THESIS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

Mastering Change Through Innovative Initiatives

Contextual Ambidexterity as a Process

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Abstract

This thesis focuses on how innovative work, driven within an established organization, can be a component for mastering change in a contemporary context. This issue has been widely addressed; however, clear solutions have not yet been obtained, in either practice or theory. Theoretically, this study seeks to understand this question using literature primarily on ambidexterity and organizational change. Empirically, it draws on action research in close collaboration with established organizations.

Driving innovative work in established organizations requires sensitivity toward the need to relate explorative work to the current model. Being ambidextrous is increasingly seen as a necessary organizational capability to meet the challenges of a fast-paced world. Previous research emphasizes how ambidexterity could be achieved, but it focuses less on how an ambidextrous organization relates to the overall organizational change journey. Traditional models for change typically do not consider the need for ambidexterity. These models have also recently been criticized for not incorporating the implications of a fast-paced environment, such as speed, polyphony, and innovation. Still, literature on change is an important field for providing insights about the issue at hand in this thesis.

This thesis is based on five papers: four drawing primarily on action research and one conceptual paper. The findings in these papers provide empirical insights from organizations in the midst of their change journeys, all attempting to solve the ambidexterity problem contextually. These papers, together with relevant literature, lead this thesis into a discussion wherein I propose a) how to design explorative work on contextual ambidexterity, b) how to lead such work, and c) how a contextually ambidextrous organization could be connected to a change journey.

With this thesis, I attempt to contribute to literature on change by suggesting innovative initiatives as an important component. Moreover, this thesis aims to reconceptualize contextual ambidexterity and consider it more as a system change process than an end state. This thesis finishes by proposing a framework for how innovative initiatives could be a component for mastering change in contextually ambidextrous organizations.

Keywords: Contextual ambidexterity; Change models, System change; Contemporary context; Action research; Innovation; Exploration

Appended papers

This thesis is based on the following papers:

1. Pregmark, J. E. (forthcoming). Renewing models for change: Towards a framework for organizational development, Revise and resubmit. *Journal of Change Management*.

   This is a single authored paper. Design, data gathering, analysis, and writing were performed by the author.

2. Fredberg, T., & Pregmark, J. (2016). Transformation in a tightly nested system: Employing fast cycles of change. In D. A. Noumair & A. B. (R.) Shani (Eds.), *Research in organizational change and development* (Vol. 24, pp. 185-219). Bingley, UK: Emerald Group Publishing Limited.

   In this paper, both authors contributed equally in design, data gathering, analysis, and writing (author names are written alphabetically).

3. Fredberg, T., & Pregmark, J. E. (forthcoming). The double-edged sword of urgency, revise and resubmit, Long *Range Planning*.

   In this paper, both authors contributed equally in design, data gathering, analysis, and writing (author names are written alphabetically).

4. Fredberg, T., & Pregmark, J. E. (2018). Organization renewal through entrepreneurial initiatives: When the seed changes the soil. In D. A. Noumair & A. B. (R.) Shani (Eds.), *Research in organizational change and development* (Vol. 26, pp. 99-126). Bingley, UK: Emerald Group Publishing Limited.

   In this paper, both authors contributed equally in design, analysis, and writing. Master students at the corporate entrepreneurship program helped gather the data according to specifications by the authors (author names are written alphabetically).

5. Fredberg, T, Pregmark, J E. & Hacklin, F. (2019). Towards a Model for Organizational Transformation: Managing Structural-Relational Tensions in Multi-stakeholder Value Creation, published as working paper, *IMIT research reports*, 2019:2.

   This paper is conceptual, and the ideas were developed jointly by all authors. Fredberg and Pregmark were the main contributors in the actual writing.

Other publications by the author

- Fredberg, T., & Pregmark, J. (2017). Michael Beer: It's not the seed, it's the soil. In D. Szabla, W. A. Pasmore, M. A. Barnes, & A. A. Gipson (Eds.), *The Palgrave handbook of organizational change thinkers* (pp. 107-125). London, UK: Palgrave MacMillan.
- Kronblad, C., & Pregmark, J. E. (2019). Beyond digital inventions—Diffusion of technology and organizational capabilities to change. In M. Corrales, M. Fenwick, & H. Haapio (Eds.), *Legal tech, smart contracts and blockchain* (pp. 123-146). Singapore: Springer Singapore.

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Johanna E. Pregmark

Göteborg, October, 2019

Contents

1 Introduction

Leaders who provided data for this thesis state that they need to incorporate innovative ideas from the entire organizational system to keep up with pressure to change. At the same time, they recognize the need to efficiently deliver upon the current promises. All organizations investigated in this research are attempting to at least partly explore and exploit within the same organizational entity as a case of contextual ambidexterity (Birkinshaw & Gibson, 2004; O'Reilly & Tushman, 2013), and they do not rely on the belief that change and innovation should come from outside. However, the change models currently in use do not seem to fully address the contemporary needs for innovation, speed, and multiple initiatives (Bartunek & Woodman, 2014; Worley & Mohrman, 2016). Therefore, in this thesis, I investigate how innovative work can be a component of mastering change.

Thus, the issue at hand is derived from practice. Specifically, this thesis discusses how innovative initiatives can be a component of strategic change in cases wherein an organization needs to both exploit and explore – a problem that is highly relevant for leaders providing data for this thesis. This research can therefore be considered to be phenomenon driven (Schwarz & Stensaker, 2016). It builds on three different studies wherein cases of organizational interventions were investigated and analyzed, and conclusions were drawn.

I strived to understand this phenomenon by studying previous literature on change as well as ambidexterity, which involves simultaneously exploring and exploiting. However, I only found parts of the answer. Therefore, I argue that there is a need for a complementing theory to understand this phenomenon. The thesis should be understood while considering the following choices and assumptions:

- I take a systems perspective of organizations (Beer, 2009; Galbraith, 2014; Katz & Kahn, 1966). This means that relations between different components are important, and the whole is more than the sum of its parts. For the thesis, this means that I will, hopefully, gain in terms of relevance and understanding of the field, but potentially lose in terms of detail.
- The starting point of this thesis is a practical phenomenon/problem (Schwarz & Stensaker, 2014, 2016): How can innovative initiatives become a component of strategic change? I would not argue that this thesis primarily derives from a theoretical gap, but rather it identifies a gap wherein theories from different research streams do not provide full explanations.
- This thesis addresses an issue that needs to be understood on multiple levels of an organization. As discussed in previous research, this is important when studying a practical phenomenon (von Krogh, Rossi-Lamastra, & Haefliger, 2012). Yet, in this thesis, the issue of mastering change is described as a strategic question. This means that this thesis should be interpreted as targeting management.
- Existing literature – for instance, on contextual ambidexterity (Gibson & Birkinshaw, 2004) or change (Bartunek & Woodman, 2014) – seems to provide only parts of the answer to my research question.

1.1 Introduction to the phenomenon/problem-driven research

Schwarz and Stensaker (2014, p. 478) argue that "it is time for change researchers to reclaim our heritage and take off the theoretical straight-jacket." They deliberate on whether the field of change is failing to develop new theories and models because it is stuck in a narrow theoretical frame. In phenomenon-driven research, the focus is a practical problem, equally relevant for practitioners and the academic community. According to von Krogh et al. (2012), this type of research has drawbacks when it comes to questions of precision, but it also has strengths such as the following:

- It is possible to tackle important management issues that currently seem to be out of the scope of current theories.
- It bridges theoretical fields and levels of analysis.
- It can support research that is both relevant and rigorous.

The starting point of this research is a practical phenomenon/problem, as discussed by Schwarz and Stensaker (2014), which seems highly relevant in practice. I do not claim that this is a novel problem that is out of the scope of current theories. However, I do argue that the problem at hand would benefit from further discussion, with perspectives from different streams of literature. Moreover, I argue that the problem is best understood by allowing this research to cover different organizational levels.

Therefore, in this thesis, I discuss empirical cases in relation to different theories, as suggested by Eisenhardt and Graebner (2007), such as processes and frameworks for managing change (Bartunek & Woodman, 2014; Pasmore, 2015) and contextual ambidexterity (Birkinshaw & Gibson, 2004; O'Reilly & Tushman, 2013). The aim is to synthesize the findings into a proposal for a new framework.

1.2 Introduction to the empirical environment and conducted studies

This thesis is a compilation of five papers, four of them based on empirical studies conducted by the research team at Chalmers. The fifth paper is conceptual, but the ideas are built on empirical work during my time as a PhD student. In all these studies, the empirical environment consisted of organizations in need of change, as perceived by the management team. Leaders in these organizations identified the need to bring more innovation and/or corporate entrepreneurship into their organization to keep up with a radically changing environment, often due to technological advances. Thus, they concluded that it would not be enough to improve and develop the existing core business. Most of them, however, had a hard time succeeding with their innovative work, primarily due to the tightly aligned current system and the constant need to deliver increasingly more efficiently using the current model. In the midst of their change efforts, our research team was invited to collaborate on initiatives for innovative work and investigations on how to move forward.

The main study, providing data for papers 2 and 3, was conducted in the media industry. A media group – referred to as Newsgroup in the papers – was under pressure to change and adapt due to digitalization. The organization was in need to change as a system, including components

such as strategy, structure, business models, people, and capabilities. The organization had a tight alignment, but it lacked capability to innovate and make radical leaps. The study at Newsgroup was designed as an intervention study, wherein the research team supported a total of seven innovative initiatives, driven as initiatives over three months within the same organizational context as the exploitive work. In the study, the top management team (TMT) and the research team identified initiatives and connected them with the strategic change agenda and the highly innovative work content. In the first three-month wave, three initiatives were set up. After learning from these initiatives, another three initiatives were appointed by the TMT. After the three months, the learnings were compiled, and one more initiative was launched. Thus, the innovative work, conducted within an established organization, became a way to work with change. This is where the idea for this thesis started to form.

The ideas around innovative work as components of a system change made me investigate the traditional models for change (Beckhard & Harris, 1987; Kotter, 1995), which are present both in practice and theory. The call for more contemporary models for change has intensified in recent years (Bartunek & Woodman, 2014; Worley & Mohrman, 2016). The next study, therefore, investigated problems and advantages of traditional change models applied in a contemporary context. In this study, I interacted with leaders (primarily on the executive level) and senior managers of six organizations, all of which were in industry transitions or on substantial change journeys. This resulted in paper 1, which highlighted the problems with traditional change prerequisites, but it also built on the strengths of these models to suggest a new framework with more room for innovative work and bottom-up approaches.

Although it was rather clear from the first two studies that innovative work needed to have a more prominent role in contemporary system change, more investigation was needed to understand how this work could be led and conducted. In the remaining study providing data for this thesis, 11 corporate entrepreneurship initiatives were followed for 10 months in 10 different organizations. This study focused on the relation between the established and innovative work as well as examined how to resolve the potential tension that could arise. The result of this study, conducted with help from master students of corporate entrepreneurship for data collection, is presented as paper 4.

1.3 Introduction to the theoretical field

Today's organizations exist in a different landscape than before. To thrive in this volatile, uncertain, complex, and ambiguous (VUCA) world (Horney, Pasmore, & O'Shea, 2010; Johansen, 2017), organizations need to be managed for change and adaption, rather than for stability (Johansen, 2017; Lawrence, Dyck, Maitlis, & Mauws, 2006; Reeves & Deimler, 2011; Satell, 2014). Increasingly, authors (Johansen, 2017; Pasmore, 2015) are discussing organizations as networks or ecosystems, connected both internally and externally. This builds on the idea that organizations should be considered as systems (Beer, 2009; Galbraith, 2014; Katz & Kahn, 1966; Senge, 1990). With a systems perspective of organizations, the whole is more than the sum of its parts. Therefore, the system must be studied and understood as a whole, since the parts are interconnected. In addition, a systems view means that an organization is open to changes in the environment and needs to respond accordingly by reconfiguring and realigning the different parts of the system. Following this approach, the goal of investigating

organizations as systems is not to find the single best efficient way or optimizing a single component, but to understand how the system works and draw conclusions about different ways to organize the work. This perspective is used in this thesis.

