



LUND UNIVERSITY
School of Economics and Management

Walking a Tightrope in Organisational Ambidexterity

Ambidextrous Micro-Balancing as a Prerequisite for Managerial Success

by Tizian Hoppen & Susanne Jeppsson

May, 2018

Master's Programme in International Strategic Management

Supervisor: Merle Jacob

Abstract

Title	Walking a Tightrope in Organisational Ambidexterity: Ambidextrous Micro-Balancing as a Prerequisite for Managerial Success
Authors	Tizian Hoppen & Susanne Jeppsson
Supervisor	Merle Jacob
Submission Date	27th of May 2018
Keywords	Organisational Ambidexterity, Exploration versus Exploitation, Efficiency and Flexibility, Managerial Challenges, Strategic Management
Purpose	Responding to a well-defined research gap, the purpose of this study is to identify challenges that arise from organisational ambidexterity and to assess implications for managers derived from these challenges.
Research Question	What are the challenges managers face in sustaining organisational ambidexterity?
Methodology	A qualitative, multiple-case study design has been crafted to capture managers' perceptions of the challenges they face and how they deal with them across companies from different industries and sizes. The empirical results are based on assessing qualitative interviews as well as organisational documents.
Findings	To succeed in balancing the overarching objective in organisational ambidexterity between exploration and exploitation, managers across different hierarchy levels are challenged to strike multiple balances in their daily work. Managers need to balance a) communication types to resolve insufficient communication of the strategy, b) generalists and specialist knowledge to resolve workforce scarcity, c) entrepreneurship and routines to resolve slow and inflexible processes and finally, d) competition and cooperation to resolve conflicting objectives between units.
Contributions	By developing the concept of <i>Ambidextrous Micro-Balancing</i> , this study contributes to the rich field of organisational ambidexterity on the managerial level; as a prerequisite for pursuing an ambidextrous strategy in teams, units and as a company.

Acknowledgements

We want to express our sincerest gratitude to our supervisor Merle Jacob, professor at the Lund University department of Business Administration, who has provided us with outstanding guidance, great ideas and who has put us into a good mood every meeting.

We also offer warm thanks to our fellow students at the MSc International Strategic Management Programme and to our study director Matts Kärreman for providing valuable feedback of this paper.

Our genuine appreciation is extended to all the managers within the three case companies for generously dedicating their time and effort which helped us to reach invaluable insights.

Finally, we want to thank our beloved ones for their patience, support, and encouragement and indeed to every single reader for taking interest in this study. We hope it offers food for thought and a deeper understanding of the complex nature of organisational ambidexterity.

Susanne & Tizian,

Lund, 27th of May 2018

Table of Contents

1 Introduction	8
2 Literature Review	11
2.1 Conceptualisation of Organisational Ambidexterity	11
2.1.1 Exploration versus Exploitation	12
2.1.2 Dynamic Capabilities	13
2.1.3 Types of Ambidexterity: Structural, Sequential and Contextual	14
2.2 Organisational Ambidexterity in Action	18
2.3 Theoretical Framework	21
2.3 Chapter Summary	21
3 Methodology	23
3.1 Research Design	23
3.2 Data Collection Method	25
3.3 Data Analysis	28
3.4 Validity and Reliability	29
3.5 Chapter Summary	31
4 Empirical Results	32
4.1 German Catering Company	32
4.1.1 Strategic Intent	34
4.1.2 Ownership and Responsibility	35
4.1.3 Common Identity	35
4.1.4 Aligned Rewards and Culture	36
4.1.5 Managing Tensions	37
4.1.6 Learnings	37
4.2 Swedish Innovation Hub	38
4.2.1 Strategic Intent	39
4.2.2 Ownership and Responsibility	39
4.2.3 Common Identity	40
4.2.4 Aligned Rewards and Culture	40

4.2.5 Managing Tensions	41
4.2.6 Learnings	41
4.3 UK Furniture Company	42
4.3.1 Strategic Intent	43
4.3.2 Ownership and Responsibility	44
4.3.3 Common Identity	44
4.3.4 Aligned Rewards and Culture	45
4.3.5 Managing Tensions	46
4.3.6 Learnings	46
5 Analysis	48
5.1 Ambidexterity in Practice	48
5.2 Managerial Challenges	50
5.2.1 Insufficient Communication of the Strategy	50
5.2.2 Workforce Scarcity	52
5.2.3 Slow and Inflexible Processes	53
5.2.4 Conflicting Objectives between Units	54
5.3 Chapter Summary	55
6 Discussion and Managerial Implications	57
6.1 Balancing Communication Types to Resolve Insufficient Communication of Strategy	57
6.2 Balancing Generalist and Specialist Knowledge to Resolve Workforce Scarcity	58
6.3 Balancing Entrepreneurship and Routines to Resolve Slow and Inflexible Processes	60
6.4 Balancing Competition and Cooperation to Resolve Conflicting Objectives Between Units	61
6.5 Ambidextrous Micro-Balancing	62
6.5 Chapter Summary	64
7 Conclusion	65
Reference List	69
Appendix A: Semi-structured Interview Guide	78
Appendix B: An integrated Model of the HR and Organisational Antecedents of Ambidexterity	79
Appendix C: Effects of Increasing Environmental Unpredictability on Performance	80

List of Tables

Table 1: Case Companies 26

Table 2: “Criteria for judging the quality of research designs” (edited from Yin, 2014, p.45)30

Table 3: Organisational Documents GCC..... 34

Table 4: Organisational Documents SIH 38

Table 5: Organisational Documents UKFC 43

List of Figures

Figure 1: Theoretical Framework	21
Figure 2: Ambidextrous Micro-Balancing	63

1 Introduction

“It is not the strongest of the species that survive, nor the most intelligent, but the one that is most responsive to change” (Darwin, 1859). While Darwin was talking about evolution that occurs over the course of thousands of years, the business world as we know it today changes every single day. With new technologies emerging and new businesses starting up, incumbents need to master the balancing act between exploiting existing resources and exploring new opportunities - both at the same time (O'Reilly, Harreld & Tushman, 2009). Organisational ambidexterity, defined in general terms as a firm's ability to successfully balance the two conflicting objectives of exploration and exploitation, has become a major argument for firms' success (O'Reilly & Tushman, 2013). More specifically, it emerged from the fundamental challenges confronting an organisation whereby they create solid organisational structures and methods for exploiting maximum profit to ensure its current viability, whilst ensuring flexibility to explore the opportunities of tomorrow (March, 1991).

During the past 15 years, organisational ambidexterity has grown in importance and been even further stimulated by the broadened markets from a globalised environment and the increased threat of competition (O'Reilly & Tushman, 2013). In a study of American firms, only 10% of those founded in the 80s survived a decade later (Stubbart & Knight, 2006) and today, only a fraction (0.1%) of established firms in the US live to the age of forty. Even before then, studies gave evidence of well-established companies only surviving on average between six and fifteen years (Agarwal & Gort, 1996), not to mention the yearly recorded collapse of large seemingly successful firms (Ormerod, 2005). The field of organisational ambidexterity therefore explains the underlying factors for organisational longevity, and particularly when attempting to explain why highly well-performing firms with developed capabilities may fail to compete long-term, despite having a superior power position and the resources available to maintain it (Brown & Eisenhardt, 1997).

Ambidexterity research currently moves into a phase of understanding the tensions and challenges managers face when implementing ambidextrous activities and structures on a managerial level. This paper seeks to cover this repeatedly highlighted knowledge gap (Heracleous, Papachroni & Andriopoulos, 2017; O'Reilly & Tushman, 2013; Blarr, 2012; Lavie, Kang & Rosenkopf 2011; Jansen, Tempelaar, Van den Bosch & Volberda, 2009) and identify the challenges that senior and middle managers encounter, as well as how they deal with them across sectors and markets. Moreover, the primary source for this study identifies that “there exists a gap in understanding how ambidexterity is actually managed within organizations” (O'Reilly & Tushman, 2011, pp.19-20). Thus, the following overarching research question that serves as a guideline and will be answered thoroughly is:

What are the challenges managers face in sustaining organisational ambidexterity?

The purpose of this study is to contribute to the world of academia as well as practitioners in organisations by covering a fundamental issue not yet researched in organizational ambidexterity (Heracleous, 2017; O'Reilly & Tushman, 2013). Analysing the activities and challenges managers face when exploring and exploiting provides an answer to the question of how they deal with the problem of implementing organisational ambidexterity. It also indicates interpersonal dimensions cognitively, behaviourally as well as organisationally for managers to adapt to changing environments and themselves master the balance between exploring and exploiting. The aim of this thesis is to assess the challenges that managers in organisations with an ambidextrous strategy face in their daily work, as well as to analyse their implications. Thus, the research objective is to derive implications from these challenges and to contribute to theory by responding to the aforementioned research gap and thus enrich the field of organisational ambidexterity.

This thesis is structured into seven main pillars with distinct purposes. First, the introduction aims to provide a first overview about the research topic, the reasoning for choosing this particular subject and to assess the contributions that are aimed to be made. Second, the literature review provides a synthesis of the most relevant and important theories in ambidexterity literature and serves as a foundation for the subsequent chapters. Third, the methodology section outlines the research design, the reasonings and procedures for collecting and analysing data, as well as essential validity and reliability considerations. Fourth, the

empirical results display the findings made throughout the data collection process. Fifth, in the analysis chapter, the different types of ambidexterity in the case companies as well as the four most prevalent challenges of managers are contrasted and put in relation to the literature body. By this, the research question “*What are the challenges managers face in sustaining organisational ambidexterity?*” is analysed and answered to using the four most prevalent challenges. Sixth, the discussion aims to explain the managerial implications of these challenges and introduces a new concept called “Ambidextrous Micro-Balancing”. Seventh, this thesis concludes with a reflection about the research objectives, the practical and academic implications, and wraps up with the most important findings of this study.

2 Literature Review

Organisational ambidexterity is an academic construction that requires a theoretical assessment in order to adequately encompass its meaning (Birkinshaw & Gupta, 2013). This literature review will therefore start with outlining the themes, concepts and controversies generated from key contributors. This is followed by the types of ambidexterity that currently prevail in management in order to distinguish the ways ambidexterity is operationalised in practice. To narrow down the latter, the article “*Organisational Ambidexterity in Action: How Managers Explore and Exploit*” by O'Reilly and Tushman (2011) is used to lay the foundations of the structure as well as arguments presented. They give detail of five conditions necessary for leaders across firms and sectors to successfully manage ambidexterity, which will support in the investigation of existing challenges and their implications as a result of emerging tensions. These conditions; ranging from a compelling strategic intent, a common ambidextrous vision and values, ownership, aligned organisational architectures and senior leaders' ability to solving tensions will be outlined and further explained below.

2.1 Conceptualisation of Organisational Ambidexterity

Ambidexterity originally stems from the need to adapt and even radically change firms in order to cope with the contrasting and often conflicting goals that arise from competing in various markets at the same time (Tushman and O'Reilly, 2013; Nosella, Castello & Filippini, 2012). Duncan (1976) who introduced the term *ambidextrous organisations* in literature, referred to this adaptation as a dual structure - having one type of structure when initiating an innovation, and another when executing it. March (1991), another pioneer in the conceptualisation of the term, described that “the basic problem confronting an organization is 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. 105). His framing provided a basis for other researchers to extend ambidextrous challenges in management to incremental and radical innovation, alignment and adaptability (Gibson & Birkinshaw, 2004),

integration and responsiveness (Gulati & Puranam, 2009) as well as efficiency and flexibility (Tushman & O'Reilly, 2013). Often, firms create these processes and structures based on their strategies and market conditions (e.g., Lawrence & Lorsch, 1967; Woodward, 1965). As an example, firms that operate in stable environments develop what Burns and Stalker (1961) explain as *mechanistic management systems* with very clear hierarchical relations, roles-and responsibility areas whereas more turbulent environments develop more *organic management systems* with informal structures, lateral coordination and are less reliant on formalisation and specialisation in order to manage turbulences. This perspective initiated the first school of thought that ambidexterity is concerned with creating these dual structures simultaneously in order to become ambidextrous (Duncan, 1976). Likewise, Tushman and O'Reilly (1996) described ambidexterity as a firm's "ability to simultaneously pursue both incremental and discontinuous innovation ... from hosting multiple contradictory structures, processes, and cultures within the same firm" (Tushman & O'Reilly, 1996, p.24). Although they limit their arguments to innovation, which risks the concept of adaptability to only reflect the creative process, they do follow the assumption that different structural alignments are required based on the various strategies and environments they face (e.g. Schumpeter, 1934; Aldrich, 1999; Sine, Mitstihashi & Kirsch, 2006; Tushman & O'Reilly, 2002).

2.1.1 Exploration versus Exploitation

These often-conflicting structural alignments are aimed at generating the value from *exploration and exploitation* with Tushman and O'Reilly (1996) describing ambidexterity as "the ability of an organisation to explore and exploit" (Tushman & O'Reilly, 1996, p.24). March (1991) related exploitation to efficiency, control, certainty and variance reduction and exploration to search, discovery, autonomy and innovation. Exploration and exploitation has been supported by the majority of experts in recent studies and is one of the most time-appropriate definitions (e.g. Smith, Binns, & Tushman, 2010; Smith & Tushman, 2005; Jansen, George, Van den Bosch, & Volberda, 2008; Jansen, Vera, & Crossan, 2009; Lai & Weng, 2010; Nemanich & Vera, 2009). These actions become important within the context of management dealing with a firm's potential threats. In one of the most cited papers in the field *Exploration and Exploitation in Organizational Learning*, March (1991) argues that there will always exist fundamental incongruities when learning how to "exploit existing assets and positions in a profit-producing way and simultaneously to explore new technologies and markets - to

configure and reconfigure organisational resources to capture existing markets as well as new opportunities” (March, 1991, p.105). This paradox of management, of balancing the trade-off between efficiency and flexibility (Thompson, 1967) provides relevance for this paper to better understand these incongruities and their implications on managers today.

2.1.2 Dynamic Capabilities

The underlying assumption behind the aforementioned incongruities is that of bounded-rationality; where decision-makers are restricted by their own cognitive limitations when learning the balancing act (Simon, 1979). This opened up the second prominent theme in literature, to view ambidexterity as a dynamic capability (e.g. Chang, 1995; Hedlund & Ridderstrale, 1995; Levinthal & March, 1993). The dynamic capability view (DCV) is based on the foundation of core competencies, however focuses more on the influence that executives have on reacting to an evolving market (Harrell, O'Reilly & Tushman, 2007). Emphasis is placed on the ability to consistently adapt and reconfigure “organizational skills and resources to match changing environments” (O'Reilly, Harrell & Tushman, 2009, p.84), thus viewing ambidexterity as a dynamic capability to realise a sustained competitive advantage when exploring and exploiting (O'Reilly & Tushman, 2008). One should mention that although many academics agree with this standpoint, others oppose by emphasising the importance of managerial cognitive awareness, disposable social and human capital and particularly learning (Vogel & Güttel, 2013). From this perspective, management requires intellectual rigour in order to accomplish a sound “quality of managerial decisions, strategic change, and organizational performance” (Helfat & Martin, 2015, p.1). Recognising the other sub-opinions concerning the definition and function of dynamic capabilities; they range from the skill of integrating and differentiating simultaneously (Vogel & Güttel, 2013) to fostering a competitive advantage (Jurksiene & Pundziene, 2016; Jiang & Kortmann, 2014). Regardless, it is fair to say literature has yet to consolidate on a clear definition. This paper argues that dynamic capabilities offer added value to the conceptualisation of ambidexterity (although in its current state risks falling short the vast body of literature on the topic). For the sake of clarity, this paper views dynamic capabilities as an organisational and managerial skill for competing “in new markets and technologies ... to survive in the face of changed market conditions” (O'Reilly & Tushman, 2008, p.330). In this context, the role of middle managers has been proven important as they

utilise linkages between a newly entering technology and its complementary assets (Taylor and Helfat, 2009) and is therefore faced with the challenges of managing ambidexterity.

2.1.3 Types of Ambidexterity: Structural, Sequential and Contextual

With the above said, there is no particular set of structures or dynamic capabilities that suits all companies, but rather a contingent approach is needed based on the mode of adapting to a changing environment (Birkinshaw, Zimmermann & Raisch, 2016). Researchers largely agree that different environments and strategies require different structural alignments in order to cope with fast changes (e.g. Schumpeter, 1934; Aldrich, 1999; Sine, Mitsuhashi, & Kirsch, 2006; Tushman & O'Reilly, 2002). Structure can take several forms such as: formalisation (e.g. rules and routines), centralisation (e.g. hierarchy, use of authority, verticality), control systems (e.g. span of control), coupling and structural embeddedness (e.g. tie strength and tie density), and specialization (e.g. role clarity) (Weber, 1946; Burns and Stalker, 1961; Pugh, Hickson, Hinings, Macdonald, Turner & Lupton, 1963; Galbraith, 1973; Mintzberg, 1979; Granovetter, 1985; Scott, 2003). Despite the differences of structural attributes, they are based on changing the actions of organisational members. This means that “entities are more structured when they shape more activities of their constituent elements and thus constrain more action. Conversely, entities are less structured when their constituent elements have more flexibility in their behaviour.” (Davis, Eisenhardt & Bingham, 2009, p.415).

