the focus of both is to increase variance, and closing leadership behaviors with exploitation, as the goal of exploitation and closing leadership behaviors is to reduce variance. Zacher, Rosing and Robinson (2016) found empiri-



cal evidence for these relationships. Examples of opening and closing leadership behaviors are exhibited in Table 5 below.

<b>Opening leadership behaviors</b>	<b>Closing leadership behaviors</b>
<ul style="list-style-type: none"> <li>• Allowing different ways of accomplishing a task</li> <li>• Encouraging experimentation with different ideas</li> <li>• Motivating to take risks</li> <li>• Giving possibilities for independent thinking and acting</li> <li>• Giving room for own ideas</li> <li>• Allowing errors</li> <li>• Encouraging error learning</li> </ul>	<ul style="list-style-type: none"> <li>• Monitoring and controlling goal attainment</li> <li>• Establishing routines</li> <li>• Taking corrective action</li> <li>• Controlling adherence to rules</li> <li>• Paying attention to uniform task accomplishment</li> <li>• Sanctioning errors</li> <li>• Sticking to plans</li> </ul>

**Table 5: Examples of leader opening and closing behaviors (Rosing et al., 2011)**

More recent research provides support that so-called “new leadership styles” (Von Krogh et al., 2012) transformational and transactional leadership are also associated with exploration and exploitation (e.g. Jansen et al 2009). Accordingly, ambidextrous leadership, or the application of both transformational and transactional leadership behaviors, may promote organizational ambidexterity (Baskarada et al., 2016).

Baskarada et al (2016) identified five leadership behaviors that leaders apply to promote exploration and three that leaders apply to promote exploitation. These behaviors closely match the characteristics of transformational and transactional leaders described by Bass (1985). Therefore, these characteristics are first summarized below.

### *Characteristics of transactional leaders*

Transactions is a keyword in the definition of a transactional leader as relationships are built on transactions of rewards and benefits between leaders and followers (Von Krogh, 2012). Transactional leadership embodies two dimensions: contingent rewards and management by exception (Bass, 1999). Management-by-exception may take an active - in which the leader actively monitors follower performance and takes corrective action - or a passive form, in which the leader is laissez-faire and waits for problems to arise before taking corrective action (Bass, 1999). Transactional leaders are concerned with routine maintenance activities of allocating resources, monitoring, and directing followers to achieve task and organizational goals of efficiency and profit (Marques, 2015). They practice reinforcement of rules and plans to achieve the performance or completion of certain tasks (Zagoršek, Dimovski & Škerlavaj, 2009).

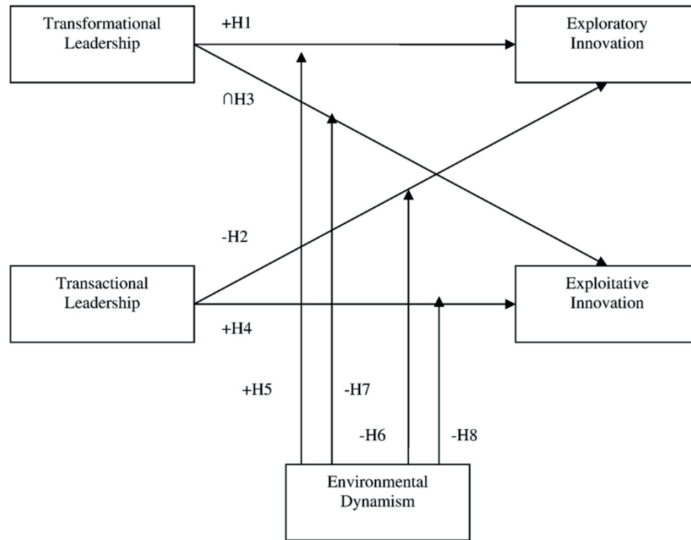
### *Characteristics of transformational leaders*

Transformational leadership embodies four dimensions: intellectual stimulation, individualized consideration, idealized influence, and inspirational motivation (Bass, 1999). Transformational leaders emphasize creating an environment with a sense of higher purpose where employees desire to perform beyond expectation (Von Krogh, 2014). They spend time developing relationships with their followers built on trust, loyalty, and mutual respect. The foundation of these relationships cause leaders and followers to share a vision, set of common values, and shared meaning (Marques, 2015). Transformational leadership fosters autonomy and challenging work (Bass, 1999), and followers are encouraged to be creative, embrace change, question assumptions, take calculated risks, and participate in strategy development (Baskarada, Watson & Cromarty 2016).

The five transformational leadership behaviors that Baskarada et al. (2016) found found to promote exploration were empowerment, inclusivity, risk comfort, vision and commitment to promote exploration. To promote exploitation, Baskarada et al. (2016) highlighted the transactional leadership behaviors of training, performance management and knowledge management.

There are indications in literature that transformational and transactional leadership may promote both exploration and exploitation (e.g. Yukl, 2009). However, these relationships have only to a certain extent been demonstrated empirically. Vera and Crossan (2004) proposed that transformational leadership encourages exploration, whereas transactional leadership encourages exploitation - but inhibits exploration.

Jansen, Vera and Crossan (2009) built on this model, and tested the relationships proposed by Vera and Crossan (2004) empirically, and confirmed their findings that transformational leadership positively predicts exploration, and transactional leadership positively predicts exploitation but negatively predicts exploration. They also argued for an inverted U relationship between transformational leadership and exploitation, and took environmental dynamism into consideration - seeking to discover its moderating effects. This framework is given in figure 1. They did find empirical support that transformational leadership is superior to transactional leadership in times of high environmental dynamism, however, they could not show the hypothesized inverted U relationship between transformational leadership and exploitation - counter to their anticipations (Jansen et al. 2009).



**Figure 1: The relationships between leadership behaviors and exploration/exploitation (Jansen et al., 2009)**

The opening and closing behaviors of Rosing et al. (2011) bear resemblance to the characteristics of transformational and transactional leaders described by Bass (1985; 1999), and several of these are related to each other - something Rosing and colleagues acknowledged. These coincidences are given in table 6 below, adapted from Rosing et al. (2011).

As we can see, some transformational leadership behaviors are similar to closing leadership behaviors, and some transactional leadership behaviors are similar to opening leadership behaviors. This supports Yukl (2009)'s argument that both transformational and transactional leadership behaviors may promote both

	<b>Opening leadership behaviors</b>	<b>Closing leadership behaviors</b>
<b>Transformational leadership behaviors</b>	A vision that motivates exploratory behavior Stimulation of thoughts in very new directions Communication of the values of openness and tolerance	A vision that motivates confirmatory behavior Stimulation of small improvements and efficiency enhancements Communication of the values of conscientiousness and rule adherence
<b>Transactional leadership behaviors</b>	Rewarding experimentation Focus on errors to learn from them Setting and monitoring explore-goals	Rewarding efficiency Focus on errors to avoid them Setting and monitoring exploit-goals

**Table 6: Coincidences between transformational/transactional and opening/closing leadership behaviors (Rosing et al., 2011).**

exploration and exploitation. However, opening and transformational leadership behaviors are believed to be more strongly related to exploration than exploration, and closing and transactional leadership behaviors to exploitation (Zacher et al., 2016).

The relationships between opening/closing leadership behaviors and exploration/exploitation behaviors have only been tested once in an empirical study, performed by Zacher, Robinson and Rosing (2016). They found that opening leadership behaviors positively predict exploration, and closing leadership behaviors positively predict exploitation, but negatively predict exploration. A high level of both behaviors was positively related to employees' self-reported innovative performance (Zacher et al., 2016).

### **2.3.3 Ambidexterity and Dynamic Capabilities**

Similar to ambidextrous leadership, dynamic capabilities is a lens through which one can look at ambidexterity to understand leaders' practices (O'Reilly & Tushman, 2008). This is because dynamic capabilities are embedded in organizational processes or routines such as allocating and coordinating resources, adjusting competencies or developing new ones (Dutta, 2012).

Dynamic capabilities is a research field that studies the firm's ability to create a sustained competitive advantage by sensing and seizing business opportunities, and reconfiguring its organizational assets to adapt to changing environmental conditions (Teece, Pisano & Shuen, 1997). Firms that survive in the face of change are able to capitalize on its dynamic capabilities (O'Reilly & Tushman, 2016). Since organizational ambidexterity has the same purpose, researchers have integrated these perspectives to provide

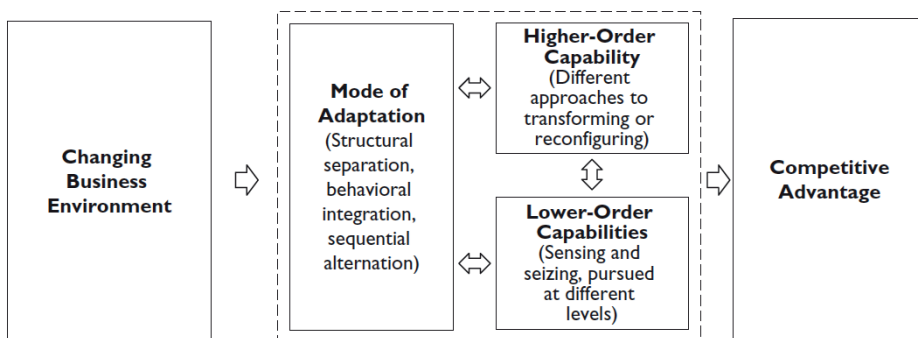
an answer to how firms are able to change and adapt, rather than fail, as their core markets and technologies have changed.

O'Reilly and Tushman (2008) were the first to make the link between ambidexterity and dynamic capabilities, and argued that a firm's ability to be ambidextrous is rooted in its dynamic capabilities. This is because ambidexterity requires senior managers to sense the changes in their competitive environment; shifts in technology, competition, customers and regulation - and be able to act on these opportunities and threats, i.e. seize them. Over time, organizational assets need to be reconfigured to meet the new challenges. O'Reilly and Tushman (2008; 2011) described ambidexterity as a dynamic capability, as the concept "embodies a complex set of routines including decentralization, differentiation, targeted integration and the ability of senior leadership to orchestrate the trade-offs that the simultaneous pursuit of exploration and exploitation requires". The keen reader may have noted the focus here on senior leadership, and that differentiation and integration are regarded as dynamic capabilities, i.e. leadership practices and not balancing modes. This is due to the key role of senior managers in structurally ambidextrous organizations. Since their research is about managing an ambidextrous structure at the firm level, Birkinshaw, Raisch and Zimmermann (2016)'s research may be a better fit for my case as it describes ambidexterity at the business unit level.

The research on how to manage firms or business units that apply other balancing modes is underdeveloped, but Birkinshaw et al. (2016) took the prioritized balancing mode of the firm into consideration. They argue that leaders develop context-shaping capabilities when a behavioral integration is the prioritized mode of ambidexterity, that is, contextual ambidexterity.

Further, their conceptual framework (figure 2) divides Teece's three categories of dynamic capabilities into lower-order and higher-order capabilities. Lower order capabilities are sensing and seizing, and are defined as "direct counterparts to the notions of exploration and exploitation" (Birkinshaw et al. 2016, p. 40). Context-shaping capabilities are higher-order and similar to reconfiguring in Teece's definition. This higher-order capability is what enables firms to orchestrate an appropriate balance between exploration and exploitation, where orchestration means how the various parts fit together (Birkinshaw et al. 2016). As the framework demonstrates, the key idea behind developing dynamic capabilities is to gain competitive advantage. When behavioral integration is the pri-

oritized mode of adaptation, Birkinshaw et al. (2016) found case evidence (in pharmaceutical firm Glaxo Smith Kline, GSK) strongly indicating that the firm's ability to cope with discontinuous change was rooted in their autonomous front-line units that decided how to divide their time between exploration- and exploitation-oriented activities (because they were accountable for the consequences of those decisions), and due to the top management level demonstrating context-shaping capabilities; developing and adapting the organizational context within which the frontline units sensed and seized opportunities. This context emphasized a dual orientation of commercial and technical expertise, as well as incorporating elements of transparency, support and mutual learning. These elements were enabled by context-shaping capabilities and deemed key to GSK's competitive advantage in a changing business environment (Birkinshaw et al. 2016).



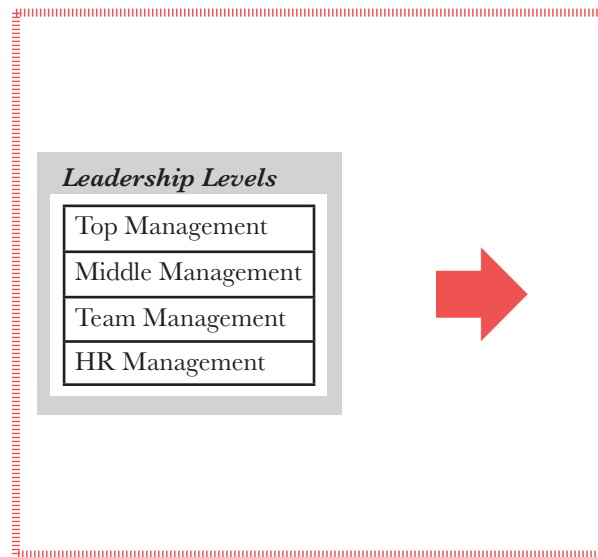
**Figure 2: Ambidexterity in a Dynamic Capabilities perspective: Birkinshaw et al. (2016)'s theoretical model.**

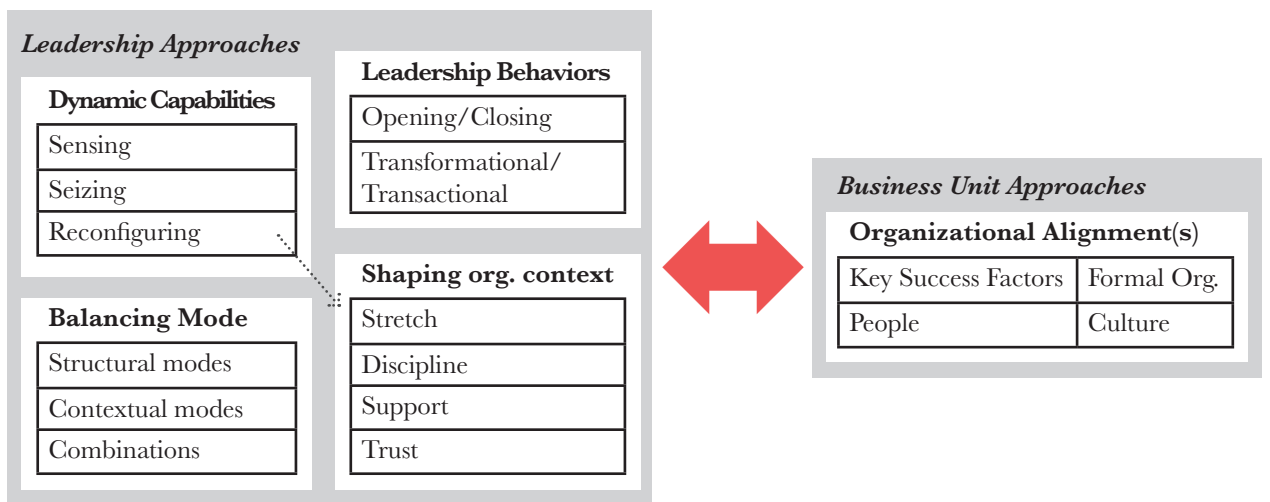
## 2.4 THEORETICAL FRAMEWORK

This chapter has provided an overview of the theoretical concept of organizational ambidexterity. As we have seen, structural, cultural and managerial approaches have been used to describe how this is achieved. This subchapter explains the logic behind the theoretical framework upon which I base my analysis in Chapter 5. The theoretical framework is presented in figure 3 below.

Organizational contexts and organizational alignments are described in literature as ways firms can be designed to enable ambidexterity. Since this thesis deals with a business unit, this is therefore named *business unit approaches to ambidexterity* in the theoretical framework (figure 3). These organizational contexts and alignments are shaped by its managers - at different managerial levels, and may shed light on how leaders establish mechanisms, systems and processes to balance the paradox of exploration and exploitation in a business unit. The leadership levels were adopted from Probst et al. (2011). Other leadership approaches to ambidexterity are dynamic capabilities and leadership behaviors. These are described in order to further the understanding of how managers balance the paradox of exploration and exploitation in practice. In the theoretical framework (figure 3), these three practices are labeled *leadership approaches to ambidexterity*.

Organizational contexts and alignments are shaped by managers and their leadership approaches to ambidexterity, but also, it may be that the leaders are shaped by the organizational context or alignment in which they act - that is, if the organizational context and alignment emphasizes exploitation, my assumption is that leaders will behave and act in such a way that short term goals are achieved, and thus would be likely to demonstrate more transactional leadership behaviors. Thus, I view the different antecedents of ambidexterity as complementary, as called for by Raisch and Birkinshaw (2008). This is why the arrow between leadership and business unit approaches is double. However, the main focus of this thesis will be on explaining how leaders influence the exploration and exploitation activities in a business unit.





**Figure 3: Theoretical framework of this thesis.**

Chapter 3

# METHOD



### 3.1 ONTOLOGY AND EPISTEMOLOGY

I begin this chapter with a description of the ontology and epistemology upon which I based my research design. This includes elements from both critical realism and moderate constructionism. The epistemology of these views is similar, but their ontological view is different.

The critical tenet of Critical Realism is that one can use causal language to describe the world (Easton, 2010). Elements from the critical realism ontology and epistemology let me both perceive the reality in my chosen unit of analysis, and to recommend changes in social behavior. Therefore, I will be able to indicate causal mechanisms such as describing how different leadership behaviors that influence exploration and exploitation. This is something I believe to strengthen my analysis and fulfillment of the purpose of this thesis: to understand how leaders balance the paradox of exploration and exploitation in a digital business unit.

Critical Realism (CR) emerged as a response to critiques of positivism and constructivism. While including elements from these scientific perspectives, there is one aspect where CR deviates from both. Positivism and constructivism have been criticized for considering what can empirically be known by humans as reality, whether knowledge acts as a container or a lens through which the reality is viewed. CR argues that there is a real world that exists independent of our knowledge of it, but that some knowledge can be closer to reality than other. This world can be understood through social science, using theory to judge social events (Fletcher, 2017).

Since knowledge can be judged, causal mechanisms can be identified, which “makes CR useful for analyzing social problems and suggesting solutions for social change” (Fletcher, 2017, p.183). Therefore, by including

elements from the critical realist perspective I can recommend solutions for change based on tendencies observed in the qualitative data. I will not question the truthfulness of what I encounter in the interviews, even though this belongs in a critical realist mindset. In this sense, my research adopts elements from Moderate Constructionism. Thus, I emphasize giving a rich description of how the paradox is balanced in the business unit, and try to view the data from different vantage points to acknowledge both rational and social aspects of knowledge (Järvensivu & Törnroos, 2010).

Both scientific positions emphasize abduction, as the research process is not necessarily linear. This represents the way I like to work: moving back and forth between the diverse stages of the research process (Easton, 2010). Unlike induction, abduction is accepting existing theory, something that might improve the theoretical strength of the case analysis (Järvensivu & Törnroos, 2010). Abduction also allows for a less theory-driven research process than deduction, thereby enabling data-driven theory generation. This gives implications for my analysis, which will be described in section 3.4.3.

### 3.2 RESEARCH DESIGN

In order to give a rich description of how the paradox of exploration and exploitation is balanced in Digital Business Development, I chose to conduct a case study of this business unit. Since I am asking “how” and not “how many” - a qualitative case study was a natural approach. Qualitative research takes the perspectives and interpretations of participants as starting points (Flick, 2015), which I believe is necessary to fully understand how the paradox is balanced by the leaders in my selected case. By conducting a case study, I will be able to tease out and disentangle complex factors related to the research problem (Easton, 2010).

Single-case studies have been criticized for their lack of ability to provide generalization. However, due to my purpose and research questions, conducting case research will allow me to reach a deeper level of contextual insight into the complex factors surrounding the paradox of exploration and exploitation. As introductory noted, there are several gaps in ambidexterity literature, and I believe an in-depth case study can contribute to bridging these gaps. More in-depth qualitative case studies have also been called for by scholars (e.g. O'Reilly & Tushman, 2013). Capturing multiple levels of analysis, as well as multiple organizational levels, the case study of this research will provide a holistic view of how the paradox of exploration and exploitation is balanced in a business unit.

### 3.2.1 Case selection

When selecting my case, the most important criterion was that the business unit was not considered an exploratory business unit of the firm. If so, the firm would be structurally ambidextrous, which argues for a firm-level analysis at the top management level in order to capture both dimensions of the paradox, or comparing managers and designs of exploring and exploiting units. My purpose is to answer how exploration and exploitation are balanced, and if my selected informants belonged to an exploratory business unit, my research would possibly lack the exploitation part. Thus, the mode of ambidexterity applied at the firm level influences how empirical data is understood.

A digital business unit is likely to have a both exploratory and exploitative focus, as digital innovation both comprises incremental improvements and cutting costs, and developing new products applying new technology. This dual focus made me perceive digital business unit as relevant in the ambidexterity context.

Most case studies in the field of ambidexterity are of U.S. origin. Due to the flat hierarchical structure and short power distance in Norwegian organizations (Hofstede, 2017), it is interesting to study ambidexterity challenges in this context, especially since multiple scholars call for multi-level studies. Conducting a multi-level study in a Norwegian firm possibly yields different results than in an American context, as organizational/managerial levels are less distinct here. This tipped the scale in favor of selecting a Norwegian company.