To succeed in a fast-moving, interconnected, uncertain, and volatile world, organizations increasingly need to be ambidextrous (O'Reilly & Tushman, 2013; Smith, Binns, & Tushman, 2010; Tushman & O'Reilly, 1996). This ambidexterity could form the basis for embarking on a change journey, continuously adapting to a new context. The future is difficult to predict and therefore needs to be explored continuously. Simultaneously, organizations need to be aligned to deliver on the current working model effectively. Many authors (Baden-Fuller & Volberda, 1997; Poole & Van de Ven, 1989; Smith et al., 2010; Tushman & O'Reilly, 1996) stress that the best way to achieve ambidexterity is to separate the old and new in time (temporal ambidexterity) or space (structural ambidexterity). Other authors, on the other hand, point out the possibility of striving to solve the ambidexterity problem within the existing system (Birkinshaw & Gibson, 2004; Fredberg & Pregmark, 2016; Gibson & Birkinshaw, 2004). This means allowing the established working model and the innovative work to co-exist within the same organization.

Various literature has discussed ways to manage such an organization (e.g., Birkinshaw & Gibson, 2004; Gibson & Birkinshaw, 2004; O'Reilly & Tushman, 2013; Tushman & O'Reilly, 1996). Some key concepts are suggested as success factors, such as trust (Birkinshaw & Gibson, 2004; Ghoshal & Bartlett, 1994), shared purpose (Fredberg & Pregmark, 2018), stretch (Birkinshaw & Gibson, 2004), and routines (Adler, Goldoftas, & Levine, 1999; Birkinshaw & Gibson, 2004). Moreover, literature has discussed problems and obstacles, such as cultural and structural tensions (Fredberg & Pregmark, 2018; O'Reilly & Tushman, 2013) and challenges with integration (Birkinshaw & Gibson, 2004). Nevertheless, how a contextually ambidextrous organization can plan and execute change has not been investigated as extensively in literature. In this thesis, the focus is on the innovative work and its relation to strategic change.

Change models, change management, and change journeys are well-investigated phenomena in other streams of research. Since decades, the issue of change has been discussed widely in literature (Beer, Eisenstat, & Spector, 1990a; Beer & Nohria, 2000; Cady, Jacobs, Koller, & Spalding, 2014; Dannemiller & Jacobs, 1992; Foster & Kaplan, 2001; Fredberg, Norrgren, & Shani, 2011; Henderson, 2006; Kotter, 1995; Lewin, 1947; Pasmore, 2015; Rothaermel, 2000) as well as in practice. The importance of managing organizational change is rather undisputed and is stressed by various authors (Burnes, 2004a, 2004b; Graetz, 2000; Pasmore, 2015; Reeves & Deimler, 2011; Todnem By, 2005). Burnes (2004b) argues that change is an ever-present feature in organizational life, on both the strategic and operational levels. Therefore, it should be intertwined with many parts of the organizational system, including strategy and capability building.

Prior literature seems to strongly support that change capability is key to organizational success (Graetz, 2000; Reeves & Deimler, 2011; Satell, 2014; Todnem By, 2005) and that most change efforts fail (Balogun & Hailey, 2004; Beer et al., 1990a; Beer & Nohria, 2000; Jacquemont, Maor, & Reich, 2015). Hence, there is room for improvement (Todnem By, 2005), since

although traditional models for change (e.g., Beckhard & Harris, 1987; Bullock & Batten, 1985; Kotter, 1995) are still in use (e.g., Rosenbaum, More, & Steane, 2018), they do not seem to effectively support change (Beer, Eisenstat, & Spector, 1990b; Harkness, 2000). This is called out by authors such as Bartunek and Woodman (2014) and Worley and Mohrman (2016), who stress the need for improved and more contemporary models for change wherein speed, polyphony, and creativity (Amabile & Kramer, 2011; Huy, 1999; 2005) take more prominent positions. In addition, in this thesis, organizations are viewed as systems (see, e.g., Galbraith, 2014). When discussing how organizations need to change in this thesis, I consider the whole system rather than its parts or components.

In short, literature on ambidexterity addresses how an organization needs to be set up to be able to explore and exploit at the same time, which is important to meet the challenges of the contemporary, fast-paced world. Literature in this field primarily addresses structural issues and is less focused on dealing with challenges related to organizations and human aspects of change (Turner, Swart, & Maylor, 2013). Moreover, previous literature does not focus much on how the innovative work can connect with organizational system change (O'Connor, 2008). The opposite could be said about literature on organizational change and development. This field has a solid track record of finding improved ways of leading and executing change. However, the traditional models often take the stance in the current reality rather than including exploration and innovation. Recently, there have been several calls for new and updated models for change (Bartunek & Woodman, 2014; Pasmore & Woodman, 2017; Worley & Mohrman, 2016). I will attempt to answer this call in this thesis.

1.4 Introduction to the research content and outcome

This thesis aims to provide a new understanding of organizational change by investigating innovative work and its connection to change, through empirical cases containing both contextual ambidexterity (Birkinshaw & Gibson, 2004; Gibson & Birkinshaw, 2004; O'Reilly & Tushman, 2013) and organizational change (Beer et al., 1990a; Kotter, 1995; Pasmore, 2015), as displayed in Figure 1.

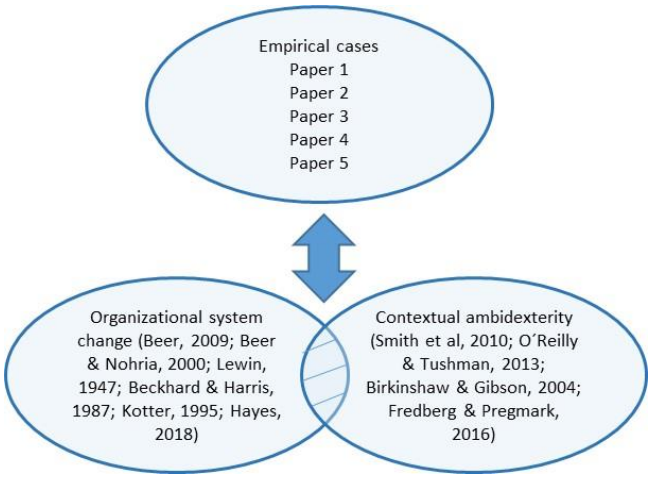

Figure 1. Introduction to the field of research

Existing literature seems to provide parts of the answer to the investigated problem. However, it is by combining different fields of research that I can reach a higher level of understanding of the phenomenon at hand. Thereby, I also attempt to contribute to these different streams of literature. I strive to create new knowledge by complementing change literature with more emphasis on innovation and creativity and ambidexterity literature with a stronger process perspective.

Different cases in this thesis also touch upon other research areas, such as dynamic capabilities (Beer, 2013; Teece, 2007, 2018; Teece, Pisano, & Shuen, 1997), agile organizations (Winby & Worley, 2014; Worley & Lawler, 2006), corporate entrepreneurship (Birkinshaw & Fry, 1998; Fredberg & Pregmark, 2018), and innovation (Christensen, 1997; Shani, Chandler, Coget, & Lau, 2009; Van de Ven, 1986). These research fields are briefly outlined in the theoretical framework and inform the discussion.

Combining knowledge from different streams of research (von Krogh et al., 2012) and basing proposals on deep interactions with practice are both described as necessary (Mohrman & Lawler, 2012) to provide updated models for successful change. This is consistent with the thinking of how to approach phenomenon-based research (Schwarz & Stensaker, 2014, 2016).

The discussion in this thesis is based on five appended papers, all of which focus on change and contextual ambidexterity. However, each brings a different perspective on the issue, thus bringing knowledge from different fields together. All papers are based on empirical findings and deep relationships with practice and practitioners in different roles and positions.

I argue that leaders need to think differently about how to prepare the organization for a change journey in a contemporary context. They cannot sit back and wait for change to emerge, as the capability to manage change and adapt to an altered internal and external context is crucial for success (Graetz, 2000; Reeves & Deimler, 2011). At the same time, leaders in today's organizations must accept that many new ideas that will shape the future will not originate from the top and cannot be planned (Pasmore & Woodman, 2017). Thus, leaders need to both lead change from the top and encourage innovativeness from the bottom. Moreover, as I investigate organizations that are striving to solve the ambidexterity problem without separating the old and the new in different units or organizations, leaders must consider the needs for both innovating for change and delivering on current promises.

I suggest that innovative work in contextually ambidextrous organizations should be an engine for mastering a change journey, by constantly being a part of discovering the road toward the future. Thus, ambidexterity is discussed as a part of the process for change rather than a way to organize. I argue three major points. First, I suggest that the process of creation of the new and different (explorative work) needs to be managed differently than projects driving continuous improvements for example – and I lay out three principles that may be helpful for success. Second, I argue that leading this explorative work in a case of contextual ambidexterity requires relational focus to turn the new and different into something acceptable for parts of the organization that are primarily working on the current core. Third, I argue that this ongoing

dance between the new and established business should interplay with the organization's overall direction by creating opportunities for aggregated learning and display of continuous progress.

The thesis ends with a discussion, leading to a proposed model wherein innovative work plays a role in mastering change in contextual ambidexterity.

The propositions in this thesis need to be investigated further, potentially both qualitatively as well as quantitatively. Since this is a compilation thesis with a system perspective, it has not been possible to investigate every component in detail. Therefore, I suggest that more research should be conducted to further detail each part of the framework proposed in this thesis. Moreover, to bring the propositions to action, more research needs to be conducted on how practices can be developed and put into use by practitioners of change.

2 Framing and defining my research question

I focus on a) how the explorative projects and initiatives can be organized, b) how innovative initiatives can be led, and c) the connection between innovative work and the strategic change agenda. The questions are based on a context wherein the pace is faster (Johansen, 2017; Pasmore, 2015; Reeves & Deimler, 2011) and the environment is more VUCA (Bennett & Lemoine, 2014; Horney et al., 2010; Johansen, 2017).

2.1 Overall scheme of my research question

The discussion is based on literature primarily relating to contextual ambidexterity and organizational change. Moreover, literature on related streams of research, such as innovation, corporate entrepreneurship, dynamic capabilities, and agile organizations is incorporated into the discussion. Figure 2 describes a conceptual framework for placing my research question in connection to the literature.

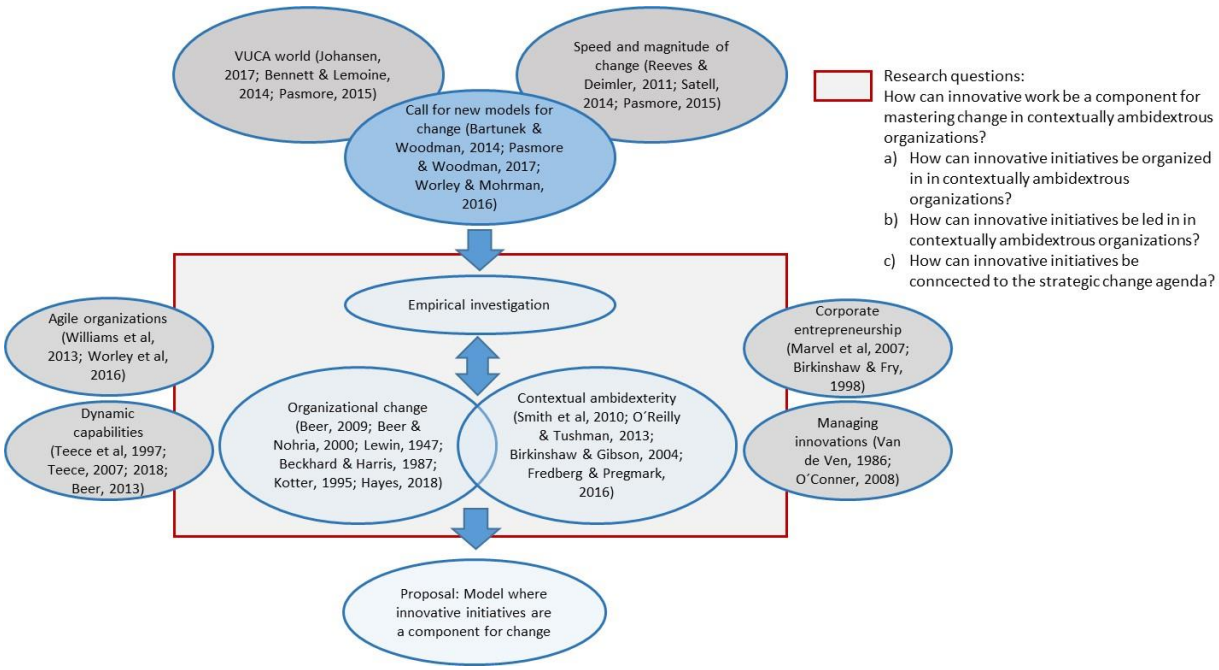

Figure 2. Framing the research question

The literature on ambidexterity is vast, but there is less understanding about the ongoing process of connecting ambidextrous organizations with directions and strategies. Literature on change is typically well grounded in its connection to direction, but it is lacking in how innovation interplays with change while simultaneously delivering by using the current model. I therefore strive to develop a process perspective on the interplay between innovative work in the contextually ambidextrous organization and strategic change. This means that I am trying to uncover a process wherein innovative work is utilized for creating the change ahead.