Structural Ambidexterity (also called Simultaneous Ambidexterity) thus emerged as a alternative to ambidexterity, characterised by designing separate units “for exploration and exploitation but also different competencies, systems, incentives, processes, and cultures - each internally aligned” (Tushman & O'Reilly, 1996, p.192) and “held together by a common strategic intent, an overarching set of values, and targeted linking mechanisms to leverage shared assets” (O'Reilly & Tushman, 2013, p 328). Looking at the causality between structure and performance, structural ambidexterity has been argued to act as a complementary approach with studies reinforcing positive performance effects (Kauppila, 2010; Adler, Heckscher, & Grandy, 2013; Lavie & Rosenkopf, 2006; Lavie, Kang, & Rosenkopf, 2011; Puranam, Singh, & Zoilo, 2006). This paper would however argue that if a separate unit is considered complementary, it would by default be devalued as equally important - risking the firm to create two separated units without turning ambidextrous. Even if implemented in an aligned manner,

one should note that there is an asymmetric structure-performance relationship, meaning firms perform better with too much structure rather than too little. In Davis, Eisenhardt and Bingham's (2009) article *Optimal Structure, Market Dynamism, and the Strategy of Simple Rules*, they detail the fundamental relationship between structure, performance and the environment. They explain that performance moderately dissolves with too much structure, and radically drops with too little. In predictable environments (characterised with stability and certainty), there is a broad level of excellent structures, suggesting the existence of numerous high-performing make-ups. In unpredictable environments (characterised with velocity, complexity and ambiguity) (Eisenhardt, 1989; Pisano, 1994), there is an inverted-V-relationship with only a narrow band of optimal structures, where flexibility and improvisation is too costly (Appendix C). This peak, often described as the *edge of chaos* explains why simple managerial rules are essential for unpredictable environments; where managers identify bottlenecks (in this research referred to as challenges), form setups for action and improvisation and engage employees from the bottom up (Bierly & Daly, 2007). This causality supports the approach of structural ambidexterity, however poses the challenge for established organisations to become more agile - and for entrepreneurial organisations, to gain enough structure for decision making and prioritisation without hampering innovation.

In situations where competition intensifies or declines over time, ambidexterity might serve as an interim solution rather than a long-term source of competitive advantage (Kriz, Voola & Yuksel, 2014). Adapting the dynamic capabilities as when appropriate gave rise to *Sequential Ambidexterity* (e.g., Kauppila, 2010; Lovas & Ghoshal, 2000; Rosenbloom, 2000; Tripsas, 1997). Grounded in the theory of *punctuated equilibrium change* (Tushman & Romanelli, 1985), firms evolve through relatively long periods of stability (equilibrium periods) forming routine patterns of doing business; which is then punctuated by short bursts of fundamental change (revolutionary periods) (Burnes, 2009). Brown and Eisenhardt (1997) recommended *semi-structures* or *rhythmic switches* allowing firms to move back-and-forth in the trade-off between exploration and exploitation. An example of this is temporary decentralisation (Siggelkow and Levinthal, 2003) for larger firms; or for smaller firms with lacking resources e.g. in the service sector (Geerts et al, 2010). However, most studies investigate sequential ambidexterity from large-scale case studies (Chen & Katila, 2008; Goosen, Bazzazian & Phelps, 2012; Ramachandran & Lengnick-Hall, 2010), suggesting that sequencing changes may be strategic in mature, slow moving markets. What the literature fails

to detail, as noted by Tushman and O'Reilly (2013), is how shifting modes between exploitative and exploratory structures are operationalised in reality and what the transition between the two looks like. This brings it back to the relevance of this paper investigating how managers implement ambidexterity on the ground and therefore also indicate the implications of the transition in their execution.

In response to that, *Contextual Ambidexterity* encapsulates a transition with human capital at its centre. It was proposed by Gibson and Birkinshaw (2004) as a way of managing the tensions of exploration and exploitation without interfering with the organisational structure. They define it as “the behavioural capacity to simultaneously demonstrate alignment and adaptability across an entire business unit” (Gibson & Birkinshaw, 2004, p.209). Although many empirical studies show results consistent with these findings, they also add the aspect of leadership as an important variable for managing the tensions brought forth from potential misalignments (Burgers, Jansen, Van den Bosch & Volberda, 2009; Burton, O'Reilly & Bidwell, 2012; Hill & Birkinshaw, 2012; Jansen, Vera, & Crossan, 2009; Lai & Weng, 2010; Lubatkin, Simsek, Ling & Veiga, 2006; Martin & Eisenhardt, 2010; O'Reilly & Tushman, 2011; O'Reilly, Harrell & Tushman, 2009; Schulze, Heinemann & Abedin, 2008; Smith & Tushman, 2005; Smith, Binns, & Tushman, 2010; Garmeli & Halevi, 2009; Jansen et al., 2008). For it is people in their everyday work and interactions that make ambidexterity possible, not the institutions themselves (Jarzabkowski, Smets, Bednarek, Burke & Spee, 2013) and it is the context of discipline and trust that encourages “individuals to make their own judgments as to how to best divide their time between the conflicting demands for alignment and adaptability” (Gibson & Birkinshaw, 2004, p. 211). Organising for ambidexterity among employees on a team level often leads management to struggle with the antecedents of psychological safety, openness towards diverse opinions, engagement in decision making, orientation towards change and building collective intelligence (Nemanich & Vera, 2009). These HR related factors, many of which associated to culture are important determinants of a firm's ambidextrous performance (Junni, Sarala, Tarba, Liu & Cooper, 2015; Khazanchi, Lewis, and Boyer, 2007; Appendix B). Consequently, contextual ambidexterity is in contrast to the others achieved at an individual level, with staff sharing a common understanding that their way of working is both aligned and adaptable (without necessarily being informed of the underlying mechanisms that made them learn this). Keller & Weibler (2015) state transformational leadership is a determinant on a managerial level for generating this understanding and

alignment across the organisation. Additionally, they propose firms' needing routines, concepts and leadership initiatives for stimulating managers' equal engagement in exploration and exploitation. Some studies therefore refer contextual ambidexterity to *meta-routines* (Adler, 1999) or *harmonic ambidexterity* (Simsek, Heavey, Veiga, and Souder, 2009). For this to be accomplished, Khazanchi et al. (2007) identified by investigating 271 manufacturing firms that a corporate culture acts as an anchor. A culture of flexibility promotes creativity; and a culture of control promotes norms for efficient execution methods. Firms that therefore operate in highly dynamic markets host a culture that supports innovation, adaptability, reactivity and risk-taking improving their performance (Bueschgens, Bausch, & Balkin, 2010; Chatman, Galdwell, O'Reilly & Doerr, 2013). Culture however in the context of change is very difficult to adjust (Scarre, Wotzka & Shennan, 2000) and therefore brings up the question whether managers deal with issues of subcultures emerging when they conflict with ambidextrous efforts. Two common critiques are firstly that contextual ambidexterity falls short in adapting to disruptive or discontinuous changes in technologies and markets, thus eluding how firms conduct radical forms of exploration and exploitation (Kauppila, 2010). It simplistically assumes knowledge and capabilities exist and will surface when the need arises (Kauppila, 2010). This paper therefore argues that contextual ambidexterity leaves out the practical and preparational factors for successful change management, which is at the heart of ambidexterity (Jarzabkowski, Smets, Bednarek, Burke & Spee, 2013). Especially as tacit understanding seems to underpin its workings, it may be argued to be the least effective form and most difficult to tailor based on the firms changing needs. In extension, that means managing the people, their cognitive strains and fears as they undergo the uncertainty of radical transformation (Keller & Weibler, 2014). This paper is therefore agreeing to the concluding remarks of Kauppila (2010) that structural separation between radical exploration and exploitation is necessary but not entirely enough to provide the right conditions for ambidexterity. "In reality, firms are likely to create ambidexterity through a combination of structural and contextual antecedents and at both organizational and interorganizational levels, rather than through any single organizational or interorganizational antecedent alone" (Kauppila, 2010, p.284).

2.2 Organisational Ambidexterity in Action

The human resource view of ambidexterity seems to have shaped O'Reilly and Tushman's (2011) article *Organisational Ambidexterity in Action: How Managers Explore and Exploit*. By investigating 15 organisations that confronted the need for exploration and exploitation; O'Reilly and Tushman offered insights into a fairly unknown research topic – the specific mechanisms required for managers to implement and drive an ambidextrous strategy and its correlation when reconfiguring assets to successfully adapt to new opportunities and risks. With the various types of ambidexterity that have been identified in literature, this paper finds the focus on their study to be far too narrow for two reasons. Firstly, it assumes that optimal ambidexterity is structural with separate explore-and-exploit subunits. As detailed above, ambidexterity may take several forms and is entirely dependent on the environment and its strategy, leading this paper to broaden the assessment of their propositions in firms. Secondly, the sample of their study is primarily concentrated on technological firms which might risk rendering these propositions relevant only to the IT sector. To examine this, this paper is additionally interested to broaden the sector base. Without further ado, their outlined elements of successful ambidexterity for managers are:

1. “A compelling strategic intent that intellectually justifies the importance of both exploration and exploitation.
2. An articulation of a common vision and values that provide for a common identity across the exploitative and exploratory units.
3. A senior team that explicitly owns the unit's strategy of exploration and exploitation; there is a common-fate reward system; and the strategy is communicated relentlessly.
4. Separate but aligned organizational architectures (business models, structure, incentives, metrics, and cultures) for the exploratory and exploitative units and targeted integration at both senior and tactical levels to properly leverage organizational assets.
5. The ability of the senior leadership to tolerate and resolve the tensions arising from separate alignments.” (O'Reilly and Tushman, 2011, p.9)

In this study, these propositions are used to serve as a basis to identify how the different organisations act in an ambidextrous manner. While O'Reilly and Tushman (2011) use them to evaluate the success of an ambidextrous strategy, we use them as a framework to build upon and derive managerial challenges. Based on these propositions, the following paragraphs serve as a review about how these success factors relate to organisational ambidexterity.

2.2.1 Strategic Intent and Targeted Integration

A logical strategic intent provides the rationale for perusing ambidexterity when the firm is under the habit of only exploiting. Several studies show that managers by large disregard future threats and tend to prioritise short-term gains by default (Bazerman & Watkins, 2004; March 1991). The strategy helps managers across the hierarchy who are essentially competing for the firm's resources to see the importance of ambidexterity (Lowe and Shaw, 1968). It thus enables them to reach a consensus of commitment, level of cooperation, how to reward good effort in common-fate and drive communication forward towards the strategy (O'Reilly and Tushman, 2011). An interesting contrast is the findings from Bower & Gilbert (2007) who studied *How Managers' Decisions Create or Destroy Your Company's Strategy*. They argue that the corporate strategy has very little to do with how business gets done, rather the 'real' strategy is the one that is crafted by managers at all levels of the organisation - regardless of the size or sector of the firm (Bower & Gilbert, 2007). The strategy becomes driven by the resource allocation process taken place every day by senior-and operational managers. Top executives who set the strategy do not influence the resource allocation process which provides a counter-argument to O'Reilly & Tushman's (2011) primary requirement to a strategic intent. Rather by identifying those in charge of the resource allocation process (general-and operational managers, customers and capital markets), they can inspire a leadership change to coherently direct how to allocate resources and align the bottom-up processes with top-down objectives. Relentless communication is therefore a vital need which is very difficult when trying to hold paradoxical strategic intents (Smith & Lewis, 2011). Future research is needed to clarify how senior management resolve these strategic challenges (Cao, Simsek, & Zhang, 2010; O'Reilly & Tushman, 2011) and provides additional relevance for this paper.

2.2.2 Separation and Alignment - A Common Identity for Ambidexterity

O'Reilly & Tushman's (2011) identified that agreement of a common vision and values is equally important as a strategic intention to shape a corporate identity and organisational design for ambidexterity. It is represented in form of responsibilities, resources and structures allocated between exploratory and exploitative units which fulfil their purposes separately yet aligned. Switching from an integrated approach such as project teams to separate units facilitate learning towards ambidexterity. Gagliardi (1986) illuminated this finding when noting that the primary strategy of an organisation is the establishment of a cultural identity where stabilised values sustain efficiency. However, if this culture is not suited for the changing environments, then change will force the firm to either create a new culture, make incremental improvements or the firm heads towards destruction. Changing culture, which is deeply rooted in attitude, beliefs, norms and behaviours is arguably one of the biggest challenges for succeeding in alignment and becoming more creative and innovative (Hatch, 1993; Martins & Terblanche, 2003). Comparing the idea of cultural unity whilst dividing work, Parker (2000) provides a compelling argument of multiplying identities of difference which has not yet been considered an alternative in ambidexterity literature.

2.2.3 Leadership and Management of Ambidextrous Tensions

There is a wide spectrum of challenges managers face at all levels of the organisation in times of change, and particularly radical transformation. Ambidexterity is therefore connected to transformational leadership theory; where transformational leadership and its interpersonal dynamics (such as personality, boldness, cooperativeness and sociability) evolves the change process (Bass, 2005). Those that are extrinsically motivated for example respond far better to transactional leadership and so, the capacity to switch management style depending on the need of the firm impacts the firm's performance (Dvir, Eden, Avolio, & Shamir, 2002). The article *The Antecedents, Consequences, and Mediating Role of Organizational Ambidexterity* (Gibson & Birkinshaw, 2004) highlight the fragmented literature behind the types of ambidextrous tensions between alignment and adaptability, comfort of the past and uncertainty of the future, exploration and exploitation of business as well as knowledge, to mention a few. They prompt researchers to look at the practical ambidextrous challenges in relation to leadership, providing further relevance to this paper.

2.3 Theoretical Framework

Based on the existing literature in the field of organisational ambidexterity, we have developed and visualised the following theoretical framework to make sense about the ways managers deal with their challenges. In the course of this thesis, it is inevitable to distinguish between the managerial and organisational level. While the managerial level is based on the five propositions of O'Reilly and Tushman (2011), the organisational level includes the three most commonly used types of organisational ambidexterity in the literature. With previous literature placing most emphasis on the organisational level, it is essential to see both levels as alone-standing, yet interrelating units that influence each other. On the one hand, the managerial level is to be seen as a separate entity that is influenced by the context of the organisational level. On the other hand, the execution of the strategy on the managerial level shapes the way ambidexterity can be planned for on the organisational level.

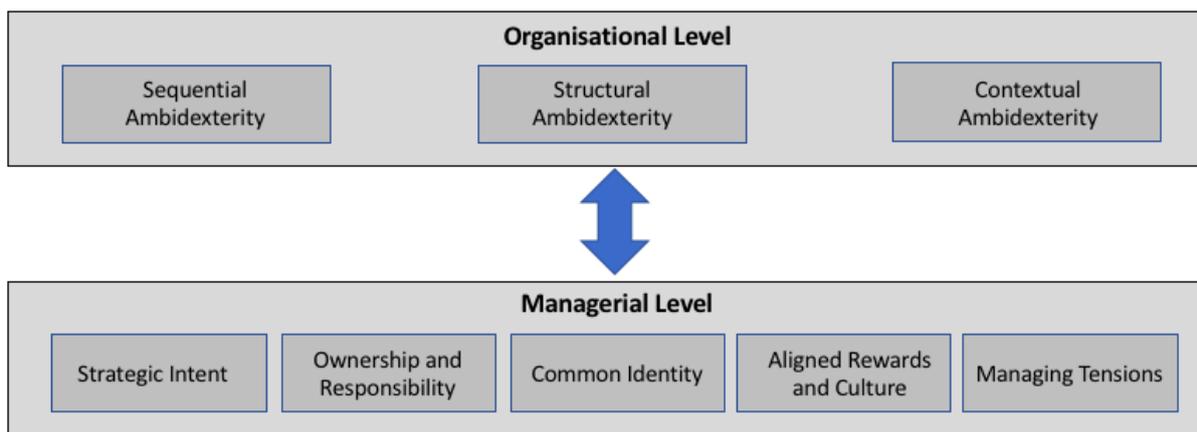


Figure 1: Theoretical Framework

2.3 Chapter Summary

To sum up, literature repeatedly highlights knowledge gaps concerning the challenges managers face when dealing with ambidexterity and how they may solve them, providing relevance for this paper. Ambidexterity has commonly been defined as the balancing act between exploration and exploitation, with dynamic capabilities being the enabler to accomplish both simultaneously. Managers seem to predominately deal with a) *structural*

ambidexterity whereby two separate units are balance efforts of exploration and exploitation in an aligned manner, b) *sequential ambidexterity* whereby firms switch between exploration and exploitation based on the need, and finally c) *contextual ambidexterity* where the balancing act is implicitly understood among staff through a firm's culture. This paper agrees with Kauppila (2010) who state, "in reality, firms are likely to create ambidexterity through a combination of structural and contextual antecedents and at both organizational and interorganizational levels, rather than through any single organizational or interorganizational antecedent alone" (Kauppila, p.284). This perspective brings light to the various challenges managers face in pursuit of different ambidextrous antecedents. In order to therefore operationalise this paper, O'Reilly and Tushman's (2011) article "*Organisational Ambidexterity in Action: How Managers Explore and Exploit*" has been used as a framework. They present five mechanisms for managers' successful implementation of organisational ambidexterity. These range from a 1) compelling strategic intent, 2) common vision and values between separate units, 3) explicit ownership of an ambidextrous strategy, 4) separate but aligned organisational architectures and 5) leadership to resolve tensions that arise. Whilst the study focuses on the managerial level following these five criteria, the organisational level (detailing the three common types of ambidexterity) will provide the context of each case company. It is essential to see both levels as alone-standing, yet interrelating units that influence one another.