Furthermore, since an ambidextrous strategy is proven to be more effective in rapidly changing industries (Raisch & Birkinshaw, 2008), I wanted my case company to be in an environment characterized by vast and recent changes in technologies, regulations, and customer demands. This applies to a lot of industries today, but after considering different industries, I landed on the financial services industry, which has - and will - experience huge changes in its core markets and technologies. As the famous quote by Bill Gates goes: "Banking is essential, banks are not". Deregulation and technological advances lower the barriers to entry and intensifies the industry rivalry in this sector, which confronts firms in this space with discontinuous change and pressures to both explore to exploit.

I finally selected my case business unit to be the recently established Digital Business Development unit of Storebrand ASA. Storebrand is a mature firm in the Norwegian financial services sector. I believe the fact that the case division is "digital" makes it relevant in the ambidexterity context because digitization implies a need for ambidexterity: digitization is required both to succeed in the current market, and in order to remain viable in

the future market. A substantial part of the innovation in the financial services sector will happen by transitioning from manual to digital processes (Forrester Research, 2017). By establishing Digital Business Development, Storebrand demonstrates that they have commenced this journey.

I would not consider Digital Business Development to be purely exploratory. This is based on the assumption that digitization requires both exploration and exploitation, which also is illustrated by the tripartite mandate of the unit: to create profitable growth in existing markets through digital customer journeys, digitize and improve existing products and services, and discover new business opportunities. Here, the latter represents the exploratory focus, while the other two represent exploitation and incremental innovation. This indicates an ambition to both explore and exploit.

Furthermore, since qualitative research requires good quality access to senior leaders, I selected a company that I am acquainted with through previous work experience. I have worked in the insurance, bank, and risk departments of Storebrand besides my studies. This has provided me with a network in the organization, which made it easier to get interviews with key informants. This was an important factor considering the limited time I had writing this thesis.

The time constraint was also an argument for choosing to conduct a single-case study. While multiple-case studies provide greater opportunities for comparison across companies or industries, the amount of data would possibly be too large. In addition, I am not sure comparison across businesses would add value as generalizability is not the goal of case studies, nor is it the objective of social research (Thomas, 2010). By choosing to conduct a single-case study, I can provide

greater detail in my analysis and hopefully, by interviewing different leaders, generate sufficient variety to be able to develop new theoretical insights (Birkinshaw et al. 2016).

### 3.3 METHOD OF DATA ACQUISITION

#### 3.3.1 Acquisition of Empirical data

My data collection process began with the collection of intensive data (Fletcher, 2017). After the two initial meetings, I conducted semi-structured interviews with 10 leaders in different roles in Digital Business Development, asking them to describe in detail how they attempt to simultaneously explore and exploit and to identify the elements that helped them or hindered them in doing so. The interviews were my primary source of data, but observation and analysis of written material were applied for triangulation of methods.

Source of Data	Description
Semi-structured Interviews	10 out of 13 leaders of DBD
Observation	Town Hall Point (1,5 hours)
Documents	<p>1 <i>The Establishment of Digital Business Development</i>, [Word-document]</p> <p>2 <i>About the Digital Board</i>, [Word-document]</p> <p>3 <i>About the Digital Board</i>, [PowerPoint-slides]</p> <p>4 <i>Organization Chart DBD</i>, [PowerPoint-slides]</p> <p>5 <i>Storebrand's overall Strategy</i>, [PowerPoint-slides]</p>

Table 7: Data sources

### 3.3.1.1 Selection of informants

The collaboration started with two introductory meetings on March 1st 2017, to ensure the fitness of Digital Business Development as my case. I wanted to understand the background for why the unit was established, as well as how it was organized. My first meeting was with Jostein Chr. Dalland, the Head of Digital Business Development, and the Head of Group Strategy, Camilla Leikvoll. After the meeting with Jostein I wrote a short introduction to the study and a brief problem description, which he forwarded to the other leaders in the unit.

I got positive feedback on my research questions and 10 out of the 13 leaders of the business unit volunteered to participate in the study. Therefore, the group of participants was not influenced by stakeholders such as my contact person who is the Head of the Department. For instance, one could imagine that he would want to control which leaders I spoke to, for instance to make it seem like they were better at addressing the

ambidexterity challenges than they truly are. Therefore, the way participants were selected strengthens the integrity of my study. A negative aspect of this method, is that this group of leaders that volunteered may be the ones that feel strongest about the problems presented, representing the “extreme points”, but since I interviewed almost all the leaders of the unit I expect to capture different viewpoints from my respondents.

Figure 4 shows the organizational structure of Digital Business Development, where interview objects are highlighted in yellow. Together with the organizational chart above, interview objects were selected using Probst et al. (2011)'s framework for ambidextrous leadership, which demonstrates how this is shared across hierarchical levels. This model states some sub-paradoxes of each level, but I did not take these into consideration as I wanted to develop my own model of how the different leaders of DBD address the tensions that emanate from the paradox of exploration and exploitation. The purpose of using

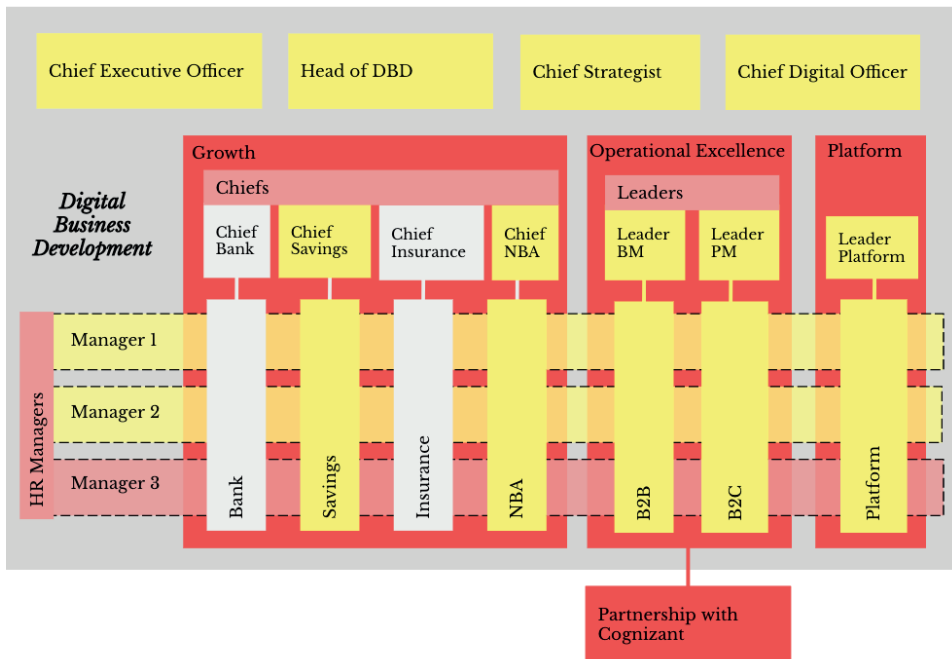


Figure 4: Selection of Interview Objects based on the organization chart of DBD

Probst et al. (2011)'s model was to ensure coverage of all important roles and provide a way of categorizing the different types of leaders. I chose two leaders from each category, except from Line Management, which I have named Team Management, where I have a total of four leaders. This is because the business unit is divided into two main areas: Growth and Operational Excellence - so I interviewed two team level leaders in each of these areas. Figure 5 provides an overview of the leadership functions I chose based on Probst et al. (2011)'s model.

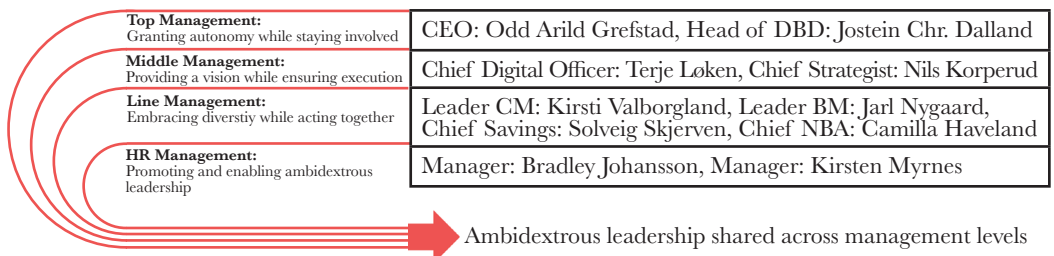
### 3.3.1.2 Making the interview guide

Making an interview guide served as a way for me to prepare for the interviews. I chose a semi-structured format to ensure flexibility to explore and update my interview guide throughout the process. I asked the same main questions to each respondent, which is a Moderate Constructionist approach to capture different viewpoints of reality.

My interview guide consisted of open-ended "how" and "what"- questions. Each question belonged to a predefined category of my a priori framework. This theoretical framework will be described in further detail in the following section (3.3.1.3). As I wanted to create a safe space for the interviewees to describe their day-to-day challenges, and to make the interview more like a conversation, I conducted semi-structured interviews. For each topic in the framework I formulated a main question, accompanied by follow-up questions. Together, these topics comprise the scope of my interviews (Flick, 2015).

### 3.3.1.3 Scope of the Interviews

The theoretical a priori framework was created after an extensive literature review conducted during the Fall of 2016, see Appendix. The focus when constructing this framework was on discovering the leadership behaviors associated with exploration, exploitation, and the balancing of the two. The framework consists of main topics that are viewed differently when working with exploration and exploitation: People, Goals, Risk/Failure, and Motivation. When working with exploration, it is important for the leader to empower people, encourage risk and failure, provide long-term goals, and trigger intrinsic motivation. When working with exploitation, on the other hand, leaders focus on unity and training people, set short term goals (measuring short-term profit), work to avoid risk and failure, and reward by extrinsic factors of motivation. The framework also includes some "balancing elements": alignment, collaboration, and integration - and to ensure that resources can be leveraged across exploration and exploitation efforts.



**Figure 5: Selection of Interview Objects based on Probst et al. (2011)'s model**

### 3.3.1.4 Execution of the interviews

The interviews were conducted at Storebrand's HQ in Oslo, face-to-face, during the period of March 27th to 31st, 2017. Each interview lasted for about an hour and was recorded using a dictaphone. The interviews were guided by the main topics from the a priori theoretical framework described above (see also Appendix 1). Additionally, I took notes during the interviews, which was helpful as several of the informants were drawing on the board to explain concepts during the interviews.

The framework was introduced to the interviewees by the end of each interview, which can be viewed as a projective questioning technique. I was conscious not to let this shape the responses, and used the framework more as a tool to make sure all topics were covered, to sum up each interview, and to allow the respondents to see how the topics were related to each other. The informants were asked to comment on the categories in the framework, to elaborate on issues they felt extra important. This ensured that all predefined topics were covered in each interview.

### 3.3.1.5 Triangulation

In social science, triangulation means to view a research issue from at least two vantage points (Flick, 2015). I used observation and written material as methods of triangulation with the interview data. This allowed me to triangulate both with methods (interviews, observation, written material) and with different kinds of data (statements, observations, facts) (Flick, 2015).

Observation was achieved by attending a Town Hall Point on March 29th. This is a meeting that once a month replaces the weekly 30 minute stand-up meeting, called Town Hall Meetings where all members of the business unit gather. The Town Hall Point is longer (1,5 hours instead of

30 minutes), and took place in the auditorium (instead of in the office landscape). I was told that the content, however, was similar, except from a vision-mission-values exercise at the end, "Storebrand's Driving Force", led by the managers. Additionally, they launched a new partnership with a start-up company at this meeting, with an app that aims to make personal saving more fun. I was sitting at the back row taking notes on my ocomputer during this meeting. Attending this meeting provided me with a more direct insight into practices and processes at Digital Business Development (Flick, 2015). Leadership involves several social processes, such as selling ideas, influencing others, energizing employees, etc. Observation provided me with realistic and contextual data about how the unit is led (Eisenhardt & Graebner, 2007).

My analysis was also supported by documents that my contact person has sent me throughout the research period, as they provided a way for me to separate subjective opinions of interviewees from how the organizational model was intended to work. This allowed me to observe the differences between intentions and practice, which was valuable as this is one of the main critiques towards ambidexterity theory: it explains why but not how. The documents included background information about the establishment of the business unit (slide-deck and document), a presentation on the purpose of the Digital Board, a slide-deck presenting Storebrand's overall strategy, and an organizational chart over DBD and the executive team. I read these documents both before and after the interviews were conducted. For instance, the intention is that all members of DBD participate in the Guilds, but the reality is that only parts of the business unit do this in practice. This fulfills my intended purpose of the triangulation: to offer insights that might refute or reinforce my interview findings (Forster, 1994).

## 3.4 METHOD OF THE DATA ANALYSIS

As described in the Data Collection section, my unit of analysis is leaders in DBD. To provide a comprehensive description of how the paradox of exploration and exploitation is balanced in DBD, I applied two levels of analysis. The managerial level is a level of analysis as I wanted to investigate how the managers balance the paradox of exploration and exploitation in practice, but I collected data about the leaders in order to also say something about how the paradox of exploration and exploitation is balanced at the business unit level.

### 3.4.1 The Role of Theory in My Research

Case studies have been suggested for a wide variety of purposes, ranging from deductive theory testing to inductive theory development (Birkinshaw et al. 2016). I have chosen an abductive approach, which is a view that resides in between deduction and induction. The reason for this choice is the exploratory nature of my research: I seek to understand the phenomena in the business unit using ambidexterity theory, however; where current ambidexterity research fails to describe the reality of how the paradox of exploration and exploitation is balanced by the leaders of the unit, I contribute to theory development or creation.

### 3.4.2 Transcribing the interviews

After the interviews were conducted, they were transcribed word for word, verbatim. When transcribing, researchers may leave out what they find to be irrelevant as they go, but due to my abductive approach, I did not want to risk removing information that turned out to be important later in the process. I transcribed the interviews alongside conducting them, which provided me with a clearer image of the information provided in the interviews, something that

was helpful when modifying the interview guide throughout the data collection period.

### 3.4.3 Coding with NVivo

Qualitative studies “allow researchers to more closely capture individuals’ own subjective experiences and interpretations (Graebner et al., 2012, p.278), as they are able to express themselves in their own words. This generates a lot of data (for me it was 90 pages of transcription with dense text), which can be a challenge of the chosen method (Bryman, 2016). Therefore, I created a case study database using the computer program NVivo. Following CR ontology, my data analysis began with searching for “demi-regularities” at the empirical level of reality (Fletcher, 2017). This was performed by creating categories by creating nodes consisting of quotes in the transcriptions, to discover tendencies in the qualitative data. Some of these categories were created with the a priori framework in mind, others not. Thus, the theoretical framework helped me understand the data, but I was also open for modifications. This reflects my abductive approach.

### 3.4.4 Developing the theoretical framework for the analysis and conducting the analysis

The theoretical framework was not static; it was influenced by the data. Dubois and Gadde (2002) define this as “systematic recombination”, which is why new theory was included to explain some of the findings in the analysis. Therefore, the framework was modified throughout the entire research process, until after the analysis (Chapter 5) was completed. The final theoretical framework can be found in Chapter 2.4, Figure 3, and in this section I will describe how this framework came about.

Initially, the chosen level of analysis was the managerial level as I wanted to investigate how the paradox of exploration and exploitation was balanced at the different



managerial levels. Furthermore, contextual ambidexterity was adopted as my theoretical outset because exploration-exploitation decisions are pushed down to lower managerial levels, which is an important indicator of contextual ambidexterity. Following the contextual ambidexterity theory, managers of a business unit should create a favorable organizational context where exploration-exploitation challenges can be resolved. Therefore, at the managerial level of analysis, I included Ghoshal and Bartlett's (1994) four behavior-framing attributes of support, discipline, trust, and stretch, as these elements define the organizational context of the business unit. Analyzing the empirical data with these elements in mind, helped me understand how the leaders shape the organizational context in Digital Business Development.

A second argument that supported the choice of contextual ambidexterity as my theoretical outset, is that it is the research stream is most strongly related to organizational culture (Gibson & Birkinshaw, 2004), and the overall recurring themes observed in my data, related to organizational culture, which made contextual ambidexterity a suitable initial theoretical framework, as it seeks to explain these cultural elements. However, I did also identify some differentiation tactics, i.e. structural mechanisms applied at the top management level. This argued for adopting a second level of analysis: the business unit level, and it also revealed that different management levels can apply different balancing modes.

Seeing the need for a second level of analysis, I included Tushman, Newman and Romanelli (1986)'s Congruence Model in my theoretical framework to understand the approaches to ambidexterity employed at the business unit level. This allowed me to describe how the key success factors, formal organization, people and culture were related

to each other in Digital Business Development, and how these differed across the business unit. This proved to be important in later iterations, especially when addressing RQ3, as seeing interaction effects between the managerial and business unit levels of analysis allowed me to describe how the different leaders influence the organizational alignments to pursue exploration- or exploitation-oriented activities, and vice versa.

Since I aimed to understand the practical implications of ambidexterity challenges, I also adapted the dynamic capabilities perspective presented by Birkinshaw et al. (2016) in my theoretical framework. As opposed to O'Reilly & Tushman (2008; 2011) and Dutta (2012), who both represent the structural ambidexterity research stream, Birkinshaw et al. (2016) take the chosen balancing mode of the paradox into account developing a dynamic capabilities perspective on contextual ambidexterity. This theory helped explain how the organizational context of DBD is shaped by its leaders, and provided practical insights into how the managers address the tensions in practice.

Note that there is a dotted arrow between "Reconfiguring" and "Shaping behavior-framing attributes" in the framework. This is because context-shaping capability is similar to reconfiguring in Teece's tripartite categorization of dynamic capabilities. Reconfiguring means shaping the context when contextual ambidexterity is the prioritized balancing mode. Also, in the framework, dynamic capabilities is restricted to the context of ambidexterity literature, as dynamic capabilities is a research field in itself, regarding how firms can adapt over time to achieve sustained competitive advantage (Teece et al. 1997). The terminology that the analysis follows is Birkinshaw et al. (2016)'s notion of lower-order and higher-order



capabilities - where sensing and seizing are labeled lower-order capabilities, and the higher order capability of context-shaping is synonymous with reconfiguring.

In ambidexterity literature, the reason for looking at managers' ambidexterity is that it has been shown to increase ambidextrous behavior in followers (Zacher et al. 2016). Thus, by developing context-shaping capabilities, managers can create a supportive environment, systems, and processes for exploration and exploitation. While dynamic capabilities has been accounted as a promising concept for understanding ambidexterity in practice, current literature is largely theoretical and abstract. Therefore, I included the research stream of ambidextrous leadership behaviors to better be able to describe how the leaders of Storebrand DBD balance the paradox in practice. Rosing et al. (2011)'s opening and closing leadership behaviors and the transformational and transactional leadership behaviors described by Baskarada et al. (2016) to foster exploration and exploitation serve this purpose.

Throughout the analysis process, I kept the different management levels in mind, based on the assumption that the paradox is nested across different levels (Andriopoulos & Lewis, 2009; March, 1991), which implies that different leaders have different responsibilities and functions in fostering ambidexterity (Probst et al. 2011). In consequence, all the dimensions of the analysis were tied together, as I decided to consider each management level in terms of balancing mode applied, examples of dynamic capabilities developed, and leadership behaviors observed. Combined with an assessment of how the paradox is balanced at the business unit level, it was possible to observe interaction effects between managerial and business unit levels of analysis. The analysis at the business unit level was con-

ducted as comparative analysis of the different alignments in DBD. This way, I was able to say something about how each management level contributes in balancing the paradox of exploration and exploitation so that ambidexterity can take place in the different parts (alignments) of the business unit, and then to create a holistic perspective on how the paradox is balanced by observing the combined efforts of organizational design and leadership approaches.

### 3.5 REFLECTIONS ON THE METHOD

In this subchapter I will provide my reflections on the chosen method, as a way to round off this chapter. I will structure these reflections around Guba & Lincoln (1985)'s notion of trustworthiness, which is a good way to assess the quality of the study (Halldórsson & Aastrup, 2003). This includes four concepts: credibility, transferability, dependability, and confirmability.

*Credibility* relates to the extent to which other people believe or can trust the findings of my thesis. According to Halldórsson and Aastrup (2003, p.327), credibility is determined by: "the degree of "match" between the respondents' constructions and researchers' representation of these". To mitigate the risk that respondents feel that quotes are taken out of context, I offered my informants to look over, correct and confirm citations and whether these support the results we present (Halldórsson & Aastrup, 2003). Triangulation with data, statements and methods, provided me with a more complete picture of the research issues, allowing me to view the data from different vantage points. This is also believed to strengthen the credibility of my findings.

*Transferability* is about showing that findings are applicable in other contexts. Therefore, generalizability is an important aspect of transferability; the extent to which the study can make generalizations about the world (Halldórson & Aastrup, 2003). However, since I am conducting a qualitative single-case study, generalization of findings across contexts is not the aim of this thesis. Single-case studies are, however, suitable for furthering the understanding of complex issues in a given context. Dubois & Gadde (2002) point out that the strength of single-case studies is not the power to generate general theories, but their capacity to really understand empirical phenomena. The findings of this thesis may be company or business unit specific, but it is important that a case study is able to stand on its own (Easton, 2010).