In the following, each research question is unpacked in terms of its content, context, theoretical underpinning, and definitions.

2.2 How can innovative work be a component for mastering change in contextually ambidextrous organizations?

In this thesis, I investigate innovative initiatives as components for mastering change. When change is discussed in this thesis, it is defined as follows:

- It occurs in a contemporary context characterized by a VUCA environment (see, e.g., Horney et al., 2010; Johansen, 2017).
- It goes beyond the improvement of merits.
- It involves a change in several parts of an organizational system (see, e.g., Galbraith, 2014; Katz & Kahn, 1966).
- It is connected to the strategic agenda.

In this thesis, mastering change does not mean the ability to perfectly plan and execute change. Rather, it refers to an understanding of factors and processes that need to be in place for a contextually ambidextrous organization to change. This discussion encourages future research to continue this research agenda.

In this thesis, I use the term "change journey." This term points toward the notion that the change of today does not seem to be fully captured as a process or project with a predefined end state. In addition, the term change journey was used by many leaders and organizational members in the conducted studies, implying that their sense of being on a journey is a part of the phenomenon I investigate.

By "innovative," I refer to work of explorative character, whose starting point is the idea that a solution is to be discovered and tested. "Initiative" refers to boundaries within which the innovative work is performed, such as the timeframe, reporting structure, and roles. In this thesis, all innovative initiatives are driven within the same organizational structure as the exploitive work, which is why contextual ambidexterity is used as a framework (Gibson & Birkinshaw, 2004; O'Reilly & Tushman, 2013; Wang & Rafiq, 2014). Of course, it could be argued that an initiative/project is also a form of structure – which could indicate structural ambidexterity (Smith et al., 2010; Tushman & O'Reilly, 1996). However, in literature on structural ambidexterity, the main emphasis is on how organizations can be ambidextrous by separating exploration and exploitation in different organizations, entities, or units and only integrating at the top; this is not the focus of this thesis. Rather, the innovative work described in this thesis is performed by teams and individuals working in the same organizational system as the exploitive work – they compete for the same resources, have the same overall goals, and interact with the same people. Thus, I argue that the way ambidexterity issues are dealt with in the organizations providing the empirical context for this thesis is closer to what is usually referred to as contextual ambidexterity.

In addition, as identified by authors such as Gupta, Smith, and Shalley (2006) and O'Reilly and Tushman (2013), there is some confusion about the terminology of the main components of ambidexterity – exploration and exploitation. For instance, Birkinshaw and Gibson (2004) frequently use adaptability and alignment, while other authors talk about innovative and established work. Gupta et al. (2006) conclude that both exploration and exploitation require

learning, but of different types. They argue that there is widespread consensus around the idea that exploration concerns learning and innovation, that is, the pursuit and use of new knowledge. The notions of exploration and exploitation require learning, but of a different type, and magnitude is consistent with the findings of March (1991).

In this thesis, the terms “exploration” and “innovative work” are used interchangeably when discussed in the context of an established organization, and they refer to work aimed at creating the new and shifting from the current trajectory. Further, Gupta et al. (2006) find less consistence in the definitions of exploitation, but they conclude that exploitation mainly involves leveraging and improving the existing model within the current trajectory. This thesis does not focus on exploitation but considers it as work aimed to refine and leverage the current ways of working. Other terms are also used when referring to specific authors.

2.2.1 How can innovative work be organized in contextually ambidextrous organizations?

With this question, I emphasize how the innovative work could be organized to be successful. To understand this issue, the empirical findings are understood together with literature primarily on ambidexterity (Gibson & Birkinshaw, 2004; O’Reilly & Tushman, 2013; Smith et al., 2010; Tushman & O’Reilly, 1996) and management of innovation in established structures (Van de Ven, 1986). In this thesis, success for innovative initiatives is defined in terms of both actual result and their effect on the established organizational system and/or strategic agenda. Rather than examining how an innovative initiative can produce as innovative a result as possible, I studied how to organize innovative initiatives in a way that produces innovations that gain a foothold and can be used productively in relation to the established organization.

2.2.2 How can innovative work be led in contextually ambidextrous organizations?

Although previous research has provided extensive insights on how management can provide a context in which contextual ambidexterity can flourish (see, e.g., Birkinshaw & Gibson, 2004), less has been discussed about what the leaders of innovative work can do to create prerequisites for success. This question focuses on how leaders of innovative work can create mechanisms to overcome obstacles and tensions through relational means. For understanding this question, I discuss how the leaders of innovative work affect and relate to the system. Therefore, literature on corporate entrepreneurship is used as a framework (see, e.g., Birkinshaw, 1997; Birkinshaw & Fry, 1998; Birkinshaw, Hood, & Jonsson, 1998; Marvel, Griffin, Hebda, & Vojak, 2007), together with literature on the relational/emotional aspects of change (Edmondson & Lei, 2014; Huy, 2005).

2.2.3 How can innovative work be connected to the strategic change agenda?

Previous questions strive to untangle the work with initiatives. This question emphasizes the relation between initiatives and system change. O’Connor (2008) argues that this relation is not completely clarified and needs further investigation. In this thesis, I do not claim that this question will be solved, since I lack longitudinal data to examine the long-term effects of innovative initiatives on system change. However, I do claim to be able to investigate the interplay between the strategic agenda and innovative initiatives. I also discuss how innovative

initiatives could play a part in the system change, although I do not present evidence on how the whole system has changed over time.

Through answering the three sub-questions, I build a tentative model for mastering change in a contemporary context. The model builds on what I found to be beneficial – both for the innovative work and for influencing the system – when organizing and leading innovative initiatives in a case of contextual ambidexterity. Moreover, it builds on what I found to be important when connecting the outcome from the initiatives to the overall organizational strategic change agenda. I argue that this corresponds well with the call for change models with more focus on, for instance, speed, polyphony (Bartunek & Woodman, 2014), emerging practice (Pasmore & Woodman, 2017), and continuous learning (Edmondson, 2008; Worley & Mohrman, 2016).

3 Theoretical frame of reference

In this chapter, I first introduce the contemporary, fast-paced (Reeves & Deimler, 2011), complex, and uncertain (Bennett & Lemoine, 2014; Horney et al., 2010; Johansen, 2017) context in which organizations operate today. Thereafter, I briefly introduce a system perspective on organizations (see, e.g., Galbraith, 2014; Katz & Kahn, 1966). I then describe literature on ambidexterity in general (March, 1991; O'Reilly & Tushman, 2013; Smith et al., 2010; Tushman & O'Reilly, 1996) and contextual ambidexterity in particular (Birkinshaw & Gibson, 2004; Fredberg & Pregmark, 2016; Gibson & Birkinshaw, 2004; O'Reilly & Tushman, 2013; Smith et al., 2010; Turner et al., 2013), as well as literature on approaches to change (Bartunek & Woodman, 2014; Beckhard & Harris, 1987; Beer et al., 1990b; Beer & Nohria, 2000; Brown & Eisenhardt, 1997; Burnes, 2004a; Cady et al., 2014; Kotter, 1995; Pasmore, 2015). Organizational change and contextual ambidexterity are the main frameworks I use to understand the phenomenon at hand. However, other closely related streams of research, such as dynamic capabilities, agile organizations, innovation, and corporate entrepreneurship, are also briefly described in this chapter.

3.1 Contemporary context for change

As Graetz (2000, p. 550) suggests, "Against a backdrop of increasing globalization, deregulation, the rapid pace of technological innovation, a growing knowledge workforce, and shifting social and demographic trends, few would dispute that the primary task for management today is the leadership of organizational change." The number of authors stressing the importance for organizations to be adaptable has exploded in the past two decades (see, e.g., Beer & Nohria, 2000; Johansen, 2017; Lawrence et al., 2006; Pasmore, 2015; Reeves & Deimler, 2011; Satell, 2014). Reeves and Deimler (2011) even describe adaptability as the new competitive advantage, and Beer and Nohria (2000) argue that organizations more or less have to change or die.

Authors from different fields are discussing the influence of the VUCA world on organizations and societies to address the changing conditions under which organizations operate (see, e.g., Bennett & Lemoine, 2014; Horney et al., 2010; Johansen, 2017; Kronblad & Pregmark, 2019). The VUCA acronym (referring to volatile, uncertain, complex, and ambiguous) was first coined by the US Army War College to describe the nature of the dynamic world (Horney et al., 2010). Although coined in the 1980s to describe the world after the Cold War, in the past two decades, it has been frequently used in an organizational and leadership context. Each of the terms in the acronym is explained as follows (Bennett & Lemoine, 2014; Horney et al., 2010; Johansen, 2017):

- Volatility refers to the speed, magnitude, and dynamics of change.
- Uncertainty refers to the lack of predictability of events and issues and the prospect of surprises.
- Complexity refers to the confounding of issues, lack of simple cause-and-effect relationships, and the chaos that surrounds any organization.
- Ambiguity refers to the haziness of reality and mixed meaning of conditions.

Leaders find it difficult to deal with this VUCA world (Horney et al., 2010), since the old rules about, for instance, predictability and top-down practices do not seem to apply anymore (Horney et al., 2010; Johansen, 2017). People connections matter as much as structures do (Horney et al., 2010), and the boundaries around companies are shifting (Horney et al., 2010; Johansen, 2017). The traditional models for organizing (Johansen, 2017), planning (Bennett & Lemoine, 2014; Horney et al., 2010), and changing (Bartunek & Woodman, 2014; Pasmore, 2015) are no longer as appropriate. Signs that organizations have a difficult time changing can be seen, for instance, in the low success rate for change – about 30% according to Jacquemont et al. (2015) – and the fact that the average life span of an organization is significantly dropping, as Satell (2014) argues. Prominent researchers in the field are also clearly stating that the models in use are not up to date for coping with the speed and uncertainty in the environment (Bartunek & Woodman, 2014; Worley & Mohrman, 2016).

According to Bennett and Lemoine (2014), leaders can choose to see the VUCA world as an excuse for not planning ahead – or they can work on new and improved approaches to get ready to respond to an ever-changing world. Volatility could be met by building in slack and by devoting resources for preparedness, uncertainty by investing in information, complexity by restructuring to develop expertise, and ambiguity by experimenting and testing to a higher extent (Bennett & Lemoine, 2014). Hence, an organization needs to build the capability to change, adapt, and be agile within the organization (Johansen, 2017; Pasmore, 2015; Reeves & Deimler, 2011). This capability is related to dynamic capabilities (Beer, 2013; Teece, 2018; Teece et al., 1997). Dynamic capabilities are discussed later in this chapter.

The notion that an organization's ability to adapt to new circumstances is crucial has been stated in literature for decades. However, the pressure to do so becomes stronger as the pace of change increases due to external factors and the leaps become greater in a more contemporary context (Reeves & Deimler, 2011; Tushman & O'Reilly, 1996). Authors argue that organizations find it harder to stay competitive in such a changing context (Reeves & Deimler, 2011; Satell, 2014).

Hence, the need for change to remain competitive increases. In addition, the conditions under which change needs to take place changes as well. In a VUCA world, the future is difficult to predict, and therefore a model for a desired future state is not easy to create. The speed and magnitude of needed changes are greater, and incremental steps to slowly adapt might not be enough. This produces a different case for change that traditional change models are not equipped to manage (Bartunek & Woodman, 2014; Mohrman & Lawler, 2012; Pasmore & Woodman, 2017; Winby & Worley, 2014; Worley & Mohrman, 2016).