3 Methodology

This chapter assesses the methodological approach of this study and reflects upon the choices we have made to answer the research question. Thus, the research design is discussed in detail while reflecting about the distinct advantages and disadvantages of our research approach. In addition, we assess the decisions made concerning the data collection and provide insights about the data analysis process. Following to that, we critically reflect upon this study's degree of validity and reliability. Furthermore, we include ethical considerations as an essential part of the research process. Finally, the most important components of the methodology are summed up in the chapter summary.

3.1 Research Design

The research design serves as a means to getting from the research question to concluding remarks that answer them (Yin, 2014). Based on the five propositions of successful implementation of organisational ambidexterity developed by O'Reilly and Tushman (2011), the research design aims to discover the challenges that arise while pursuing an ambidextrous strategy and to find out how senior-and middle managers deal with these challenges. As discussed earlier in this study, the overarching research question is as follows:

What are the challenges managers face in sustaining organisational ambidexterity?

Correspondingly, we have chosen a qualitative research design because it serves to identify various personal and individual perceptions of the interviewed managers' environment (Bryman & Bell, 2015). This is inevitable to identify what the challenges arising from organisational ambidexterity are, and how managers deal with them. Confirming this choice, Agostini, Nosella and Filippini (2016) emphasize that organisational ambidexterity obligates a qualitative research design due its inherent complexity that could not be captured by other research designs. Thus, while quantitative research methods have their relevance in social

sciences research, they are not as suitable as qualitative research in the context of assessing what challenges managers face when dealing with organisational ambidexterity. Moreover, it is essential to mention that this study follows a hermeneutical approach, meaning that both the researchers' and participants' prior experiences and intuition impact the course and the analysis of the research (Alvesson & Sköldbberg, 2009).

To be more precise, this study will be based on a multiple case research design. Compared to single case studies, multiple-case designs provide more imperative insights and are regarded to be more robust (Herriott & Firestone, 1983). Within this study's multiple-case design involving three different companies, the distinct answers from individuals among one organisation can be captured, as well as the differences among the three distinct companies as a whole. Furthermore, using several cases can reduce scepticism about extraordinary conditions being present in a single case (Yin, 2014). In addition, the main advantage of using a case study method is the fact that it allows for exploring organizational phenomena from a unique perspective (Easterby-Smith, Thorpe & Jackson, 2015) that could not be achieved by any other research method.

According to Easterby-Smith et al. (2015), using a multiple case study has certain limitations. Especially the lack of rigor and the issue of limited statistical generalizability are general consensus for case study designs, as well as the multitude of qualitative data that makes unbiased and objective interpretations of the researchers hard to maintain (Easterby-Smith et al., 2015). Moreover, multiple-case studies are more resource- and time-consuming than single case studies (Yin, 2014). With Easterby-Smith et al. (2015) advocating for longitudinal case study methods that compare events and changes over time, the time frame of this research does not allow for such a design. While these limitations cannot be completely resolved, this study aims to leverage the advantages of the multiple case study approach with rigorous evaluation criteria articulated in a case study protocol. It is essential to emphasise that all findings made during the course of this study provide only a snapshot in time.

Previous literature has identified challenges that arise when companies operate in an ambidextrous manner. Heracleous et al. (2017) have utilized a single case study method to identify the various challenges that arise for a company leveraging structural ambidexterity. For future research, the study highlighted the need to investigate how managers handle the distinct

challenges in the context of structural ambidexterity (Heracleous et al., 2017). To respond to this research gap, this study aims not only to identify these challenges and how they are dealt with in other companies and takes it even a step further by expanding from the narrow focus on structural ambidexterity to assessing the overall concept of *organisational ambidexterity* with structural ambidexterity being only a part of it. Based on that, it is essential to operationalize the term *managers*. As managers, we define employees in leading positions within their firms or departments. Thus, the definition of a manager in this study reaches from a middle manager of a multinational company to a managing director in a small or medium-sized organisation. Using this broad operationalisation of managers helps to secure different kinds of perspectives, as well as greater accessibility to several case companies.

This multiple case study includes both semi-structured interviews and the use of textual data. On the one hand, interviews can provide unique new insights into a research topic and are especially valuable when aiming to gain the personal perspectives of individuals (Easterby-Smith et al., 2015). On the other hand, textual data can complement the insights gained from interviews and provide a different, high-quality angle which can be critically assessed by the researchers. By using both primary and secondary data, the respective disadvantages of the two can be resolved and more rigor involved into the study. First, interview data are tailored to the research objectives and resolve the issue of secondary data which were usually created for other objectives than research. Second, textual data open up a historical perspective that might not be available during interviews due to issues of recall (Easterby-Smith et al., 2015).

3.2 Data Collection Method

Before collecting the empirical data, it is essential to clarify this study's unit of analysis. As defined by us, the units of analysis are managers on their respective hierarchical levels within their organisational context, i.e. within the frames of their respective organisational business strategies. Thus, the term *case study* can be applied on both the managerial level (all eight respondents), as well as the three different companies on the organisational level. Due to the fact that the organisational context is essential to answer this study's research question, it

has been taken into account as part of the theoretical framework and regarded as an important influence on the distinct challenges that managers face in their everyday work.

In order to gather information regarding organisational ambidexterity, we have collected data from two sources of evidence: internal documents and semi-structured interviews. Three companies have been chosen to be studied in-depth: German Catering Company, Swedish Innovation Hub, and UK Furniture Company. To make sure that all empirical findings can be fully utilised throughout the study, we have chosen to anonymise all of the companies' names, as well as the managers names which have been replaced with their roles. Correspondingly, organisational documents handed to us were held confidential and are not published in this report. Additionally, before finally deciding upon the case companies, we have clarified that all of the companies do indeed operate in an ambidextrous manner in order to serve as valid cases for this study.

Within the short time frame of this research, a theoretical sampling strategy has been chosen that suits the grounded theory approach of this study (Bryman & Bell, 2015). Contrary to other sampling methods, theoretical sampling is an iterative process that evolves in focus and method over time, aiming to end in a point of theoretical saturation (Bryman & Bell, 2015). Due to the limited time frame of this thesis, the authors are convinced that eight interviews are a reasonable number that allowed several adjustments in the sample method and the choice of participants. However, a longer period of time and a higher number of interviews would have resulted in a higher degree of theoretical saturation.

Table 1: Case Companies

	German Catering Company	Swedish Innovation Hub	UK Furniture Company
Country	Germany	Sweden	United Kingdom
Industry	Catering Services	Consulting	Furniture
No. of employees	150	15	10.000+

Based on that, it is important to mention that the case companies cover different sizes and operate in distinct industries, meaning that they allow for an analysis of organizational ambidexterity in different forms and with different scopes. Correspondingly, the sector and size

diversity are an advantage that allows the researchers to assess challenges that these very different companies share in the course being ambidextrous.

The definition of *data* goes back to the word's Latin origins, meaning "the things having been given" (Galloway, 2011, p.87). On the one hand, this study will collect data from accessible internal documents, i.e. things that have been handed to the researchers in its existing form. On the other hand, it is important to distinguish that the qualitative interview data collected during this study are not given but created specifically in regard to the research objectives. Before collecting data, we have developed and signed a case study protocol, because it is inevitable when applying a multiple-case design that aims to demonstrate a high degree of rigor (Yin, 2014). In total, we conducted eight interviews with managers from different hierarchical levels within the three case companies. The interviews were conducted with several respective managers from the three case companies, most of them via video call due to geographic distance. Only the interviews with Swedish Innovation Hub were conducted in person. Moreover, all interviews were conducted in English language and with both of us present. All of the participants have agreed that the interview is recorded, while the anonymity of all interviewees has been a prerequisite. Moreover, all interviews followed a semi-structured interview guide based on the before-mentioned propositions developed by O'Reilly and Tushman (2011) with a special regard towards the challenges that different managers face while working in an ambidextrous manner. In addition, the duration of the interviews was within the range of 45 minutes and 96 minutes. We have put special emphasis on the wording of the interviewees' descriptions, rather than on the body language that would not have been possible to analyse via a video call. The semi-structured interview design allowed us to ask follow-up questions concerning the various challenges that might have arisen from these factors.

In addition to the interviews, we have used secondary textual data which were either handed to us by the case companies, or that we have obtained from publicly available sources. Organisational documents represent the perspective of only one or more individuals within the organization and are created for other purposes than research (Easterby-Smith et al, 2015). Thus, we are aware of the biases that these documents might entail. However, we are certain that the informational value of these documents outweighs the issues of subjectivity, especially when being specifically aware about this fact.

3.3 Data Analysis

According to Bryman and Bell (2015), there are no strict rules for analysing qualitative data, but rather general guidelines for doing so. Correspondingly, Yin (2014) argues that there is no single right way to analyse data, it rather depends on the researchers' preferences on how to ensure a rigorous analysis. Because qualitative data provide an enormous richness of information, there are different strategies for analysing these data (Bryman & Bell, 2015). While *analytic induction* phrases hypotheses before conducting data analysis to avoid subjectivity, *grounded theory* uses coding and consistent comparison to identify new concepts (Bryman & Bell, 2015). Because we do not aim to confirm or disprove an existing theory, but rather to develop the research field of organisational ambidexterity by responding to a research gap, the grounded theory approach has been deemed the method of choice.

Data analysis based on grounded theory offers several advantages that no other analysis strategy can account for. First, grounded theory is exceptionally appropriate for organisational research (Locke, 2001). Second, it can apprehend complex relationships between individuals and their organisational context and situations (Locke, 2001). Third, it is particularly suited to research areas that provide research gaps (Locke, 2001), which is the case when exploring the managerial challenges in the otherwise well-researched field of organisational ambidexterity.

While grounded theory and its way of analysing data has several advantages, critics argue that the iterative process of sampling and data analysis leads to time constraints when dealing with tight deadlines (Bryman & Bell, 2015). Furthermore, it is argued that the difference between resulting concepts and categories is blurry (Bryman & Bell, 2015). Finally, critics question whether grounded theory analysis will eventually result into a theory (Bryman & Bell, 2015). In the case of this study, we claim to present a contribution to organisational ambidexterity theory by responding to a previously identified research gap. However, it is essential that future research builds upon the concepts and categories identified in this thesis, so that a general theory can be developed over time.

To analyse the rich amount of qualitative data, we have chosen to utilise the process of coding. Coding serves as a means to break down unstructured data and find patterns which are categorised into several topics of analysis (Corbin & Strauss, 2008). Moreover, coding can be

specified as the “outcomes of the researcher’s interpretations and analyses, which seek to bridge and bond data and theory in meaningful and credible ways” (Styhre, 2013, p.59). In addition, it is essential to constantly review the codes and categories to keep them coherent to the research objectives (Bryman & Bell, 2015). During the data analysis process, we have followed the three stages of coding developed by Corbin and Strauss (2008). First, in the stage of *open coding*, we have pointed out the most important concepts, phrases, and contents from both interviews and documents and assigned to more general labels. Second, in the stage of *axial coding*, we have gathered these labels and formed them into sub-categories. Third, in the stage of *selective coding*, we have continually refined these sub-groups and integrated them in order to result into a contribution to theory (Corbin & Strauss, 2008).

3.4 Validity and Reliability

As a common disadvantage, qualitative based research is often regarded as not allowing for generalizations to be made (Bryman & Bell, 2015). However, ethnography is based on a subjective and intuitive approach that does not highlight the importance of generalizability (Styhre, 2013). Correspondingly, Yin (2014) argues that the case study method in particular does not aim to make generalizations about large populations, but rather to enrich and contribute to scientific theories. While qualitative interviews in general have the advantage that they allow a focused approach in relation to the research topic and thus provide relevant and unique data, it is essential to decrease the occurrence of biases and inaccuracies (Yin, 2014). We are confident that the rigorous adherence to the case study protocol and the systematic and steady interview conduction have resolved most of these issues. Nevertheless, it is essential to highlight that subjectivity plays an essential role in qualitative research (Styhre, 2013).

According to Yin (2014), there are four distinct considerations that allow to evaluate the quality of a study: construct validity; internal validity; external validity; and reliability. Since internal validity is only a requirement for causal and explanatory studies (Yin, 2014), it is not evaluated in the course of this exploratory case study.

Table 2: "Criteria for judging the quality of research designs" (edited from Yin, 2014, p.45)

Tests	Case Study Tactic (Yin, 2014)	Implementation (Thesis)
Construct validity	<ol style="list-style-type: none"> 1. Use multiple sources of evidence 2. Establish chain of evidence 3. Have key informants review draft case study report 	<ol style="list-style-type: none"> 1. Used primary data from interviews and secondary data from organisational documents. 2. The chosen structure and presentation of findings aims to provide a coherent chain of evidence. 3. Three key informants (one of each organisation) were able to review the report before termination.
External validity	<ol style="list-style-type: none"> 1. Use replication logic in multiple-case studies 	<ol style="list-style-type: none"> 1. Having used three very distinct companies, certain generalisations are possible, but a larger sample size is needed to prove these.
Reliability	<ol style="list-style-type: none"> 1. Use case study protocol 2. Develop case study database 	<ol style="list-style-type: none"> 1. A case study protocol was used throughout the data collection and analysis process to ensure rigorous execution. 2. A case study database was developed as a tool to gather transcribed information and synthesise these.

In addition to validity and reliability considerations, we complied to high ethical standards as a major priority during the research process. As one of the most essential ethical considerations in research, we ensured that participants could not be harmed in terms of their personality, career opportunities, or status in their respective companies (Diener & Crandall, 1978). Moreover, we put an emphasis on establishing informed consent, meaning that we have given respondents sufficient information beforehand to decide whether they wanted to participate in the study or not (Bryman & Bell, 2015). Related to that, every respondent was aware about the possibility to withdraw from answering certain questions, for example due to privacy invasion. Finally, we emphasised to avoid ambiguous or misleading terminologies when communicating with participants to ensure accurate responses (Bryman & Bell, 2015).

3.5 Chapter Summary

To sum up, this chapter provides a critical reflection about the research methodology and its consequences. First, we are convinced that a qualitative research design with a multiple case study approach are the best way to identify the challenges which managers deal with when operating in an ambidextrous manner. Second, involving three very distinct companies with managers of different hierarchies is a challenge in itself, but provides the opportunity to gather unique insights that even very different companies have in common, especially when including different sources of evidence. Third, utilizing a grounded theory approach and following the tradition of coding qualitative data allowed us to iterate during the choice of participants and draw conclusions based on a vast amount of data. Fourth, as consequence of the previously discussed choices, we aimed to construct this thesis as valid and reliable as possible. Nevertheless, it is essential to be aware of the limitations that we have highlighted.

4 Empirical Results

This chapter provides the empirical findings drawn from the conduction of qualitative interviews and the collection of organisational documents. For each of the three companies, we present a brief company background, portray the roles of the managers, and display the organisational documents used to gain more in-depth insights about the companies. Following to that, the managers' challenges in each of the companies are presented in the order of the five propositions developed by O'Reilly and Tushman (2011): Strategic Intent, Ownership and Responsibility, Common Identity, Aligned Rewards and Culture, and Managing Tensions. As a final component for each company, we include the main learnings from being ambidextrous that the different managers provided during the interviews. In line with the research question "*What are the challenges managers face in sustaining organisational ambidexterity?*", this chapter aims to identify the challenges that they are dealing with.

4.1 German Catering Company

The traditional German Catering Company (GCC) has been family-owned since the end of the 19th century. In its Düsseldorf headquarter, it employs about 150 full time employees and considers itself as one of the three leading event catering companies in Germany. While the centralised organisation operates from Western Germany, it serves to customers all over the country. Furthermore, GCC owns stakes in several smaller catering companies and can dispose of a variety of different locations such as football stadiums, industrial buildings and outdoor areas. It has only been 15 years since the second of the two current managing directors has joined the company as a non-family member. Since then GCC has experienced significant growth in revenues, climbing from around 5 million Euros in annual revenue (1993) to more than 22 million Euros (2017).

For identifying how managers of different hierarchical levels deal with the challenges arising from an ambidexterity strategy, the following participants have been chosen to provide insights derived from their personal experiences and their perceptions of their everyday work. As one of the two managing directors of GCC, *Managing Director* is responsible for developing, communicating and executing organisational strategies. He has a specific focus on the financial side of business, but is also responsible for internal processes, product quality, and the hiring of qualified personnel. In addition, *Area Manager* has been included as a source for information about how strategies formulated by the top management are carried out to various departments within the company. Area Manager is responsible for around 10 million Euros of annual revenue, meaning that he accounts for almost half of the current annual turnover. Being on one hierarchy level below top management, he is leading 22 project managers that execute catering services across Western Germany and the greater Berlin area. Finally, *Product Manager* has been chosen to shed a light on how GCC ensures their strategic objective of developing creative new services while at the same time standardising their offerings. In daily business, the product manager is responsible for creating new food concepts, training kitchen staff on how to prepare the meals, and to communicate the concepts to the marketing and sales departments.

Besides the three respondents from various hierarchical levels, a variety of documents have been provided by the company in order to understand strategic objectives, processes, and the organisation structure more in detail. The following documents have been created for other purposes than this particular study but are an important and valuable tool for understanding the company as an outside observer. First, the Management Book is handed to all employees on an upper management level as a communication tool of the company's strategy, how it is supposed to be executed, and what characteristics shape a successful manager at GCC. Second, the GCC Organisation is a visual representation of the company's structure, aimed to clarify respective roles and responsibilities, as well as visualising who in the company reports to whom. Third, the GCC DNA is provided to all employees across the company in order to communicate the vision and mission of the company in a clear manner.