*Dependability* concerns being able to track variance; that the findings are consistent and can, if needed, be repeated. In other words, dependability is about the stability of data over time (Guba & Lincoln, 1989 op.cit. Halldórsson & Astrup, 2003). The the interview guide and use of projective questioning techniques, i.e. the a priori framework, is believed to have strengthened the dependability, even though the semi-structured nature of the interviews may have caused variance in the responses as it allowed for dialogue. I did however, make an effort to stay on track, and make sure that all topics were covered in each interview. This is believed to have enhanced the dependability of my research.

*Confirmability* in qualitative research is parallel to the objectivity of a quantitative study (Halldórson & Aastrup, 2003). This signifies that the conclusions of my study must be supported by the data itself, and not biased by my own interpretations of the data. I therefore maintained a theoretical focus, which I believed allowed me

to remain critical to the responses and not let my own predispositions compromise the neutrality of the findings. Separating methodology completely from the researcher is nearly impossible in qualitative research (Erlandsson et al. 1993), but I believe I handled this well by sticking to the interview guide and being concentrated on not asking leading question. Also, by working in structured manner with the analysis (transcribing, coding, identifying tendencies) I believe my conclusions, interpretations, and recommendations can be traced back to their sources (Halldórson & Aastrup, 2003).



Chapter 4

**CASE  
DESCRIPTION**

This chapter provides a description of the empirical data collected in Digital Business Development. I begin by describing the organization design of Digital Business Development, then dig deeper into the challenges that were discussed by the informants.

## 4.1 BACKGROUND AND MANDATE OF DIGITAL BUSINESS DEVELOPMENT

This year, Storebrand is celebrating its 250th year as a financial services institution. Its core business areas are pension savings, insurance, and banking. Storebrand's strategy has been twofold for the past five years: to achieve profitable growth in savings, banking, and insurance, and to manage their capital intensive guaranteed pension products during a period of new regulations, falling interest rates and increased life expectancy (Storebrand, 2017). When CEO Odd Arild Grefstad got his seat in 2012, the introduction of a new solvency regulation imposed strict capital requirements on the firm. His goal was to satisfactorily improve the solvency position, without asking for equity from the shareholders. This required mobilization of the entire organization, and did not leave much room for focusing on the first part of the strategy. Now, when the capital requirements have been met, growth has gained more strategic attention.

Storebrand has a strong position in the business-to-business pension savings market, with a 35 % market share - 50 % within large firms. However, this market is becoming individualized as firms don't set aside funds for their employees' retirement to the same extent as before. The CEO therefore turns to the consumer market to ensure the future success of the company:

*"We cannot rest on the customer base we have had in business-to-business anymore, we need to become relevant in the consumer market. Well-designed digital solutions will help us gain inbound traffic of individuals in B2C segments. Our strategy is to activate the 1.2 million members in B2B pension schemes, in the areas of less market share; we have 8-10 % within savings, less than 2 % in the bank sector, 4 % of the insurance market."*

(Odd Arild Grefstad, CEO)

Few industries will experience the digital revolution like the financial industry, and Storebrand acknowledges the need to create growth driven by digital products. "Focusing on incremental improvements and new business opportunities simultaneously, is very challenging" (Storebrand, 2017, p.1). This is the background for the establishment of Digital Business Development, which has been in operation from January 1st, 2017.

At the firm level Storebrand is structured as a matrix organization, consisting of corporate and private customer areas with profit and loss (P&L) responsibilities in one dimension and functional designs in the other dimension - people and technology, marketing, customer services, etc. This is called the line organization. Digital Business Development, as a business unit, is separated from the line organization in that it deals with all these areas, and is responsible for the entire value chain of the products they develop.

The new digital unit has a tripartite mandate, which is intended to facilitate the simultaneous pursuit of incremental improvements and growth opportunities. The mandate is formulated as three "Must Win Battles": to create profitable growth through digital products, digitize existing products, and discover new business opportunities. At the business

unit level of DBD, this mandate has been approached by dividing the unit into two main areas: Growth and Operational Excellence. These areas consist of groups of teams, seven in total. At the team level, Digital Business Development comprises of four Growth teams and two Operational Excellence teams, in addition to one team called Platform. The Platform team is the most technical team and does not belong to any of the main areas. The third part of the mandate - discovering new business opportunities - is intended to take place in informal structures called Guilds, formalized by a newly established Digital Board, which makes investment decisions outside the operational plan. These different parts of the business unit will be described in later subsections.

Storebrand is a mature company, and large in a Norwegian scale as 95 % of companies are SMEs with less than 250 employees, but as the Chief Strategist pointed out - they are not the biggest in their space, and competitors have far more resources. They therefore need to keep these constraints in mind when pursuing the third part of their mandate, and informants stressed that people need to be smart when exploring new business opportunities - spending the least amounts of resources possible. The CDO and the Chief Strategist argued that this is a positive thing as it forces people to be creative.

All team members of DBD (80+ people) belong to one of three fixed resource pools, to which they were allocated at random. Each resource pool is managed by a manager with the human resources responsibility. Usually, in organizations, the team leader also has the people responsibility and the commercial responsibility (P&L), but in DBD the team leader only has the commercial responsibility. The reason why team

leaders do not have the people responsibility is that team members, over time, will rotate and work in different teams. This makes the resources pools fixed, and the teams flexible. This way, a rotation need not entail restructuring the entire unit, something that would bear large overhead costs. Moving competencies and capacity by demand is easier with such a model, and ensures that people in one dimension is not locked to that dimension. The Chief Strategist elaborates:

*“This way, we aim to achieve a more dynamic organization. Designing the organizational model we looked to management consulting firms, where employees report to somebody else than the ones they work with on a project. Team allocations are made at a higher level.”*

(Nils Korperud, Chief Strategist)

The HR managers are responsible for staffing, recruitment, performance management, and organizational development. One of the managers explains:

*“Our job is to facilitate organizational development and find the right balance of competency and capacity between the three areas: growth, operational excellence, and guilds. We ensure that the teams have competencies and capacities suitable for the current tasks at hand”*

(Bradley Johansson, HR Manager).

The CEO of Storebrand is now seated in the same office landscape as the other members of DBD. He believes that this sends a signaling effect to the rest of the organization - communicating the importance of the digital shift. He also hopes that his presence motivates the people of the unit to be more ambitious, that they feel like they are seen and that what they do is important for the further development of the firm. The other members of the top/middle management in

DBD argued that they try to motivate people by empowering people, delegating much of their decision power to team level leaders to provide them with a sense of being able to make a difference.

In order to trigger motivation and sense of belonging, the Head of the business unit leads frequent meetings where all members of the business unit are present. These are called Town Hall Meetings and are held weekly. I observed one of these meetings during my data collection process, and will present the findings from this meeting in section 4.5.

The Head of the business unit has the following view on motivation: *“The most important thing I can do to motivate people is try not to kill their motivation. Motivation needs to come from the inside. To kill motivation is dead simple. I could do it in my sleep. As a leader, all I can do is kill motivation. People say that “as a leader, you can motivate people”, but you really can’t. You can trigger something that was there already.”*

(Jostein Dalland, Head of DBD)

The HR managers believe a lot of the motivation comes from the teams. Therefore they engage in frequent dialogue with team leaders. Another measure to create a sense of belonging and a feeling of being seen, is that teams have daily stand-up meetings. The Consumer Market team leader tries to shed light on the importance of their work when speaking to her employees.

My respondents stressed that since the business unit was established only three months ago at the time of the interviews, the model is a work-in-progress. *“It is not like you make an organizational transformation and you’re done. Things like these take time, it is a journey that we have just started.”* (Odd Arild Grefstad, CEO).

I will in the following subsections explain the elements that comprise Digital Business Development, and elaborate on the functions of the Growth teams, the Operational Excellence teams, the Guilds and Digital Board in the business unit.

## 4.2 GROWTH

There are currently four growth teams in the business areas of Banking, Insurance, Savings, and one team specialized on Customer Development, NBA (Next Best Activity). The teams are cross-disciplinary and consist of both IT developers and business developers. Additionally, the teams have project managers with the operational responsibility. They are led by a Chief who has the strategic and commercial responsibility.

The growth teams are autonomous, which means that they are responsible for delivering on some growth objectives set by the line organization, but arguably they are free to define how they will reach them. When designing the model for the growth teams, Storebrand was inspired by Spotify, which is organized in so-called squads; autonomous teams in a decoupled but integrated structure (Storebrand, 2017). The growth teams follow a lean startup methodology, which emphasizes speed, rapid prototyping, and testing. They select customer journeys or products to improve, and are focused on thinking differently when approaching these problems.

*“The growth teams are built for speed - they have business developers and IT developers who sit together, they can work on prototypes and test as they go. I believe it ensures rapid progress and shorter time to market, as you don’t have to ask for permission from anyone and everyone in the organization when pursuing an idea.”*

(Kirsti Valborgland, Leader CM)

While growth teams have the freedom to shape their own strategy, they do deliver on the commercial goals of the line organization, named Customer Area Norway. This means that Growth teams do not have their own budget. The Chief Strategist explains the reason for this:

*“We are shifting from a delivery-focus towards a goal-focus. Previously, the product pipeline was defined at the beginning of the year, which made it difficult to change. Now, only the goals are defined at the beginning of the year, and the product pipeline to reach those goals changes throughout the year.”*

(Nils Korperud, Chief Strategist)

This also means that a substantial part of their strategy is predetermined, since some of the goals they deliver on are very explicit. Therefore, some informants questioned how autonomous the growth teams were in practice.

The Growth teams seem to be highly motivated, according to surveys performed weekly by the managers. The Chief of the NBA team accounted that: “I am sure my team believes that we work with the coolest projects in the entire organization! People feel that they are professionally challenged and see results immediately”.

#### **4.2.1 The NBA Team**

The NBA team has three resources in India through Cognizant, and two in Vilnius, where Storebrand has most of its manual processes. It is a cross-disciplinary team, with both IT and business resources; business analysts, customer success, IT architects, data scientists, data engineers. “Our mantra is that business needs to know some tech and tech needs to know some business - that drives the best results” (Camilla Haveland, Chief NBA). While the three other growth teams, Bank Insurance, and Savings, have in-depth knowledge about one vertical, the NBA

team is aimed at capturing customer behavior across verticals. They use machine learning algorithms to find patterns in big data sets to make predictive models about the “next best activity” of the customer. Their strategy is twofold: prioritizing which NBA models to develop further, and which new ones to create.

*“I find it important to give my team the freedom to work exploratory so that our data scientists can look at patterns in data to get insights that can turn into a new model.”*

(Camilla Haveland, Chief NBA)

The team mainly focuses on existing customers today, as these are the ones they have data about, but the Chief of the NBA team, says that their next step is to work with prospecting. They have also delivered some NBA models and methods to the partner Rema Insurance, and she states that their models can be sold as-a-service in the future, which can provide new business opportunities. The NBA team gets some of their goals from the operational plan, that are set in cooperation with Customer Area Norway. These are for example “number of sales resulting from NBA-methods”, which are broken down and followed up on each month. But the NBA-team also has some goals that they set for themselves, e.g. the number of NBA models to develop each quarter.

#### **4.2.2 The Savings Team**

The savings team has mostly worked with a product that was enabled by a regulatory change. From September 1st, 2017, the Norwegian government will remove taxes on capital gains from stocks, i.e. if the consumer sells one stock to invest in a different stock, no taxes are charged. In other words, you do not pay taxes until you withdraw the capital gains from the stock savings account. This is a new product for Storebrand, but is directed



towards the same market. The Chief of the Savings team explains that this product is important for Storebrand to release for existing customer retention.

The Savings team has broken down the goal horizon of 12-36 months into monthly sales goals. Their KPIs are closely connected to the Must Win Battles, and each growth team has formulated specific goals interpreting what the must win battles means to them. For the Savings team, the chief is very focused on her KPI that concerns increasing digital sales of savings products. She further argues that they were “sold out” at the beginning of the year, and recognizes that it is difficult to change direction throughout the year.

### 4.3 OPERATIONAL EXCELLENCE

Operational Excellence consists of two teams: Business Market (BM) and Consumer Market (CM). BM works business to business (B2B) with pension savings, and CM works business to consumer (B2C) with the product areas bank, insurance, and savings. The Operational Excellence teams work with digitization and continuous improvement of existing products, by request from the rest of the organization. Additionally, the Operational Excellence teams collaborate with Cognizant in India, where Storebrand has offshored a substantial part of their IT resources.

The Operational Excellence teams face some initialization problems. These problems throw a wrench into the gears in achieving speed and simplicity. “We who work with continuous improvements are simply not rigged for speed, yet”, says Kirsti, team leader CM. The challenges relate to capacity and competency. The two Operational Excellence teams share local IT resources, four in total. This makes it difficult to priori-

tize projects and people, as CM and BM must compete for technical resources. as Kirsi explains: “We don’t have the capacity to make shifts as big as the ones the growth teams pursue. We improve stuff, we digitize existing products.”

In terms of competency, the fact that the CM team spans all product areas in the consumer market, makes it difficult to attain all this knowledge in the same team. The leader of CM explains: “Since our area is so broad, we often get requests we cannot fulfill. Building competencies take time as we have to deliver on all product areas for all stakeholders throughout the entire organization”. A second competency challenge is the collaboration with Cognizant, as their developers are not trained in Storebrand’s systems and business specific norms yet, due to the strategic partnership being fairly new (December 2016).

Collaborating with the line organization also poses some challenges. Projects ordered by the line organization should be relatively small and fairly concrete, so that deliveries can be made frequently. The leader of BM explains how it has worked so far:

*“Our teams expect well-defined projects with specified tasks. This requires that those who order know what they want and how to solve it. What we see though, is that requests are not so specific as we thought they would be. For example they can say “the customers are unsatisfied, they can’t navigate our portal” but they don’t know how to help the customers find what they look for. Vague, ambiguous, larger projects require a different kind of setup - which we have in the growth teams, but not in the OE teams.”*

(Jarl, Team leader BM)

However, it is the collaboration with Cognizant that seems to be the most significant complicating factor for Ope-

rational Excellence. One of the leaders of Operational Excellence expressed concern that the partnership has inhibited them from testing the organizational model properly. The establishment of DBD is in itself a huge organisational change, but the collaboration with Cognizant makes the transformation move slower. According to CM Leader Kirsti, "Working with India is very challenging. We work on improving the collaboration with Cognizant, continuously making the process smoother so that we get deliveries quicker, but it is difficult".

A consequence of the collaboration with Cognizant, is that the local developers' jobs have changed. Instead of coding and developing technical solutions themselves, the programmers mostly spec projects - write requirement specifications - and perform quality assurance of Cognizant's work. Several informants expressed concern about how this affects the developers' motivation. This culminated in resignation in March.

The Leader of CM explains that the Operational Excellence teams feel like they got dealt a bad hand, and that her employees are envious of the ones that work in Growth. Team rotations is therefore an important point for the management to deliver on, however, it turns out to be challenging: "We have said that we want resource rotations, but this has to be done in such a way that people don't dread being moved from a growth team to an operational excellence team" (HR Manager).

*"It would be great if we had more intrinsic motivation in our teams, but I think we have to realize that it is less exciting to work in Operational Excellence right now."*  
(Kirsti Valborgland, Leader CM)

The managers and team leaders are working to figure out how they can retain employees and keep them motivated. One suggestion that was tried out in the beginning of April was to alternate weekly between own projects and quality assurance/specing, as the cognizant teams work in two-week sprints, which allows Norwegian programmers to work on other projects during the lead time.

The collaboration with Cognizant implies work tasks different from the tasks they were hired to do; today they spend most of their time on quality assurance: "Our coders feel that their work has ceased to give meaning. They don't code anymore, they check that other people's code meets quality standards." (Bradley Johansson, HR Manager). Quality assurance of Cognizant's work is tedious and informants stated that it weakens the motivation of the Operational Excellence team members. The programmers in India are not trained in Storebrand's systems and ways of working, so even though requirements are specified in detail, a substantial part comes back with errors.

Operational Excellence works with continuous improvements on demand from the line organization, while Growth teams are autonomous and select which product clients and customer journeys to work with in order to reach their goals. In practice, however, it is not that simple. First of all, there seems to be a continuous discussion about what is a Growth initiative and what is Operational Excellence:

*"It was the intention to draw clear lines between Growth and Operational Excellence, but then reality hits us and it turns out to be difficult to say if an initiative contributes primarily to growth or primarily to improvement. After all, we mostly improve existing solutions in DBD."*  
(Kirsti Valborgland, Leader CM)

An example of this is the Insurance growth team, which is currently working on developing a new buying solution for all insurance products. Despite being an improvement of an existing solution, the project is held by a growth team because there is a goal to increase conversion in digital channels, as this would result in customer growth.

*“It is like this in most projects held by the Growth teams: one could easily argue that they contribute to improving existing solutions. They achieve growth by improving existing products and services.”*

(Kirsti, Leader CM).

The blurred lines between the responsibilities of Growth and Operational Excellence is challenging because the two areas deliver on different goals. “Some of the MWBs are very focused on growth. So the opex-teams deliver on orders from Customer Area Norway’s goals and the effectiveness goals outside of DBD.”, Kirsti explains. Furthermore, the KPIs of DBD mostly concern the growth teams, so success for Operational Excellence is when they can deliver on time and cost to the line organization.

As we have seen, the Operational Excellence and Growth areas apparently both work on improving existing solutions - but their approach to doing so is very different. Their goals do not have the same time horizons and their work style and tasks are disparate. At the beginning of my data collection process, during an initial meeting with the Head of the Department, the words exploration and exploitation were used to describe the endeavors of Growth and Operational Excellence, respectively. I will discuss this further in the analysis in light of the theory and definitions presented in chapter 2.

## 4.4 GUILDS

The Guilds are informal groups where people meet regularly to learn about for instance new technologies and new work methods. The CDO explains the purpose of the guilds:

*“The guilds are our only and perhaps most important mechanism for professional development. In a hierarchical structure, the divisions are both structuring work and people, and the professional development of its human resources. In Digital Business Development, this is done separately: the teams are only focused on the results, and it is the guilds that ensure that people from different teams can learn from each other to develop their own praxis.”*

(Terje Løken, CDO)

Employees are allowed to spend up to 10 % of their time in a guild of their choice. Everyone in DBD are required to join at least one guild, but guilds are also open for employees of the entire organization, which is described as a way of including everyone in innovative efforts:

*“We try to avoid boxing innovation into one unit, but create something bigger... We are breaking down the barriers, encouraging people to volunteer so we can bring in those who are interested in innovation. This way you have not restricted the innovative power to those who work in an innovation-unit; it thrives in the guilds. We get tentacles out in the organization.”*

(Nils Korperud, Chief Strategist)

While everyone in Storebrand can join the guilds, my impression is that the members of DBD, especially the Growth teams, are the most active. According to the Chief Strategist there are currently 25 % from the rest of the organization in the Innovation guild, but he expects this to change as the word-of-mouth spreads to the entire organization. In fact, when

I asked the leaders of the Operational Excellence teams how their team members participate in exploratory efforts, the answer was that they didn't because they had been treading water with making the collaboration with Cognizant work.

It is the role of the CDO to sponsor the guilds and ensure that Storebrand has the right guilds, meaning that they are filled with content that is relevant for its members. The content of the guilds will change over time, but the common theme will be innovation.

*“We are still in the early days of this, so we have yet to see the outcome - except that it is extremely fun and cosy - but I'm sure we will. It's a way people can work cross-disciplinary with something they share a passion for.”*  
(Jarl, Leader BM)

The most frequently mentioned guilds were the Innovation guild, Pitching Guild, and the Modern Ways of Working guild. The latter is focused on teaching the lean startup methodology, and tools associated with innovation such as “The business Model Canvas”. The Innovation Guild has got the overall responsibility to generate ideas. This guild is led by Chief Strategist, Nils Korperud. He explains how they work with idea generation and selection:

*“We want a funnel, not a pipe: we don't want all ideas to get through. This requires quick verification with the least resources possible. Our resource scarcity forces us to be creative and seek consciously. In theory, this means that in order to select ten ideas, you need to generate a 100 ideas. After further developing the ten ideas, you narrow it down to one, which you bring to market. We need to acknowledge how much effort there is behind 10 ideas.”*  
(Nils Korperud, Chief Strategist)

Each quarter, a certain number of the ideas developed in the Innovation Guild are pitched to the Digital Board. Also, the members of the leader group in the business unit, that is, all the leaders except the HR managers, have meetings where they discuss new business opportunities. Informants stated that they all feel a personal responsibility to look for new business ideas. The Digital Board selects one or more of these ideas to grant an investment with a time-frame of a given number of months. I will elaborate on the function of the Digital Board in the next subchapter.

## 4.5 DIGITAL BOARD

The Digital Board was established in order to secure Storebrand's future growth and competitiveness. The mandate of the board is to position Storebrand in a market with new competitors, new and changed business models and customer behaviors (Storebrand, 2017).

*“The Digital Board is a new and more formalized mechanism that shall force us to think outside the box and explore new opportunities and partnerships, and get investments to realize them.”*  
(Terje Løken, CDO)

The Digital Board is lead by the CEO and has a budget outside the operational plan and commercial goals. Each quarter, the new ideas are pitched into the board to get funding.