3.2 Organizations as systems

This thesis takes a systems perspective on organizations (see, e.g., Beer, 2009; Galbraith, 1984, 2014; Katz & Kahn, 1966; Senge, 1990). The systems theory has been discussed as a perspective on organizations by, for instance, Katz and Kahn (1966), who claim that organizations could be seen as organisms rather than machines. According to Katz and Kahn (1966), the system could be defined as not only the whole organization but also a part of an organization such as a division, unit, or department. Burns (2007) argues that to understand organizations as systems, a researcher or practitioner must understand how the system works

with all its interrelated parts. Some key points for applying the systems theory to organizations are as follows (see, e.g., Katz & Kahn, 1966; Senge, 1990):

- The organization is an open system interacting with its environment, and continuously influencing and being influenced by its environment.
- It must continuously adjust and adapt to stay relevant.
- All parts of the organization are interconnected and interdependent, and the whole is more than the sum of its parts.
- To understand the system, the whole system must be studied.

Previous research has presented several different congruence models, designed to understand the dynamics of a system by analyzing how well the parts fit together (Galbraith, 1984, 2014; Nadler & Tushman, 1980). The models vary but have much of the same elements and similar principles – the alignment between the elements determines the effectiveness of the system. The star model of Galbraith (2014) is briefly outlined below. In this model, the design elements of the system fall into the following five main categories:

- Strategy describes the organizational direction.
- Structure describes the location of power in the organization.
- Processes relate to the flow of information and decisions, cutting across structures.
- Rewards and the reward system influence motivation.
- People relate to the human resource policies influencing mindsets and skills.

The interplay and alignment between the design elements produce the output in the form of organizational performance and culture. Galbraith (2014) emphasizes that the organizational structure is only one element of the organizational design – the other four elements are just as important in shaping organizational outcomes. Moreover, he stresses the seemingly obvious notion that organizational design is a function of its strategy and direction. This means that a change in the environment requiring a new strategy should also affect other elements in the star model. This is consistent with the general idea of the system theory, stating that a system needs to be able to adapt to stay relevant (Katz & Kahn, 1966).

This thinking is similar to the model by Nadler and Tushman (1980): in this model, the input variables are strategy, resources, and the environment; the organizational system consists of people, work, and formal and informal structures; and the output is defined as individual, team, and organizational performance. Nadler and Tushman (1980) describe that the continuously adaptive system is related to organizational change and transformation, but the model does not clarify how this connection is made. In their model, as in the star model (Galbraith, 1984, 2014), the quality of the output is a function of the level of fit and alignment within the system.

Many change models build on the idea that the current state and future desired state are to be analyzed to – in simplified terms – find the best road to the future. When viewing organizations as systems, the idea is that there could be many best ways to the future, since the system is constantly subject to changes in its external and internal environments.

3.3 The ambidextrous organization

The need for organizations to adapt fast, innovate, and constantly be ready for change seems indisputable in literature (Beer & Nohria, 2000; Pasmore, 2015; Reeves & Deimler, 2011; Satell, 2014). However, there is a need to deliver efficiently on today's promise as well. Competition is hard, and to stay alive today and tomorrow, organizations need to both be aligned to deliver on the current model and be creative enough to innovate for the next model (O'Reilly & Tushman, 2011, 2013; Smith et al., 2010; Tushman & O'Reilly, 1996). The idea that a balance between the exploitation of the current working model and exploration of a future one is crucial for long-term success is widespread and discussed in literature (Gibson & Birkinshaw, 2004; Gupta et al., 2006; March, 1991; Martin & Eisenhardt, 2010; O'Reilly & Tushman, 2008, 2013; Papachroni, Heracleous, & Paroutis, 2016; Smith et al., 2010; Tushman & O'Reilly, 1996) covering various topics, such as organizational learning (Levinthal & March, 1993; March, 1991; Shani et al., 2009; Wei, Yi, & Guo, 2014), organization design (Rivkin & Siggelkow, 2003), strategic management (Burgelman, 1991), and innovation (O'Reilly & Tushman, 2008; Tushman & O'Reilly, 1996).

3.3.1 Defining ambidexterity

The balancing act between exploration and exploitation is referred to as organizational ambidexterity. Ambidexterity as an organizational concept was first introduced by Duncan (1976). Fifteen years later, March (1991) published a seminal paper wherein he discussed the relation between exploration and exploitation as a central concern when investigating adaptive processes. March (1991) states, "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" (p. 105). He argues that exploitation and exploration are in a constant competition for scarce resources. March (1991) argues, "The essence of exploitation is the refinement and extension of existing competencies, technologies, and paradigms. The essence of exploration is experimentation with new alternatives" (p. 85).

Since the article by March (1991) was published, the relation and potential tension between exploration and exploitation has been a hot topic in literature, named and framed differently by different authors. In an influential paper from 1996, ambidexterity was defined as "The 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). In a paper from 2013, the same authors simply state that ambidexterity refers to the ability of an organization to both explore and exploit (O'Reilly & Tushman, 2013). The conflicting components, originally exploration and exploitation (Gupta et al., 2006; March, 1991; Rosenkopf & Nerkar, 2001; Sidhu, Commandeur, & Volberda, 2007; Tushman & O'Reilly, 1996), have varied and been put forward as efficiency and flexibility (Adler et al., 1999), evolutionary and revolutionary change (Tushman & O'Reilly, 1996), and alignment and adaptability (Birkinshaw & Gibson, 2004; Bonchek, 2016). Although the concepts may be similar, several researchers stress the need to clearly define the components of organizational ambidexterity to avoid diluting the construct (Gupta et al., 2006; Nosella, Cantarello, & Filippini, 2012; O'Reilly & Tushman, 2013; Raisch & Birkinshaw, 2008). O'Reilly and Tushman (2013) suggest that further work needs to be done to provide a clear definition.

Moreover, ambidexterity has been used with regard to strategy, new product development, technology, software development, intellectual capital, innovation, and other topics (O'Reilly & Tushman, 2013). Although interesting research has been done on all these topics, the idea of ambidexterity as capability needed to deal with tensions between the old and the new has potentially been lost (O'Reilly & Tushman, 2013). Several authors propose that such a definition would benefit from returning to the idea of ambidexterity as the capability to resolve tensions (Nosella et al., 2012; O'Reilly & Tushman, 2013), thereby facilitating the possibility for organizations to exploit and explore simultaneously.

3.3.2 Achieving ambidexterity

Previous research points primarily toward three ways to achieve ambidextrous organizations (O'Reilly & Tushman, 2013; Smith et al., 2010):

- Sequentially (Duncan, 1976),
- Structurally (Duncan, 1976; McDonough & Leifer, 1983; O'Reilly & Tushman, 2004; Tushman & O'Reilly, 1996), and
- Contextually (Birkinshaw & Gibson, 2004; Gibson & Birkinshaw, 2004).

In the early proposition by Duncan (1976), it was suggested that organizations needed to shift their structure over time to accommodate the conflicting alignments required for efficiency and innovation. The shifts would follow the different strategic choices an organization needs to make. Hence, this proposition is in line with sequential ambidexterity. Other authors argue for a solution to the ambidexterity problem that requires the organization to pursue both logics simultaneously (Smith et al., 2010; Tushman & O'Reilly, 1996). Tushman and O'Reilly (1996) argue that a simultaneous approach is more effective than a sequential approach when rapid changes are needed, and they discuss an approach wherein the exploitive work and explorative work are separated structurally. Thereby, it is possible to create two different alignments: one suitable for exploitation and one for exploration. Through separation, the exploitation entity could be designed for characteristics proposed by March (1991), such as "search, variation, risk taking, experimentation, play, flexibility, discovery, innovation" (p. 71), and exploitation could include "refinement, choice, production, efficiency, selection, implementation, execution" (p. 71). Tushman and O'Reilly (1996) argue that the separate alignments of structures, people, processes, and cultures should then be consciously integrated to ensure effective use of resources and capabilities, preferably on a top management level. In literature, structural ambidexterity has been stressed as the standard approach (Birkinshaw & Gibson, 2004). However, structural ambidexterity also comes with disadvantages. For instance, structural separation between the old and new can cause isolation (Birkinshaw & Gibson, 2004; He & Wong, 2004) and problems with integration due to lack of linkages to the core business (Birkinshaw & Gibson, 2004).

A third view of how to achieve ambidexterity is offered by Birkinshaw and Gibson (2004), who put forward the idea of contextual ambidexterity. Proponents of contextual ambidexterity stress that it is possible to both explore and exploit within the same organizational structure or unit (Birkinshaw & Gibson, 2004; Fredberg & Pregmark, 2016, 2018; Gibson & Birkinshaw, 2004; Gordon & McCarthy, 2011) by encouraging teams (Lavie, Stettner, & Tushman, 2010) and

individuals (Birkinshaw & Gibson, 2004) to allocate time to both exploitative and explorative activities. The issue with the need for integration of the new into the old is less problematic in contextual ambidexterity. On the other hand, achieving contextual ambidexterity is claimed to be harder than achieving structural ambidexterity, since it is more complex to manage two inconsistent alignments within an organization than to separate the different alignments structurally (Gupta et al., 2006).

Moreover, critics question whether pursuing contextual ambidexterity is enough to cope with disruptive changes (Kauppila, 2010; O'Reilly & Tushman, 2013). As O'Reilly and Tushman (2013) state, it is "conceptually easy to imagine how contextual ambidexterity might operate within a given setting or technological regime, it is harder to see how it would permit a company to adjust to disruptive or discontinuous changes in technologies and markets" (p. 329).

In a review of the past, present, and future of ambidexterity, O'Reilly and Tushman (2013) find evidence that all three suggested ways to achieve organizational ambidexterity (sequential, structural, and contextual) could be viable in different situations. Moreover, they conclude that, in practice, cases of a combination of different ambidextrous designs can be found. This is consistent with the findings of other authors, concluding that structural ambidexterity and contextual ambidexterity could, to some extent, be seen as complements to one another (Birkinshaw & Gibson, 2004; Simsek, Heavey, Veiga, & Souder, 2009).

3.3.3 Zooming in on contextual ambidexterity

Birkinshaw and Gibson (2004) define contextual ambidexterity as "the behavioral capacity to simultaneously demonstrate alignment and adaptability across an entire business unit" (p. 209). In their view, individuals in an organization can assume roles and tasks of both exploitive and adaptive characters. Following that, decisions about how to prioritize between tasks cannot be taken at the top management level but need to be delegated further down the organization. The role of top management in this situation is rather to develop a context in which contextual ambidexterity could be achieved instead of defining trade-offs between exploration and exploitation. Thus, a primary role for top management is to create a context wherein employees are free to use their judgement on how they balance their time between exploration and exploitation (Birkinshaw & Gibson, 2004; Güttel & Konlechner, 2009; Smith & Tushman, 2005).

Thus, according to authors discussing contextual ambidexterity (Birkinshaw & Gibson, 2004; Gibson & Birkinshaw, 2004; Güttel & Konlechner, 2009; Simsek et al., 2009; Smith & Tushman, 2005), the context created and/or supported by management is key. Birkinshaw and Gibson (2004) argue that a supportive culture is characterized by the interaction of "stretch, discipline, and trust" (p. 214). Other examples of proposals for prerequisites for a beneficial context are a culture that promotes both flexibility and control (Khazanchi, Lewis, & Boyer, 2007) and the need for a higher purpose (Fredberg & Pregmark, 2018). Fundamental for these proposals is the idea of creating a climate wherein individuals can use their own judgement, thereby contributing to both alignment and adaptability (Birkinshaw & Gibson, 2004; Bonchek, 2016) or exploration and exploitation (O'Reilly & Tushman, 2013).

The advantage of contextual ambidexterity over structural approaches is increasingly emphasized in both research and business practice (Wang & Rafiq, 2014). First, in fast-paced environments, especially with technological advances, organizations more or less have no choice but to consolidate existing business while simultaneously finding new opportunities (Birkinshaw & Gibson, 2004). Second, contextually ambidextrous organizations promote the integration of exploration and exploitation through a learning process (Kang & Snell, 2009; Wang & Rafiq, 2014). In that way, the organization can avoid transition costs caused by temporal separation or coordination issues due to structural separation (Simsek et al., 2009). Potentially, the risk of encountering the not-invented-here problem (Antons & Piller, 2015) could also be lowered, compared with structural ambidexterity, Moreover, the resource base might not be enough to divide it into separate structures. The knowledge and capabilities in the resource base working on the current business might also be crucial for developing future business.