Table 3: Organisational Documents GCC

Document Name	Description
Management Book	Guidelines and expectations of the company directed to the upper management.
GCC Organisation	Organisation structure and visualisation of hierarchical levels.
GCC DNA	Vision and mission statement across the whole organisation.

4.1.1 Strategic Intent

As a strategy, GCC aims to continue growing organically and steadily from year to year. This strategic objective is aimed to be reached through efficiency ensured by highly standardised processes and offerings, as well as a high degree of creativity in the product range. Conforming to the Managing Director, GCC expresses the overarching strategy to balance efficiency and flexibility. Furthermore, GCC aims to “make the future more predictable” (Managing Director). Correspondingly, the Area Manager reveals that “there is a clear and explicit strategy to be very efficient and standardised, but also to provide creative and customized solutions to customers” (Area Manager). Moreover, the Product Manager works based on the above-mentioned strategy, developing products that balance the most creative product for the customer with the most possible level of standardisation for the company. As reported by her, the strategy is clearly communicated to all levels of the company.

According to the Managing Director, the company “talks about this strategy constantly”, for example during the yearly kick-off meeting during which strategies and yearly targets are discussed. Even though he aims to communicate the strategy as often as possible, he claims that “there is a lot of struggle in communicating the strategy” because it has been misunderstood or got lost in certain departments or on certain hierarchy levels. Another challenge are the mix and match concepts which “bundle resources which make processes less efficient” (Area Manager). In rare cases, GCC even fulfils fully individualised customer requests, but the strategic objective is to have at least 90% of their services derived from existing offerings. Moreover, the Product Manager states that “everything that is not standardised has much higher need for

control and requires much more effort". Thus, GCC tries to keep the execution of fully individualised events to a minimum.

4.1.2 Ownership and Responsibility

Within GCC, both managing directors are responsible for the formulation of the strategy. According to the Area Manager, all area managers reporting to the top management are responsible for carrying out the strategy in daily business. As reported by him, "at least one of us reviews every offer that goes out to customers", ensuring a special emphasis on the balance between efficiency (costs) and creativity (creative service offerings). Realising that reviewing offers is not the only thing to be done to provide ownership over the strategy, the Area Manager makes sure to assign some of the 22 project leaders reporting to him as advocates for this strategy. One challenge he identifies is the intent of some employees to circumvent the established standards of GCC for benefiting from short-term success. To mitigate this challenge, he points out the importance of clear and direct communication and potential intervention from higher hierarchy levels. According to the Product Manager who is located below the other two respondents in terms of hierarchy level, the "responsibility is broken down on many different heads within the company". Moreover, she identifies clear cut hierarchy levels, but recognises that all levels work together very closely in daily business. According to her, the high degree of communication ensures that ownership is not only carried out by a few individuals, but by many members of the organisation.

4.1.3 Common Identity

According to the GCC DNA, all of the company's departments are supposed to share one common identity. As stated by the Managing Director, every employee knows that not only the product itself is important, but the whole service and experience which is offered. Because different departments have different and sometimes conflicting objectives, all employees "try to reach their targets without damaging any relationships" (Managing Director). In order to execute their strategic objectives, GCC "aims to develop entrepreneurs within the company" (Managing Director) by giving them clear targets and frames on the one hand, but on the other hand giving them freedom to reach these targets in a flexible manner. The Area Manager

expresses that the objective is to have common vision as a whole, but in reality, there are different identities due to different objectives of the departments. He exemplifies that with the conflicting objectives of logistics who want to plan ahead as early as possible, and those of the project managers who aim to react to customer requests as close to the events as possible. In consonance, the Product Manager makes clear that every department has different objectives, but due to the close collaboration of units, they possess similar values and visions. To balance the strategy of being efficient and flexible at the same time, she emphasises the balance between an external view (customer focus) and an internal view (process focus).

4.1.4 Aligned Rewards and Culture

Conforming to the Managing Director, the reward system of almost all employees is based on the fulfilment of targets, where bonuses are based on an individual level. Furthermore, the performance is evaluated on a yearly basis. Since the reward system is based on individual achievement within the frame of one's department, the Managing Director reveals that different units incorporate "distinguished sub-cultures which have to be led differently". As reported by the Area Manager, there is a bonus card expressing clear cut targets and respective bonus payments when revenue targets are reached. According to him, these bonus payments are based on routine jobs and efficiency. While everyone can act entrepreneurially and freely, the targets have to be reached in order to be granted a bonus. Contrary to that, the Product Manager conveys that the reward system in her department is almost exclusively based on extraordinary or special projects rather than routine jobs. According to her, she spends most of her time in daily administrative work but gets rewarded for the projects that are adaptive to a changing environment and have a creative component, for example by responding to current trends in the food industry and creating corresponding food concepts. Both the Area Manager and the Product Manager agree that it is a major challenge to align their daily activities with the performance indicators set out for themselves.

4.1.5 Managing Tensions

GCC's Managing Director reveals that there are certain tensions arising in the organisation which "do not occur as a result of the system, but rather when one department causes problems in another department". He tries to let departments resolve their tensions independently but intervenes when needed. Asking the Area Manager, he states that he wants to be informed about all the conflicts going on, and also only intervenes when he sees a need. As an example, if something goes wrong, he does not blame the employee, but rather discusses what could have worked better. Regarding the management of conflicts, he states that it is essential that everyone's voice is heard, and perspective understood. In line with the product manager, the Product Manager states that conflicts are even used as a means to learn and to become better. For example, conflicts helped the company to find out times in which standards were not state-of-the-art anymore and where thus adapted to current trends. Confirming the other two, she expresses that the units usually resolve tensions on their own, whereas top management only intervenes in rare occasions.

4.1.6 Learnings

Being asked about the learnings derived from the discussed challenges of the past, the Managing Director provides the insight that "to be a good leader, you have to be a good change manager". According to him, being ambidextrous is more and more about adapting to changes and about communicating the change strategy. Furthermore, he states that "managing changes means managing the fears of people". To do so, he is convinced that the company must be able and willing to adapt its targets constantly. Moreover, the managing director asserts that "being flexible in time is a big challenge which requires the competence of precise forecasting". As another perspective of learnings, the Area Manager discloses that he recommends being calm when taking important decisions. Thus, he is certain that it is often good to let things calm down rather than rushing through a decision. As stated by the Product Manager, it is essential to spend more time in the early stages of projects clarifying details and standardising processes, rather than spending time and money in the later stages resolving mistakes that have been done before. Thus, she is convinced that "preparation is key" and "when there is the possibility, forecast and plan as much as possible".

4.2 Swedish Innovation Hub

The Swedish Innovation Hub (SIH) incorporates 15 full-time employees and offers innovation solutions to mature corporate clients. As a non-profit organisation, it is separated into three different units with different competencies and target customers (large established enterprises, SMEs and large public organisations). One business unit sells customised consulting in intrapreneurship and open innovation. The second unit markets itself as an innovation marketplace, whilst the third is a corporate accelerator aiming to connect established businesses with early-phase start-ups.

As part of this study, the *Managing Director* for SIH has provided his insights about leading the organisation and its employees for more than six years. Additionally, the *Senior Project Manager* overlooking the workings of the second business unit (for over three years) offer his perspective of the managerial challenges. It is important to notify that whilst the Managing Director announced to leave the organisation briefly after the interview and his position will be taken over by the Senior Project Manager, both members have been interviewed representing their current position, and not that of the future. Thus, the future Managing Director has been interviewed about his experiences as a Senior Project Manager.

Besides the two interviewees, the following two documents have been given access to in order to better understand the firm structure and its strategy. It is essential to mention that these documents were created for other purposes than this study and thus provide only a complementary perspective on the company. They were kept confidential.

Table 4: Organisational Documents SIH

Document Name	Description
Organisational Structure	Visualisation of the three different units of SIH and their respective roles.
Strategy Compass	A visual representation of SIH's vision, mission, business model, unique selling proposition, as well as target customers.

4.2.1 Strategic Intent

According to the strategy compass available to all employees, SIH enables firms to radically improve their long-term innovation culture and capabilities through intrapreneurial methods consisting of promoting contacts and collaboration between established corporations and public organisations as well as individual academics, researchers, entrepreneurs and start-ups. The documentation also inform how their approach is aimed at spreading awareness of how their innovation, culture and capability can benefit the resources and learnings of target clients. To reach this mission, SIH aims to balance the lean operations of open innovation whilst identifying new opportunities - using good examples as a source of inspiration.

The Managing Director explains how SIH works very implicitly with their strategy through words and actions. As an example, he refers to their strategic intent on *reusing* concepts, approaches, material and knowledge across different assignments and “repackage things from a cost and a marketing point of view”. As SIH delivers “entrepreneurial services, our lifeline is being flexible and agile. We try to keep routines to an absolute minimum”. Similarly, the Senior Project Manager reiterates that “it's more our culture and DNA to keep flexible.” He describes that “contrary to larger companies, we don't have many guidelines and rules”. They run their line of business in the same way they innovate in a transformative manner, or as the Managing Director states “open innovation is an enabler ... with radical innovation, you have to work openly”. He emphasises their ability to adapt over the importance of efficiency as they would become stifled if focusing too much on routines and existing resources. Thus, “we have a minimum of administration and a minimum of stability”.

4.2.2 Ownership and Responsibility

Both interviewees consider the Managing Director to hold ownership of the strategy however detail that due to the rather small size of the firm, each member of the team has the responsibility of delivering it. He reports how they use an entrepreneurial spirit to govern their work and how each employee needs to feel an “extreme ownership and drive ... like it's their baby”. Moreover, he elaborates that their primary challenge in this regard is the role of HR in cultivating a culture, individual leadership and values of being entrepreneurial, open, bold, challenging and passionate to stimulate the sense of ownership. He describes how the sense of

ownership of an ambidextrous strategy will not do much good for the value gained by clients unless they themselves adopt it. "We deliver culture projects even if the companies don't order them". The second challenge presented from the Senior Project Manager is to keep the strategy alive and fostering a sense of care among staff members. One way they manage this is by regularly question its relevance and how it could be changed to better suit the nature of their current and future environment. Additionally, "if we don't have fun with a project, we don't do it" (Managing Director, SIH).

4.2.3 Common Identity

The main challenge is that they "don't work towards a shared vision" which will become increasingly more important in the future with the need to share staff among the separate business units, states the Managing Director. Instead they rely on a shared co-creational mindset, unspoken values and the entrepreneurial spirit at its heart linking the pieces together. However, the Senior Project Manager identifies some slight value differences across the three subunits and aims to merge them in order to transition SIH into forming one organisation with a commonly shared culture. The priority, he emphasises, is to allow more freedom than control by having the different parts focus on their particular specialties. The challenge he foresees is that on a meta-level, replicating the working concept and expanding it to other units step by step and aligning it to their innovation park and its incubators. These factors thus concern the coherence within the network of SIH and the impact change has on its ecosystem.

4.2.4 Aligned Rewards and Culture

The main challenge is to limit the personal preference among most people to fall back on routines and processes. It is the management of attitudes to believe in "the freedom and individuality of entrepreneurs" that proves challenging across all units, states the Managing Director. "It's all about attitude and not about having hierarchy levels. All hierarchy levels (two or three in total) have approximately the same amount of balance". Only the Managing Director has more of a focus on efficiency and routines and particularly when managing employees from bigger companies who are accustomed to routines, security and predictability. Rather he explains that the challenge of attitudes has much to do with their strategic decision to keep the

SIH units unaligned in order to stimulate movement for employees to run their ideas. “We will become the same as our clients if we standardise and align” which he fears will decrease their value proposition to clients. The Senior Project Manager reckons the challenge falls in standardising some of the parts and leaving the rest free. Estimating the proportion between flexibility and efficiency, he states 80 percent flexibility and 20 percent efficiency, with the latter consisting of “having some kind of basic order and routines”.

4.2.5 Managing Tensions

The overall tensions in balancing efficiency and flexibility was observed in the emergence of egoism among the entrepreneurs where they drive their own interests, explains the Managing Director. “We allow so much autonomy, so people are building subcultures. Good entrepreneurs want to protect and develop their project”. This has a knock-on effect causing conflicts among the entrepreneurs in setting goals, cooperation and allocation of resources. The Managing Director rarely intervenes, most often the minimal intervention takes place ad hoc. He states that in the context of innovation, conflict is “good and needed”. The Senior Project Manager associates the emerging conflicts with a reluctance to change between the units, triggered from not fully understanding one another; expressing “we have avoided conflicts quite a lot because the units are independent from each other. Only sometimes top management had to intervene and resolve conflicts”.

4.2.6 Learnings

The Managing Director explains how his leadership style has developed over time and as he learned that he could not foresee the outcome of investments. Instead he now values structured creativity of well-defined processes and structures and states; “if you have to choose, choose flexibility!”. Flexibility allows the organisation to accept and embrace the uncertainty that comes with having two potentially correct answers or solutions at the same time, encouraging the mindset that “there is not always one right way of doing certain things”, nor is there a perfect situation for doing them. His final learning was that SIH operates in a “start-up kind of world so the team is much more important” and the need to overcoming barriers of recruiting. Having so called “misfits” in the team enables better co-creation and results for the

clients under projects or workshops that run for a very short amount of time. People have different learning styles, referring to Saras Sarasvathy's (2001) concept of Casual versus Effectual Thinking Dominant and states "if you as a leader recognise you need both, then you have a huge potential!" (Managing Director, SIH).

The Senior Project Manager with 25 years of experience in multinationals and seven years in start-ups recognizes the importance of breaking rules more often. "You should not become too comfortable with just complying to rules and follow routines. Don't ask for permission, ask for forgiveness" (Senior Project Manager, SIH). Whilst never over-focusing on the process or routines, they are considering within SIH to measure failure as a KPI because "if you have never failed as an organization, you don't try hard enough". As the forerunning Managing Director, he aims to find a balance between external projects (business as usual) and internal projects (develop organisation) and increase the time spent on the internal projects. Executing them well and employing new staff will bring SIH through their current survival mode as a non-profit organization; "as a non-profit with zero financing, we have to balance profit and loss. We need to end up in break-even at the end of the year".

4.3 UK Furniture Company

The UK Furniture Company (UKFC) has established a reputable brand nationally through scope and scale and after years of steady growth, the organisation is now challenged with adapting to customers' needs against experts in product-and service customization. Although having started an organisational transformation, ranging from product development and logistic setup to innovative ways of meeting the customer, their priority lies in revitalising their entrepreneurial spirit and work on all managerial levels towards finding better solutions and becoming more convenient, accessible and personal as customers change their expectations of an ideal shopping experience.

Previously, they kept their processes inside the firm, however realise today the need to open up and engage in new partnerships whilst striving for relevance and agility, at the same

time as they maintain a strong store model concept to generate the bulk of revenues (5.8 percent increase between 2016-2017). To thus identify the challenges with exploitation, a *Store Manager* and a *Deputy Sales Manager* provide the challenges within the retail dynamics. The Store Manager overlooks the performance of the retail unit and the collective workings of all teams to ensure profit and customer satisfaction. Similarly, the Sales Deputy Manager ensures efficiency within the department and the development as well as scheduling of 20 team members. Finally, a *Customer Fulfilment Manager* provides insights of tensions around efforts of exploration when meeting customers in new ways, the process to adapt and to become a more agile brand.

Table 5: Organisational Documents UKFC

Document Name	Description
Organisational Structure	Visualisation of the firm’s functions and set-up.
Strategy/Annual Report	Annual report detailing the overall direction of the firm

4.3.1 Strategic Intent

Within the retail unit, the Store Manager expresses that the “strategy should be to balance between right number of hours and right number of heads”. However, “because of changes done in the past, staff structure is not suitable to be flexible”, meaning to make changes they need additional staff members to meet customers - staff that are not covered in the department budgets. To make changes, they therefore implement them department by department, lending workers and slowly expanding it to other areas of the store. Although the slow change makes it financially manageable, it is often too slow on the side of meeting changing customer demands. The Customer Fulfilment Manager reinforces that the “stiffness of the store structure” is due to the resource restrictions following budget forecasts for each financial quarter and that “everyone is too specialized in one domain which makes us lose flexibility”. This specialisation does however contribute to the quality of execution. The Deputy Sales Manager illustrates their collaborative process as “we have a working triangle”. The triangle consists of different teams (sales, logistics and designers) who move in and out of collaboration. As each team has their set of strategies and priorities of the change process, the main tension that mostly arises is that of timing for implementation and conflicting solutions.

Within her own team, there is free movement within boundaries, meaning “it is encouraged to dare to be different ... it's more a cultural thing than a strategy itself” but does not know of any overarching ambidextrous strategy.

4.3.2 Ownership and Responsibility

The Deputy Sales Manager is not aware nor connected personally to those having ownership of strategies however assumes it is taken at a national level. The Customer Fulfilment Manager however refers the overarching strategy to concern *fulfilment*, conveying the importance of being flexible to customer's need and delivering value by “putting the customer first in everything we do”. He considers “every department has an input” to carry it forward by asking “what are the customers' needs, dreams and ambitions?”. He states that the challenge is when communicating this strategy to line workers in stores and increasing the vitality of fulfilment, particularly as the stores primarily focus on efficiency. They cannot invest without growing and includes expanding their human resources (which is the main barrier to flexibility). The expressed barrier is reinforced by the Store Manager, who poses “how can we find the right balance between meeting customers' needs and being efficient without increasing working hours”. Although this is yet to take full shape in the store, he considers it the responsibility of the Sales Manager and Logistics Manager to communicate the strategy and the department managers to then lead the change.