The Head of DBD has the responsibility for choosing which ideas are pitched and how they are conceptualized. One of the guilds, the Innovation Guild, has got the overall responsibility for generating ideas.

Together with Jostein, the Innovation guild makes sure that the requirements from the Digital Board are met, e.g. how many ideas should be pitched each quar-

ter. Furthermore, the Chief Strategist has two resources that work 50-50 in growth teams and with finding partnerships. “We say that they are out hunting for elephants.” (Bradley Johansson, HR Manager).

## 4.6 TOWN HALL MEETINGS AND TOWN HALL POINT

Each week, there is a 30 minute stand-up meeting in the division. To Jostein Dalland, the Head of Digital Business Development, it is important that everyone gets the same information at the same time:

*“I have weekly Town Hall Meetings and monthly leader-meetings. Usually it is the opposite: leaders meet often and forward the information to their organizations. But by the time the information reaches the individual employees, it’s like a broken-telephone game. Therefore, I turn the flow of information around.”*

(Jostein Dalland, Head of DBD)

The meetings are held in the open office landscape, and there are no powerpoints or people taking minutes. It is an informal setting where everyone simply stands up, and Jostein and other leaders give updates about the business.

*“Town Hall is an example of the culture we try to create. I use the Town Halls to energize people - make everyone feel that they can influence goals and results. I achieve this by using colloquial language: instead of quarterly numbers or monthly reports, I call it “status in the shop”. Simplicity is key - we love to glutton in complexity, but what we do really isn’t that complicated.”*

(Jostein Dalland, Head of DBD)

Once a month there is a longer Town Hall Meeting, called Town Hall Point. This meeting lasts for 1,5 hours and is held in the auditorium. At these meetings, the Head of DBD presents

the quarterly numbers - the “status in the shop”. I observed this meeting on March 29, 2017, as a part of my data collection process. I will therefore in the following subsections describe the content of this meeting. On March 29th, the Head of DBD also gave numbers on how NBA models and machine learning had improved conversion in digital channels, and presented the new strategy for the Insurance team and Bank team.

Then, Gustav Gorecki, one of the resources that works 50-50 with new partnerships and in a growth team, presented Storebrand’s new partnership with a fin-tech startup. He illustrated the journey of finding this partnership as a curve of his own motivation, how he started out as very optimistic, then had a couple of setbacks along the way, until they finally managed to find a fit. He explained that Storebrand cautious with startups, as they don’t have the resources to enter partnerships with startups that lack proof of concept or have a certain market traction. He is very excited about the new partnership.

Lastly, the HR managers led an activity where all employees of DBD were to discuss what Storebrand’s Driving Force means to them, and which element they regard as most important to them. Storebrand’s Driving Force is a model that consists of the company’s vision, purpose, its “what”, and its “how”.

Storebrand’s overall vision is “Our customers recommend us”. Their purpose is to give people “a future to look forward to”, which they will achieve by providing “better pension, simply and sustainably” (what) and by being “a courageous pathfinder” (how).

One of the HR managers explain the why they are raising awareness about the driving force:

*“At Digital Business Development we are working by the core values of speed and simplification. However, we need to keep the driving force of the company in mind. We are doing this activity because we want everyone to have an active relationship with our driving force.”*

(Bradley Johansson, HR Manager)

The division was divided randomly into three groups, one per manager. I observed the group led by Bradley. He put four pieces of paper on the ground, one per element of the driving force, and told the group to stand on the element that is most important to them. Most people chose “pension, simply and sustainably”, one picks the purpose, one picks vision, and the rest go to “courageous pathfinder”.

The Chief Digital Officer explains why he chose courageous pathfinder: *“I chose courageous pathfinder because of its dual focus: it means something to us as employees, and to our customers. We have to be courageous to try new things; new ways of working, new technology. It guides me everyday, it feels close. Additionally, I hope it conveys to our customers that we take a different position than our competitors in an industry that is not always on the customer’s team. That we provide simpler and better products for the customer.”*

(Terje Løken, CDO)

The next step of the activity was to talk about what it means to be a courageous pathfinder, but with a twist; to first answer “what does it mean to not be a courageous pathfinder?”. This revealed information about the culture and challenges that did not come up in the interviews. The group mentions criticizing failure; being concerned with finding out who made the mistake in-

stead of how to fix it. “Traditionally, it is not the right answer in Storebrand to say you did something because you thought it was right”, says Terje, CDO.

Finally, the group discusses what it means to be a courageous pathfinder. Bradley says: “It takes courage to say “no”, to kill off projects. Right now we have a lot going on.”. Terje follows up: “But sometimes being a courageous pathfinder means saying “yes” too, without a lot of analyzing, calculating, thinking, and asking for advice, before taking action.”

On another note, an example from the interviews of what it means to be a courageous pathfinder, was a product prototype called “Muslim Mortgages”. The minimum viable product was developed by one of the growth teams, and was a landing page for interest-free mortgages for people who cannot take loans with interest rates due to religious concerns. Paying interest on loans is unethical according to Islam, so the loan would be replaced by shared ownership with the bank, and the customer would pay rent to the bank until they had full ownership of the house. The Chief of Savings explains how it went:

*“We did not consult with the rest of the organization, but we knew it would cause a commotion. We got a green flag from our CEO, he said we could take it. The campaign got a lot of attention in media, Jostein had to attend debates on TV, our communications officer had to speak with journalists... But what was important is that we got positive feedback from the organization - it makes me feel like the purpose is alive in the organization.”*

(Solveig Schjerven, Chief Savings)

## 4.7 SUMMARY

As we have seen in this chapter, Digital Business Development is a fairly recently established business unit, that has been divided into two areas: Growth and Operational Excellence. These groups have different approaches to improving existing products and services. Additionally, there are informal groups that run across this structure, called Guilds. New business opportunities are searched for here. This chapter also provides insights into the culture that the leaders are trying to create, and how the organizational model and processes serve as means to meet the challenges of the digital transformation.



Chapter 5

# ANALYSIS



I begin this chapter by describing exploration and exploitation in Storebrand DBD, to shed light on some of the tensions present in the business unit. I then demonstrate with the use of ambidexterity theory how exploration and exploitation is aligned in the business unit and how the leaders balance the paradox. After analyzing how the paradox is balanced at the business unit level (organizational alignments) and the managerial levels (balancing modes and leadership behaviors), I discover interaction effects between these.

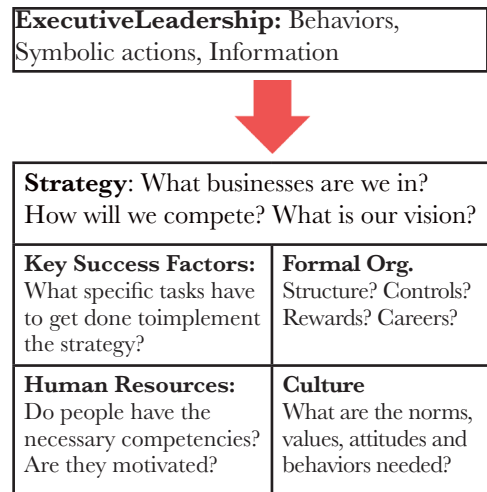
## 5.1 EXPLORATION AND EXPLOITATION AT THE BUSINESS UNIT LEVEL

In this subchapter I will use definitions of and theory about the paradox of exploration and exploitation to understand how these is practiced in DBD. This section seeks to answer RQ1 about how the paradox of exploration and exploitation is balanced at the business unit level in DBD.

### 5.1.1 DBD's tripartite mandate calls for different organizational alignments within the unit

As a response to the rapid changes in the financial services sector, Storebrand established DBD, as a part of their dual strategy of improving existing business while exploring new opportunities. The establishment of DBD represents a big organizational change, both structurally and culturally. While Storebrand is a very different company today that 250 years ago, changes have happened over a long time and have not - unlike now - required simultaneous shifts in strategy, structure and culture (Tushman, Newman & Romanelli, 1986).

With Digital Business Development, Storebrand is trying to establish alignments for exploration and for exploitation within the same business unit. This is referred to as task partitioning or spatial separation in ambidexterity literature (Gibson & Birkinshaw, 2004; Andriopoulos & Lewis, 2009). Organizational alignment means to align culture, structure and people to support the execution of the strategy (O'Reilly & Tushman, 2016). Exploring new opportunities in an uncertain environment requires a different alignment than exploitation. Nadler, Tushman & Romanelli (1986) created a framework for describing the organizational alignments, which is given in the figure below.



**Figure 6: Nadler et al. (1986)'s Congruence Model**

The key success factors in the congruence model are the three or four specific tasks that need to get done in order for the strategy to be implemented. Executive leadership articulates these key success factors, while managers create controls and rewards to measure the execution of the strategy. For this to work, the people must know where the company is headed (the strategy) and share a set of expe-

citations about how they need to behave to accomplish the objectives associated with the strategy (the key success factors), and be motivated to achieve these. The culture needs to provide norms, values and attitudes need to support the key success factors. The structure supports this by providing the right information to the right people. (O'Reilly & Tushman, 2016). When congruence is achieved between these components, the organizational alignment achieves its strategic intent.

Applying this framework to my case business unit, Operational Excellence adapts an alignment rigged for exploitation, and Growth has an exploration alignment. The strategy of DBD can be summarized using the three Must Win Battles that underpin the tripartite mandate of the business unit: to create profitable growth, improve digital products, and discover new business opportunities. Leadership will be addressed in later subsections

(5.2 and 5.3). The alignments of DBD are mapped in the figures below, using Nadler et al. (1985)'s congruence model, and serves as a way to systematize and summarize the empirical data described in Chapter 4. The terms in the figures are both theoretical terms commonly associated with exploration and exploitation (e.g. O'Reilly & Tushman, 2016) and my own observations. I will elaborate on how the different leaders shape the culture (organizational context) in chapter 5.2.

At first glance, Growth seems to be aligned for exploration. Promoting exploration, i.e. search, discovery, autonomy, innovation - requires a focus on growth, flexibility and rapid innovation. These are terms that describe Growth well. An exploration alignment is characterized by entrepreneurial people, eager to develop new skills and the ability to adapt and move quickly. Furthermore, exploration alignments demonstrate a

<b>GROWTH</b> Creating new knowledge about existing problems	
<b>KSFs</b> Scale market share Speed Rapid learning Autonomy Customer acquisition	<b>Formal Org.</b> Structure: Organic, Autonomous teams Rewards: Experimentation, commercial growth in 12 months
<b>People</b> Entrepreneurial Creative Generalists Motivated (intrinsic)	<b>Culture</b> "Fail fast forward"-mindset Flexibility/Agility Empowerment Error tolerance/error learning

**Figure 7: Organizational alignment of Growth**

<b>OPERATIONAL EXCELLENCE</b> Refining existing knowledge about existing problems	
<b>KSFs</b> Efficiency Quality assurance Detailed specifications Continuous improvement	<b>Formal Org.</b> Structure: Mechanistic Rewards: efficiency each month, careful planning
<b>People</b> Technical experts Detail oriented Analytical	<b>Culture</b> "Doing things right"-mindset No mistakes

**Figure 8: Organizational alignment of Operational Excellence**

flat, organic structure. Success metrics emphasize scale, milestones, customer acquisition and retention, and financial metrics are less useful. The explorative alignment is supported by a culture that promotes speed and flexibility, and norms and values like initiative, autonomy, and experimentation (O'Reilly Tushman, 2016). In contrast, promoting exploitation emphasizes increased efficiency, lowering costs, and incremental innovation – learning to do things faster and cheaper, which is the goal of Operational Excellence. Exploitation alignments therefore have a mechanistic structure and short-term rewards and controls (O'Reilly & Tushman, 2016).

Additionally, one can say that the guilds provide a third alignment in DBD, although their structure is much more informal. The guilds have the mandate to explore new business opportunities of a certain size, outside the operational plan. The Digital Board is responsible for the

execution of these opportunities, by demanding a certain number of ideas to be pitched in for screening each quarter and for investing in the most promising ones. As the guilds are open to everyone in DBD and in the rest of Storebrand, and voluntary for everyone to join, they have a lattice type structure (Dutta, 2012).

### 5.1.2 Exploitation in DBD

Exploitation emphasizes efficiency, refinement, choice, execution, selection, control, implementation, certainty, and variance reduction (March, 1991). These words describe the endeavors of Operational Excellence well: they refine existing resources, implement orders from the line organization, and reduce variance aiming to eliminate errors and improve efficiency. The teams work to continually improve the quality and performance of existing products and services, with help from external resources in India through the Cognizant collaboration. The Operational Excellence activities fit the definition of exploitation by Benner & Tushman (2003) and He & Wong (2004) as well, since they are pursuing incremental innovation in the same domain following the current technological trajectory. This definition also seems to fit the growth teams, as they - although aligned for exploration - improve existing products and services in the same markets and segments as before.

However, Growth and Operational Excellence pursue different kinds of exploitation. The two areas both pursue incremental innovation, but with a different goal horizon. While Operational Excellence measures results month to month and within the year, Growth has a goal horizon of 12-36 months. Some informants expressed frustration about the fact that projects belonging to Growth teams might as well belong to Operational Excellence. The Leader of CM said

<b>GUILDS</b> Creating new knowledge about new problems	
<b>KSFs</b> New business opportunities Search opportunities of a certain size Variance enhancement Adaptation Business model innovation	<b>Formal Org.</b> Structure: Informal, Lattice, Voluntary Rewards: Idea generation, experimentation Controls: Digital Board
<b>People</b> Passionate Interested in innovation Attentive to trends	<b>Culture</b> Voluntary spirit Flexibility/Agility Empowerment Error tolerance/ error learning

**Figure 9: Organizational alignment of the Guilds**

she was confused because both areas pursue incremental innovation but have different alignments. A more granular definition of innovation may provide clarity. Christensen (2016)'s notions of efficiency innovations and sustaining innovations both describe incremental innovation. Efficiency innovations generate cash, by cutting costs and by doing things faster, but they can never generate growth (Christensen, 2016). As we see in the Operational Excellence teams this is not the goal either. The endeavors of the Growth teams may be described using the concept of Sustaining innovations; these innovations improve existing products and increase market share, but limited net growth.

*Lack of motivation in Operational Excellence leads to suboptimal performance and inefficient exploitation*

As noted in Chapter 4, Operational Excellence has not yet achieved the desired level of efficiency and effectiveness, which I would like to elaborate on in this section. There seems to be two external factors causing the low performance: the organizational model and the collaboration with Cognizant are fairly young. Since the establishment of DBD happened recently, expectations between Operational Excellence and the line organization have yet to crystallize. The line organization ordering digital development from Operational Excellence are less specific in describing project requirements than Operational Excellence needs in order to deliver satisfactory, on time. This reduces efficiency as communication and deliveries needs to go multiple rounds. The same applies to the collaboration with Cognizant, as most of the deliveries come back below Store-brand's standards. The leader of CM stated that she hopes that the efficiency will get better as these collaborations mature.

The lack of efficiency also seems to have an impact on the motivation in Operational Excellence. Since the deliveries from Cognizant are sub-par, the developers of the Operational Excellence teams spend most of their time working with quality assurance (QA). This task is very different from what the team members expected when being reallocated to Digital Business Development - they want to code. The informants note that these developers do not necessarily want to develop new stuff - they can be highly motivated improving existing solutions - but they need to see quick results of their work in order to feel valuable. Additionally, informants mentioned that most of the KPIs and Must Win Battles are more relevant to the growth teams, which also kills motivation. The difference between the goals in Operational Excellence and Growth is that the growth teams have managed to create a sense of ownership in reaching the goals, despite delivering on the commercial goals of Customer Area Norway. Operational Excellence does not have the same sense of ownership, they do not get to see the results of their work as they are handed off to someone, somewhere else in the organization.

The lack of motivation and slow collaboration processes lead to a lack of effectiveness in doing what the Operational Excellence teams are aligned to do: exploit. Operational Excellence has the alignment described in literature to foster exploitation. The reason for the suboptimal performance might be appropriated to external factors, i.e. Cognizant and the line organization, but it is difficult to say something about which factors in the congruence model are the most influential on exploitation. The Leader of CM hopes that motivation and effectiveness will improve over time, as the col-

laboration with ordering functions and offshored resources runs more smoothly.

### 5.1.3 Exploration in DBD

Exploration is captured by terms such as experimentation, search, discovery, risk taking, variance increase, play, autonomy, flexibility, and innovation (March, 1991). These words illustrate the alignments of the growth teams and guilds well.

The guilds are devoted to develop new skills and capabilities needed to explore new opportunities. The Innovation Guild recently got the overall responsibility for developing ideas to be pitched to the Digital Board. While the structure of these guilds are highly informal, as they are voluntary and open to the entire organization, they are a way to formalize exploration activities as they serve as an execution discipline for exploration (O'Reilly & Tushman, 2016). A key criteria of an idea to get funded by the Digital Board, is that it has an owner in the organization. This key person has the responsibility to gather a team that can collaborate on developing the idea further. In gathering this team, informants accounted that one can dedicate a growth team or take resources from a growth team. Here, Cognizant is thought to contribute with resources that can replace the people who are pursuing exploration projects, for a given amount of time. This way, growth resources will have more time to explore, which can be seen as a way of alleviating the pressure from the tensions of the paradox. Additionally, because they get to follow through on exploration ideas, it is likely that growth team members will be more motivated to participate in the guilds.

The CDO argues that the guilds are a way for DBD to contribute to cultural change, to become more inclined to exploration:

*In Storebrand, we don't have history of not knowing the effect of what we do: we like to analyze and evaluate all our activities. This does not fare well with exploration. The guilds are a way for us to "sneak in" exploration in people's minds, and demystify new technologies and work methods.*  
(Terje Løken, CDO)

This is a classical example of cultural inertia (O'Reilly & Tushman, 2016). With the guilds, Storebrand is trying to limit this inertia, as top and middle managers argued that they want all members of DBD to voluntarily participate in the guilds. This is at the core of contextual ambidexterity: creating and organizational context encouraging individuals to make their own decisions about when to exploit and when to explore (Gibson & Birkinshaw, 2004). The CDO further explains that whereas before people could say "we do not offer this product to the market today - why should we explore it, we do not have the skills" the guilds are aimed at developing new skills and capabilities so that people instead will say "I am not sure but let's try" if something feels right, and then explore that opportunity. However, not all members of DBD has been participating in the guilds so far, mostly the leaders and members of the growth teams.

The Operational Excellence team members have not participated in the guilds. Since the Operational Excellence teams are already behind on their daily exploitation tasks, and as the guilds as an arena of exploration are voluntary, exploration is difficult to prioritize and easy to postpone. This is a well-known phenomenon in ambidexterity literature, and part of the reason why exploration and exploitation are considered paradoxical (Sætre, 2016). In the face of short-term priorities, exploitation will almost unexceptionally be chosen in favor of exploration, which is why critics of the contextual

ambidexterity research stream, such as O'Reilly and Tushman, warn senior leaders to leave exploration to the discretion of lower level employees. The Leader of CM elaborates: "My team is not free to explore or free to join the guilds - it requires time, and right now all time needs to be devoted to delivering on our goals."

In addition to participating in the guilds, the members of the growth teams show signs of exploration in their daily tasks. Although subsection 5.1.2 argues that growth teams exploit despite their exploration alignment, there are arguments that they explore as well. The lean startup methodology applied by the growth teams reflects this. The Growth teams' work approach is fundamentally different from that of Operational Excellence, as they develop and implement the digital solutions themselves, with a "fail fast, fail forward"-mindset. The teams are organized as autonomous cross-functional teams with a flat, organic structure - they were even labeled "mini-startups" by one of the informants. Another difference is that they work on relatively larger projects as they select entire customer journeys to rethink and improve. Thus, even though Growth by definition exploits, the teams demonstrate an "exploratory approach" to solving problems - emphasizing search, risk taking, autonomy and flexibility. This is believed to allow the Growth teams to take "innovation leaps" larger than increments - placing them somewhere in between exploration and exploitation if the paradox is visualized as a continuum.

In addition to the growth teams and guilds, there are four resources dedicated to explore new business opportunities with partner organizations. Remal000 Insurance is an example of such partnership, where Storebrand has partnered with a Norwegian grocery chain

to deliver insurance. At the Town Hall Point I observed, one of these resources launched a new partnership with a fintech start-up. Partnerships help Storebrand explore new business opportunities with very little effort. This is an example of external approaches to ambidexterity, which is outside the scope of this thesis.

The guilds and growth teams together serve as disciplines for selecting, experimenting, funding, and terminating new businesses (Dutta, 2012) in DBD. The lean startup methodology, which is followed in both the guilds and growth teams, allow for rapid experimentation, selection, testing and termination of ideas, which helps DBD to establish methods of learning about the future as it emerges (O'Reilly & Tushman, 2016). Regarding funding, one can say that the growth teams get funding from the line organization since they do not have their own budget but deliver on the line organization's, Customer Area Norway's, commercial goals. Guilds, as we know, get funding from the Digital Board to experiment with new business opportunities. Therefore, these mechanisms can lead to successful exploration in the future.

Although the arguments above suggest that both the growth teams and the guilds explore, it is stressed that they pursue different kinds of exploration. This is, like with Operational Excellence and Growth, reflected in their differing goal horizons: the growth teams have a goal horizon of 12 months; guilds have a 2-10-year timeframe of achieving the desired success. Thus, the growth teams have a short-term focus compared to the guilds.