Although arguably beneficial, contextual ambidexterity is difficult to achieve (Kauppila, 2010; O'Reilly & Tushman, 2013; Wang & Rafiq, 2014). One problem is to find sustainable ways to allocate resources from the current model to explore the new (Judge & Blocker, 2008). Another problem is to design the cultural and structural mechanism that will encourage integration of the explorative work (Birkinshaw & Gibson, 2004; Fredberg & Pregmark, 2018; Gibson & Birkinshaw, 2004). How to encourage such integration in a case of contextual ambidexterity has not been fully investigated and needs further research (Wang & Rafiq, 2014). Moreover, contextual ambidexterity relies on a context that supports individuals to make judgements about how to engage in both exploration and exploitation (Birkinshaw & Gibson, 2004). To succeed, it requires a bottom-up approach, stressing the participation and engagement of members of the organization (Simsek et al., 2009). Not much has been published, however, to understand how individual organizational members could be involved in achieving contextual ambidexterity (Güttel & Konlechner, 2009), or how to plan and structure the work. Critics also suggest that some decisions cannot be left to the judgement of individuals but need to be escalated to upper management (Gilbert, 2005; O'Reilly & Tushman, 2013).

3.4 Managing change

How to manage change has been under investigation since decades (see, e.g., Bartunek & Woodman, 2014; Beer et al., 1990a, 1990b; Beer & Nohria, 2000; Dannemiller & Jacobs, 1992; Foster & Kaplan, 2001; Fredberg et al., 2011; Kotter, 1995; Lewin, 1947; Meyer & Stensaker, 2006; Pasmore, 2015). Still, according to Todnem By (2005), there is not much consensus apart from the following: 1) the pace of change has never been greater, and 2) change comes in different shapes and forms. Potential additions to this list could be as follows: 3) most change efforts fail (Balogun & Hailey, 2004; Beer et al., 1990a; Beer & Nohria, 2000; Jacquemont et al., 2015), and 4) change is essential for success (Pasmore, 2015; Reeves & Deimler, 2011). Upon combination of these four factors, it seems urgent to investigate how change can be more productively managed and led. The literature on organizational change is vast. Scholars have investigated change, for instance, in relation to sequencing (Bridges, 2009; Kotter, 1995; Taffinder, 1998), engagement (Beer, 2009), culture (Foster & Kaplan, 2001), emotions (Huy, 1999), and capabilities (Beer, 2013; Teece et al., 1997). Thus, the topic of change in

organizations has been researched from many angles and various theoretical fields, such as strategic management, organizational development, and organizational psychology. This makes change a complex field, wherein different lenses provide different perspectives.

3.4.1 System change

This thesis takes a systems perspective on change (Beer & Eisenstat, 2000; Beer & Eisenstat, 2004; Beer & Huse, 1972; Galbraith, 1984; 2014; Katz & Kahn, 1966). Beer, as cited in Fredberg and Pregmark (2017), states that the academic community still struggles to understand system change. Burns (2007) describes system change as a holistic view on change in a complex social and organizational setting. It is further argued that the best way to understand system change is to intertwine oneself within the changing organization and engage in action research (Beer, 2013; Burns, 2007).

The core assumption of the systems theory is that the whole is greater than the sum of its parts, and the behavior of the whole therefore cannot be understood by investigating its parts (O'Connor, 2008). Perspectives on system change have been discussed frequently in literature. Literature has discussed how organizations can learn from the whole system through honest conversations (Beer & Eisenstat, 2004) and dialogic approaches (Isaacs, 1999; Senge, 1990), how systems can be moved (Beer, 2009; Beer & Eisenstat, 2000), and how systemic action research can be a tool in doing so (Beer, 2013; Burns, 2007). Less has been discussed about how innovation is connected to system change (O'Connor, 2008; O'Connor, Paulson, & DeMartino, 2008).

In the past decades, authors (see, e.g., Axelrod & Cohen, 2001; Dooley, 1997; Schneider & Somers, 2006) have also come to discuss organizational system change from the perspective of complex adaptive systems (CAS). A CAS cannot be understood by its parts as it changes constantly through (often) self-organized learning, wherein the parts adjust to one another (Holland, 2006). The ideas around CAS also propose that each agent within a CAS is a CAS itself. Thus, a CAS (e.g., a unit) is a part of larger CAS (e.g., an organization), which in turn is a part of an even greater CAS (e.g., the ecosystem within which the organization operates). A CAS is characterized by distributed control and adaption as a response to feedback from its environment. This could relate to both dynamic capabilities (Teece et al., 1997) and agile organizations (Williams, Worley, & Lawler, 2013), as discussed later in this chapter.

3.4.2 Approaches to change

Managing change has been defined as "the process of continually renewing an organization's direction, structure, and capabilities to serve the ever-changing needs of external and internal customers" (Moran & Brightman, 2001, p. 111). Hence, change in this context is more about adapting the organizational system to the internal and external contexts than it is about driving a specific change initiative. This thesis focuses on this system level of change.

There are many frameworks for how to characterize and discuss change (Cameron & Green, 2004; Senior, 2002). In this review, the framework by Senior (2002) is used as a guide, and other contributions are used to enrich the discussion. Senior (2002) proposes that change could

be discussed from the perspectives of 1) its rate of occurrence, 2) how it comes about, and 3) its scale.

When change is discussed from the first perspective – rate of occurrence – authors discuss whether change is to be seen as discontinuous (Grundy, 1993; Luecke, 2003) or continuous (Brown & Eisenhardt, 1997; Burnes, 2004b; Lawrence et al., 2006; Pasmore, 2015). Luecke (2003) describes discontinuous change as events that take place through large, separated initiatives, which are followed up by long periods of consolidation. Grundy (1993) discusses discontinuous change as inflicted by rapid shifts in strategy, structure, culture, or all three. Hence, authors describe discontinuous change as a reactive response to internal or internal events that provoke a change process between phases of stability.

Discontinuous change is mainly advocated in earlier work on change models (see, e.g., Lewin, 1947), emphasizing that change efforts could not be effective and improve performance unless they were followed by stability (Rieley & Clarkson, 2001). Most contemporary research is in agreement that change needs to be seen as continuous (see, e.g., Pasmore, 2015; Pasmore & Woodman, 2017). Organizations, their leaders, and their members need to continuously change fundamentally to keep up with a fast-paced environment (Burnes, 2004a, 2004b; Lawrence et al., 2006). Luecke (2003) suggests that continuous change can be said to coincide with the definition of incremental change, since both concepts describe how organizations can change by sensing and responding to the environment in a continuous manner, which relates to the body of work around dynamic capabilities (Teece et al., 1997). Other authors stress that incremental change more often corresponds with the operational level, and continuous change usually relates to the more strategic, system level of change (Todnem By, 2005).

The second perspective is suggested by Senior (2002) to distinguish between different approaches to change in terms of how change comes about. The most common approaches discussed in literature (Todnem By, 2005) distinguish between planned or emerging change. Planned change approaches started to gain ground in the early 1950s, originating from the famous three-step-model (unfreeze, move, and re-freeze) created by Lewin (1947). This approach is driven from the top and typically involves sequential steps to alter individual and organizational behavior to suit a future desired context (Burnes, 2004a; Liebhart & Garcia-Lorenzo, 2010).

Planned change approaches have been subject to criticism over the years (Livne-Tarandach & Bartunek, 2009; Mintzberg & Waters, 1985; Pasmore & Woodman, 2017; Tsoukas & Chia, 2002; Worley & Mohrman, 2016). First, many critics emphasize that planned approaches suit stable environments and not the turbulent context in which many organizations exist (Liebhart & Garcia-Lorenzo, 2010; Livne-Tarandach & Bartunek, 2009; Senior, 2002). Second, authors criticize that planned approaches do not encourage rapid or radical change (Burnes, 2004b; Senior, 2002). Responding to this criticism, several authors instead stress the need for emergent approaches (Bamford & Forrester, 2003; Burnes, 2004b; Mintzberg & Waters, 1985; Pettigrew, 1997).

Emergent change can be defined as "ongoing accommodations, adaptions, and alterations that produce fundamental change without a priori intention to do so" (Weick, 2000, p. 237). The emergent approach emphasizes that change should be seen as a continuous, open-ended process of adaptation to changing circumstances rather than as a linear end-to-end process (Todnem By, 2005). Although emergent thinking has been gaining acceptance, critics state that the only clear proposal from this approach is that it is against planned approaches. As Bamford and Forrester (2003) state, proponents of emergent approaches are "more united in their stance against planned change than their agreement on a specific alternative" (p. 547).

Although advocates of emergent approaches to change stress that there is no single correct way to lead and manage change (Pasmore, 2015; Pettigrew, 1997), several proponents of emergent models suggest sequences of actions that organizations should comply with to best facilitate change. According to Todnem By (2005), three such sets of authors are Kanter, Stein, and Jick (1992); Kotter (1995); and Luecke (2003). Their three approaches have similar features (Todnem By, 2005), stressing a set of steps or actions, such as development of a vision and mobilizing the organization to move forward. Interestingly, Rosenbaum et al. (2018) list the work by Kotter (1995) as a model for planned change. This implies that it might be difficult to completely and clearly separate from one another the models in use for planned and emerging change.

Many authors advocate a combination of planned and emergent approaches (Beer & Nohria, 2000; Burnes, 2004b; Liebhart & Garcia-Lorenzo, 2010; Livne-Tarandach & Bartunek, 2009). As Livne-Tarandach and Bartunek (2009) state, "Leaders should no longer be considered (implicitly at least) solely as initiators and implementers of pre-planned organizational change; nor should they be seen (again implicitly, at least) solely as reactive agents to emergent change forces. Rather they should develop the ability to connect the two to create synergy" (p.28). In a contemporary context, organizations need the stability of planned approaches and the flexibility of emergent processes. Hence, planned and emergent approaches to change need to co-exist (Liebhart & Garcia-Lorenzo, 2010).

The third way to look upon change in the framework proposed by Senior (2002) is by scale. There are many ways to describe different of types of scale. Dunphy and Stace (1993) use a framework wherein change can be divided into four categories: fine-tuning, incremental adjustments, modular transformation, and corporate transformation. Fine-tuning represents small adjustments in strategy, people, processes, and structure to create an aligned system (Galbraith, 1984). Incremental adjustments are characterized by distinct modifications of the instance strategy or management processes, but they do not include radical shifts. Modular transformation in this definition represents radical shifts in parts of the organizations, whereas corporate transformation is marked by radical shifts affecting the whole organization (Dunphy & Stace, 1993; Todnem By, 2005)

3.4.3 Change models

In the extensive literature on change, many contributions focus on specific topics or constructs, such as resistance to change (Coch & French, 1948; Lawrence, 1969), role of emotions (Huy, 2005), sense of urgency (Kotter, 2008), and role of vision (Bass, 1990; Kotter, 1995). This part

of the literature review engages with the overall process and concepts for mastering change and therefore does not go in depth into all these different topics. However, literature on specific topics is infused in the following discussion on influential models for leading change.

Many models in practice (see, e.g., Hayes, 2018; Kotter, 1995; Taffinder, 1998) emphasize the need for a strong vision of a future state (Beckhard & Harris, 1987; Gill, 2002; Kotter, 1995). Even authors stressing a more bottom-up approach (see, e.g., Beer et al., 1990a) advocate a strong vision, originating from the top. Another factor stressed in change models is a sense of urgency or dissatisfaction with the current state (Beckhard & Harris, 1987; Kotter, 2008). This urgency should be evoked by messages of real importance, such as those claiming a matter of survival for the organization (Kotter, 1995). Conner (1992) argues for conveying pain messages; in practice, it is common to talk about a burning platform. Urgency or dissatisfaction has mostly been discussed from the perspective of creating motivation to leave the current state (Beckhard & Harris, 1987; Dannemiller & Jacobs, 1992; Kotter, 1995, 2008). However, some authors have discussed how different approaches to motivation can create offensive or defensive approaches (Argyris, 1993; Higgins, 1997; Rock, 2008). Higgins (1997) elaborates on these subjects by discussing how human motivation can come from a prevention orientation (avoiding failure) or promotion orientation (aspiring to succeed). Previous literature also stresses that change needs a clear process for moving the organization forward (Armenakis & Bedeian, 1999; Beckhard & Harris, 1987; Bullock & Batten, 1985; Cady et al., 2014). These features are clearly related to the model created by Lewin (1947).