4.3.3 Common Identity

The Deputy Sales Manager expresses the importance of reaching financial goals within the organisation through the company's values; one of which is to learn from mistakes and develop. Although she recounts when her Manager trusted her as a new employee and allowed her the freedom and responsibility to lead a rebuilding project, she faces the challenge of empowering her own team. To say, “I trust you, just do it gives a lot to the company”, but then people have to feel engaged to carry it through.

The Store Manager provides a more holistic view on the shared vision and values for all departments, which is to find the balance between offering a better everyday life for both customers and employees. He explains that the values are about helping others and that

management is challenged when identifying behaviours and encourage collaboration to meet this vision. A third perspective is offered by the Customer Fulfilment Manager, who refers to the common vision as communication, and it being key particularly in relation to the challenge of alignment across a multichannel environment.

4.3.4 Aligned Rewards and Culture

The Customer Fulfilment Manager states “we have a flat management structure and flat hierarchies ... alignment starts at the top”. Every employee has the same extrinsic reward system (such as the one bonus scheme), and rather places the importance of alignment in terms of empowerment on all organisational levels in order to drive implementation across the functions. The empowerment to “decide something without calling the manager every time” is a challenge for all managers with their teams. He also expresses managers to resolve the lack of competence or confidence that hinder effective implementation.

Likewise, the Store Manager questions “how can we engage and make people feel empowered and have new ideas? Only if you understand the ‘why’ you can contribute”. He highlights the importance to not falling into mechanically fulfilling tasks but rather communicating clearly the challenge to be executed and allow people to self-select. A method of achieving this is presented by the Deputy Sales Manager who describes using a routine process called “top ten” where the ten most commonly asked questions by customers are used as a way of identifying opportunities. Conducting every-day research on the preferences of customers allows them to stay updated with any changes but does however interfere with their primary task of enabling sales. Another routine method is “floor maps”, which identifies where customers walks and pauses the most by means of observation and tracking. The combination of these methods offers learnings and improvements to be made; so “there is no negative challenge in itself because we always learn from them”. She expresses how creating something new is more salient than everyday work and is rewarded in terms of acknowledgement and praise as well as the personal learnings gained among those that contribute. Additionally, people feel satisfied seeing customers appreciating the end result. With salience rewards, it is challenging to show appreciation to multiple team members, gain a personal understanding of

their learning styles and cultural differences to make communication and managerial support effective.

4.3.5 Managing Tensions

The main challenge as expressed by the Deputy Sales Manager concerns the different availabilities of co-workers and giving them a balanced level of attention towards meeting their business-and personal needs. Moreover, the Store Manager relates greater tensions in the coordination and implementation of change as the departments and processes follow through at different timings. He describes the solution as relative, looking for a win-win situation where for example one department takes over capabilities for another and keeping a wider outlook on the overall company objectives rather than an individual department's responsibilities. Furthermore, the Customer Fulfilment Manager emphasises empowerment stating "I think we have become too safe today as a company. Because we have grown so fast, we have become slow in empowerment and decision making" and recalls the greatest tension to give "very clear expectations and let people make their own decisions" - urging it is required as "we need to be more accessible to many people".

4.3.6 Learnings

The key learnings as detailed by the Deputy Sales Manager is to invest more time in the initial planning stage in order to balance the tensions of exploring and exploiting more effectively, involving more people from different areas of the organisation throughout the project timelines rather than just scrutinising resources and cost savings. This is particularly important as "it is hard to fit in exploring in daily routines". She concludes with the essentiality of being "hungry to learn and improve on a continuous basis".

In order to fit in exploration in already established ways of working, the Customer Fulfilment Manager prompts the managers across functions to ask "how can we multitask ... and have fluidity to cross function?" He has learned that in order to cope with the ambidextrous challenges, UKFC needs a young workforce that remains attached to the brand in order to build expertise knowledge and familiarity with the entire operations. Proclaiming that "a changing workforce makes you lose flexibility", he additionally poses the question to managers and HR

team alike; “how do we maintain UKFC as an attractive employer and a life choice?” His key learning is therefore to develop staff into becoming multi skilled specialists, so that they grow the business whilst providing the flexibility of being experts in more than one area.

A way of cultivating this engagement and alignment among employees in different functions, the Store Manager emphasises the importance of communicating *why* management is taking a decision rather than *what* decision has been made. This type of communication should go past everyday routines offering a learning that the customer experience should be explored whilst keeping long-term efficiency on the ground. Starting processes earlier is an aforementioned prerequisite, however supported by member across the hierarchy to discover competitors (e.g. through retail safaris) to gain an outsider’s perspective on change.

5 Analysis

After having presented the empirical findings, this chapter aims to synthesise the findings in order to draw a deeper meaning of what these challenges mean for managers and how they organise for ambidexterity. This chapter serves as a vivid assessment of our novel findings resulting from our research question and how these relate to current ambidexterity literature. Moreover, both companies and managers are compared to each other to draw generalisations in the form of four propositions. Before discussing the four challenges in-depth on the managerial level, this chapter synthesises how organisational ambidexterity is structured in practice among the three companies. Analysing the three distinct companies on the organisational level, it is essential to note that they demonstrate very distinct types of organisational ambidexterity which are inevitable to understand the particular challenges on the managerial level. This chapter aims to answer the research question: “*What are the challenges managers face in sustaining organisational ambidexterity?*”

5.1 Ambidexterity in Practice

According to German Catering Company’s management book directed to all managers within the company, the firm explicitly emphasises organisational ambidexterity as a strategic objective. On the one hand, the *exploitative* strategic objective is to standardise processes, to ensure high predictability of revenue, and to be a highly efficient company overall. On the other hand, the *explorative* strategic objective is to provide customers with a high degree of creativity and customised services depending on the circumstances and the occasion. GCC has an explicit strategy to be an ambidextrous organisation and aims to communicate this across all hierarchy levels which is mostly done via communication channels like internal documents or meetings, and through the ownership taken by upper managers like the Area Manager. Thus, GCC clearly corresponds to the two success factors of *strategic intent* and *ownership and responsibility* (O’Reilly & Tushman, 2011). With its 150 employees, GCC structures itself in units with clear-

cut objectives. While the Product Manager and her department are rewarded for being flexible and creative, the Area Manager emphasises his focus on efficiency. Derived from that, GCC demonstrates its execution of *structural ambidexterity*, being divided into units with seemingly opposed objectives (Tushman & O'Reilly, 1996). Ironically, only by having units with contrasting focal points can GCC harmonise as an ambidextrous organisation.

Similarly, UK Furniture Company aims to be increasingly efficient, while adapting to changing circumstances in the environment, especially in regard to the needs of customers. However, according to the middle managers interviewed in the context of this study, they are not aware of the explicit wording of the strategy, but rather take the balancing act between exploration and exploitation for granted as part of their corporate culture.

“Exploring and exploiting at the same time is more a cultural phenomenon than a strategy itself” - (Deputy Sales Manager, UK Furniture Company)

Even though the company shows a clear *strategic intent* to be ambidextrous (O'Reilly & Tushman, 2011), middle managers act upon it for other reasons than corresponding to the overall strategy. Especially on the store level where efficiency is a prerequisite for reaching the company's targets, UKFC's managers almost intuitively default to explorative behaviour when the environment requires them to do so. This behaviour is consistent with the findings of Kriz et al (2014) who argue that switching to ambidexterity as a short-term cure is defined as *sequential ambidexterity*. However, UKFC does not only execute sequential ambidextrous behaviour, but also makes use of contextual ambidexterity on a team level, where managers on a team level prioritise between the two where they see fit (Gibson and Birkinshaw, 2004).

Additionally, Swedish Innovation Hub demonstrates ambidextrous behaviour rather on a personal than on a structural level. While the *strategic intent* is explicitly formulated on the organisation's strategy compass, there is no specific *ownership or responsibility* for the strategy on an organisational level, rather it is each individual's personal priority to act in an ambidextrous manner.

"Our strategy is very implicit. It's more our DNA to keep being flexible as often as possible." - (Senior Project Manager, Swedish Innovation Hub)

By allowing for the freedom to decide which of the two objectives of exploration and exploitation is prioritised at what point, SIH acts as a prime example for *contextual*

ambidexterity, which corresponds to the findings of Gibson and Birkinshaw (2004). All of the three companies are structured in a way that corresponds to the requirements emerging from their own strategies as well as those arising from the competitive environment, thus corresponding to Lawrence and Lorsch (1967) and Woodward (1965). Because no specific combination of structure or dynamic capabilities fits to every organisation (Birkinshaw et al., 2016), each company aiming to be ambidextrous needs to decide which type of ambidexterity suits best in accordance with its core competencies, resources and strategic objectives. Remarkably, each of the three case companies provides a different type of organisational ambidexterity out of the three main concepts identified in the literature. Thus, the following analyses of predominant challenges that the interviewed managers face, cover all of the three types of organisational ambidexterity: structural, sequential and contextual.

5.2 Managerial Challenges

Moving from the organisational level to the managerial level, the following four challenges have been identified either due to their frequency of being highlighted, or due to their inherently contrasting perceptions across all organisations and managerial positions.

5.2.1 Insufficient Communication of the Strategy

While GCC emphasises the explicit communication of their strategy as one of the highest priorities, the other two companies demonstrate a rather implicit approach to communicating the strategy. Regardless of the way of communicating, managers in all companies identified the need for communicating the strategy as a prerequisite for success.

*“The biggest challenge is to keep the strategy alive and make our staff care about it.” -
(Senior Project Manager, Swedish Innovation Hub)*

Because the strategic objective of being ambidextrous is exclusively crafted in the upper management of the companies, the managing directors of GCC and SIH are aware of the fact that they are dependent upon the daily execution of the strategy on all hierarchy levels and within all departments. Correspondingly, Bower and Gilbert (2007) argue that middle managers' daily decisions and choices about allocating resources shape the way a strategy is

executed, thus making them even capable of stifling a strategy. Related to that, Taylor and Helfat (2009) emphasise the importance of middle management in the context of dynamic capabilities. Especially in the large multinational company UKFC, where hierarchical levels are even more separated, the middle managers are not aware about the exact strategic objectives of the company. In the two smaller companies, top management aims to communicate the strategy as often as possible in different ways because they realised the inherent complexity of balancing two conflicting objectives: exploration and exploitation. This conforms to the importance of direct communication as imperative for explaining two seemingly opposing strategic objectives (Smith & Lewis, 2011).

*“There is a lot of trouble in the communication of the strategy.” - (Managing Director,
German Catering Company)*

Even though the managing directors of GCC and SIH have realised the importance of communication, they identify its execution in practice as a difficulty. This can be explained by the phenomenon of bounded rationality which explains that managers are limited by their personal cognitive potential when executing the strategy of ambidexterity (Harreld, O'Reilly & Tushman, 2007). Because we assume managers on different hierarchy levels to be of similar competence and intelligence, it is the way the strategy is translated from theory to practice which is supposedly the issue. In line with that, Vogel and Güttel (2013) argue that the wrong approach of communicating can limit the willingness of individuals to take in and execute a strategy. Moreover, it is argued that interpersonal and explicit communication is dramatically more effective than written and implicit communication (Chimhanzi, 2004). Because every single of the three companies presents a large proportion of its communication efforts via implicit and written communication (strategy compass, management book, implicit culture), this theory explains why communicating this strategy is such a challenge for various managers.

Proposition 1: There is a positive correlation between the explicitness of communication across all hierarchy levels and the successful execution of an ambidexterity strategy.

5.2.2 Workforce Scarcity

Interestingly, all of the three case companies have repeatedly identified a lack of skilled employees as a major challenge when aiming to be ambidextrous. To be more precise, they claim to be in need of more employees to deal with the increasing need to flexibly adapt to a changing environment which is hard to accomplish while performing routine tasks in daily business.

"Often, we fail to be flexible due to a lack of workforce" - (Store Manager, UK Furniture Company)

Even though ambidexterity literature has failed to identify the correlation between the appropriate number of employees and its effect on ambidextrous performance, it is intriguing to assess how human resources related issues portrayed by the various managers relate to previous research. Especially in UKFC and SIH, the employees sense a high degree of uncertainty resulting from their inability to staff their employees on the seemingly overwhelming number of projects and tasks. Consistent with the literature, psychological safety is a challenge that ambidextrous organisations are dealing with on the managerial level (Nemanich & Vera, 2009). A major reason for this uncertainty in the case companies is a generational shift to a younger workforce who, according to multiple managers, might not feel the need to stay at the company long-term.

"A changing workforce makes you lose flexibility. I have a nervousness because I do not know how our company will deal with unpredictable changes in the future." - (Customer Fulfillment Manager, UK Furniture Company)

In line with previous research, these human resources and culture related challenges are a major barrier for successful implementation (Junni et al, 2015; Khazanchi et al., 2007). Moreover, ambidexterity literature identifies similar challenges on an organisational level (Kauppila, 2010), but does not succeed in explaining their consequences on the managerial level. In reality, these challenges on the organisational level trickle down to various managers that individually face the consequences in their everyday work.

Proposition 2: There is a positive correlation between the degree of workforce skill and ambidextrous performance.

5.2.3 Slow and Inflexible Processes

Mainly predominant in the two larger companies GCC and UKFC, slow processes pose a challenge to managers in their daily attempt to balance efficiency and flexibility, leading to frustrations and lower work performance. According to multiple managers, they struggle to fit in exploring in their daily routines and particularly when the organisation has standardised routines. Conversely, other managers are challenged by keeping up daily business while trying to explore new opportunities. Looking at current ambidexterity literature, academics realise this balancing act as a paradox (Smith, Binns & Tushman, 2010), but do not deal with the issues and challenges that managers face in their daily work. For example, GCC's Area Manager or one of his two colleagues need to confirm every single offer that employees send out to potential customers. Corresponding to Van Den Heuvel (2009), these so-called legacy systems are so closely intertwined with daily business processes that they are difficult to circumvent. While literature emphasises the managerial paradox of harmonising both efficiency and flexibility (Thompson, 1967), it is here the paradox between balancing old and new that challenges ambidextrous behaviour in the first place.

“The word ‘new’ is sometimes a challenge in itself.” - (Deputy Sales Manager, UK Furniture Company)

More ironically, aiming to be ambidextrous while incorporating slow processes that hinder this strategic objective clearly contradicts the consensus in literature of developing *dynamic* capabilities as an organisation. While dynamic capabilities as a source for competitive advantage aim to consistently readjust and reconfigure the organisation as a response to a changing environment (O'Reilly, Harrell & Tushman, 2009), slow processes within an organisation clearly demonstrate a lack of adjustment in an increasingly faster competitive landscape. Furthermore, incorporating slow processes as a barrier to acting dynamically clearly displays a lack of intellectual rigor applied by managers in charge, which is a prerequisite for leveraging dynamic capabilities (Helfat & Martin, 2014; Dutta, 2012)

“I think we have become too safe as a company. Because we have grown so fast, we have become slow in decision making.” - (Customer Fulfilment Manager, UK Furniture Company)

Correspondingly, Davis et al. (2009) identify that the degree of structure has a major impact on firm performance. To be more precise, they explain that too much structure is

generally better than having too little structure, but neither of the two extremes is desired when performing within unpredictable environments (Davis et al., 2009). Because both GCC and UKFC show symptoms of applying too much structure, managers are challenged while aiming to perform in an ambidextrous manner. To sum these findings up, slow processes resulting from a too structured organisational framework act as a barrier for ambidextrous performance.

Proposition 3: There is a negative correlation between the degree of structure and managers' abilities to balance efficiency and flexibility.

5.2.4 Conflicting Objectives between Units

As identified in the chapter “ambidexterity in practice” (5.1), the three different companies leverage different types of organisational ambidexterity to their advantage. While SIH and UKFC rather employ the balancing act between efficiency and flexibility within all departments in the course of contextual or sequential ambidexterity, GCC uses structural ambidexterity by having different units focussing on only one of the two objectives respectively. Even though there are structural differences on the organisational level, managers in all three organisations face challenges while collaborating with units of different focus. For example, GCC's logistics managers aim to work as efficiently and prepared as possible, while project managers want to remain flexible to shifting customer requirements even a few days before delivering the service. In SIH, different departments show clear tensions between each other, resulting from the circumstance that managers from these distinct departments fight for resources that decide about the fate of their individual projects. These findings correspond to Lowe and Shaw (1968) who argue that conflicts can occur through managers competing for the company's resources.

"Different departments have different sub-cultures decoupled from overall corporate culture. Every unit has to be led differently" - (Managing Director, German Catering Company)

To mitigate the issues derived from these subcultures fighting for a limited amount of resources, the various managers of the companies have different approaches. While GCC's and UKFC's managers aim to promote a shared vision among all units, SIH deliberately tries to keep the units separate and even encourages tensions between departments. Clearly contradicting the proposition of O'Reilly and Tushman (2011), SIH's managers argue that these

conflicts serve as boost to their staff's ambitions, even though they are challenging for each individual.

Defining factors for tensions among various departments are the organisations' reward systems that influence managerial behaviour. Comparing the reward systems of UKFC and GCC, a major difference becomes evident: while UKFC rewards managers based on their units' performance in regard to acting in an ambidextrous manner, GCC rewards individually relatively to each manager's particular objective of either acting efficiently or flexibly but decoupled from particular goals of the manager's unit. Because most units in the other two companies have unaligned and often conflicting objectives as part of their reward systems, managers from these units compete for resources to fulfil their targets. Moreover, they prioritise personal short-term gains over reaching long-term company-wide objectives, thus being in line with Benner and Tushman (2013). Because GCC shows less conflicts between units than the other two companies, it is assumed that so-called common-fate rewards within the units of SIH and UKFC are correlated with the resulting conflicts among units.