This short-term focus may be problematic, as a central notion of exploration is long-term focus (O'Reilly & Tushman, 2004). This is because, as CEO of



Amazon Jeff Bezos argues, shareholder and customer interests are contradictory in the short term – the shareholders want profit but the customers may want different/better products that take time to develop – but in the long run, customer and shareholder values are more aligned (O’Reilly & Tushman, 2016). Similarly, in the case of DBD, Customer Area Norway’s interests may not be aligned with those of the growth teams, as their work approach emphasizes a customer focus.

The commercial goals from Customer Area Norway may cause the growth teams to focus too much on profit, thus selecting the “safe” solutions with quick economic results. The informants acknowledged that this has been a challenge so far, and that the goal horizon of the growth teams is in reality not so much longer than that of Operational Excellence - since the commercial goals are monitored each month. This has for instance lead to the Insurance team improving the online buying solution, which does not increase the amount of customers (growth), but may improve retention in digital channels, i.e. ensuring that more sales are closed (efficiency). Thus, this project could have belonged to the CM-team in Operational Excellence, since it can be defined as a sales optimizing efficiency innovation.

Considering Benner and Tushman (2003)’s argument that exploration involves pursuing a different technological trajectory and He & Wong (2004)’s definition of exploration as entering new domains, the endeavors of the Growth teams do not seem to fit into this category. This definition is however suitable to describe the activities in the guilds. Conversely, and as mentioned in section 5.1.1, the activities of Growth can be described using Benner & Tushman (2003) and He & Wong (2004)’s definition of exploita-

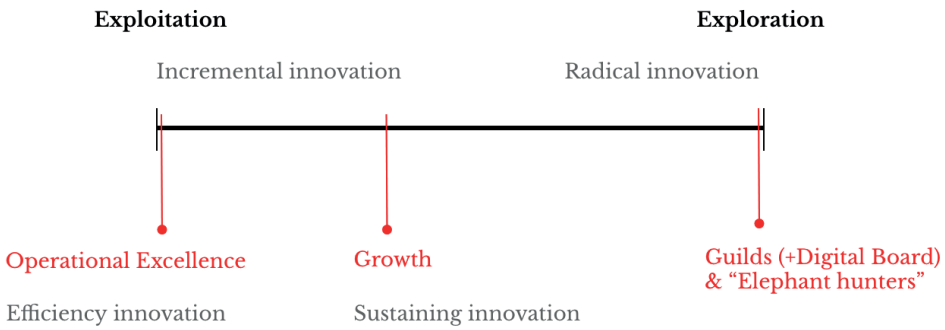
tion as following the same technological trajectory and as improving performance in the current domain. This is evidence that, while demonstrating several feats of an exploratory alignment, the growth teams’ activities are mainly exploitative.

#### 5.1.4 Summary of this section

The analysis in this section shows that, at the business unit level, DBD is pursuing exploration and exploitation simultaneously. This part of the analysis describes the box to the very right in the theoretical framework, Business Unit Approaches, providing insights into how the business unit is designed and aligned to simultaneously be able to explore and exploit.

The paradox is balanced by task-partitioning (Gibson & Birkinshaw, 2004) into three different organizational alignments: one for exploration one for exploitation, and one for both. To summarize, one can say that Operational Excellence refines existing knowledge about existing problems, Growth creates new knowledge about existing problems, and the Guilds create new knowledge about new problems. However, contextual ambidexterity is also a balancing mode of DBD, as the organizational context (processes, systems, beliefs) is designed to encourage individuals of these alignments to make decisions about when to explore and exploit, for instance since the guilds are voluntary.

The three alignments pursue different types of innovation. Literature associates exploitation with incremental innovation, and exploration with radical innovation. This definition matches the guilds: they aim to discover business opportunities that will lead to radical innovation. However, as both Operational Excellence and Growth exploit, and have different approaches to incremental innovation, a different definition was needed.



**Figure 10: Continuum between Exploration and Exploitation and Innovation types in Digital Business Development**

By applying Christensen (2016)’s more granular definition of incremental innovation, Growth is found to pursue sustaining innovations, while Operational Excellence pursues efficiency innovations.

If we visualize the exploration-exploitation paradox as a continuum, Operational Excellence is placed at the end-point of exploitation, by the arguments above. Secondly, the guilds and dedicated exploration resources (so-called elephant hunters) are at the far right at exploration. Lastly, and interestingly, Growth is placed somewhere in between exploration and exploitation, due to their explorative approach to exploitation and participation in the guilds. Thus, the figure above illustrates how the paradox of exploration and exploitation is balanced in Digital Business Development.

This is a surprising finding because the organic structure of the exploratory alignment should, according to ambidexterity theory (e.g. Gibson & Birkinshaw (2004), O’Reilly & Tushman, 2004) lead to exploration. Interestingly, though, the organic alignment does not lead to exploration but both exploration and exploitation. Thus, Growth can be viewed as an ambidextrous alignment within the business unit, pursuing “explorative exploitation”.

## 5.2 THE PARADOX IS BALANCED DIFFERENTLY DEPENDING ON MANAGEMENT LEVEL

Understanding that different alignments are needed for pursuing different strategic objectives is easy, making them work - individually and together - is far more challenging. Literature underscores the central role of leaders and managers in tackling this challenge (Probst et al., 2011). Furthermore, Probst et al. (2011) argue that leaders and managers complement each other in this, which makes it useful to look at how these challenges are distributed across different managerial levels.

The following analysis addresses Research Question 2: “How is the paradox of exploration and exploitation balanced by the different leaders of DBD?” The theoretical framework is applied to understand and describe these mechanisms, investigating each management level in terms of balancing mode, dynamic capabilities, and - most importantly - their leadership behaviors, since leadership is such a substantial factor in achieving ambidexterity (O’Reilly & Tushman, 2016; Probst et al., 2011).



### 5.2.1 Team level management

The team level management is divided into two areas: Growth and Operational Excellence, which have different alignments as demonstrated in the analysis above (section 5.1). This affects how team leaders balance the paradox of exploration and exploitation. Overall, the team level management demonstrate contextual approaches to ambidexterity. While leaders at higher levels have an important role in shaping the organizational context( Gibson and Birkinshaw (2004a), the ultimate goal of a contextually ambidextrous organization is that leadership becomes a characteristic displayed by everyone in the organization, in which team level leaders have an important role: The impetus toward ambidexterity may sometimes be driven by top-down initiatives, but the goal is to allow leadership to emerge from the organization at all levels and for that ubiquitous, emergent leadership to be inherently ambidextrous. (p. 55).

#### 5.2.1.1 Growth

The chiefs of the Growth teams demonstrate the bottom-up initiatives mentioned above by selecting projects for their teams that are either exploratory or exploitative. They evaluate whether the selected customer journey best can be improved by experimenting with alternative business models (exploration) or improving identified pain points of the customer journey (exploiting). In general, the chiefs therefore apply contextual ambidexterity by making decisions about how to divide their team's time between alignment and adaptability (Gibson & Birkinshaw, 2004) from project to project. Additionally, the Chief of Savings claimed she imagined splitting her team into groups pursuing exploration and exploitation in parallel, which would be an example of subunit differentiation at the team level(Yukl, 2009). According to Yukl (2009),

such subunit differentiation may improve efficiency, but it also creates barriers to information sharing and cooperation.

Thus far, some teams have worked on exploratory projects and some have worked on exploitative projects, most of them a mix. Since the growth teams alternate between exploratory and exploitative projects, this resembles sequential ambidexterity at the project level (Duncan, 1976). Looking at Growth as a whole, however, exploration and exploitation is pursued simultaneously. This is because exploratory and exploitative efforts are distributed across the teams, so at a given point in time, some teams will explore and others exploit. By the assumption that each growth team will take on explorative and exploitative projects over time, chiefs must be capable of leading for exploration and for exploitation, as this requires different leadership behaviors (Jansen et al. 2009, Baskarada et al. 2016, Rosing et al., 2011).

Exploration and exploitation not only require different leadership behaviors, but also the ability to know when to switch. This is called temporal flexibility (Rosing et al., 2011). This argument may also apply within the same project, by the assumption that every project has an exploratory and an exploitative phase, which is true for the Growth teams due to the nature of the lean startup methodology. Each project starts with an idea generating, experimenting phase (explore), and then iteratively - by prototyping and testing - moves to a refinement and implementation phase (exploit). Therefore, the chiefs need to switch flexibly between leadership behaviors that foster exploration and exploitation over the span of each project.

Since the Growth chiefs lead both exploratory and exploitative projects, and exploratory and exploitative phases within each project, the Growth chiefs are the leaders in DBD that practice ambidextrous leadership the most. This makes them adopt both a short-term and a long-term orientation, as stated by several authors to characterize ambidextrous managers (e.g., O'Reilly and Tushman 2004, Probst and Raisch 2005). As Growth chiefs are defined as lower level managers, this statement contradicts Kauppila (2016)'s argument that middle managers are the leaders that influence the exploration and exploitation behaviors of organization members the most. Displaying ambidextrous leadership involves demonstrating transformational and transactional, and opening and closing leadership behaviors (Baskarada et al., 2016; Rosing et al., 2011; Jansen et al., 2009).

There are several examples of the leadership behaviors associated with exploration among the Growth chiefs. The NBA team can explore NBA models, come up with their own ideas to analyzing customer behavior and develop models based on that. Camilla hosts retrospects to see how the team can learn from recent failures "Our CEO says that it is OK to make mistakes, but you cannot make the same mistake twice. I live by that". These examples illustrate Rosing et al (2011)'s opening leadership behaviors of giving room for own ideas and possibilities for independent thinking and acting as well as encouraging error learning. The latter opening leadership behavior also induces support.

The growth chiefs also demonstrate closing leadership behaviors as Camilla and Solveig follow up on commercial goals each month. These monthly goals represent the monthly breakdown of the yearly

commercial goals from CAN, which is made at the beginning of the year. This illustrates how they make a plan and stick to it, and monitor and control goal attainment, both closing leadership behaviors. Furthermore, the frequent follow-ups are believed to induce stretch. Camilla states that they are working on establishing, "professionalizing" and streamlining routines for NBA model development, which is an example of how she pays attention to uniform task accomplishment - which is also a closing leadership behavior (Rosing et al. 2011).

These leadership behaviors are believed to foster both exploitation and exploration behaviors in followers, but it is mainly the Growth chiefs that make the decisions about when to explore and when to exploit - not the individual team members. This is an important difference to the Operational Excellence teams, which will be elaborated on in the next subsection.

In a dynamic capabilities perspective, chiefs are making their teams sense and seize business opportunities, which are examples of lower-order dynamic capabilities (Birkinshaw et al. 2016). Additionally, the Growth chiefs stated that they feel - as a part of the leader group in DBD - a personal responsibility for exploring new business opportunities. Since they are the ones making decisions on behalf of their teams, about when to explore and exploit, they are demonstrating few context-shaping capabilities. However, as Growth chiefs encourage their team members to participate in the guilds and to explore alternative solutions, by providing a flexible climate, they are found to shape the organizational context of their teams.

<b>KEY TAKEAWAYS</b>	
<b>Team level management: Growth</b>	
<b>Balancing mode</b>	Contextual ambidexterity (sequential at the project level)
<b>Dynamic capabilities</b>	Sensing, Seizing
<b>Leadership behaviors</b>	<i>Transformational</i> : individualized consideration, inspirational motivation, intellectual stimulation <i>Transactional/Closing</i> : monitoring goal attainment, make plans and stick to them <i>Opening</i> : Encourage error learning and risk taking, giving room for own ideas and independent thinking and acting <i>Inducing behavior-framing attributes</i> : stretch, discipline, support

**Table 8: Key takeaways Growth**

### 5.2.1.2 Operational Excellence

The leaders of the Operational Excellence teams, on the other hand, trust their team members to pursue exploration by their own desire. This is an example of individual ambidexterity - a branch of ambidexterity research derived from contextual ambidexterity (Haugen & Larssen, 2016). The leaders of Operational Excellence argued that they felt a responsibility for their team members to participate in the guilds and thus in exploration activities, but that it had to take place after the “regular work day” was over as they have a lot on their plates right now.

To foster individual level ambidexterity, ambidexterity literature argues that leaders need to create an organizational context of stretch, discipline, support, and trust (Gibson & Birkinshaw, 2004). However, there are few signs of this in Operational Excellence as of now. The motivation is low, so is the effectiveness - both at exploration and exploitation. There were few examples in the data that could illustrate leaders of Operational Excellence allowing their team members to think and act independently, developing their own ideas - which would be examples of opening and transformational leadership behaviors.

In contrast, the CM and BM leaders demonstrate closing and transactional leadership behaviors as they closely monitor goals, seek unitary performance of tasks, strive for profit in the short term.

The previous section argues that the lack of transformational leadership exhibited by the team leaders may impede explorative behavior in Operational Excellence. However, the individuals of Operational Excellence are exposed to transformational and opening leadership behaviors from higher management levels. The Town Halls, for instance, are an arena for this.

Transactional leadership may take the form of passive leadership, in which the leader practises passive managing-by-exception by waiting for problems to arise before taking corrective action or is laissez-faire and avoids taking any action (Bass, 1999). This description of a transactional leader fits the way the Operational Excellence leaders deal with fostering contextual ambidexterity: they expect their members to do it at their own time, but do not follow up on it until senior managers take corrective action. This underpins Gupta, Smith and Shalley (2006)’s conclusion that it is challenging for an individual to excel at both exploitation and exploration.

<b>KEY TAKEAWAYS</b>	
<b>Team level management: Operational Excellence</b>	
<b>Balancing mode</b>	Contextual ambidexterity (passively encouraging ambidex.)
<b>Dynamic capabilities</b>	Seizing
<b>Leadership behaviors</b>	<i>Transformational</i> : individualized consideration <i>Transactional/Closing</i> : monitoring goal attainment, ensure unitary task performance, passive managing-by-exception <i>Inducing behavior-framing attributes</i> : discipline

**Table 9: Key takeaways Operational Excellence**

### 5.2.2. Top and middle level management

For the purpose of this analysis, top and middle level leaders, i.e. the Head of the Division, the CEO, the Chief Strategist and the Chief Digital Officer, are labeled the senior team of Digital Business Development. This is because these leaders have similar ways of balancing the paradox of exploration and exploitation; both groups have a coordinating role in shaping the organizational design and cultural elements of the business unit. Due to their coordinating role, senior managers can be seen as “the antecedents of the antecedents of organizational ambidexterity”, since organizational designs - structure, strategies, processes - lay the foundation for ambidexterity to happen, and managers make important decisions about these mechanisms (O’Reilly and Tushman, 2004; Gibson & Birkinshaw, 2004). But managers can also be seen as antecedents of ambidexterity themselves, as they shape the behaviors of their followers by applying different leadership behaviors (Zacher et al. 2016). This section will use examples from the empirical data to illustrate how they do this in practice.

#### *Balancing mode: Differentiation and integration*

The task partitioning organization design described in section 5.1 is an example of how senior leaders decided to apply dif-

ferentiation to balance the paradox of exploration and exploitation (O’Reilly & Tushman, 2008). However, according to Andriopoulos & Lewis (2009) “differentiation and integration are vital to successfully balancing the paradox” (p. 702). Integration means stressing the interdependence between opposite alignments to enable coordination between them, leveraging their synergies (Lewis, 2000; Smith & Tushman, 2005).

Despite claiming that he tries to keep Growth and Operational Excellence separate, the Head of DBD also stressed the importance of staying connected: “Even though we have to adopt different approaches to working in Operational Excellence and Growth, we need to feel like we are one unit” (Jostein Daland, Head of DBD). If not, he argues, exploration will end up “too far from business”, and then get killed when “coming back into the organization”. This is a central argument for structural ambidexterity according to O’Reilly & Tushman (e.g. 2016), and against Christensen (1997)’s spinout designs. Similarly, exploitation in Operational Excellence cannot be “so heavy that you can’t free the smart heads to work on new projects”.

This reasoning underscores the importance of integration. While not a reality yet, rotating resources and esta-

blishing routines for knowledge transfer between Growth and Operational Excellence may provide channels for organizational assets to be leveraged (O'Reilly & Tushman, 2004) and synergies to be identified in the future.

The integration mechanisms described by the Head of DBD have yet to be realized, and remain an important point to deliver on for the business unit to be able to balance the paradox. Between the guilds and Growth, on the other hand, resources are being leveraged as the content of the guilds overlap with growth teams' areas of interest. For instance in the Privacy guild, the Chief of NBA is involved and says she is bringing in knowledge from her team into the guild and vice versa. Perhaps it is easier for assets to flow between these two alignments as Growth demonstrates an inclination towards exploration, even though their main activities are identified as exploitation.

#### *Dynamic capabilities: Reconfiguring, sensing and seizing*

The balancing efforts of the senior team can be understood using a dynamic capabilities frame. The examples of integration mentioned above is equivalent to reconfiguring (O'Reilly & Tushman, 2008), which Birkinshaw et al. (2016) referred to as a higher-order capability. Birkinshaw et al (2016) argued that senior leaders only demonstrate higher-order capabilities, while lower management levels demonstrate the lower-order capabilities of sensing and seizing. In DBD, however, senior managers demonstrate sensing and seizing capabilities too. The Chief Strategist is in charge of the partnership efforts, managing the resources "hunting for elephants", which represents sensing new opportunities outside the boundaries of the firm. Similarly, as responsible for the content of the guilds, the CDO and Head

of DBD make sure that a sufficient amount of ideas are pitched in to the Digital Board. Since the CEO is the Head of the Digital Board, one can say that he is seizing the new business opportunities sensed by the guilds or "elephant hunters".

Dynamic capabilities imply that the organizational model is updated and adjusted over time, i.e. by reconfiguring organizational assets. In a similar vein, researchers have argued for a dynamic, as opposed to static, perspective on managing the paradox (Raisch et al., 2009). This quote by the CEO supports this view: "It is not like you make the organizational design and you are done - the model needs to be continually adjusted and improved". Informants from the senior team stressed that, even though they had decided on the structures and processes to implement the strategy, and the culture they wanted to create, implementation takes time.

#### *Ambidextrous leadership: Leadership behaviors that shape the organizational context*

The empirical data shows several examples of context-shaping capabilities (Birkinshaw et al., 2016), i.e. how the senior leaders shape the organizational context to enable contextual ambidexterity. This relates to the leadership behaviors exhibited by the senior managers, as ambidexterity is first and foremost a leadership challenge (Probst et al. 2011). The focus in the following subsections will therefore be on identifying senior team leadership behaviors that shape the organizational context. As mentioned in Chapter 2, transformational leadership and opening leadership behaviors are associated with fostering exploration, while transactional and closing behaviors are found to influence exploitation. By using examples from the empirical data, I investigate how

the senior leaders guide the behavior framing attributes stretch, discipline, trust, and support (Ghoshal & Bartlett, 1994), and how they apply opening and closing (Rosing et al. 2011), and transformational and transactional leadership behaviors (Bass, 1999; Baskarada et al., 2016). Leadership behaviors and behavior-framing attributes will be italicized in the text.

### ***Town Hall Meetings as a catalysator for stretch, discipline, and support***

The Town Halls are an arena for communicating the ambidextrous strategy. Communicating the strategy, vision and values of the business unit builds a common identity among the members (O'Reilly & Tushman, 2004). The Head of the business unit and the Chief Strategist stress the importance of relentlessly communicating the strategy: "I talk about the strategy to establish a link between the strategy and the operations - this is crucial for strategy execution" (Jostein). This is an example of making strategy a dialogue - not a plan document (O'Reilly & Tushman, 2016). In Bass (1999)'s words: "The interests of the organization and its members need to be aligned. Such is a task for the transformational leader" (p.9). Therefore, Jostein can be viewed as a transformational leader.

The Town Hall meetings also embody the core values of the unit: simplification and speed. "No matter how you twist and turn it: it is about people, values, and attitudes. Making the strategy work relies on these three pillars" (Jostein). The Head of the division emphasizes simplification by using colloquial language, but also by giving everyone the same information at the same time. This creates transparency. By communicating the strategic intent, vision, and values of the digital business unit at the Town Hall Meetings, the senior team creates meaning in the context of

contradiction (Smith & Tushman, 2005). This induces stretch because employees, when being aligned around the same strategic intent, values, and common identity, voluntarily will strive for more ambitious goals (Gibson & Birkinshaw, 2004).

At the Town Hall Meeting I observed, Jostein presented the monthly numbers of the growth teams. This is a way of holding them accountable for their decisions and results, as it enhances transparency across the unit (Birkinshaw et al. 2016). This example of monitoring goal attainment is a transactional leadership behavior. By speaking of numbers, standards of performance, and giving feedback, Jostein ensures commitment to the financial goals, which induces discipline. "It is important that everyone feels they can contribute to the results".

Furthermore, Jostein asked one of the "elephant hunters" - Gustav Gorecki - to present a new partnership with a fintech startup. This story exemplifies the use of inspirational motivation at Town Hall Meetings - a transformational leadership behavior. Telling success stories about exploration envisions a desirable future and sets an example to be followed (Bass, 1999). Therefore, it can also induce support, as members who are reluctant to explore will see how this is received by the business unit and become more motivated to participate in such efforts in the future. Thus, this is also an example of intellectual stimulation as the leader helps followers to become more innovative and creative (Bass, 1999).