The most obvious addition to change models in the past decades has been an emphasis on the human side of the change equation (Rosenbaum et al., 2018). The notions of fear or resistance to change are not new (see, e.g., Coch & French, 1948; Lawrence & Lorsch, 1967), but they were not always accentuated in the early models as workable factors in a change process. In Gleicher's change formula (Beckhard & Harris, 1987; Cady et al., 2014; Dannemiller & Jacobs, 1992), the potential relational and emotional costs of change are introduced as key components of the formula for successful change. The formula suggests that to succeed with change, the effects of a strong vision (V), sufficient process (P), and organization-wide dissatisfaction with the status quo (D) outweigh the potential relational and emotional costs (C) of change. Previous literature often discusses fear or resistance as inevitable, since people in a change process are afraid of losing status (Rock, 2008; Trader-Leigh, 2002), certainty (Rock, 2008), relationships (Beer, 2007; Rock, 2008), and identity (Beer, 2007). In other models, the human costs are addressed by emphasizing communication (Kotter, 1995), the need for building a movement (Kotter, 1995), overcoming of resistance (Bridges, 2009), and the continuous need to lead and manage people through the whole process (Hayes, 2018). Table 1 describes seven different change models, with reflections about how they connect to the commonly agreed factors: vision, process, urgency, and human costs

		Connection to traditional factors for planned change				
Model	Author(s)	Vision/statement of future state	Process/set of steps	Dissatisfaction/ motiviation	Costs/resistance	Comments
3-step model • Unfreeze • More • Refreeze	Lewin (1947)	Not very explicit in how the desired future should be created but the "refreeze" is done in the visionary state.	Process is related to the "move" part of the model, which is the actual change activities taking place	Relates to the "unfreeze", which is done by "destabilizing" the organization.	Not in the actual model but mentioned that a change process could be hard.	The refreeze phase regards integration of change
4 stages • Exploration • Planning • Action • Integration	Bullock & Batten (1985)	Not clear about the need for a vision/ model for future.	Stage 2 in the model relates to creating a change plan with key activities, including sequensing., stage 3 more about actually "doing".	Step 1 describes an exploration phase, determining the need for change.	Not explicit about managing costs/resistance.	Separates planning from doing.
Change formula V*P*D>C	Beckhard & Harris (1987) Dannemillar & Jacobs (1992)	Described as a top town activitiy, and needs to be a clear future state. In a later version it was more descirbed as a vision of what is possible.	A clear process is described as key. Different intepretations if it has to be the full process from current state to end goal or a clear set of first steps.	Dissatisfaction with status quo is key as motivation.	Explicit about costs of change in terms of relational and emotional strains.	Does not present "implementing" or "delivering" change as a separate step/factor
8 steps • Sense of urgency • Guiding coalition • Vision • Communicate vision • Enabling action • Short term wins • Consolidate change • Integrate	Kotter (1995)	Step 3 in Kotter`s model is in part connected to the need for a vision statement. It is said to be about clarifying how the future will be different.	In the modell part of step 3 regards formulating initiatives that needs to be taken. Steps 5 & 6 are also clearly about process (enabling actions by removing barriers and generating short term wins).	Kotter´s famous "sense of urgency" corresponds with this factor (step 1). Suggests creating motiviation through paying organizationwide attention to outide threats.	In Kotter´s model costs/resistence is mentioned in the context of both "sense of urgency" (step 1) and as something that could be partly overcome through communication and building a movement (step 2 & 4).	Step 7 and 8 relate to sustaining and integrating change.
5 transition lines • Awakening • Conceiving future • Building change agenda • Delivering big change • Mastering change	Taffinder (1998)	Concieving the future is obviously linked to vision. However, conceiving the future can be interpreted as less firm than for example Kotter´s need for vision statement.	Building a change agenda in Taffinder´s model is closely related to showing a process ahead. Also delivering change could be thought about as a process	Awakening in Taffinder´s model is fairly similar to "dissatisfaction" i the change formula or "sense of urgency" in Kotter´s model.	Costs of change or resistance is not given a prominent role in Taffinder´s model.	Delivering change as separete part.
3 stages transition model • Letting go • Neutral zone • New beginnings	Bridges (2009)	Most emphasis on Vision in the third phase, where the leader should explain the purpose and help the organization to picture the fuutre.	In the third phase a detailed step-by step plan should be developed and communicated. Also in the second phase short term goals should be developed and executed on.	In the first phase the reaons why the change is needed should be communicated. It is implicit in the model that the change ahead is causing fear in the organization.	Both phase one and two is about overcoming resistance, but the first phase is more about handling losses from leaving the past and the second is touching upon the need for encouraging the future.	Focused on encouraging people to overcome losses and leaving the old behind.
7 core activities • Recognizing need • Diagnosing and formulating vision • Planning • Implementing and reviewing • Sustaining change • Managing people • Learning	Hayes (2018)	Second activity clearly about formulating a vision – here described in close connection with the diagnoses.	Planning a seprate steps to outline how to intervene. Implementing plan and reviewing as next step following plan.	First step is about recognizing need for change. Not as explicit about how to motivate the change.	Describes leading and managing people issues as a parallell activity during the whole change process.	In model are the first five activites presented as squential (thought pointed out that boundaries are not always clear cut) and the last two as supporting during the whole process.

Table 1. Review of the change models

Table 1 reveals similarities between the models for change through the decades. Hence, this review confirms the finding from previous literature (Bartunek & Woodman, 2014; Rosenbaum et al., 2018) that models do not seem to have evolved substantially since Lewin (1947). Some differences are still emerging, such as the following:

a) Whether the planning and action are seen as separate phases or not,
b) The degree of emphasis on integration of change,
c) Whether integration is seen as ongoing or as a "phase,"
d) To what extent human emotions and relations are emphasized, and
e) Clarity of vision and who is responsible to create it.

These similarities and differences could be seen in light of different approaches to change. For instance, a), c), and e) above could be tied to a discussion around whether change should be seen as planned or emergent (Liebhart & Garcia-Lorenzo, 2010; Livne-Tarandach & Bartunek, 2009), and c) could be discussed in light of the reflection upon discontinuous or continuous change (Luecke, 2003; Pasmore, 2015; Todnem By, 2005).

3.4.4 Recent calls for new approaches and models for change

Recently, several prominent authors have discussed that the change approaches and models currently in use are inadequate in a contemporary context (see, e.g., Bartunek & Woodman, 2014; Pasmore & Woodman, 2017). As Worley and Mohrman (2016) ask, "is there anything more irrelevant and anachronistic than applying change models developed in the 1950s to the development challenges facing organizations today? Despite a world where change, uncertainty, and discontinuity are common, organizations continue to employ traditional change models and emphasize traditional skill sets" (p. 29). Some authors stress that scholars have made strong progress in terms of finding new and contemporary views on managing change; however, in practice, the traditional phase-based models dominate (Rosenbaum et al., 2018; Worley & Mohrman, 2016). Bartunek and Woodman (2014) consider a model that makes room for multiple additional temporal dimensions of change processes. According to Pettigrew, Woodman, and Cameron (2001), temporal dimensions have not yet attracted enough attention from the field. Bartunek and Woodman (2014) suggest that the following temporal dimensions are lacking in many models and, therefore, should be incorporated into a contemporary model for change:

- Sequence,
- Timing,
- Pacing,
- Rhythm, and
- Monophony/polyphony.

Sequence refers to the temporal ordering of events (Bartunek & Woodman, 2014). A sequence may include recognizable steps or events and order. However, a sequence is not necessarily linear (Bartunek & Woodman, 2014), but could involve cycling back and forth. Timing is discussed from the point of view wherein the timetable for how change unfolds could matter for the results (Ancona, Goodman, Lawrence, & Tushman, 2001) or organizational change readiness (Huy, 2001). Pacing refers to the speed of change. Bartunek and Woodman (2014)

stress that this could include the overall speed of a change process as well as the speed of different events or different paces at different times. Rhythm refers to the repetition of cycles (Bartunek & Woodman, 2014). Perhaps most importantly in their proposal, Bartunek and Woodman (2014) argue that today's change is often polyphonic in nature. Hence, different events and initiatives, with different sequencing, timing, pacing, and rhythm, occur at the same time. Consequently, two or more activity cycles depend on each other (Ballard, 2009) and need to somehow be coordinated.

Worley and Mohrman (2016) propose a new change theory, wherein agents of change are asked to engage and learn in four areas: awareness, design, tailoring, and monitoring. Huy (1999) suggests focusing on a framework that is capable of radical change, in which learning, mobilization, and receptivity are emphasized. This framework was later developed to include the need for retaining key people and promoting organizational creativity (Huy, 2005). This stream of literature focuses on individual and organizational capabilities to create the future, wherein motivation, creativity (Amabile & Kramer, 2011; Huy, 2005), trust (Dougherty & Hardy, 1996; Edmondson & Lei, 2014), and positive emotions (Huy, 2002; Johansen, 2017) play an important role. These frameworks focus less on how to successfully design and travel on a change journey and more on the capabilities required to meet the needs of a constantly changing environment. This thinking is consistent with the work on dynamic capabilities discussed below (Beer, 2013; Eisenhardt & Martin, 2000; Teece, 2018; Teece et al., 1997).

3.5 Dynamic capabilities

The concept of dynamic capabilities was first introduced by Teece et al. (1997) and defined as "the firm's ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments" (p. 516). It refers to the capability of an organization to create, extend, and modify its resource base (Helfat et al., 2007) for maintaining or developing competitive advantage. Eisenhardt and Martin (2000), demystify this concept and stress that dynamic capabilities should rather be viewed as more specific processes such as product development or decision making. Moreover, they argue that dynamic capabilities evolve through well-known learning mechanisms.

Although the definitions vary slightly among authors, the main idea of dynamic capabilities as the ability to reconfigure resources for competitive advantage seems to last. The use of this concept has also broadened during the years. Since it was introduced, authors have discussed the concept of dynamic capabilities from different points of view. Dynamic capabilities have been used as a lens to discuss, for instance, change (Beer, 2013; Helfat et al., 2007), ambidexterity (O'Reilly & Tushman, 2008), innovation (O'Connor, 2008; O'Connor et al., 2008), digitalization, and strategic management (Teece, 2018; Vogel & Güttel, 2013). Teece (2007) emphasizes that this concept should not be considered as a precise model but as a framework.

In Teece's 1997 framework, dynamic capabilities are related to learning, integrating strategic assets, and transforming existing assets. A later framework (Teece, 2007, 2012) instead stresses the following three dynamic capabilities:

- Sensing (and shaping), which refers to opportunities that need to be identified and assessed;
- Seizing, which refers to the mobilization of resources to address an opportunity and capture value; and
- Transforming, which refers to resource configuration, meaning that the organization is continuously renewed.

Sensing involves activities such as scanning, learning, and interpreting (Teece, 2007). Seizing requires the organization to exploit opportunities as they emerge (Hodgkinson & Healey, 2011). Transforming activities involves altering the operative capabilities (Teece, 2007). This reconfiguration of the operative capabilities could involve minor adjustments as well as more substantial shifts (Helfat et al., 2007).

Various authors have also suggested additions or reframing of the dynamic capabilities, especially proposing ideas for how dynamic capabilities should be connected to a rapidly changing environment. Beer (2013) argues that rapid changes in the environment demand innovation in the organizational design as well as development of dynamic capabilities. He defines dynamic capability as "the capacity of the organization to reinvent itself over and over again" (p. 32). Beer (2013) emphasizes the importance of a continuously ongoing, vertical dialogue, through which leaders can learn from the whole system. Huy (2005) proposes an emotions-based view on dynamic capabilities, stressing that positive emotions can evoke creativity, mobilization, and receptivity, which he argues are specifically important in times of rapid, radical change. Fainshmidt and Frazier (2016) argue for the need for trust and strong interpersonal relationships in times of change. Shuen and Sieber (2009) argue that dynamic capability research needs to stretch beyond organizational boundaries and focus on not only quickly mobilizing resources within an organization but also orchestrating and reconfiguring externally sourced competences. Thus, by agreeing on the core concept of dynamic capabilities, it seems that authors see the need for stretching the concept into new areas to fit a fast-paced context. Moreover, O'Reilly and Tushman (2013) stress that ambidexterity should be seen as a dynamic capability. However, neither literature on ambidexterity nor dynamic capability seems to provide an extensive explanation for how this dynamic capability should be deployed.