Proposition 4: There is a positive correlation between the proportion of common-fate rewards and the number of conflicts between units.

5.3 Chapter Summary

Having identified the most relevant challenges that managers face when dealing with organisational ambidexterity, we have identified four major propositions that can be derived from our empirical data. It is important to mention that these propositions are based on the observations made in the three case companies, thus providing a rather small sample size. Even though not all companies have faced the exact same challenges due to their inherent differences, exceptions and anomalies have rather helped to draw the following generalisations:

Proposition 1: There is a positive correlation between the explicitness of communication across all hierarchy levels and the successful execution of an ambidexterity strategy.

Proposition 2: There is a positive correlation between the degree of workforce skill and ambidextrous performance.

Proposition 3: There is a negative correlation between the degree of structure and managers' abilities to balance efficiency and flexibility.

Proposition 4: There is a positive correlation between the proportion of common-fate rewards and the number of conflicts between units.

6 Discussion and Managerial Implications

This paper identifies that managers face similar challenges when planning for- and implementing ambidexterity, regardless of the company, market conditions or type of ambidexterity. The main challenges relate to insufficient communication across the hierarchy levels of the organisation, workforce scarcity, slow and inflexible processes as well as conflicting objectives between units. Although these provide insight of mechanisms that influence successful ambidextrous performance, they need practical inferences for managers. After having analysed these challenges, this chapter will portray the managerial implications resulting from them. The value gained from a practical perspective are the possible solutions shared from the case companies and how the solutions may aid in overcoming the common tensions as well as support the transition between various ambidextrous efforts managers lead. As mentioned before, the four different propositions used in this chapter are based on our own empirical findings.

6.1 Balancing Communication Types to Resolve Insufficient Communication of Strategy

Proposition 1: There is a positive correlation between the explicitness of communication across all hierarchy levels and the successful execution of an ambidexterity strategy.

Ownership of the ambidextrous strategy reflect the importance of providing ownership of the communication itself. Realising the clear distinction between the two allows managers to share ownership of the communication cross-functionally and between the separate units. The aim is to spread the awareness of an ambidextrous strategy across the entire organisation by continuously emphasising *why* a certain decision is important for reaching efficiency,

flexibility or both. Awareness in turn gives rise to favourable attitudes and salient cultural characteristics that form an underlying mechanism triggering a willingness to change and engage in efforts for transformation. The most prominent characteristic is that of entrepreneurs that with clearly communicated expectations - dare to make risky decisions independently from managers, learn from mistakes and develop the business towards a successful execution. Additionally, spreading the ownership of communicating will furthermore solving potential tensions before they even surface.

“We are talking about this strategy constantly. ... The high degree of communication solves problems before they can occur” (Product Manager, German Catering Company)

Viewing ambidexterity as an ecosystem where units, people, and processes are interconnected and continuously influencing the survival of the organism, close collaborations and a clarity of assignments across the hierarchy (even with horizontal firm structures) will improve the balancing act. As a consequence, managers need to succeed in balancing out explicit and interpersonal communication with implicit and written communication. While the latter has been most prevalent among managers in the case companies, the extra effort of explicitly explaining the strategic intent to employees can make the difference between a successful and failing ambidextrous strategy.

6.2 Balancing Generalist and Specialist Knowledge to Resolve Workforce Scarcity

Proposition 2: There is a positive correlation between the degree of workforce skill and ambidextrous performance.

The balance between efficiency and flexibility will vary depending on the nature of the industry and the need of the firm to remain competitive. In the case of mature markets, there is greater emphasis on exploitation as firms gain highest returns as they reach the top of the Performance S-Curve and the contrary in unstable markets (Bower & Christensen, 1995). The s-curve shape within the topic of ambidexterity can be reviewed from the relationship between

learning and performance. In the initial stages, resources are invested in building competence and learnings which often corresponds to the infancy stage of a business cycle. With greater specialisation, the performance improves, and the business moves upwards from expansion towards maturity. For those firms in the mature stage, the emphasis should be on multi-skilling, turning an employee into several specialisations. Not only does it develop the employees and contributes to their willingness of remaining within the firm, but it also allows mature organisations to become more flexible using existing members of staff. Additionally, generalists need to be seen as equally valuable as specialists, reason being that they often provide the outsider ideas (simply due to their mismatch knowledge) which can be developed into practical solutions by the specialists. Its implication on a managerial level is to transition the organisation from following a single s-curve performance and learning pattern, to consolidate multiple s-curves. In reality, that means to constantly develop generalists and specialist knowledge to facilitate adaptation towards the needs of markets and consumers.

As part of this process, managers must be able and willing to adapt targets constantly. Although this breaks the traditional thought of setting targets, it does however correlate better to the nature of an ambidextrous environment. Investing more time and resources in the early stages of planning with the involvement of other functions will ensure better forecasting, implementation and identification (as well as resolution) of potential challenges - particularly when balancing the right number of hours and right number of heads. Another consideration deemed as a “win-win situation” by the Store Manager in UKFC is to share budgets and human resources and promoting managers to look at the overall company objectives rather than their department targets alone. This mind-set change has the potential of increasing collaboration which in turn across the case companies, increases flexibility and agility.

“Business is getting more and more about change management. Every day you have to face new challenges. You are permanently in a change process. To be a good leader, you have to be a good change manager. You have to communicate a lot, you have to explain things to your employees, and to show them the ideas of the future and how we can get there. You have to talk about it constantly.” - (Managing Director, German Catering Company)

To manage change, managers need to readjust themselves into an ambidextrous way of thinking. After all, “managing changes means managing fears of people” (Managing Director, GCC) and becoming more people-focused on a managerial level (rather than financially)

requires managers to develop an intellectual rigour for managing anxiety and the uncertainty experienced among staff. This confirms Keller and Weibler (2014) who emphasise the existence of fears in changing environments. Its implication is that ambidexterity is more concerning the management of people, rather than structures and processes. The “team is more important than anything” (Managing Director, SIH) and through their development, the organisation will increase its likelihood of improved performance. As a consequence, managers must move from narrow specialist knowledge to be more generalist, i.e. being a specialist in multiple domains. Only by this, managers can ensure flexibility to shifting demands of the environment and ensure efficient staffing across units in the context of a scarce workforce. Additionally, it may have implications in terms of the type of leadership that is required to successfully manage people and the firm’s changes - prompting whether managers need an ambidextrous type of leadership, rather than a transformational (Keller & Weibler, 2015) to better develop the skillsets that supports the management of people and their implementation of ambidexterity.

6.3 Balancing Entrepreneurship and Routines to Resolve Slow and Inflexible Processes

Proposition 3: There is a negative correlation between the degree of structure and managers’ abilities to balance efficiency and flexibility.

As detailed in the analysis, the greater the structure the more rigid the organisation and indeed managers becomes to pursuing exploitation. Despite the legacy of processes and routines, managers should never over-focus on them but rather adopt and share a different mindset towards making mistakes and learning from them.

"You should not become too comfortable with just complying to rules and follow routines. We try to break the rules more often. Don't ask for permission, ask for forgiveness"- (Managing Director, Swedish Innovation Hub)

A way of promoting this is by incorporating a key performance indicator (KPI) for mistakes, with the meaning that mistakes correlate to the effort of exploitation in very structured organisations and the contrary in very fluid structures. Through this communication, employees shift away from the negative connotations towards viewing mistakes as opportunities for growth. This is one method of developing entrepreneurs and trigger a sense of empowerment from within, which is essential when implementing an ambidextrous strategy on all hierarchical levels. The implication is that ambidexterity is a phenomenon that can be learned and developed, meaning that it has practical techniques for management to utilise. Ambidexterity can thus be born, and reborn. Additionally, it suggests that these ambidextrous techniques are of greater value for stable and mature organisations that are challenged far greater with adapting their processes towards exploration, than flexible firms have towards exploitation. Nevertheless, with existing processes and routines, managers are able to create exploitative routines and standardise them as part of their regular procedures. Managers should however note that identifying opportunities is not sufficient for becoming ambidextrous, rather it is the fulfilment and quality of execution that impacts the performance of the firm or its relationship with customers. Achieving this long-term, managers need to balance out the freedom of entrepreneurship within the organisation with the efficiency of adhering to budgets and reaching their targets.

6.4 Balancing Competition and Cooperation to Resolve Conflicting Objectives Between Units

Proposition 4: There is a positive correlation between the proportion of common-fate rewards and the number of conflicts between units.

Managers will experience conflict at some point in their dealings with employees and other middle-senior teams. Although conflict may damage the planning and execution of ambidexterity, it can also be channelled to increase flexibility and the innovation that comes with it. One method of channelling it is to allocate a set of rewards for efficiency and other for flexibility. Controversially, findings also suggest benefits from rewarding mistakes.

“When I did a project that wasn’t successful, no one said anything ... What they should say is: ‘Fantastic that you dared to take on this project, even if it was not successful. What can we learn from this now? What can we learn for the future?’ You give credit to the one that dared to do it.” - (Managing Director, Swedish Innovation Hub)

For the latter, management needs to balance their own emphasis on results equal to the level of effort. Correspondingly, managers will benefit from structuring conflict the same way the benefit from structuring creativity, using it to learn and identify constructive solutions. It forms a new perspective on management where conflict resolution hampers the entrepreneurial spirit and should therefore be minimised. Instead, firms should create an environment for healthy conflict that stimulate flexibility. Seeing conflicts as both curse and blessing, sensitivity towards this balancing act is required to leverage the opportunities that arise from healthy competition among units. Only by setting up the reward system in a way that balances competition and cooperation in a healthy way can a firm resolve tension before they occur.

6.5 Ambidextrous Micro-Balancing

Based on the implications of the four different challenges discussed in this chapter, it provokes the emergence of a new concept, what this paper terms *Ambidextrous Micro-Balancing*. While the concept is a newly developed insight of this thesis, it aims to contribute to organisational ambidexterity theory and trigger responses from future research. The concept consists of various micro-balancing acts that together ensure a successful harmonisation between exploration and exploitation. First, it emphasises the importance of explicit and interpersonal communication of the strategy which needs to outweigh implicit and written communication channels, such as internal documents. Second, we highlight that balancing specialist and generalist knowledge among staff is an essential capability that ensures successful adaptation to changing market requirements. In addition, managers need to be aware that a balance between the right number of workers and the right number of working hours are a key success factor for leveraging a potentially scarce workforce. Third, a structural balance is needed between efficiency and flexibility in the firm’s processes. Only when managers successfully move away from either too much or too little structure, they can make the most

out of their ambidextrous strategic priorities. This can be achieved by balancing out entrepreneurship that allows managers to be flexible and following certain routines and frames that remind the managers to reach their respective targets. Fourth, ambidextrous managers need to be aware that conflicts among units can be both a curse or a blessing. While a certain degree of competition for resources can be beneficial, too much of it might have dramatic consequences. Thus, managers must find a balance between the two extremes in order to leverage the potentials of each unit, especially in relation with the reward system. Ambidextrous Micro-Balancing as a concept suggests that balancing between exploitation and exploration requires a vast amount of micro-balancing acts that form the foundation of an ambidextrous strategy. Correspondingly, if an organisation wants to explore and exploit, it needs to establish ambidextrous managers in leading positions within the organisation that ensure these balances on various hierarchy levels.

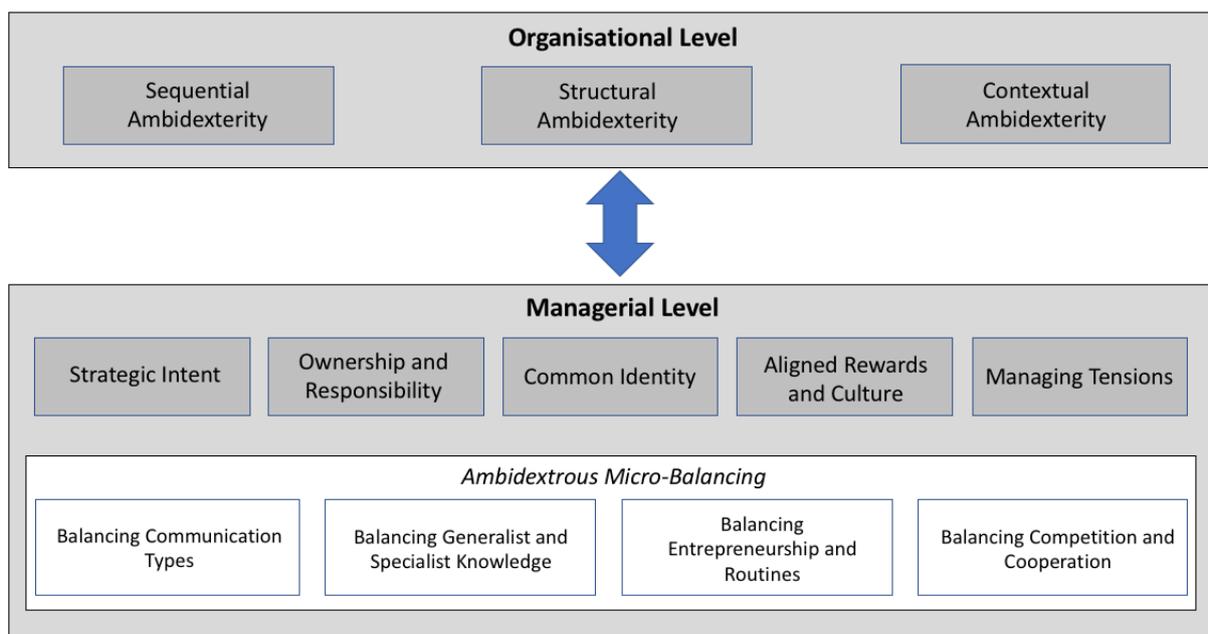


Figure 2: Ambidextrous Micro-Balancing

Based on our developed theoretical framework, *Ambidextrous Micro-Balancing* serves as an extension to the managerial success factors developed by O'Reilly and Tushman (2011). Thus, it provides an addition to the managerial level, providing a deeper level of understanding how an ambidextrous strategy forged on the organisational level needs to be implemented by managers in their daily work. While the four challenges and mitigation strategies were

developed in the course of this thesis, it will be interesting to see what other micro-balancing acts exist within organisations of different sectors and sizes.

6.5 Chapter Summary

To sum up, this chapter provided a lively discussion about how managers on different hierarchy levels deal with the challenges identified in the analysis. What became evident is the fact that managers have to face various micro-balancing acts while pursuing the overarching objective of simultaneously exploring and exploiting. Consequently, we have introduced the concept of “Ambidextrous Micro-Balancing” that emphasises the importance of harmonising various challenges and its resulting conflicts in order to be an ambidextrous organisation.

7 Conclusion

This study aims to identify the main challenges senior and middle managers encounter when planning for or implementing organisational ambidexterity. The well-researched field of ambidexterity has moved into a phase of understanding the underlying challenges of ambidexterity that arise when managers attempt to leverage ambidexterity. This paper therefore covers the repeatedly highlighted knowledge gap (Heracleous, 2017; O'Reilly and Tushman, 2011; Blarr, 2012; Lavie et al., 2011; Jansen et al., 2006) and gives recommendation to practitioners how they might deal with them. To successfully administer the balancing act of exploration and exploitation, the most agreed upon definition of the phenomena - O'Reilly and Tushman's (2011) article "*Organisational Ambidexterity in Action: How Managers Explore and Exploit*" was used as the framework for the study. They detail five criteria for successful implementation, broken down into:

1. "A compelling strategic intent that intellectually justifies the importance of both exploration and exploitation.
2. An articulation of a common vision and values that provide for a common identity across the exploitative and exploratory units.
3. A senior team that explicitly owns the unit's strategy of exploration and exploitation; there is a common-fate reward system; and the strategy is communicated relentlessly.
4. Separate but aligned organizational architectures (business models, structure, incentives, metrics, and cultures) for the exploratory and exploitative units and targeted integration at both senior and tactical levels to properly leverage organizational assets.
5. The ability of the senior leadership to tolerate and resolve the tensions arising from separate alignments." (p. 9)

The conducted eight in-depth interviews with managers across hierarchy levels (ranging from Managing Directors to Project Managers) from three very different case companies located in separate countries and sectors (a catering company in Germany, an innovation hub in Sweden and a furniture company in the United Kingdom), allowed results to be generalised. The managers were thus the focus point of study, having the firms and their environment providing the context. Answering to the research question concerning the challenges that managers face arising from ambidexterity, four common tensions emerged from the results; (1) *Insufficient communication of the strategy*, (2) *Workforce scarcity*, (3) *Slow and inflexible processes* and (4) *Conflicting objectives between units*.