### ***Muslim Mortgages: encouraging risk***

The situation that arose in the wake of the launch of the prototype for "muslim mortgages", demonstrates the top managers' willingness to take risk and learn from failure. The growth team responsi-

ble for the project only asked the CEO prior to the launch, with the response “We can take it”, i.e. encouraging risk. No one else in the organization were asked for permission, which is atypical for Storebrand. Jostein explains that, traditionally, the culture in Storebrand takes pride in doing things right and being able to provide a reason based on facts and numbers, a calculated risk. Terje elaborated that “You can’t just say you did something just because you thought it was right”. This is an example of how the senior leaders of DBD work to develop a different culture than what has characterized Storebrand in the past, and that promoting selected risk taking (Dutta, 2012) is a component of this culture. Whether this “new culture” will lead to ambidexterity will be discussed in Chapter 6.

Sometimes exploring new opportunities lead to failure. After the media publicity, the senior team held a retrospect ceremony, acknowledging that this was not well received in the market, letting people vent their frustrations, but it was focused on not blaming anyone, but on how they could learn and find what they could do differently the next time. This is an example of an open feedback system which can increase discipline. The ability to promote selected risk-taking is a central component of an ambidextrous culture (Dutta, 2012). Moreover, it is a tangible example of individuals not being punished for well-intentioned business failures, which arguably contributes to building trust.

### ***Empowering people to embrace the new culture***

The senior team shows several signs of empowering people do make decisions about when to explore and when to exploit. Jostein says he trusts the Growth chiefs to make balancing decisions - “if not, they will miss out on the fun stuff”.

The new organizational design has a lot of “moving parts” which creates new roles and areas of responsibility, something that has caused many people who were very confident leaders in their previous position, to feel insecure. Often when people ask for his advice, they are confused if they are the right person to make the decision. “It is fascinating how organizational change also changes people” (Jostein Dalland). Jostein therefore acknowledges his job in providing guidance and support to leaders in new roles, which he does by encouraging initiative to come from lower levels - this way decisions are made “where they are supposed to be made” (Jostein). “The leader needs to avoid the situation where no one is willing to do anything until the leader provides direction” (Baskarada et al., 2016, p. 783). Pushing decisions down like this, reinforces autonomy which underpins contextual ambidexterity in a business unit (Gibson & Birkinshaw, 2004).

Jostein displays the transformational leadership behaviors of idealized influence and inspirational motivation when he envisions a desirable future by confidently communicating the strategy at the Town Hall Meetings. While Jostein talks about big trends and new technologies, about the strategy that will prepare Storebrand for the future, with his employees, Terje has a different approach:

*”I hold back - there are a lot of ideas I don’t talk to subordinates about: we don’t have the time. If I talked about fourteen opportunities and big trends and what our competitors do - it would leave them paralyzed.”*

(Terje Løken, CDO)

This displays a different transformational leadership behavior: individualized consideration. As the CDO, Terje has a technological mindset, so he talks to the operational people first, the programmers of



the Growth teams, to see if they have got time on their hands for a new idea. Individualized consideration is displayed as Terje pays attention to the developmental needs of followers, delegating assignments as opportunities for growth (Bass, 1999).

The CEO is sitting in the same room as all members of DBD, in an open office landscape. This is an example of the transformational leadership behavior of idealized influence (Bass, 1999), as it is a symbolic action that strengthens the follower loyalty to the new organization model (Yukl, 2009).

**Key takeaways**

To sum up, the senior team of DBD demonstrates more examples of transformational and opening leadership behaviors than transactional leadership behaviors. The Town Halls are an arena for leaders to induce stretch, discipline, and support. The “Muslim Mortgages” situation demonstrates how leaders encourage risk and display a willingness to learn from errors, both opening leadership behaviors. The senior team balances the paradox by differentiation and integration. In a dynamic capabilities perspective, they mainly reconfigure or demonstrate context-shaping capabilities, but also sense and seize new business opportunities.

**5.2.3 HR Managers**

The HR managers also have a coordinating role in balancing the paradox, as they ensure that the teams have the right competencies and capacities needed for exploration and exploitation. In a dynamic capabilities perspective, one can say that HR leaders develop reconfiguring capabilities as they reconfigure the human resources of the business unit. Because they ensure that the business unit always have exploration and exploitation capabilities, this reconfiguring becomes a way of balancing the paradox. This illustrates the HR managers active role in helping the business unit develop ambidexterity (Probst et al. 2011).

Human resources are reconfigured by adjusting existing competencies and developing new ones (Dutta, 2012) as a contextual mode of adaptation requires employees to have a certain set of capabilities which may or may not be currently present in the organization (Birkinshaw et al. 2016). HR managers frequently engage in dialogue with the team members to evaluate motivation and job satisfaction, which is believed to enhance the behavior-framing attribute support. These dialogues and weekly measurements of job satisfaction (so-called pikon measurements) will also

<b>KEY TAKEAWAYS</b>	
<b>Top &amp; middle level management</b>	
<b>Balancing mode</b>	Differentiation and integration
<b>Dynamic capabilities</b>	Reconfiguring (Context-shaping), Sensing, Seizing
<b>Leadership behaviors</b>	<i>Transformational:</i> individualized consideration, inspirational motivation, intellectual stimulation <i>Transactional/Closing:</i> monitoring goal attainment <i>Opening:</i> Encourage error learning <i>Inducing behavior-framing attributes:</i> stretch, discipline, support

**Table 10: Key takeaways Senior management**



build trust if changes are made according to employee responses. One example of this is the developers alternating weekly between quality assurance of Cognizant’s work and personal projects. Listening to employees like this is also an example of the transformational leadership behavior inclusivity (Baskarada et al. 2016) and individualized consideration.

In addition to reconfiguring capabilities, HR managers also need sensing-capabilities in order to develop the competencies of the future, so that the unit displays competencies needed for exploration and exploitation. For instance, one of the HR managers is now in the process of recruiting designers - a role that historically has not typically been found internally in the financial services firm. In addition to hiring people, HR managers have an important role in training existing employees so they can be able to both exploit and explore (Probst et al. 2011). The activity with Storebrand’s Driving Force at the Town Hall Point is an example - raising awareness about the company purpose, vision, and values to ensure alignment between people, culture, and the ambidextrous strategy. The HR managers are not, however, involved as much in professional development, as this takes place in the guilds.

### 5.3 HOW LEADERSHIP BEHAVIORS INFLUENCE EXPLORATION AND EXPLOITATION ACTIVITIES IN DBD

As the previous section illustrates, the leaders of DBD have different leadership approaches to balancing the paradox of exploration and exploitation. In this section I will elaborate on how the leadership behaviors mentioned in 5.2 are believed to influence how the different groups - growth, the guilds, and operational excellence - pursue exploration and exploitation, as covered in section 5.1. Thus, this section seeks to juxtapose the preceding two sections to see how leadership and organizational alignments influence ambidexterity in the business unit. In other words, the aim of this section is to observe interaction effects between the business unit and managerial levels of analysis, seeking to provide an answer to RQ3: How does the managerial levels influence the balancing of the paradox of exploration and exploitation at the business unit level?

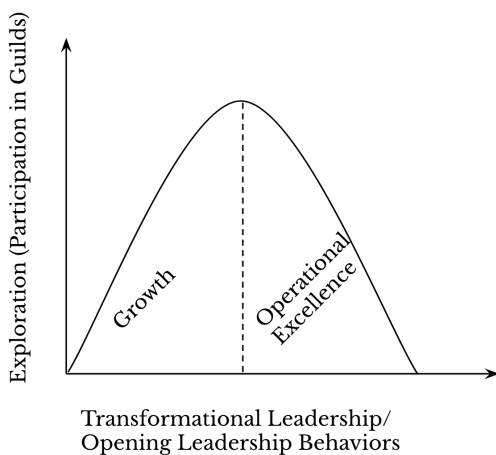
#### 5.3.1 Transformational Leadership has an Inverted U Relationship with Exploration

A substantial body of literature argues for the positive relationship between transformational leadership and explo-

<b>KEY TAKEAWAYS</b>	
	<b>Top &amp; middle level management</b>
<b>Balancing mode</b>	Differentiation and integration
<b>Dynamic capabilities</b>	Reconfiguring (Context-shaping), Sensing, Seizing
<b>Leadership behaviors</b>	<i>Transformational:</i> individualized consideration, inspirational motivation, intellectual stimulation <i>Transactional/Closing:</i> monitoring goal attainment <i>Opening:</i> Encourage error learning <i>Inducing behavior-framing attributes:</i> stretch, discipline, support

**Table 11: Key takeaways HR management**

ration (e.g. Jansen et al. 2009; Rosing et al., 2011). The same relationship has been argued for opening leadership behaviors (Zacher et al. 2016). This is only partially true in Digital Business Development. Transformational leadership is found to positively predict exploration in the growth teams, as levels of both participation in guilds and transformational leadership are high in this subunit. Transformational leadership is also considered to have a positive influence on the explorative projects in this alignment. In contrast, transformational leadership is found to negatively influence the willingness to participate in developing exploratory innovations among the Operational Excellence teams, as they do not deem it relevant to them. This results in an inverted-U relationship between transformational leadership and exploration when the type of organizational alignment is taken into consideration - positive in the exploration alignment (Growth), negative in the exploitation alignment (Operational Excellence). This is illustrated in figure 11 below, which is based on Jansen et al. (2009)'s conceptual framework.



**Figure 11: Relationship between transformational/opening leadership behaviors and exploration**

The different leadership levels influence this relationship differently. Section 5.2 observed several opening and transformational leadership behaviors demonstrated by the Growth chiefs, which makes the team members inclined to explore in their daily tasks as errors and risk-taking are accepted as learning opportunities (Baskarada et al. 2016). Since the growth teams are exposed to transformational leadership behaviors on a daily basis, they develop an “entrepreneurial mindset” which makes them more receptive to transformational leadership behaviors from higher management levels at for instance the Town Hall Meetings.

In contrast, the transformational leadership and opening leadership behaviors exhibited by the senior team are not found to positively influence the Operational Excellence teams willingness to participate in the guilds. In fact, it is found to negatively influence exploration among Operational Excellence members. The emphasis on exploration and growth at the Town Halls makes the Operational Excellence teams feel that it is the growth teams that do the important job. This makes them avoid participation in the guilds. This argument is supported by the Leader of CM's statement that many of her team members are jealous of the growth teams, since growth teams get to think big about new business opportunities, work independently and together with alternatives and ideas - while they largely perform quality assurance of other people's work. The nature of these tasks requires closely monitoring unitary performance and goals - transactional leadership and an exploitative organizational alignment.

The culture of DBD emphasizes exploration; flexibility, speed, autonomy, scale, learning by doing. Transformational leadership supports this culture,

but it may not be what the Operational Excellence teams need to succeed at their strategy. Operational Excellence teams feel like they do not belong in this culture. Therefore, the Operational Excellence teams, who are rigged for exploitation, regard exploration as something that is not meant for them.

### 5.3.2 Transformational leadership has an inverted-U relationship with exploitation

Previous ambidexterity research has theorized an inverted U relationship between transformational leadership and exploitation, but did not find empirical evidence for this (i.e. Jansen et al. 2009). This thesis, however, demonstrates this relationship when the type of organizational alignment is taken into consideration, but also the type of incremental innovation pursued by each alignment. This relationship is enabled because Growth is an “explorative exploitation” alignment - or a contextually ambidextrous alignment. Transformational leadership is found to facilitate the emergence of ideas for improvement in the growth teams. Thus, transformational leadership is found to make teams more effective at incremental innovation, i.e. sustaining innovations. Therefore, transformational leadership has a positive impact on exploitation in growth teams.

However, for efficiency innovations, as pursued by Operational Excellence, transformational leadership is viewed as a distraction for efficiency. In the words of Jansen et al. (2009: “high levels of transformational leadership with a focus on change would be dysfunctional and distracting when the goal is to exploit existing customer bases and technologies, and increase reliability” (p.9). Thus, transformational/opening leadership behaviors are positive for sustaining innova-

tions (Growth) and negative for efficiency innovations (Operational Excellence). This relationship is illustrated in figure 12 below.



**Figure 12: Relationship between transformational/opening leadership behaviors and exploitation**

### 5.3.3 Transactional Leadership negatively predicts exploration

Transactional leadership is regarded as negative for exploration in literature (Vera & Crossan, 2004; Jansen et al. 2009). This is because transactional leaders reward followers for accomplishing agreed-upon objectives to refine existing knowledge and maintain the status quo (Jansen et al., 2009). Exploration is unpredictable, so establishing a predictable environment through transactional/closing leadership behaviors is detrimental to exploration. The data collected in this thesis confirms this relationship, especially in Operational Excellence, which is mainly exposed to transactional/closing leadership behaviors, and seems to avoid exploration.

Transactional and closing leadership behaviors are also discovered in Growth. By definition, this subunit also exploits, as shown in section 5.1. Transactional leadership behaviors such as rewarding short term commercial success and closely monitoring and controlling goals, is

forcing a short-term focus on the growth teams, which makes them exploit, in spite of being aligned for exploration. This does not need to be negative, as the goals of Growth are to increase market share, but it can make it harder for them to both explore and exploit - to be contextually ambidextrous by participating in the guilds. This illustrates the mediating effect of contextual ambidexterity: the attributes of context themselves can create and amplify internal tensions between alignment and adaptability (Gibson & Birkinshaw, 2004).

The mismatch of leadership behaviors in operational excellence leads to a lack of motivation and effectiveness described in Chapter 4. By mismatch, I mean that the senior team demonstrates transformational leadership behaviors while operational excellence leaders demonstrate transactional leadership behaviors. If the goal is efficiency innovations, the leaders should display transactional and closing leadership behaviors to ensure clarity in work processes and provide a clear path towards goal attainment. Leadership behaviors found to foster exploration - transformational and opening - are likely to confuse and discourage exploiting teams. This is reflected in the jealousy described by the Operational Excellence leaders.

#### **5.3.4 Transactional Leadership positively predicts exploitation**

Transactional leadership behaviors are, however, regarded as positive for exploitation. Operational Excellence has goals, leaders, and a culture that emphasize continual improvement and short-term profits. These are examples of transactional leadership behaviors. It is difficult to say if transactional leadership helps foster effective exploitation in Operational Excellence yet, as external factors (collaboration processes with Cognizant and the line organization) slows down the work processes.

On the contrary, too much transactional leadership and exploitative focus makes it difficult for members to hold two mindsets at once. This is a dilemma: the Operational Excellence teams need transactional leadership behaviors to become effective at exploitation, but this removes the flexibility in the environment needed for them to be individually ambidextrous (Gibson & Birkinshaw, 2004). Therefore, it is important that leaders are clear about when members are expected to explore and when they are expected to exploit, as ambiguous communication - not being clear about this - is causing confusion.

## 5.4 ANSWERING THE RESEARCH QUESTIONS AND SUMMARY OF ANALYSIS

The analysis shows how different organizational alignments and different leadership behaviors influence exploration and exploitation in Digital Business Development. This chapter provided an analysis of how the paradox of exploration and exploitation is balanced at the business unit (RQ1) and managerial (RQ2) levels, and then observed interaction effects between these levels of analysis (RQ3). Addressing RQ1, it is found that exploration and exploitation is combined in the business unit and balanced by task partitioning: exploration and exploitation is separated in differentiated subunits of Digital Business Development. However, all alignments have cultural components that underpin contextual ambidexterity, therefore integration is identified as a balancing mode in addition to differentiation. Growth is aligned for exploration, and Operational Excellence is aligned for exploitation. The guilds provide a second alignment for exploration. It is, however, found that Growth mainly pursues exploitation, despite being aligned for exploration. This is a counterintuitive finding in light of previous ambidexterity literature, and the reasons for this will be discussed in the next chapter.

To summarize the comparison of the alignments that exploit, Growth and Operational Excellence, an important point is that they have different approaches to exploitative innovation: while Growth applies a lean startup methodology, Operational Excellence works more traditionally with refining knowledge and continually improving solutions. In other words, Growth has an “explorative” approach to exploitative innovation, which

allows them to take innovation leaps larger than increments, but that still falls into the category of exploitation as they improve existing solutions. Operational Excellence works on relatively small alterations to improve efficiency. This distinction was made possible by using Christensen (2016)’s more granular definition of incremental innovation: sustaining innovations (Growth) and efficiency innovations (Operational Excellence).

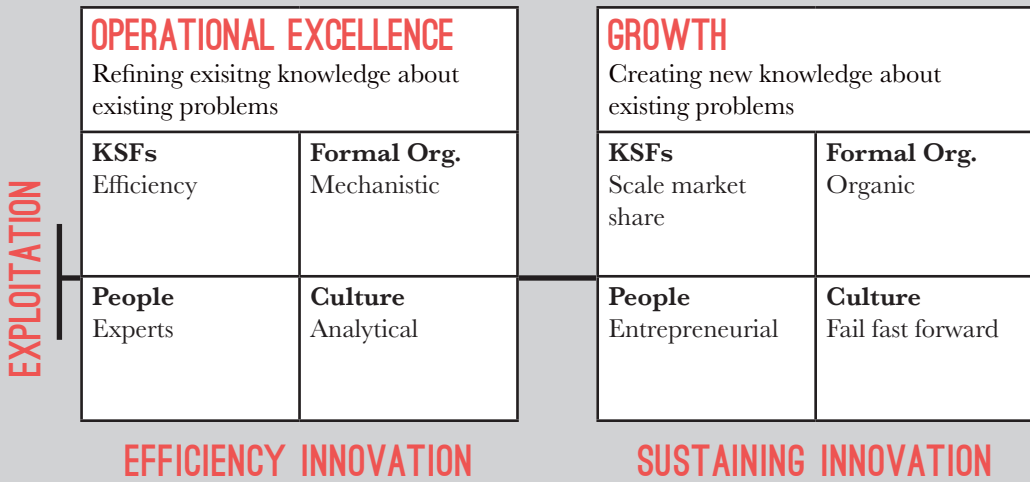
The Guilds are dedicated to exploring new business opportunities of a certain size, and have a budget through the Digital Board which is outside the operational plan of the firm. All members are encouraged to participate in guilds, and are allowed to spend 10 % of their time there, but the reality is that only the growth teams, chiefs, and the senior team actually do this. Members and leaders of Operational Excellence do not.

A summary of the characteristics of the three alignments and their innovation activities is given in Figure 13 on the next page.

To address RQ2, multiple levels of management were researched. The analysis finds that the different leaders apply different balancing modes, develop different dynamic capabilities, and display different leadership behaviors to balance the paradox and facilitate for followers’ ambidexterity. The key takeaways from each management level is given in the complete framework below (table 12), which provides a holistic description of the leadership approaches to ambidexterity.

As we can see, the leaders display several similarities in the mentioned activities - independent of management level. This underpins the collective responsibility of ambidexterity (Andriopoulos & Lewis,

**Figure 13:** Organizational Alignments in DBD and their Exploration/Exploitation Activities



2009), but may also be explained by the fact that Storebrand is a Norwegian company with a flat structure. These similarities will be discussed in Chapter 6.

Although the senior team demonstrated structural approaches with the differentiation into two (three) alignments within the business unit, the primary balancing mode employed by the leaders of the business unit is contextual ambidexterity (integration). This is because much of the power to make decisions about when to explore and when to exploit is shifted to lower levels, so tensions are held by the teams. The task of senior leaders is therefore to create a favorable organizational context supporting both exploration and exploitation. Since the Growth chiefs lead both exploratory and exploitative projects, and exploratory and exploitative phases within each project, the Growth chiefs are the leaders in DBD that practice ambidextrous leadership the most. The leaders of the Operational Excellence

teams, on the other hand, trust their individual team members to pursue exploration by their own desire and do not seem to actively work to promote explorative participation - which illustrates individual ambidexterity as balancing mode.

The organizational context of DBD is found to provide a supportive environment for contextual ambidexterity to prosper for the growth teams, but this does not apply to the Operational Excellence teams, yet. Literature largely agrees that exploration and exploitation need different cultures (e.g. O'Reilly & Tushman, 2004). Different cultures require different organizational alignments and different leadership behaviors, accordingly (Rosing et al. 2011). In DBD, the senior team seems to work to create one culture, one which is better fit for exploration than exploitation. The communication of the vision, values, strategy and goals, is well intentioned by the senior managers; to create a common identity

<b>GUILDS</b> Creating new knowledge about new problems	
<b>KSFs</b> New business opportunities	<b>Formal Org.</b> Lattice, informal
<b>People</b> Passionate	<b>Culture</b> Voluntary spirit

EXPLORATION

**RADICAL INNOVATION**

and achieve integration among contradicting alignments - but thus far it seems to be more well received by the Growth teams than the Operational Excellence teams.

Furthermore, the top, middle, and HR managers have similar roles in facilitating for the simultaneous pursuit of exploration and exploitation, which represents context-shaping capabilities (Birkinshaw et al. 2016) or reconfiguring (Dutta, 2012). These are the leaders who shape the context so that contextual ambidexterity can be achieved. Top management (The Head of the Department and the CEO) and middle management (the CDO and Chief Strategist) are even found to have identical leadership approaches to the paradox, consisting mostly of transformational/opening leadership behaviors, and reconfiguring/context-shaping dynamic capabilities. Growth chiefs make decisions on behalf of their teams when to explore and exploit, and Operational Excellence leaders take a passive

role in fostering ambidexterity in followers, but participate in both exploration and exploitation as individuals - as members of the leader group of the unit. This finding supports Andriopoulos and Lewis (2009)'s argument that different leadership functions complement each other in balancing the paradox, but contradicts O'Reilly and Tushman's research which claims that exploration-exploitation tensions are held solely by the top management team of the firm (e.g. O'Reilly & Tushman, 2004; 2008; 2016).