3.6 Agile organizations

Many authors agree about the need for adaptability for organizational survival and success (Johansen, 2017; Reeves & Deimler, 2011). One way to look at this is as agile organizations or agile management (Williams et al., 2013; Worley, Williams, & Lawler, 2016). Worley et al. (2016) argue, "Good management processes help a company execute its strategy and exercise its capabilities. But in fast-changing business environments, companies also need agile management processes that can help the organization change when needed" (p. 77).

Williams et al. (2013) also point out that agility in organizations means more than just an ability to change. It refers to the ability of an organization to respond in a quick, timely, and sustainable manner when environments change. This ability is sometimes discussed in the framework of dynamic capabilities. Williams et al. (2013) describe four routines for agile organizations:

- Strategizing dynamically,
- Perceiving environmental change,
- Testing responses, and
- Implementing change.

These four routines allow an organization to act agilely. Strategizing dynamically refers to the organizational ability to create a sense of shared purpose, a change-friendly identity, and a robust strategic intent. Perceiving environmental change has to do with sensing, communicating, and interpreting information. To be able to test responses, it is important to provide slack in resources, risk management, and learning. The fourth routine, implementing change, requires organizational autonomy, embedded change capability, and performance management. However, becoming an agile organization is not an easy task (Johansen, 2017; Williams et al., 2013). According to Williams et al. (2013), pursuing agility demands decisions from the top: "Executives in agile organizations make explicit, system-wide decisions that promote adaptability over stability and flexibility over inertia. Leaders and employees see the ability to change and adapt as the key for long-term success. They do not fear or avoid change; they embrace it because their ability to manage change well is their primary advantage" (p. 8).

3.7 Corporate entrepreneurship

Recent research stresses the need for a more polyphonic approach to change (Bartunek & Woodman, 2014), wherein change relies less heavily on the brilliance of the few and more on the initiatives of the many. This corresponds with literature on corporate entrepreneurship and corporate innovation (Marvel et al., 2007; Sakhdari, 2016).

Authors generally agree about the character of entrepreneurial activities within existing firms. Baden-Fuller and Stopford (1992) argue that corporate entrepreneurship can be a vehicle to push companies out of stagnating industries. Definitions of corporate entrepreneurship vary, but often focus on both the act of creating and leveraging an initiative. Thus, corporate entrepreneurs not only invent but also take their ideas to the market. Ginsberg and Hay (1994) define corporate entrepreneurship as something "that generates and exploits new technologies, products, or businesses under the corporate umbrella of an established firm" (p.382). A similar definition that adds the perspective of how an established business is used in terms of, for instance, resources is provided by Wolcott and Lippitz (2007): "Corporate entrepreneurship is the process by which teams within an established company conceive, foster, launch and manage a new business that is distinct from the parent company but leverages the parent's assets, market position, capabilities or other resources" (p. 75).

Previous literature has discussed what makes corporate entrepreneurship successful (Birkinshaw & Fry, 1998; Fredberg & Pregmark, 2018; Marvel et al., 2007). Successful corporate entrepreneurship is often driven as bottom-up initiatives, residing on a subsidiary or individual level (Birkinshaw, 1997; Birkinshaw & Fry, 1998). According to Birkinshaw (1997), the bottom-up approach is the core of corporate entrepreneurship. Beer et al. (1990a) has also discussed the bottom-up approach, with its origin in periphery, as a means to corporate change.

When explaining successful corporate entrepreneurship, prior literature predominantly focuses on structural issues, such as organizational structure (Marvel et al., 2007), processes (Marvel et al., 2007), and control systems (Williams & Lee, 2009). Although some authors have made contributions about the importance of factors such as trust (Birkinshaw & Fry, 1998; Fredberg & Pregmark, 2018) and risk willingness (Marvel et al., 2007), cultural and relational aspects of corporate entrepreneurship are less investigated.

3.8 Managing innovation in established models

Discussions about how to manage innovation in established organizations are closely related to corporate entrepreneurship and the potential tension between the established models and innovative work (see, e.g., Christensen, 1997; Christensen, Skok, & Allworth, 2012; Van de Ven, 1986; Wei et al., 2014). Innovation is a broad topic, including angles such as innovation collaboration (Maria, Marko, & Mikko, 2010), innovation culture (Shani et al., 2009), and innovation process (Žižlavský, 2013). This thesis mainly discusses innovations in relation to the established structure/model and to change (O´Conner, 2008). This means that only a fraction of the vast literature on innovation is outlined.

Van de Ven (1986) defines four central problems in managing innovation. First, established organizations normally put the most emphasis on what they do well. This could be tied to a discussion around ambidexterity and the classic innovator's dilemma (Christensen, 1997). Second, Van de Ven (1986) also points out that process models for development initiatives are inclined to focus on the initiatives that fit with the model rather than on their potential (Shani et al., 2009; Winby & Worley, 2014). Third, solving a problem (Van de Ven, 1986) involves managing the part-whole relationships, meaning that the practice of solving problems involves dividing them into parts and summing up the pieces under the assumption that they are representative of the whole (Marion & Uhl-Bien, 2001). Lastly, Van de Ven (1986) states that firms that strategically want to invest in innovation need to provide institutional leadership and an infrastructure that supports innovation – otherwise, the established organization will kill the new ideas.

Other perspectives on explorative and innovative work in established systems are discussed in sections regarding ambidexterity.

3.9 Summary of the main constructs in the theoretical framework

To untangle my research question, the main frameworks I choose to focus on are contextual ambidexterity and models/processes for managing change. In this section, findings from these two research streams are outlined.

Ambidexterity: The need for ambidexterity is well explained in literature. In addition, different models for achieving ambidexterity are investigated extensively (predominantly structurally, sequentially, and contextually), along with the benefits and challenges of each model (O'Reilly & Tushman, 2013). Ambidexterity has also been described as a dynamic capability (O'Reilly & Tushman, 2008). Research on contextual ambidexterity (Birkinshaw & Gibson, 2004) mainly provides insights about the context management needs to make room for individuals to act

ambidextrously. For this thesis, literature on ambidexterity in general and contextual ambidexterity in particular provides valuable insights, such as the following:

- The importance for established organizations to continuously focus on innovative work and simultaneously deliver on their current business;
- Which tensions need to be overcome to successfully drive innovative work in established organizations;
- Characteristics of the context that needs to be created for innovative work to flourish when pursuing the ambidexterity problem contextually; and
- The need for a multitude of explorative initiatives.

However, literature on ambidexterity is less focused on the process of continuously utilizing ambidexterity for moving forward in accordance with a strategic direction as well as the way to engage people in the change ahead. Moreover, the relation between contextual ambidexterity and both the organizational system and organizational strategic change agenda is not fully investigated.

Change: Literature on change brings a broad understanding of the challenges involved when attempting to manage extensive change. Many authors agree that change often needs to be a combination of planned and emergent approaches to be successful (Beer & Nohria, 2000; Livne-Tarandach & Bartunek, 2009). Some authors advocate that change affecting the whole organization needs to be driven from the top (Kotter, 1995), whereas others put forward a more bottom-up approach (Pasmore & Woodman, 2017). The presented review of change models and frameworks for change shows that many models take a broad perspective and present a good understanding of the following:

- The need for a direction/vision;
- The importance of bringing people into a shared process;
- How people might resist change and need to find motivation to leave the old behind; and
- The need for constant re-shaping, especially in recent literature (Johansen, 2017; Worley & Mohrman, 2016).

However, literature on change has not thoroughly investigated how to make room for innovation, speed, and creativity in the change process, nor does it generally focus on how to make a multitude of initiatives grow, as called for by, for instance, Bartunek and Woodman (2014).

To understand my research question, I have made choices in terms of theory. A summary of choices with regard to the theoretical framework is included below:

- I focus on contextual ambidexterity as a framework for understanding my research question. Hence, I only discuss how an organization can manage its change journey in a case wherein the new must be created within the same structure as the current.
- This thesis does not go in depth into all these perspectives on managing change. Rather, since the aim of the thesis is to investigate how a change journey can be shaped, literature covering models or frameworks for change is primarily the focus.
- This thesis focuses on change from a perspective wherein the whole system is in play (Beer, 2009; Henderson, 2006). Nevertheless, it does not necessarily mean that the only focus is on what Dunphy and Stace (1993) would describe as corporate transformation with radical shifts affecting the whole organization. Previous research points out that a system can also be changed through modular transformation, as a unit-by-unit change (Beer et al., 1990a) or through innovative initiatives (Bartunek & Woodman, 2014; Fredberg & Pregmark, 2016; Fredberg & Pregmark, 2018; Pasmore & Woodman, 2017).

4 Methodology

This section describes my choices for the overall research approach and my motivations. I briefly describe the different empirical settings I have interacted with to collect data for the papers enclosed in this thesis. This chapter also describes the appended papers from a methodical point of view. Lastly, issues of research quality are discussed along with potential limitations of the research presented in this thesis.

4.1 Choice of the overall research approach

This thesis discusses change in a volatile, fast-moving environment. Therefore, a method enabling me to gain access to the change processes as they unfold was needed (Pettigrew, 1997). Consequently, a qualitative and primarily longitudinal approach, following cases over time (Yin, 1994), was chosen as the main research method. Qualitative research methods are appropriate for studying issues in their natural settings, as they attempt to make sense of, or interpret, phenomena in terms of the meanings people bring to them (Denzin & Lincoln, 2005) as well as for investigating social relations (Flick, 2009). This thesis discusses change in a case of contextual ambidexterity, which is best understood by being involved with an organizational community experiencing the change. This fits well with the description in Denzin and Lincoln (2005).

From an ontological perspective (Burrell & Morgan, 1979; Guba & Lincoln, 1994), the research in this thesis leans toward relativism rather than realism. Unlike realism, the research takes a stance that the studied phenomenon exists in relation with the organizations, individuals, and systems. Thus, the change processes and organizations are understood through perceptions and actions. Discussing epistemology (Carson, Gilmore, Perry, & Gronhaug, 2001; Guba & Lincoln, 1994), the major opposing camps are positivists and interpretivists (Onwuegbuzie & Leech, 2005). Positivists stress that it is possible to obtain objective data, and the focus is generalization and abstraction. Interpretivists on the other hand argue that issues and phenomena could be understood by perceptions and stress the importance of taking context into account. This thesis leans toward an interpretative epistemology. This would imply that research presented in this thesis does not aim to uncover the truth, but rather to discuss what seems to work when incorporating innovative work in change processes in contextually ambidextrous organizations.

4.1.1 Problem/phenomenon-driven research

As stated in the introduction, the presented research is derived from a practical problem, rather than from the discovery of a theoretical gap. The importance of allowing research to emerge from a practical problem/phenomenon has been discussed by authors such as Beer (2011), von Krogh et al. (2012), and Schwarz and Stensaker (2014). One argument is that some problems in practice cannot be solved by one field or stream of research. Solutions need to emerge from understanding problems together with existing theory from different fields (see, e.g., Bansal, Smith, & Vaara, 2018; Eisenhardt & Graebner, 2007). Von Krogh et al. (2012) conclude that problem/phenomenon-based approaches are important, because it is possible to investigate complex management problems currently out of scope for one single field or theory. The

openness achieved by combining different fields and levels of analysis is described as beneficial.

In this thesis, as described in previous sections, I focus on a practical phenomenon/problem. In studies 1 and 3, representatives of different parts of the system are described as taking part in initiatives, increasing the possibility to understand the complexity of issues. In study 2, the leaders of different management teams are described as being encouraged to reflect upon the complexity of the organizational system. In setting up the studies and analyzing the results, the research team was open to influence from different theoretical fields. This is in line with what Burns (2007) recommends for understanding complex system change.