In regard to the challenges of communicating the strategy across hierarchy levels, results indicate a positive correlation between interpersonal and explicit communication with successful execution of an ambidextrous strategy. All three case companies present a large proportion of their communication efforts via implicit and written communication (strategy compass, management book, culture) which explains why implicitly communicating the strategy provides challenges for reaching ambidexterity. Similarly, results present a positive correlation between workforce competence levels and the firm's overall ambidextrous performance. Structured firms need more multi-specialists rather than one-dimensional specialists they currently attain. Additionally, they could benefit from generalists who dominate in flexible firm structures (and unpredictable environments) as they are better able contributing with outsider perspectives, thus meeting the exploitation needs of the business. Management does however struggle retaining specialists among the young workforce who seem less eager staying with an organisation long-term. Contrarily from the above two challenges, there is a negative correlation between a high degree of organisational structure and managers' abilities to balance efforts of efficiency and flexibility. This explained the third challenge of slow and inflexible processes. Too much structure is generally better than having too little structure, but neither of the two extremes is desired when performing within different kinds of environments, thus limiting managers in their implementation of ambidexterity. Inherited legacies of these processes that have become intertwined with the daily operations throughout the years and must be reshaped with more adaptive systems in order to curve the ways of working towards flexibility. Lastly identified was the positive correlation of the proportion of common-fate rewards and the number of conflicts between units. Findings correspond to literature that managers compete for a firm's resources and therefore prioritise short-term gains rather than

long-term, causing the tension of conflicting objectives between units. Balancing out competition with cooperation by for example rewarding exploration and exploitation intrinsically and extrinsically will allow managers to stimulate a healthy level of competition among different departments.

How these findings contribute to theory is the viewpoint that ambidexterity efforts and challenges have a depth dependence effect and should not be simplified in terms of balancing between efficiency and flexibility, or exploration and exploitation. Rather it is that a balance between various communication types to resolve insufficient conveyance of the ambidextrous strategy, a balance between generalist and specialist knowledge to resolve workforce scarcity, a balance between entrepreneurship and routines to resolve slow and inflexible process and finally, between competition and cooperation to resolve conflicting objectives between units. By portraying the managerial implications from identified challenges in organisational ambidexterity, this study develops the concept of *Ambidextrous Micro-Balancing*. Contributing to theory, this concept aims to explain that ambidexterity does not only consist of the overarching balance between exploitation and exploration, but rather of numerous sub-challenges on a managerial level that determine the success of realising ambidexterity. Consequently, firms need to establish ambidextrous managers in leading positions within the organisation that ensure these micro-balances are carried out effectively and aligned across hierarchy levels. To reflect upon the research aims of this study, we are confident our contribution to theory answers the research question through introducing the concept of *Ambidextrous Micro-Balancing*.

Concerning the limitations, the scope of this thesis is firstly limited to O'Reilly and Tushman's (2011) criteria for successful management of ambidexterity and therefore lead results to correspond to these. The investigation may therefore have excluded other challenges if following a different framework. Although the findings can be generalised to all managers as the case companies range in size, sector and geographical location - this same factor also makes findings less generalizable to a specific type of market environment, organisation or even the type of ambidexterity. This paper therefore has an underlying assumption that all managers regardless of placement in a firm or market environment will deal with similar challenges, and therefore experience the resembling benefits from the identified solutions. Moreover, this paper was unable to interview any senior managers at one of the selected case companies (UKFC), which means we lack a senior's perspective in that company which could have presented

insights for this study. Finally, since the thesis was limited in terms of time, it only provides a snapshot of the case companies today. Withstanding these limitations, the study certainly adds to our understanding that ambidexterity has more micro-balancing acts than what has broadly been categorised as exploration versus exploitation.

Deriving from the results of this study, we suggest six implications for future research. First, future research would greatly benefit from identifying additional micro-balances that might occur across various companies. While this study portrays four micro-balancing acts, it will be highly intriguing what other challenges can be added to these. Second, future research may assess if the same challenges exist within structural, sequential or contextual ambidexterity alike or whether there are any clear differences. Thus, future research has great potential of identifying the introduced micro-balancing acts under each type of ambidexterity (structural, sequential and contextual) and detail their path dependency. Third, another recommendation for upcoming studies is to investigate if the company size or industry have an impact on different challenges and micro-balancing acts. Fourth, future research may complement this study by conducting longitudinal studies on the subject and assess how efforts of balancing various challenges on a micro-level have an impact on their ambidextrous strategy's success. Fifth, it will be of great interest to analyse how newly emerging trends and concepts in human resources theory have an impact on managing ambidexterity on the managerial level. Sixth, ambidexterity literature would benefit from investigating how the reward system of a company can be set up to successfully micro-balance cooperation and competition.

On a practical level, managers would take advantage from a deeper dive of various coping techniques of the four identified challenges in this paper, thus coming closer to meeting the gap identified primarily from Heracleous et al. (2017) and O'Reilly and Tushman (2013) concerning how managers deal with ambidextrous challenges. Moreover, both top managers and middle managers would benefit from spreading awareness that not only the overarching balance of exploration and exploitation is of importance, but that it requires various balancing acts on the micro-level. Thus, management should learn from the challenges and their implications assessed in this study by implementing Ambidextrous Micro-Balancing hands-on: (1) by balancing their ways of communicating, (2) by balancing their own specialist and generalist skills and those of their workforce, (3) by balancing entrepreneurship and financial frames, (4) and finally by balancing conflicts and cooperation among units to ensure a healthy competition.

Reference List

- Adler, P., Benner, M., Brunner, D., MacDuffie, J., Osono, E., Staats, B., Takeuchi, H, Tushman, M. & Winter, S., (2009). Perspectives on the Productivity Dilemma. *Journal of Operations Management*, vol. 27, no. 2, pp. 99-113.
- Adler, P., Heckscher, C, & Grandy, J., (2013), *From Clans to Collaboration: Collaborative Community as the Basis of Organizational Ambidexterity* (Working Paper). Los Angeles, CA: University of Southern California.
- Agarwal & Gort., (1996). The Evolution of Markets and Entry, Exit, and Survival of Firms, *Review of Economics and Statistics*, vol. 78, no. 3, pp. 489-498.
- Agostini, L, Nosella, A, & Filippini, R., (2016), Towards an Integrated View of the Ambidextrous Organization: A Second- order Factor Model, *Creativity and Innovation Management*, vol. 25, no. 1, pp. 129-141. Available online: 10.1111/caim.12167. [15 April 2018].
- Aldrich, H., (1999). *Organizations Evolving*. London: Sage
- Alvesson, M., & Sköldbberg, K., (2009). *Reflexive Methodology: New Vistas for Qualitative Research*. Los Angeles, London: SAGE.
- Bass, B.M., (2005), *Transformational Leadership Theory*. JB Miner. Organizational Behavior I. Essential theories of motivation and leadership, pp.361-385.
- Bazerman, M & Watkins, M., (2004). *Predictable Surprises*, Boston, MA: Harvard Business School Press
- Bierly, P. E., and Daly, P. S., (2007), Alternative Knowledge Strategies, Competitive Environment, and Organizational Performance in Small Manufacturing Firms. *Entrepreneurship: Theory and Practitioners*, vol. 31, no. 4, pp. 493-516.
- Birkinshaw, J., & Gupta, K., (2013). Clarifying the Distinctive Contribution of Ambidexterity to the Field of Organization Studies. *Academy of Management Perspectives*. vol. 27, no. 4, pp. 287-298.
- Birkinshaw, J., Zimmermann, A., & Raisch, S., (2016). How Do Firms Adapt to Discontinuous Change? *California Management Review*, vol. 58, no. 4, pp. 36-58, Business Source Complete, EBSCOhost [Accessed 10 April 2018].
- Blarr, W. H., (2012). *Organizational Ambidexterity: Implications for the Strategy-Performance Linkage*. Springer Science & Business Media.
- Bower, J.L. & Christensen, C.M., (1995). Disruptive technologies: catching the wave.
- Bower, J.L & Gilbert, C., (2007). How managers' decisions everyday create or destroy your company's strategy. *Harvard Business Review*. Available Online:

<https://hbr.org/2007/02/how-managers-everyday-decisions-create-or-destroy-your-companys-strategy> [Accessed 22 Apr 2018].

- Brown, S. L., & Eisenhardt, K. M., (1997). The art of continuous change: Linking complexity theory and time-based evolution in relentlessly shifting organizations. *Administrative Science Quarterly*, vol. 42, pp. 1-34.
- Bryman, A., & Bell, E., (2015). *Business Research Methods*. Oxford: Oxford University Press.
- Bueschgens, T., Bausch, A., & Balkin, D. B., (2010). *Organizational Culture and Climate: An Integrative Review*. Paper presented at the annual meetings of the Academy of Management, Montreal.
- Burgers, J. H., Jansen, J. J. P., Van den Bosch, F. A., & Volberda, H. W., (2009). Structural Differentiation and Corporate Venturing: The moderating Role of Formal and Informal Integration Mechanisms. *Journal of Business Venturing*, vol. 24, no.3, pp. 206-220.
- Burnes, B., (2009). *Managing Change: A Strategic Approach to Organisational Dynamics*. New York: Prentice Hall/Financial Times.
- Burns, T., & Stalker, G. M., (1961). *The management of innovation*. London: Tavistock.
- Burton, M. D, O'Reilly, C. A, & Bidwell, M., (2012). *Management Systems for Exploration and Exploitation: The Micro-foundations of Organizational Ambidexterity*. Paper presented at the annual meetings of the Academy of Management, Boston.
- Cao, Q., Simsek, Z., & Zhang, H., (2010). Modelling the Joint Impact of the CEO and the TMT on Organizational Ambidexterity. *Journal of Management Studies*, vol. 47, no. 7, pp. 1272-1296.
- Chang, S., (1995). International Expansion Strategy of Japanese Firms: Capability Building through Sequential Entry. *Academy of Management Journal*, vol. 38, no. 2, pp. 383-407.
- Chatman, J. A, Galdwell, D. F, O'Reilly, G. A, & Doerr, B, (2013), *Organizational Culture and Performance in High Technology Firms: The Effect of Culture Content and Strength* (Working Paper), Berkeley, CA: Haas School of Business.
- Chen, E. L., & Katila, R., (2008). *Rival Interpretations of Balancing Exploration and Exploitation: Simultaneous or Sequential?* In S. Scott (Ed.), *Handbook of Technology and Innovation Management* (pp. 197- 214). New York: Wiley.
- Chimhanzi, J., (2004). The Impact of Marketing/HR Interactions on Marketing Strategy Implementation. *European Journal of Marketing*, vol. 38, no 1/2, pp. 73-98.
- Corbin, J. M., & Strauss, A. L., (2008). *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory*. Thousand Oaks: SAGE
- Darwin, C., (1859). *On the Origin of Species by Means of Natural Selection, or the Preservation of Favoured Races in the Struggle for Life*. London.

- Davis, J. Eisenhardt, K. & Bingham, C., (2009). Optimal Structure, Market Dynamism, and the Strategy of Simple Rules. *Administrative Science Quarterly*, vol. 53, no. 3, pp. 413-452.
- Diener, E., & Crandall, R., (1978). *Ethics in Social and Behavioral Research*. U Chicago Press.
- Duncan, J., (1976). *The Ambidextrous Organization: Designing Dual Structures for Innovation*. In Kilmarm, R.H, Pondy, L.R. & Slevin, D., (Eds) *The Management of Organization Design: Strategies and Implementation*, pp. 167-188. New York: North Holland.
- Dutta, S. K., (2012). Dynamic Capabilities: Fostering Ambidexterity. *SCMS Journal of Indian Management*, vol. 9, no. 2, pp. 81.
- Dvir, T., Eden, D., Avolio, B.J. & Shamir, B., (2002). Impact of Transformational Leadership on Follower Development and Performance: A Field Experiment. *Academy of Management Journal*, vol. 45, no. 4, pp.735-744.
- Easterby-Smith, M., Thorpe, R. & Jackson, P., (2015). *Management and Business Research*. 5th ed. London: Sage.
- Eisenhardt, K.M. , (1989). Making Fast Strategic Decisions in High-velocity Environments. *Academy of Management Journal*, vol. 32, no. 3, pp. 543-576.
- Gagliardi, P., (1986). The Creation and Change of Organizational Cultures: A Conceptual Framework. *Organization Studies*, vol. 7, no. 2, pp.117-134.
- Galbraith, J., (1973). *Designing Complex Organizations*. Reading, MA: Addison-Wesley.
- Galloway, A. (2011). Are Some Things Unrepresentable? *Theory, Culture & Society*, vol. 28, no. 7-8, pp. 85-102.
- Garmeli, A., & Halevi, M, Y., (2009). How Top Management Team Behavioral Integration and Behavioral Complexity Enable Organizational Ambidexterity: The Moderating Role of Contextual Ambidexterity. *Leadership Quarterly*, vol. 20, no. 2, pp. 207-218.
- Geerts, A, Blindenbach-Driessen, F, & Gemmel, P., (2010). *Achieving a Balance between Exploration and Exploitation in Service Firms: A Longitudinal Study*. Paper presented at the annual meetings of the Academy of Management, Montreal.
- Gibson, C.B. & Birkinshaw, J., (2004). The Antecedents, Consequences, and Mediating Role of Organizational Ambidexterity. *Academy of Management Journal*, vol. 47, no. 2, pp.209-226.
- Goosen, M, G., Bazzazian, N., & Phelps, G., (2012). *Consistently Capricious: The Performance Effects of Simultaneous and Sequential Ambidexterity*. Paper presented at the annual meetings of the Academy of Management, Boston.
- Granovetter, M., (1985). Economic Action and Social Structure: The Problem of Embeddedness. *American Journal of Sociology*, vol. 91, no. 3, pp.481-510.

- Gulati, R. & Puranam, R. (2009). Renewal through Reorganization: The Value of Inconsistencies between Formal and Informal Organization. *Organization Science*, vol. 20, no. 2, pp. 422-440.
- Harrell, J.B., O'Reilly III, C.A. and Tushman, M.L., (2007). Dynamic Capabilities at IBM: Driving Strategy into Action. *California Management Review*. vol. 49, no. 4, pp. 21-43.
- Hatch, M.J., (1993). The Dynamics of Organizational Culture. *Academy of Management Review*, vol. 18, no. 4, pp.657-693.
- Hedlund, G., & Ridderstrale, J., (1995). Towards a Theory of the Self-renewing MNG. In B. Toyne & D. Nigh (Eds.), *International business: An Emerging Vision*, vol. 1, pp. 329-353). Columbia, SC: University of South Carolina Press.
- Helfat, C, & Martin, J., (2015). Dynamic Managerial Capabilities: Review and Assessment of Managerial Impact on Strategic Change. *Journal of Management*. vol. 41, no. 5, pp. 1281-1312.
- Heracleous, L., Papachroni, A. & Andriopoulos, C., (2017). Structural Ambidexterity and Competency Traps: Insights from Xerox PARC. *Technical Forecasting and Social Change*. vol. 117, pp.327-338.
- Herriott, R. E., & Firestone, W. A., (1983). Multisite Qualitative Policy Research: Optimizing Description and Generalizability. *Educational Researcher*, vol. 12, no. 2, pp. 14-19.
- Hill, S. A., & Birkinshaw, J. (2012). Ambidexterity and Survival in Corporate Venture Units, *Journal of Management*. vol. 40, no. 7, pp.1899-1931.
- Jansen, J. J. P., George, G., Van den Bosch, F. A., & Volberda, H. W., (2008). Senior Team Attributes and Organizational Ambidexterity: The Moderating Role of Transformational Leadership, *Journal of Management Studies*, vol. 45, no. 5, pp. 982-1007.
- Jansen, J. J. P., Tempelaar, M. P., Van den Bosch, F. A., & Volberda, H. W. (2009). Structural Differentiation and Ambidexterity: The Mediating Role of Integration Mechanisms. *Organization Science*, vol. 20, no. 4, pp. 797-811.
- Jansen, J. J. P., Vera, D., & Crossan, M., (2009). Strategic Leadership for Exploration and Exploitation: The Moderating Role of Environmental Dynamism. *Leadership Quarterly*, vol. 20, no. 1, pp. 5-18.
- Jarzabkowski, P., Smets, M., Bednarek, R., Burke, G. & Spee, P., (2013). *Institutional Ambidexterity: Leveraging Institutional Complexity in Practice*. In Lounsbury, M. & Boxenbaum, E., (2013). *Institutional Logics in Action*, Part A, pp. 3-22. Emerald Group Publishing Limited.
- Jiang R, Kortmann S., (2014). On the Importance of Mediating Dynamic Capabilities for Ambidextrous Organizations. *Procedia CIRP*, vol. 20 (2nd ICRM 2014 International Conference on Ramp-Up Management): pp. 85-92.