Thus, the balancing of the paradox in DBD can be divided into leaders enabling ambidexterity and leaders executing ambidexterity, shown in Table xx below. This is in line with Birkinshaw et al. (2016)'s notion of which leaders hold higher-order and lower-order capabilities and serves as the final answer to RQ2.

<b>Management level</b>	<b>Balancing Mode</b>	<b>Dynamic capabilities</b>	<b>Leadership behaviors</b>
<b>Senior level management (Top and Middle)</b>	Differentiation/Integration (Contextual)	Reconfiguring, (context-shaping), sensing	<i>Transformational</i> : individualized consideration, inspirational motivation, intellectual stimulation <i>Transactional/Closing</i> : monitoring goal attainment <i>Opening</i> : Encourage error learning <i>Inducing behavior-framing attributes</i> : stretch, discipline, support
<b>Team level management: Growth</b>	Contextual (sequential at the project level)	Sensing, Seizing	<i>Transformational</i> : individualized consideration, inspirational motivation, intellectual stimulation <i>Transactional/Closing</i> : monitoring goal attainment, make plans and stick to them, <i>Opening</i> : Encourage error learning and risk taking, giving room for own ideas and independent thinking and acting <i>Inducing behavior-framing attributes</i> : stretch, discipline, support
<b>Team level management: Operational Excellence</b>	Contextual (passively encouraging ambidexterity)	Seizing	<i>Transformational</i> : individualized consideration <i>Transactional/Closing</i> : monitoring goal attainment, ensure unitary task performance, passive managing-by-exception <i>Inducing behavior-framing attributes</i> : discipline
<b>HR Management</b>	Balancing human resources (competencies and capacity) to enable exploration and exploitation	Reconfiguring, Sensing (competencies)	<i>Transformational</i> : individualized consideration, inclusivity <i>Inducing behavior-framing attributes</i> : trust, support

**Table 12: Key takeaways all management levels**



<b>Enablers of ambidexterity</b>	<b>Executors of ambidexterity</b>
Top Managers (Jostein, Odd Arild) Business Unit Managers (Nils, Terje) HR Managers (Bradley, Kirsten)	Growth Chiefs (Solveig, Camilla) (Operational Excellence Leaders (Jarl, Kirsti))

**Table 13: Enablers and Executors of ambidexterity**

In the table above, Operational Excellence Leaders are put in parenthesis to highlight the difference between the team level leaders; Growth chiefs both participate in guilds themselves and make ambidexterity decisions on behalf of their teams, whereas Operational Excellence leaders are as individuals considered executors of ambidexterity, since they part-take in discussing new business opportunities at leader group meetings. Thus, I identify signs of individual ambidexterity in DBD. Furthermore, it is noted that Growth chiefs, while identified as executors of ambidexterity, were found to shape the behavior-framing attributes of stretch, discipline, and support, thus demonstrating context-shaping capabilities, to encourage members to make decisions to explore and exploit, for instance by choosing when to participate in the guilds. This supports the notion that ambidexterity tensions are solved

one level down (Raisch & Birkinshaw, 2008; Andriopoulos & Lewis, 2009).

In addition to similarities, I observe contradictions and interrelations between and individual's, a group's, and an organization's activities that affect ambidexterity (Raisch et al. 2009). Interpreting "the organization" here as the business unit, not the firm, I find similarities between managerial levels, contradictions between business unit alignments and activities, contradictions between managerial and business unit levels and interrelations between individual and group levels. A summary of this is given in table 14 below.

The similarities in balancing the paradox between top, middle and, HR managers were described above, as they were labeled "enablers of ambidexterity". Second, I observe interrelations between individual and group levels of analysis in Growth, both as managers make balancing decisions on behalf of their teams, and as the team members get to decide when and how much to participate in the guilds. Growth managers are thus both enablers and executors of ambidexterity. Conversely, I observe contradictions between the business unit level and managerial levels, as subunits aligned for exploitation pursue exploitation activities. Similarly, in Operational Excellence, individuals exploit despite being exposed to transformational leadership, which in theory should foster exploration (e.g. Rosing et al. 2011).

<b>Similarities</b>	Top, middle, and HR managers have similar leadership approaches to balancing the paradox
<b>Contradictions</b>	Growth represents and explorative alignment with exploitative activities Operational Excellence do not explore despite being exposed to leadership behaviors shown in literature to foster exploration
<b>Interrelations</b>	Growth chiefs (group level) and team members (individual level) make decisions about when to explore and when to exploit

**Table 14: Similarities, contradictions and interrelations between management levels in their approach to the paradox**

After addressing RQ1 and RQ2, this chapter sought to describe the interaction effects between the business unit and managerial levels, thus addressing RQ3. Here, it could be observed that the leadership behaviors of the different leaders affected the exploitation/exploration activities in the organizational alignments.

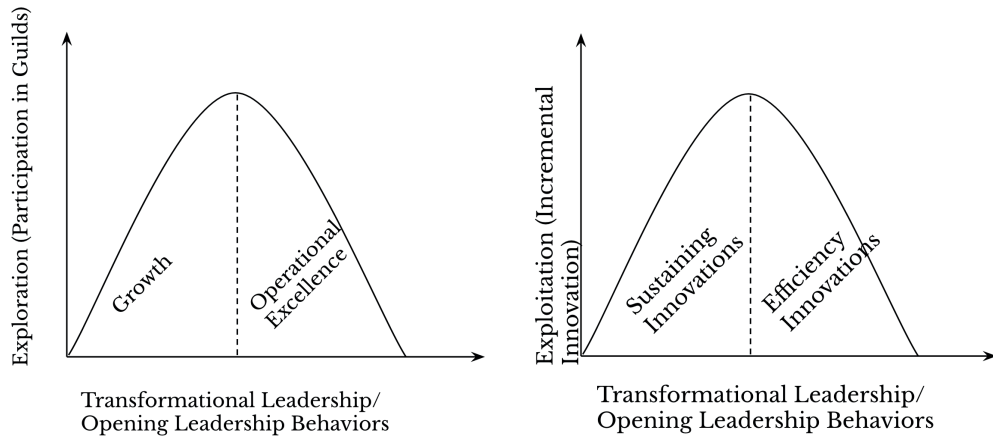
Previous literature has found that transformational and opening leadership behaviors positively predict exploration, and that transactional and closing leadership behaviors positively predict exploitation. These relationships were confirmed in this thesis. However, there were two counterintuitive findings. First, transformational leadership was shown to have an inverted U relationship with exploration, instead of a strictly positive one as noted in previous literature. Jansen et al. (2009) theorized this inverted U relationship but did not find empirical evidence for it. However, since Storebrand DBD is divided into Growth and Operational Excellence, this relationship could be observed: transformational leadership was found to be positive for Growth's willingness to explore, and negative for that of Operational Excellence.

The second counterintuitive finding was that transformational and opening leadership behaviors were found to have an inverted U relationship with exploitation in the different alignments. Jansen et al. (2009) found transformational leadership to negatively predict exploitation. However, referring to Christensen (2016)'s definition of incremental innovation as either sustaining or efficiency innovations, transformational leadership was found to positively influence exploitation in teams pursuing sustaining innovations. For efficiency innovation exploiting teams, i.e. Operational Excellence, transformational leadership was

seen as a distraction, something that confirms Jansen et al. (2009)'s finding.

Section 5.3 analyzed the mentioned leadership behaviors effect on exploration and exploitation in DBD. However, it is also plausible that the different leaders are also influenced by the organizational alignment they lead. This will be further discussed in Chapter 6.

In concluding this chapter, RQ1, RQ2, and RQ3 were answered. DBD balances the paradox of exploration and exploitation by task partitioning at the business unit level. At the managerial level, several balancing modes were detected, depending on management level. I also identified different dynamic capabilities and leadership behaviors applied by the leaders to foster ambidexterity. As several management levels appeared to have similar leadership approaches to the paradox, the final answer to RQ2 was that leaders could be divided into two groups: as enablers of ambidexterity and as executors of ambidexterity. Similarities, contradictions and interrelations between management levels were observed. In observing interaction effects between the managerial and business unit levels of analysis, interesting relationships between different leadership behaviors and exploration and exploitation were discovered.



**Figure 15: The inverted U relationships between transformational/opening leadership behaviors and exploration and exploitation**

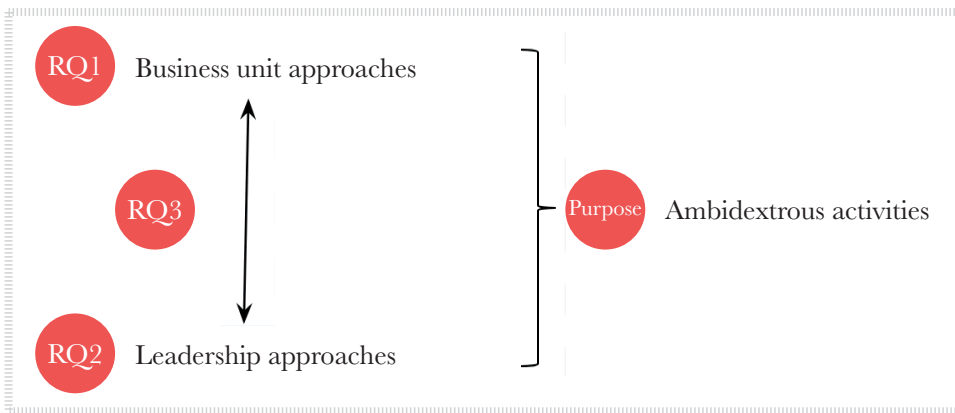
Chapter 6

# DISCUSSION

This chapter discusses the findings of the analysis in light of the theoretical gaps and ambiguities presented in the introduction. The findings bear implications for both theory and practice, which will also be discussed in this chapter. First, I will describe how the assessment of the research questions enabled the purpose of the thesis to be fulfilled. The conceptual model in figure 15 illustrates the moderating and combined effects of business unit and leadership approaches on ambidextrous activities pursued by the business unit. The term ambidextrous activities denotes how exploration and exploitation activities are balanced. Describing these moderating and combined effects of managerial and organizational antecedents to ambidexterity provides better understanding of how explorative and exploitative innovations are pursued in organizations, as called for by Jansen et al. (2009).

Firstly, the conceptual model illustrates that the ambidextrous activities, i.e. exploration and exploitation, that are pursued in an organizational alignment is moderated by the leadership approaches demonstrated by the managers of that alignment. Secondly, and likewise, and the design of the organizational alignment moderates the leadership approaches that

the different leaders demonstrate. These moderating effects are illustrated by the double arrow. Finally, leadership approaches and organizational alignments together influence the ambidextrous activities pursued by the business unit. Thus, the combined effects of the business unit and managerial approaches describe how the paradox of exploration and exploitation is balanced in the business unit. The conceptual model illustrates how the purpose of this thesis was fulfilled. RQ1 addressed business unit approaches - that is, how organizational alignments are designed to enable ambidexterity, and how they affected the ambidextrous activities of each of the alignments. RQ2 addressed how leadership approaches shape the organizational context to enable ambidexterity, taking each management level into consideration. RQ3 addressed how these levels of analysis interact with each other, describing how leadership approaches affect the organizational alignments to foster ambidexterity, and vice versa. The combined and moderating effects of organizational alignments and leadership approaches, described by these three research questions, describe how the paradox of exploration and exploitation is balanced in DBD.



**Figure 15: Conceptual model of fulfilling the purpose of this thesis.**

## 6.1 EXPLORATION AND EXPLOITATION CAN COEXIST - NOT ONLY IN A BUSINESS UNIT BUT ALSO IN SUBUNITS

I found that exploration and exploitation can coexist, not only in a business unit, but also in subunits.

The findings from addressing RQ1 were that, at the business unit level, the paradox of exploration and exploitation is balanced by task partitioning. This way, exploration and exploitation are pursued simultaneously, balanced between three organizational alignments. This shows how exploration and exploitation can be combined in business units, thus adding to a line of research described as underdeveloped by Lubatkin et al. (2006) and Cao et al. (2009). A key finding associated with this research question was that how the business unit, and also the subunit, is aligned to implement the strategy, i.e. its key success factors, people, formal organization, and culture - influences its exploration and exploitation activities.

More specifically, the Growth alignment (subunit) demonstrated some unexpected findings. Growth is aligned for exploration, but is shown to exploit - by definition. A suggested reason for this is that success of the teams are measured by short term goals, while their work approach has explorative characteristics. Therefore, growth teams pursue “explorative exploitation”. Intuitively, according to ambidexterity literature, an exploratory alignment that exploits implies that something has gone wrong. But Growth demonstrates that a strategic growth ambition need not foster radical innovations but may benefit from exploratory elements - as the teams thrive in terms of motivation and effectiveness in making incremental innovations.

This finding was enabled by applying a more granular definition of exploitative innovation. Instead of strictly associating exploitation with incremental innovation, the term was separated into efficiency and sustaining innovations (Christensen, 2016). Operational Excellence, shown to be aligned for exploitation, pursues efficiency innovations, and Growth’s “explorative exploitation” was defined as sustaining innovations. This calls for more flexibility in the paradox construct, as this was shown to lead to a more holistic understanding of the balancing of the paradox.

My analysis shows that combining exploration and exploitation elements in a subunit allows for outcomes or activities that are, in fact, a combination of explorative and exploitative innovation. Most ambidexterity and paradox literature to date emphasizes an “either/or” perspective, but several researchers call for managers to apply “both/and” thinking (Andriopoulos & Lewis, 2009). Growth illustrates “both/and” thinking in practice: applying elements from exploration to enable a different approach to exploitation. Thus, this thesis is consistent with the research of Cao et al. (2009) which showed that exploratory and exploitative processes can be supportive of one another. However, my concept of explorative exploitation extends this argument as it demonstrates how explorative approaches can lead to enhanced performance in existing domains.

## 6.2 DIFFERENTIATION MECHANISMS IN THE ORGANIZATIONAL DESIGN OF THE UNIT CALL FOR INTEGRATION TO LEVERAGE ASSETS IN THE FUTURE

As noted in the introduction, ambidexterity literature has traditionally focused on either differentiation or integration, but more recent research argue for the combination of both tactics (e.g. Andriopoulos & Lewis, 2009). The case of DBD illustrates how integration and differentiation can be combined to balance the paradox.

The balancing mode of task partitioning in Digital Business Development demonstrates how differentiation is applied to draw clear lines between exploration and exploitation. However, managers focused on contextual mode of ambidexterity, for instance as the senior team claimed to push exploration-exploitation decision down to lower levels and to be encouraging all members of the unit to participate in exploration activities in the guilds. This illustrates how differentiation and integration tactics, when viewed as analogous to structural and contextual approaches, complement each other in the balancing of the paradox in the business unit. This has been argued as vital for creating value balancing exploration and exploitation (Raisch et al., 2009; Smith & Tushman, 2005).

However, when viewing integration as leveraging resources across exploratory and exploitative efforts to achieve synergies between them (O'Reilly & Tushman, 2004), few integration mechanisms were observed in DBD. The Head of the division claimed he wants to keep the Growth and Operational Excellence alignments separate. Guilds, as a purely

explorative alignment, could serve as an integration mechanism between Operational Excellence and Growth if members of both alignments participated in the guilds and could learn from each other. These synergies remain untapped today as Operational Excellence members do not participate in the guilds. As Gilbert (2006) argued the mere coexistence of explorative and exploitative alignments is, while important, an insufficient condition for organizational ambidexterity.

### 6.2.1 Commitment and execution

Furthermore, informants emphasized that exploration always should be done with the least resources possible, due to resource scarcity. Storebrand is a mature company, and large in a Norwegian scale as 95 % of companies are SMEs with less than 250 employees, but as the Chief Strategist pointed out - they are not the biggest in their space, and competitors have far more (slack) resources. However, not devoting enough resources to exploration can compromise on the commitment to exploration, which is a critical success factor of to the ambidextrous strategy (O'Reilly & Tushman, 2016). In addition to devoting resources, execution disciplines need to be applied to exploration initiatives to ensure commitment.

The intended execution discipline of the Digital Board is promising, as it puts pressure on people to spend time in the guilds to meet the requirements of new business opportunities. However, only constitutional meetings have been held in the Digital Board, so the CEO recognizes his important task in driving it forward and realizing its intentions. If not, short term priorities will kill exploration initiative. As O'Reilly and Tushman (2016) warn: "Do not be seduced by the idea that exploration can be a night job" (p.210).

If the growth teams fail to take on exploration projects, exploration is left to voluntary efforts and the four resources that are “hunting for elephants”. Contextual ambidexterity has been criticized for leaving decisions about exploration and exploitation to the discretion of individuals (O’Reilly & Tushman, 2013), as it is difficult for them to set aside time for exploration. This is a second reason why integration and commitment are important to achieve in the future, by following up on execution mechanisms to ensure participation in the guilds as a way to formalize exploration.

### 6.3 MANAGERS AND INDIVIDUALS OF DBD ARE AMBIDEXTROUS

At the outset of this thesis, I noted and described the ambiguity in who owns the tensions of the exploration-exploitation paradox. There is also an ongoing debate in ambidexterity research as to whether individuals can be ambidextrous. Ambidexterity research either regards tensions as belonging only to the top management (e.g. O’Reilly & Tushman, 2004), or to all the individuals of the firm (e.g. Gibson & Birkinshaw, 2004). This thesis demonstrates that several management levels share managing the tensions, and shows how the different management levels apply different leadership approaches in this pursuit. However, not all individuals participate in balancing the contradicting demands of exploration and exploitation, for instance, members of Operational Excellence teams only exploit, and in the Guilds, members only explore.

I do, however, find evidence that the growth chiefs behave ambidextrously. This finding adds to the research stream

of individual ambidexterity. Advocates of structural ambidexterity argue that only a few selected top managers can display ambidextrous behavior, as they make decisions about resource allocations for exploration and exploitation (e.g. O’Reilly & Tushman, 2004). Advocates of contextual ambidexterity claim that all individuals of a firm can be ambidextrous (e.g. Adler et al. 1999). In DBD, not all individuals are ambidextrous, but other managers than just the senior levels are, as represented by the growth chiefs. Thus, again, DBD falls “in between” established “standards” in ambidexterity literature.

The Growth chiefs are ambidextrous individuals because they have both a short-term and long-term orientation (e.g. O’Reilly & Tushman, 2004). They are, in fact, ambidextrous in three ways: as managers making balancing decisions on behalf of their teams, as individuals participating in the guilds and leader group discussing new exploration opportunities, and with their leadership approaches inclined to encourage their team members to make decisions about when to explore and exploit as well. Mom et al. (2007) added to the individual ambidexterity research stream by investigating managers ambidexterity, and found that structural mechanisms and a manager’s decision-making authority is positively related to ambidexterity. This might explain why the growth chiefs were found to be the most ambidextrous leaders, as they lead autonomous teams. This also illustrates how different managerial levels influence each other’s ambidexterity as the growth chiefs are empowered by the senior team to make balancing decisions.

The commercial goals from Customer Area Norway do, however, make it difficult for the growth teams to keep a long-term and short term focus simultaneously,



or to make a truly autonomous decision about when to apply a long-term or a short-term orientation. Since the chiefs set their strategies at the beginning of the year, and follow up on external commercial goals each month, it becomes difficult to alter this plan throughout the year to pursue more exploratory projects. This is known in literature to impede exploration, as the returns of exploration are often uncertain and distant in time (March, 1991).

In general, leaders of DBD seem to perceive ambidexterity as a collective responsibility, rather than something controlled at the top. Even the Operational Excellence leaders, who were not found to be ambidextrous as team leaders, may be considered ambidextrous as individuals, since they claimed a personal responsibility for participating in exploration activities with the DBD leader group. This underpins the sense of collective responsibility, as outlined by Andriopoulos and Lewis (2009).

## 6.4 LEADERSHIP BEHAVIORS WERE FOUND TO IMPACT EXPLORATION AND EXPLOITATION ACTIVITIES

I included dynamic capabilities as a perspective to better understand the balancing of the paradox in practice. However, I believe dynamic capabilities would be better suited for longitudinal studies, as one can better observe which reconfigurations are realized and their effects over time. Additionally, Storebrand DBD is a fairly recently established business unit, so several of the identified reconfiguring examples remain intentions - for instance the team rotations. Conversely, studying leadership behaviors added to the understanding of how the paradox

is balanced in practice, as these are less abstract than dynamic capabilities and were easier for the leaders to describe.

In addressing RQ3 I observed interaction effects between organizational alignments and leadership approaches to ambidexterity. In this quest, there were two interesting findings: that transformational leadership seems to have an inverted U relationship with exploration, and with exploitation.