- Junni, P., Sarala, R.M., Tarba, S.Y., Liu, Y. & Cooper, C.L., (2015). Guest Editors' Introduction: The Role of Human Resources and Organizational Factors in Ambidexterity. *Human Resource Management*, vol. 54, no. 1, pp.1-28.
- Jurksiene, L, & Pundziene, A., (2016), The Relationship between Dynamic Capabilities and Firm Competitive Advantage, *European Business Review*, vol. 28, no. 4, pp. 431-448.
- Kauppila, O. P., (2010). Greeting Ambidexterity by Integrating and Balancing Separate Interorganizational Partnerships. *Strategic Organization*, vol. 8, no. 4, pp. 283-312.
- Keller, T. & Weibler, J., (2015). What it Takes and Costs to be an Ambidextrous Manager: Linking Leadership and Cognitive Strain to Balancing Exploration and Exploitation. *Journal of Leadership & Organizational Studies*, vol. 22, no. 1, pp.54-71.
- Khazanchi, S., Lewis, M. W., & Boyer, K. K. (2007). Innovation-supportive Culture: The Impact of Organizational Values on Process Innovation. *Journal of Operations Management*, vol. 25, no. 4, pp. 871-884.
- Kriz, A., Voola, R. & Yuksel, U., (2014). The Dynamic Capability of Ambidexterity in Hypercompetition: Qualitative Insights. *Journal of Strategic Marketing*, vol. 22, no. 4, pp.287-299.
- Lai, H. G., & Weng, G. S., (2010). *How to Manage Organizational Ambidexterity in the Phase of Technological Discontinuity?* Paper presented at the annual meetings of the Academy of Management, Montreal.
- Lavie, D., & Rosenkopf, L. (2006). Balancing Exploration and Exploitation in Alliance Formation. *Academy of Management Journal*, vol. 49, no. 4, pp. 797-818.
- Lavie, D., Kang, J., & Rosenkopf, L. (2011). Balance Within and Across Domains: The Performance Implications of Exploration and Exploitation in Alliances. *Organization Science*, vol. 22, no. 6, pp. 1517-1538.
- Lawrence, P. R., & Lorsch, J. W. (1967). Differentiation and Integration in Complex Organizations. *Administrative Science Quarterly*, pp. 1-47.
- Levinthal, D. A., & March, J. G., (1993). The Myopia of Learning. *Strategic Management Journal*, vol. 14, no. 2, pp. 95-112.
- Locke, K., (2001). *Grounded Theory in Management Research*. Sage.
- Lovas, B., & Ghoshal, S. (2000). Strategy as Guided Evolution. *Strategic Management Journal*, vol. 1, pp. 875-896.
- Lowe, E.A. & Shaw, R.W., (1968). An Analysis of Managerial Biasing: Evidence from a Company's Budgeting Process. *Journal of Management Studies*, vol. 5, no. 3, pp.304-315.

- Lubatkin, M. H., Simsek, Z., Ling, Y., & Veiga, J. F., (2006). Ambidexterity and Performance in Small- to Medium-sized Firms: The Pivotal Role of TMT Behavioral Integration. *Journal of Management*, vol. 32, no. 5, pp. 1-27.
- March, J. G., (1991). Exploration and Exploitation in Organizational Learning. *Organization Science*, vol. 2, no. 1, pp. 71–87.
- Martin, J. A., & Eisenhardt, K. M., (2010). Rewiring: Crossbusiness-unit Collaborations in Multibusiness Organizations. *Academy of Management Journal*, vol. 53, no. 2, pp. 285-301.
- Martins, E.C. & Terblanche, F., (2003). Building Organisational Culture that Stimulates Creativity and Innovation. *European Journal of Innovation Management*, vol. 6, no. 1, pp.64-74.
- Mary J. Benner & Michael L. Tushman., (2003). Exploitation, Exploration and Process Management: The Productivity Dilemma Revisited, *Academy of Management Review*, vol. 28, no. 2, pp. 238-256.
- Mintzberg, H., (1979). *The Structuring of Organizations*. Englewood Cliffs, NJ: Prentice-Hall..
- Nemanich, L., & Vera, D. (2009). Transformational Leadership and Ambidexterity in the Context of an Acquisition. *Leadership Quarterly*, vol. 20, no.1, pp. 19-33.
- Nosella, A., Cantarello, S. & Filippini, R., (2012). The Intellectual Structure of Organizational Ambidexterity: A Bibliographic Investigation Into the State of The Art. *Strategic Organization*, vol. 10, no. 4, pp. 450-465.
- O'Reilly III, C.A., Harreld, J.B. & Tushman, M.L. (2009), Organizational Ambidexterity:IBM and Emerging Business Opportunities. *California Management Review*, vol. 51, no. 4, pp.75-99.
- O'Reilly, C. A., & Tushman, M. L., (2013). Organizational Ambidexterity: Past, Present, and Future. *Academy of Management Perspectives*, vol. 7, no. 4, pp. 324–338.
- O'Reilly, C.A. & Tushman, M.L., (2011). Organizational Ambidexterity in Action: How Managers Explore and Exploit. *California Management Review*, vol. 53, no. 4, pp.5-22.
- O'Reilly, I & Tushman, M., (2008). Ambidexterity as a Dynamic Capability: Resolving the Innovator's Dilemma. *Research In Organizational Behavior.*, vol. 28 pp. 185-206.
- Ormerod, P., (2005). *Why Most Things Fail*. New York, p. 18. NY: Pantheon Books.
- Parker, M., (2000). *Organizational culture and identity: Unity and division at work*. Sage.
- Pisano, G. P., (1994). Knowledge, Integration, and The Locus of Learning: An Empirical Analysis of Process Development. *Strategic Management Journal*, vol. 15, no. 1, pp. 85-100.

- Pugh, D., D. Hickson, C. Hinings, K. Macdonald, C. Turner, & T. Lupton., (1963). A Conceptual Scheme for Organizational Analysis. *Administrative Science Quarterly*, vol. 8, pp. 289-315.
- Puranam, P., Singh, H., & Zoilo, M. (2006). Organizing for Innovation: Managing the Coordination-autonomy Dilemma in Technology Acquisitions. *Academy of Management Journal*, vol. 49, no. 2, pp. 263-280.
- Ramachandran, L, & Lengnick-Hall, G. A. (2010). *Multidimensional and Dynamic Ambidexterity Configurations: Rethinking the Question of Balance*. Paper presented at the annual meetings of the Academy of Management, Montreal.
- Rosenbloom, R. S., (2000). Leadership, Capabilities, and Technological Change: The Transformation of NGR in the Electronic Era. *Strategic Management Journal*, vol. 21, pp. 1083-1103.
- Sarasvathy, S.D., (2001) Effectual Reasoning in Entrepreneurial Decision Making: Existence and Bounds. In *Academy of Management Proceedings*, vol. 1, pp. D1-D6. Briarcliff Manor, NY.
- Scarre, C., Wotzka, H.P. & Shennan, S., (2000). Population, Culture History, and the Dynamics of Culture Change. *Current Anthropology*, vol. 41, no. 5, pp.811-835.
- Schulze, P., Heinemann, F., & Abedin, A., (2008). *Balancing Exploitation and Exploration: Organizational Antecedents and Performance Effects of Ambidexterity*. Best Paper, Proceedings of the Academy of Management, Anaheim.
- Schumpeter, J. A., (1934). *The Theory of Economic Development*. Cambridge, MA: Harvard University Press.
- Scott, W. R., (2003). *Organizations: Rational, Natural and Open Systems*, 5th ed. Upper Saddle River, NJ: Prentice Hall.
- Siggelkow, N., & Levinthal, D. A. (2003). Temporarily Divide to Conquer: Centralized, Decentralized, and Reintegrated Organizational Approaches to Exploration and Adaptation. *Organization Science*, vol. 14, no. 6, pp. 650-669.
- Simon, H.A., (1979). Rational Decision Making in Business Organizations. *The American Economic Review*, vol. 69, no. 4, pp.493-513.
- Simsek, Z., Heavey, C., Veiga, J. & Souder, D., (2009). A Typology for Aligning Organizational Ambidexterity's Conceptualizations, Antecedents, and Outcomes. *Journal of Management Studies*, vol. 46, no. 5, pp. 864-894.
- Sine, W. D., Mitstihashi, H., & Kirsch, D. A., (2006). Revisiting Burns and Stalker: Formal Structure and New Venture Performance in Emerging Economic Sectors. *Academy of Management Journal*, vol. 49, no.1, pp. 121-132.

- Smith, W., Binns, A., & Tushman, M., (2010). Complex Business Models: Managing Strategic Paradoxes Simultaneously. *Long Range Planning*, vol. 43, no. 2-3, pp 448-461.
- Smith, W. and Lewis, M., (2011). Toward a Theory of Paradox: A Dynamic Equilibrium Model of Organizing. *Academy of Management Review*, vol. 36, no. 2, pp. 381-403.
- Smith, W. K., & Tushman, M. L., (2005). Managing Strategic Contradictions: A Top Management Model for Managing Innovation Streams. *Organization Science*, vol. 16, no.5, pp. 522-536.
- Stubbart C.I & Knight, M.B., (2006). The Case of the Disappearing Firms: Empirical Evidence and Implications, *Journal of Organizational Behavior*, vol. 27, no. 1, pp. 79-100.
- Styhre, A. (2013) *How to Write Academic Texts: A Practical Guide*, Lund: Studentlitteratur.
- Taylor, A., & Helfat, C. E., (2009). Organizational Linkages for Surviving Technological Change: Complementary Assets, Middle Management and Ambidexterity. *Organization Science*, vol. 20, no. 4, pp.718-739.
- Thompson, J., (1967). *Organizations in Action: Social Sciences Bases of Administrative Theory*. New York: McGraw-Hill.
- Tripsas, M., (1997). Surviving Radical Technological Change Through Dynamic Capability: Evidence From the Typesetter Industry. *Industrial and Corporate Change*, vol. 6, no. 2, pp.341-377.
- Tushman, M. L., & O'Reilly, C. A., (1996). The Ambidextrous Organization: Managing Evolutionary and Revolutionary Change. *California Management Review*, vol. 38, no. 4, pp.1-23.
- Tushman, M. L., & O'Reilly, C. A., (2002). *Winning through Innovation: A Practical Guide to Leading Organizational Change and Renewal*. Boston, MA: Harvard University Press.
- Tushman, M. L., & Romanelli, E., (1985). Organizational Evolution: A Metamorphosis Model of Convergence and Reorientation. *Research in Organizational Behavior*, vol. 7, pp.171-222.
- Tushman, M. L., O'Reilly, C. A., & Harreld, B., (2013). *Leading Strategic Renewal: Proactive Punctuated Change Through Innovation Streams and Disciplined Learning*. Paper presented at the Harvard Business School, May 9.
- Vogel R, Güttel W. (2013) The Dynamic Capability View in Strategic Management: A Bibliometric Review. *International Journal Of Management Reviews*, vol. 15, no. 4, pp.426-446.
- Weber, M., (1946). *From Max Weber: Essays in Sociology*. H. H. Gerth and C. W. Mills, eds. and trans. New York: Oxford University Press.

Woodward, J., (1965). *Industrial Organization: Theory and Practice*. New York: Oxford University Press.

Yin, R., (2014). *Case Study Research: Design and Methods*. London: Sage

Appendix A: Semi-structured Interview Guide

- 1. Please tell us about your role and responsibilities.**
- 2. How does the function of your department/team integrate with the others?**
 - a. Are there any challenges?
 - b. How did you manage them?
- 3. We are researching how firms balance between profiting from existing resources whilst recomposing them to adapt to changing environments. Do you have a strategy corresponding to this; and if so, how does it emphasize the importance of this balance?**
 - a. Were there any challenges?
 - b. How did you manage them?
- 4. How is ownership and responsibility over this strategy ensured? How is the strategy communicated?**
 - a. Were there any challenges?
 - b. How did you manage those?
- 5. How does management work towards sharing values and a common vision across business units that focus on one or both sides of this strategy?**
 - a. Were there any challenges?
 - b. How did you manage those?
- 6. How aligned are individuals/units in terms of corporate culture, reward systems and organisational structure for meeting this balance? How does the level of execution vary across different hierarchy levels?**
 - a. Were there any challenges?
 - b. How did you manage them?
- 7. How do you deal with the tensions that arise from potential misalignments between these individuals/units?**
 - a. Were there any challenges?
 - b. How did you manage those?
- 8. If you faced the previously discussed challenges again, how would deal with them from today's perspective? Is there anything you have learned from dealing with these challenges?**

Appendix B: An integrated Model of the HR and Organisational Antecedents of Ambidexterity

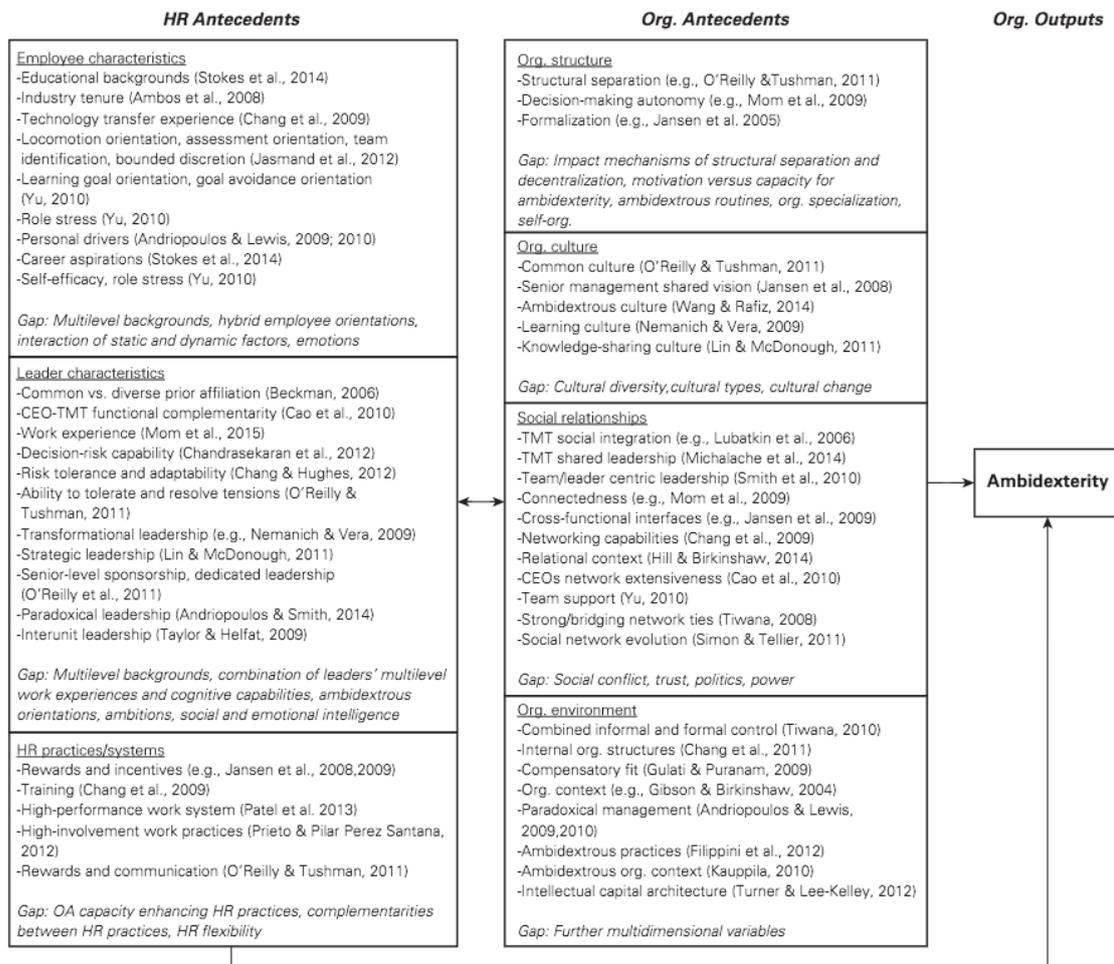


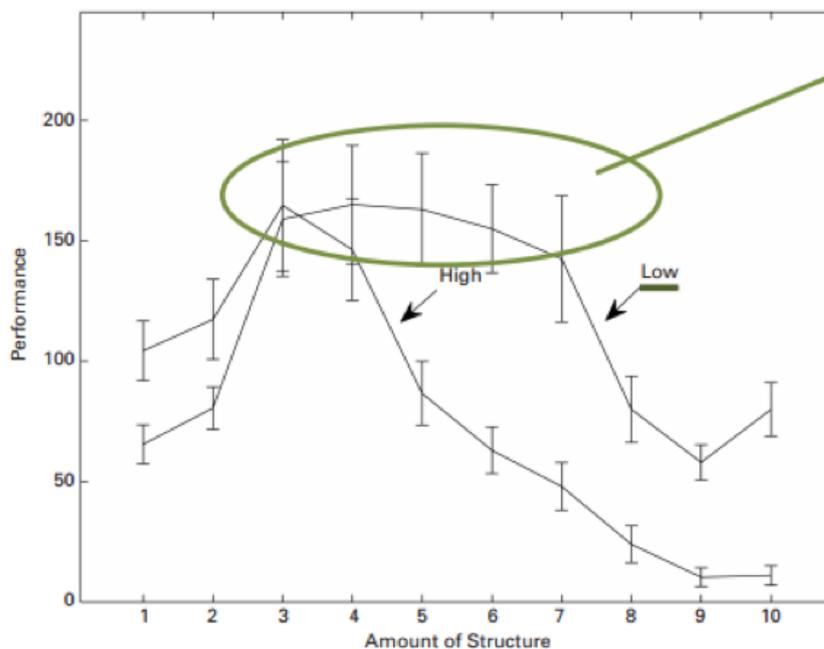
FIGURE 4. An Integrative Model of the HR and Organizational Antecedents of Ambidexterity

(Junni, et al, 2015, p.24).

Appendix C: Effects of Increasing Environmental Unpredictability on Performance

The graph illustrates the relationship between a firm's structure and their performance in relation to predictable and unpredictable environments. The broad plateau show that highly structured firms in stable markets can optimally perform using a wider range of structures. By contrast in unpredictable markets, performance has greater risk of radically dropping to the point destroying its performance – therefore calling this inverted-V-relationship edge of chaos. The balance between too much structure and too little is an ambidextrous challenge, where too much structure makes firms inflexible and too little structure make them inefficient.

Figure 5. Effects of increasing environmental unpredictability on performance (over 30 runs).



Level of structures for optimal firm performance, depending on environmental conditions

(Davis, Eisenhardt & Bingham, 2009, p.432)