Due to the inverted U relationship between transformational leadership and exploration and exploitation discovered in this thesis (section 5.3), the relationships previously identified (e.g. Vera & Crossan, 2004; Jansen et al. 2009) may be up for redefinition in future research. This finding is an indication that both transformational and transactional leadership behaviors may both have a positive impact on exploration and exploitation, which supports Yukl (2009)'s argument to look for a more comprehensive set of leadership behaviors instead of sticking to the dichotomies of transformational and transactional or opening and closing leadership behaviors.

The inverted U relationship was found by parsing the incremental innovation term into efficiency and sustaining innovations, arguing that transformational leadership behaviors have a positive effect on teams pursuing sustaining innovations. This relationship has previously only been theoretically observed (Jansen et al., 2009). Seeing this inverted U relationship in conjunction with the finding that Growth pursues innovation outcomes that are a combination of exploration and exploitation, can offer additional insights on combinations of leadership behaviors; perhaps this type of innovation requires a combination of leadership behaviors.

## 6.5 IMPLICATIONS OF THE SIMILARITIES IN LEADERSHIP APPROACHES TO AMBIDEXTERITY

As introductory noted, multiple-level studies have been called for by scholars - both studies spanning multiple organizational levels, and multiple levels of analysis. This thesis adds to both these gaps, and the implications of findings will be discussed in this section.

The most central finding with regards to multiple managerial levels, were that several management levels had similar, if not identical, approaches to balancing the paradox. Due to these similarities, one could question the value of a multiple level approach in this case, however it did enable me to observe moderating and combined effects of different levels of analysis.

Since multiple managerial levels were found to have similar leadership approaches to the paradox, they were divided into two groups: enablers of ambidexterity (top, middle and HR Managers) , and executors of ambidexterity (Growth chiefs). This is in line with Papachroni et al. (2015)'s finding that senior managers face strategic tensions from the paradox, and lower level leaders face operational tensions. By making the distinction of enablers versus executors of ambidexterity, more granularity in describing the interaction effects between business unit and managerial levels of analysis can be provided: the top, middle, and HR managers make the design choices they find best fit to implement the ambidextrous strategy, and are therefore considered to influence the organizational context. The team level leaders, on the other hand, are influenced by the organizational context.

The implication of the previous argument is that the exploration and exploitation activities that take place in the different organizational alignments are not only influenced by the leaders of those alignments and above, but by the organizational design of those alignments. In other words the team level leaders, as executors of ambidexterity, are influenced by the alignment they lead: Operational Excellence leaders, for instance, are believed to be more transactional and short-term-focused, as this is required by their task environment. The Growth chiefs have more freedom - more autonomy - in their ambidexterity decisions since their alignment supports flexibility and speed. Describing these moderating and combined effects of managerial and organizational antecedents to ambidexterity, provides better understanding of how explorative and exploitative innovations are pursued in organizations, as called for by Jansen et al. (2009).

This supports Raisch et al. (2009)'s argument that "organizational mechanisms may be required to enable ambidexterity at the individual level, and ambidextrous individuals may be vital to the usefulness of organizational mechanisms" (p.686), which was also an argument why analyses capturing multiple levels were needed. Rosing et al. (2011) also suggested multilevel research to be helpful when studying the effect of leadership on individual and team innovation. The different organizational alignments of DBD have key success factors that impact the frequency of when explorative and exploitative activities are required, which may have consequences for the leadership behaviors needed (Rosing et al. (2011).

On an even higher level, the similarities in management levels and their approach to the paradox may be explained by the fact that I researched a business unit of a Norwegian company. Norwegian companies are known for their flat hierarchies, something the case business unit illustrates as the Town Halls Meetings, which comprise the entire unit, are held weekly, and leader group meetings are held monthly. This switch of information flow embodies the values of speed and simplification that represent the business unit, and underscores the flat hierarchy. Similarly, the Norwegian culture is characterized by short power distance and an informal communication style with superiors (Hofstede, 2017). Thus, the national culture that provides a context for innovation in an organization seems to play a role in the way that ambidextrous leadership is performed. This supports previous arguments by Rosing et al. (2011) and Bledow et al. (2011). By providing a detailed description of the organizational alignments, balancing modes, dynamic capabilities, and leadership behaviors conducive to exploration and exploitation in this case study of a business unit, this thesis contributes to the gap in ambidexterity literature of how the paradox of exploration and exploitation is balanced in practice. Further, I contribute to the theory on how exploration and exploitation can be combined in the same business unit, and demonstrate how leaders at different management levels balance the paradox in the business unit.

Chapter 7

# CONCLUSION

## 7.1 RESEARCH QUESTIONS AND PURPOSE

Concluding RQ1: *How is the paradox of exploration and exploitation balanced at the business unit level of Digital Business Development?* I find that the business unit balances the paradox of exploration and exploitation by task partitioning and contextual ambidexterity - i.e. differentiation and integration. The business unit is divided into three organizational alignments, one for pursuing exploration, one for exploitation, and one for both. Participation in the exploration alignment, the Guilds, is voluntary and the organizational context encourages individuals to make decisions about exploration and exploitation, which is why contextual ambidexterity is considered as a balancing mode of the business unit.

Moving on to the managerial level, several balancing modes were detected, depending on the management level of the leader. Leaders have an important role in shaping the organizational context. In addressing RQ2: *How is the paradox of exploration and exploitation balanced at different managerial levels of Digital Business Development?*, in addition to balancing modes I identified different dynamic capabilities and leadership behaviors that foster ambidexterity,

which together were labeled leadership approaches to ambidexterity. As several management levels appeared to have similar leadership approaches, the final answer to RQ2 was that leaders, in balancing the paradox, could be divided into two groups: as *enablers* of ambidexterity and as *executors* of ambidexterity. Thus, I found that some managers at lower levels (i.e. Growth chiefs) are able to hold two mindsets at once - be ambidextrous leaders, but that not all individuals of DBD behave ambidextrously. This contradicts the perspectives of both structural and contextual ambidexterity which respectively argue that paradox tensions belong to either all individuals of the organization or to the top managers only.

Addressing RQ3: *How do the managerial and business unit levels influence each other in balancing the paradox of exploration and exploitation?* I observe interaction effects between the managerial and business unit levels of analysis. Relationships between different leadership behaviors and exploration and exploitation were discovered. Especially interesting are the relationships between transformational leadership and exploration and exploitation. When parsing the incremental innovation term into the categories of

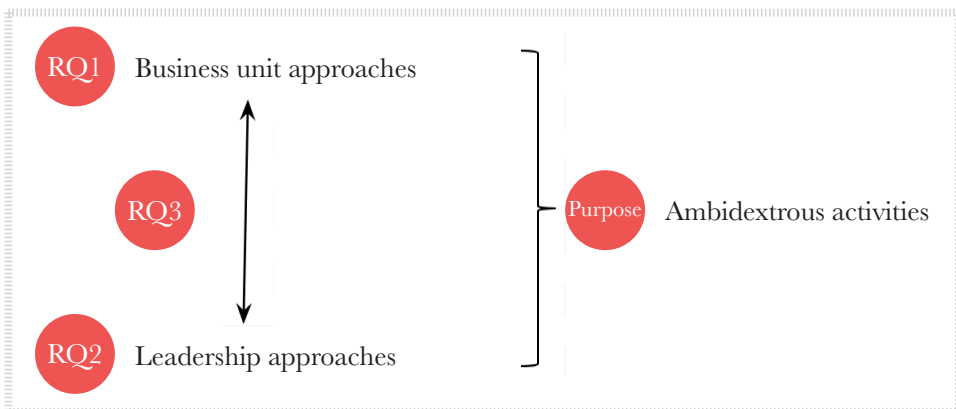


Figure 15: Conceptual model of fulfilling the purpose of this thesis.

efficiency and sustaining innovations, transformational leadership was shown to be positive for the latter and negative for the former - both for exploration and exploitation. These findings have previously only been theoretically hypothesized (i.e. Jansen et al., 2009). Therefore, this thesis sheds light on the complex relationships between leadership behaviors and exploration/exploitation outcomes.

Finally, the conceptual model presented in figure 15 illustrates how the purpose of this thesis was fulfilled. As we have seen, RQ1 addressed how organizational alignments are designed to enable ambidexterity. RQ2 addressed how leadership approaches shape the organizational context to enable ambidexterity. RQ3 addressed how these levels of analysis interact with one another, describing how leadership approaches affect the organizational alignments to foster ambidexterity, and vice versa. The combined effects of organizational alignments, leadership approaches, and their interaction effects, described by these three research questions, serve as an answer to how the paradox of exploration and exploitation is balanced in the business unit. This fulfills the purpose of my thesis.

## 7.2 CONTRIBUTION

Upon fulfilling the purpose of this thesis, I contribute to the gaps in ambidexterity literature identified in the introduction, as this thesis presents a holistic, multi-level view of leadership approaches to ambidexterity. Thereby, this thesis contributes to the avenues of research spanning multiple managerial levels and levels of analysis, as called for by e.g. Raisch & Birkinshaw (2008), and investigating the practical implications of balancing the paradox. Additionally, I contribute to the research on individual ambidex-

terity, as I, after viewing how the different leaders approach the paradox, find that leaders can be divided into enablers and executors of ambidexterity. This extends the notion of how paradox tensions are solved one level down in the organization (Raisch & Birkinshaw, 2008; Andriopoulos & Lewis, 2009).

Furthermore, my analysis of leadership approaches contributes to the research stream of ambidextrous leadership, as I combine the different balancing modes with dynamic capabilities and leadership behavior perspectives to better describe how the different leaders balance the paradox. Findings from this analysis include interaction effects between the managerial and business unit levels of analysis, as I observe some interesting relationships between leadership behaviors and their influence on exploration and exploitation.

These relationships describe how transformational and transactional, and opening and closing, leadership behaviors influence exploration and exploitation activities in followers. These findings confirm the identified relationship with transactional leadership as positively influencing exploitation and negatively influencing exploration, but contradict Jansen et al. (2009)'s finding that transformational leadership does not have an inverted U relationship with exploration, as I find indications that empirically confirm this relationship. In fact, I also found that transformational leadership had an inverted U relationship with exploitation as well - something that is unprecedented in ambidexterity literature. This furthers the understanding of the management of exploration and exploitation in organizations.

Lastly, I contribute to the understanding of how exploration and exploitation efforts can be combined in business units and teams, demonstrating how structural and contextual approaches to ambidexterity can complement each other. My findings extend the research that associates exploration with radical innovation and exploitation with incremental innovation, by suggesting a third form of innovation that resides in between the other two: explorative exploitation. This contributes to a line of research that was claimed underdeveloped by Lubatkin et al. (2006) and Cao et al. (2009), which considers it possible for organizations to pursue high levels of exploration and exploitation simultaneously.

### 7.3 LIMITATIONS

In RQ3 I investigated the interaction effects between business unit and managerial levels of analysis, meaning how leadership behaviors influenced exploration and exploitation activities in the different organizational alignments. However, as leadership is about influencing people, it is a limitation of my research that I did not interview followers to get their view of how they were influenced by the different leadership behaviors. The statements of how different leadership behaviors affect followers' ambidexterity, therefore risk being one-sided. Also, verifying the leaders' statements could have been achieved by spending more time on observation of the leaders. Interviewing followers and including observation as a more substantial part of the research design were not prioritized due to time constraints. Most likely, the amount of empirical data would quickly be unsurmountable. Conducting interviews with leaders from selected levels is believed to have provided me with more relevant information in a relatively short

time, as there is no guarantee I would be able to observe exploration and exploitation if I, for instance, spent a day shadowing given leaders or teams.

The purpose of this thesis was to investigate how the paradox of exploration and exploitation is balanced in a business unit. The managerial levels covered in RQ2 therefore only includes levels found within the business unit. However, conducting a multiple-level study may have benefited from including more senior managers (i.e. Top Management Team members), as a substantial body of literature argues for their important role in balancing the paradox. This could have provided insights into the alignment and commitment of the top management team, something that has been deemed crucial to succeeding with an ambidextrous strategy (O'Reilly & Tushman, 2004), but would arguably not contribute further to the purpose of this thesis; to understand how the paradox is balanced in a business unit.

### 7.4 PRACTICAL IMPLICATIONS

Based on the findings of this thesis, I would like to provide some recommendations for Storebrand DBD. Since I conducted a single-case study, I do not attempt to indicate implications for practice in other businesses or industries. However, I recognize that some of the identified key success factors and challenges for Storebrand Digital Business Development to address, may be of importance to other companies as well.

Integration was identified as a critical success factor in the organizational model, and managers need to foster learning across explorative and exploitative alignments. First and foremost, integration is crucial to leverage resources across the three alignments. This

should entail encouraging people to participate in the Guilds, so that Operational Excellence teams and Growth teams can learn from each other and synergies can be tapped between the two alignments.

Secondly, integration between the Growth teams and the Guilds is also suggested as an execution discipline for exploration. Execution disciplines are important to get in place in order to avoid that short term priorities crowd out the innovation efforts that shall secure the future survival of Storebrand. Investment from the Digital Board is a promising mechanism for ensuring that exploration initiatives are followed through, and informants stressed the importance of assigning an owner to the new business opportunities in the organization. I believe the growth teams are an arena where this can be achieved; as Growth members participate in the Guilds and have an explorative approach to its exploitation endeavors, they are a natural location for seizing the opportunities that are sensed in the Guilds

Third, commitment to exploration is important in order to succeed with the ambidextrous strategy. Informants stressed that exploration should consume the least resources possible, thus putting the commitment at stake. However, the partnership strategies, which were outside the scope of this thesis, serve as promising outlets for exploration in the future. By entering partnerships with startups and larger players, Storebrand may get “the best of both worlds”: not spending an extensive amount of resources on developing ideas in-house, while possibly reaping the benefits of setting foot in a new domain or technological trajectory. This may strengthen the position of the firm in the face of rapid environmental changes.

Integration and alignment is important to ensure that the entire unit is working in the same direction, and feel that both exploration and exploitation is a collective responsibility (Gibson & Birkinshaw, 2004). However, leaders need to acknowledge that there are different alignments in DBD and that these need to be managed with “consistent inconsistency” (O’Reilly & Tushman, 2016). There are clear lines between exploration in the Guilds and exploitation in the two other areas, but not between Growth and Operational Excellence in terms of roles and responsibilities. It is of paramount importance that Growth and Operational Excellence are deliberately held to different standards, as their goal horizons are different. At the same time, both alignments must be recognized for their work, as it is both exploration and exploitation that makes the ambidextrous strategy succeed.

An identified challenge with the Guilds and their voluntary nature is to ensure that enough time is spent in them. It is difficult to assess how much time is “enough”, but an identified problem is that Operational Excellence members do not participate in these activities. A reason for this may be that their task environment is aligned for efficiency, refining existing knowledge and improving existing solutions, which requires a short-term focus on profits. Therefore, Operational Excellence may live in a “thought world” too far from the explorative activities in the guilds. A second reason is that external factors inhibit Operational Excellence is that the collaborations with Cognizant and the line organization are slowing down their workflows and deliveries. This leaves little time for exploration. This makes it a key success factor for the future to improve the collaboration processes in these interfaces.



However, due to their efficiency focus, getting Operational Excellence members to participate in searching for new business opportunities may be farfetched. They are found to respond poorly on the transformational leadership behaviors demonstrated by the senior managers, and seem to feel like “outsiders” in the communicated culture favoring exploration. For instance, the values of speed and simplification are not likely to be motivating when orders are complex and collaboration processes make things move slowly. A proposed solution to this issue is to organize the efficiency exploiting efforts, i.e. Operational Excellence, together with IT in the line organization. Since their workflows are not believed to be very different from those of “traditional” IT, and the IT divisions of the line organization also collaborate with Cognizant and get orders from the line organization, organizing Operational Excellence here they can work together with IT to learn how to work with offshored resources and refine the collaboration process. This is believed to enhance their performance in exploiting existing resources.

A second positive outcome of organizing Operational Excellence outside DBD is that it reduces complexity in the organizational design of DBD, so that managers can focus their efforts on the Growth teams and Guilds to adapt to discontinuous changes in technologies and markets. This would enhance the explorative focus of DBD, and could therefore represent a switch to structural ambidexterity. Jansen et al (2013) found that successful ambidextrous firms changed balancing modes over time, which this would be an example of.

## 7.5 THEORETICAL IMPLICATIONS

A central finding of this thesis was that exploitation could benefit from elements usually associated with exploration. Most ambidexterity research to date focuses on the endpoints of the continuum between exploration and exploitation, and associates exploitation with incremental innovation and exploration with radical innovation. My opinion is that these categories are too narrow and too far apart to fit other innovation outcomes that are also beneficial to the firm. A potential problem with dichotomies is that they oversimplify complex processes (Yukl, 2009), which can limit the understanding of interdependencies and how leaders can integrate the processes associated with exploration and exploitation.

By parsing incremental innovation into efficiency and sustaining innovations, using Christensen (2016)'s definitions, I am able to show that sustaining innovations fall in between the endpoints of exploration and exploitation. Such combination of exploration and exploitation in an organizational alignment was shown to foster innovation outcomes that are a combination of radical and incremental innovation: explorative exploitation. This is suggested as “the missing link” between exploration and exploitation, which implies moving beyond seeing dilemmas and tensions in purely binary terms, and suggests efforts to consider reframing of dilemmas in the future.

Seeing this in conjunction with my findings that transformational leadership can positively predict both exploration and exploitation in teams that pursue a combination of exploration and exploitation, implies the possibility of adopting a different view on the influence of leadership behaviors on innovation outco-

mes in the future. This supports Yukl (2009)'s argument that scholars should look for a more comprehensive set of leadership behaviors instead of sticking to dichotomies. I believe this is important in order to find a set of leadership behaviors that foster exploration, exploitation, and a combination of the two.

## 7.6 METHODOLOGICAL IMPLICATIONS

Upon finishing this thesis I also found some implications for methodology. The empirical data displayed many examples of transformational leadership behaviors and opening leadership behaviors, but less transactional and closing behaviors. The reason for this could be the recent establishment of the business unit. Jansen et al (2009) found that transformational leadership is prioritized in times of environmental dynamism. The leaders seemed eager to speak about the things they do differently in the new model, which is related to exploration, and therefore transformational leadership behaviors may have been more prevalent. Future studies can employ more observation in their research design, to observe to a larger extent what is practiced on a daily basis.

Additionally, to further deepen the understanding of how leaders shape the organizational context and apply transformational and transactional, opening and closing leadership behaviors to foster ambidexterity, a study incorporating employees as a unit of analysis is suggested. Due to time limitations, interviews with employees were not prioritized, but should be investigated in further research to better establish the relationships outlined in this thesis between leadership behaviors and ambidexterity activities pursued by followers.

## 7.7 FUTURE RESEARCH

While this thesis provides answers to the research questions posed, it also raises opportunities for future research.

Future longitudinal studies are necessary to empirically establish the causal indications of RQ3. Case studies are not meant for establishing causality or generalization of findings, but the comprehensive description provided in this thesis suggests some interesting mechanisms that can serve as groundworks for further investigation. Longitudinal studies can observe the interaction effects presented in this thesis and how they affect performance over time, as enhanced long-term performance should be the ultimate outcome of ambidexterity.

Although this thesis observes that team level leaders are able to take on contradictory tasks, it does not explain why these managers - as opposed to other individuals - are able to do so. However, according to Raisch et al. (2009), answering this question may require exploring managers' personal characteristics. This was outside the scope of this thesis, as I kept a managerial - not psychological, focus throughout the study. Exploring personal dispositions to exploration and exploitation would add to the individual ambidexterity research stream, as several researchers define individual level ambidexterity as the cognitive abilities of an individual to balance exploration and exploitation (Kauppila & Tempelaar, 2016). Cognitive processes for managing the paradox have been researched at the top management level (Smith & Tushman 2005; Carmeli & Halevi, 2009), thus, future studies can investigate such processes at lower managerial levels.

The distinction of efficiency and sustaining innovations also enabled other relationships to be discovered. Transformational leadership was found to positively predict exploration in teams pursuing sustaining innovations as it allowed them to think differently about problems, but found to negatively predict exploration in efficiency exploiting teams as it was viewed as a distraction. Thus, an inverted U relationship is suggested. Previous research (i.e. Jansen et al. 2009) has hypothesized this relationship, but was not able to find empirical evidence supporting it. Additionally, transformational leadership was found to positively predict exploitation in sustaining innovation teams (i.e. Growth). This contradicts previous findings, and is evidence that being flexible in the definition of innovation/the paradox can raise new opportunities in designing organizational alignments for improved adaptation. Therefore this thesis provides insights that can be further tested empirically and quantitatively, or across multiple cases.

As this thesis provides case research about how exploration and exploitation can be combined in business units, and groups, taking a firm level perspective would provide interesting insights on integration mechanisms between the business unit and the rest of the organization. This is because most firm level studies on integration mechanisms have been researched in structurally ambidextrous firms, i.e. where exploration and exploitation are separated in different business units. DBD serves as an interesting case for this purpose, as this thesis has touched upon challenges associated with the collaboration interfaces between this business unit and the rest of the organization.

In *The Age of Paradox*, Handy (1994) wrote that “Paradoxes are like the weather, something to be lived with, not solved, the worst aspects mitigated, the best enjoyed and used as clues to the way forward” (p. 13). Ideally, the insights contained in this thesis contribute to the knowledge about favorable conditions that support leaders to navigate and learn from paradox.



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# APPENDIX 1

A Priori Theoretical Framework, brought to the interviews