As this is a compilation thesis, the addressed practical problem is derived from several studies and papers. In brief, the way the understanding for writing this thesis emerged is as described in Figure 3.

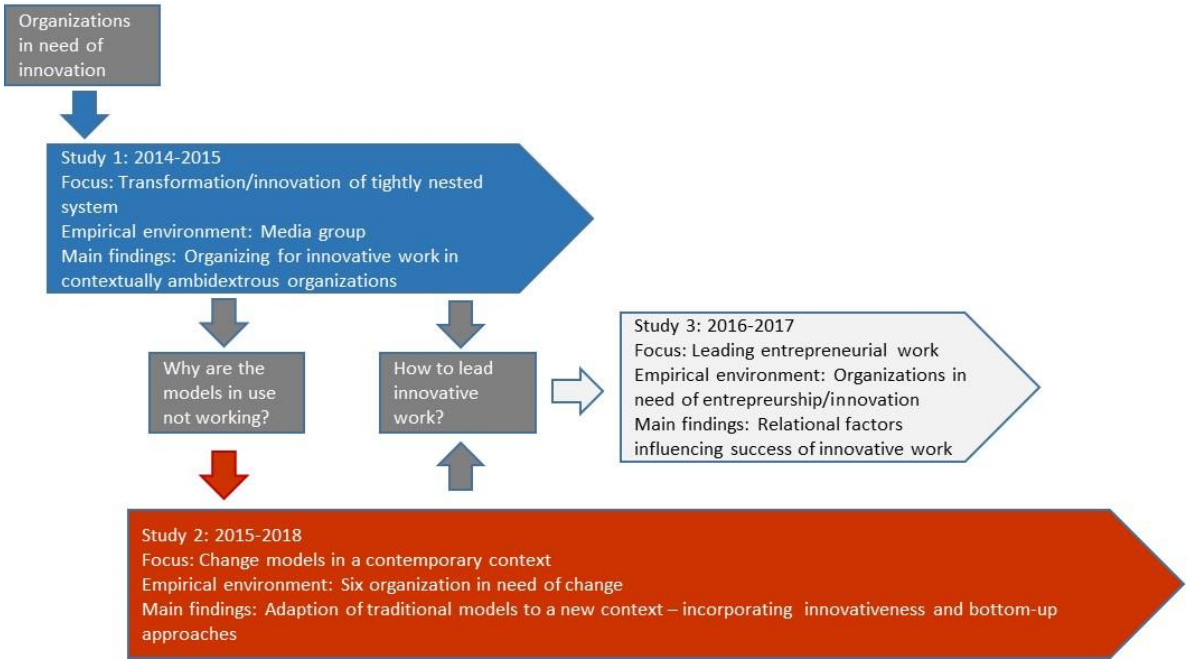

Figure 3. Relation between the studies

As shown in Figure 3, the first study in the media industry was designed to understand how innovative work could be set up to help transform a tightly nested system. In the study, the research team obtained data showing the needed connections between the top management change agenda and requirements for designing innovative work in established systems. The study, led the research team to identify the need for further research:

- In the first study, it was clear that the management team members were experienced in leading changes – and they used established models to find their way. However, they did not manage to understand and move the system the way in which they intended. This provoked a question about why the change models in use do not seem to provide enough support, leading to a new study – study 2.
- The first study also gave insights about the relational/emotional difficulties in leading innovative work in established organizations under pressure. Therefore, the third study

was designed to understand reactions to innovative work in established organizations and to discuss leading innovative/entrepreneurial initiatives. The study aimed to take the perspective of the corporate entrepreneur rather than the top management.

Therefore, the second study, conducted partly in parallel with the first, addressed traditional models for conducting extensive change initiatives in established organizations. The question of interest was to investigate if the models in use have elements that are lacking the content needed for the contemporary environment, which is faster paced (Pasmore & Woodman, 2017), has an uncertain future (Johansen, 2017), and presents the need for polyphony (Bartunek & Woodman, 2014). Leaders in this study confirmed the strengths of well-known models (see, e.g., Beckhard & Harris, 1987; Kotter, 1995) but made it clear that other components, such as creativity and innovativeness, were missing in the models. The findings led to deeper understanding of what needs to be augmented and/or altered to create a change framework that fits better with contemporary settings and includes innovative work.

A question about leading innovative initiatives in contextually ambidextrous organizations is important for further investigation. Although the first study provided insights about how organizations could design explorative work, only clues for how to lead that work in practice could be obtained. The first study showed that leading innovative work in an established organization was a difficult task. It showed a constant struggle for resources and constant management of tensions and fear. Therefore, the third study focused on the perspective of initiative/project leaders. This means that the focus was on understanding more of the relational ingredients when taking on the challenging task of leading innovative work in contextual ambidexterity. The study followed corporate entrepreneurs over time and zoomed in on their experiences of perceived obstacles and how they overcame them and made their work successful.

4.1.2 Intervention approach

In each study, I (together with the research team) worked closely with the organizations and leaders. The research team constructed interventions together with members of the organizations, all derived from the strategic agenda, and supported the intervention leaders in their activities while continuously noting the system reactions. This meant that the research team and I used continuous cycles of action, reflection, and learning (Argyris & Schön, 1978; Edmondson, 2011) to advance the knowledge about the issue in focus.

Moreover, I continuously worked to bridge the potential gap between different levels in the organization by supporting the innovative work in the teams but compiling the learning for reflection in the top team. Another key principle in the interventions was the effort to understand the system rather than singling out components, consistent with suggestions from previous authors (Beer, 1980; Burns, 2007). How the research team worked with the interventions in the different studies is briefly described below:

- Study 1 started by striving to understand the system through a strategic fitness process (Beer & Eisenstat, 2004), wherein selected employees conducted 96 interviews within the organization, based on a statement of direction drafted by the management team. I was a part of a team of three, leading the process, developing material for it and

moderating the conversations in the management team. The research team then supported the management team in the task to select a total of seven three-month initiatives, conducted in three waves. This was done in a workshop where I was one of two facilitators. Each of the three initiatives in the first wave was supported by me and two colleagues, through monthly action-learning meetings and continuous check-ins. After three months, the learnings were extracted, both within each project and on an aggregated level from each project. These learnings served as inputs for creating the next wave of interventions.

- In study 2, the interactions with different organizations differed but shared the same principles – close relationships, bridging of the gap between different levels, and a system perspective. In the interventions in this study, both actions and stated perceptions were noted and formed the base for learning. In this study, however, the aim was not to go in depth into understanding each of the six organizations, but rather to understand how the organizations' leaders related to change models in light of a fast-paced contemporary context. In this study, I was the only researcher involved in the interventions, mainly participating in and facilitating workshops around change.
- In study 3, master students collected the data but used themes developed by the research team. A total of 11 entrepreneurial initiatives were followed over time. The master students led the initiatives but had coaching sessions every other week with one of the researchers and every month with the steering committee consisting of a company representative, the researcher, and students. In this way, the researchers involved in this effort strived to build close relationships, understand the system, and bridge gaps between the levels. I was the coach in three of the eleven initiatives.

4.1.3 Choice of research method

The method was chosen to create a good fit (Maxwell, 2012) between the research question and the method. The overall approach, along with the qualitative approach, considers the context through deep relationships and allows the researcher to be a part of the phenomenon under study in the action research. This is consistent with what Carson et al. (2001) suggest as a suitable research methodology for interpretivists. Below, the choices are described in more detail.

Qualitative approach: As this thesis investigates change in a complex, fast-moving, contemporary context, affected by the thinking and actions within the organizational systems, the natural choice was to pursue a qualitative approach. Quantitative approaches are not as suitable when trying to understand a phenomenon in depth or when patterns need to emerge. Papers 1, 2, 3, and 4 all draw upon qualitative approaches (paper 5 is conceptual). A qualitative approach allows the interpretation of what is going on to try to seek patterns (Flick, 2009). In addition, as described by Denzin and Lincoln (2005), qualitative research is the preferable choice when studying phenomena in their natural settings and when context matters. The research question in this thesis points toward a situation wherein understanding the internal and external contexts is crucial, which strengthens the choice of qualitative methods.

Considering the ontological and epistemological stance of this thesis, a qualitative approach seemed the most viable option. This choice is supported by previous research (see, e.g., Carson et al., 2001), which recommends qualitative methods taking an interpretative perspective.

Longitudinal research: Data for the appended papers are primarily collected through longitudinal research. Longitudinal designs allow deeper relations and better understanding of the context, which is appropriate when taking an interpretive stance. Paper 1 partly draws upon longitudinal research, which is combined with research based on shorter interactions. Papers 2 and 3 draw solely on longitudinal research within one organization during 2015–2018, and paper 4 draws upon 11 initiatives in different organizations for 10 months. Data for papers 2 and 3 were collected through a case study. Case studies have the benefit of making it possible to study something in depth, with multiple data points, and they are considered suitable when the research question demands an ongoing process (Yin, 1994).

Both Pettigrew (1997) and Schein (1987) call for more longitudinal research designs, especially regarding research areas wherein the understanding of the emerging process is more interesting than the state. In this thesis, this is clearly the case. Pettigrew (1997) defines a processual analysis as "a sequence of individual and collective events, actions, and activities unfolding over time in context" (p. 338). When studying change processes, wherein the future is yet to be created, it is relevant consider such a study as a processual analysis, thus calling for a longitudinal approach.

Action research: To thoroughly understand organizational change, it is beneficial for the researcher to work in a collaborative way and take an active part in the change process (Balogun & Johnson, 2004; Beer, 2011; Pettigrew et al., 2001). Moreover, phenomenon-driven research benefits from collaborative/action research approaches (von Krogh et al., 2012). Therefore, all papers in this thesis that include empirical insights involve action research (Argyris, Putnam, & McLain Smith, 1985; Coghlan, 2011; Coghlan & Shani, 2014) as the primary research approach. Through action research, organizations and researchers create synergies that enhance the relevance of both the research and management practice (Coughlan & Coghlan, 2002; Shani, Mohrman, Pasmore, Stymne, & Adler, 2007). Closer collaboration and interaction between practice and research are called for by several authors (Bansal et al., 2018; Mohrman & Lawler, 2012; Van de Ven, 2007).

With action research, it is also possible to investigate the whole system, as described by, for instance, Burns (2007). The interventions in this thesis were deliberately designed to create a micro-cosmos, with representatives from different parts of the systems and where the goal could only be reached by considering factors such as strategy, structures, processes, culture, and capabilities. Hence, this approach seemed suitable for understanding my research question with a system perspective on organizations.

As I was close to the organizations as a researcher, it was important for me to create a collaborative, trusting relationship. This way, the actors within the organizations could be seen as fellow researchers rather than as objects of my research. That means that members of the organizational community could work together with the research team to make sense of the data and discuss the implications. I have adopted a clinical perspective (Schein, 1987), not to be impartial or uninvolved, but rather to explicitly affect the organization I study. To be able to do so, Schein (1987) recommends that it is important to gain trust of the members of the organization and to strive to be helpful. In addition, Schein (1987) stresses the importance of

learning to understand the reactions from the interventions. Therefore, during all the studies, it has been important to conduct continuous learning meetings and keep learning journals. This is consistent with the proposals of Coghlan and Shani (2014), who advocate that action research should reflect the context; be based on strong relations within the system; and provide a solid process for action, reflection, and learning. Moreover, Coghlan and Shani (2014) suggest that action research should have the dual outcome of scholarly and practical gain, which has been the aim of the collaborative research presented in this thesis.

The main action research component in this thesis has been the design of intersections wherein models, resources, and capabilities representing the old and the new could meet and do real shared work. Hence, the intervention projects and initiatives, described in more detail in papers 2, 3, and 4, as well as in the following chapter, were all designed for investigating ways to make contextual ambidexterity work in practice and contribute to the process for change.

There are limitations to action research. For instance, it is difficult, or perhaps not even desired (Carson et al., 2001), to have an objective, unbiased, and impartial view. I have tried to balance this drawback by continuously conducting interviews in each study and by being thorough in testing conclusions with the organizational community and with research colleagues outside the projects. Yet, there is always a risk that an action researcher will see, select, and interpret data based on assumptions and biases. I have tried to be as clear and transparent as possible about my assumptions and continuously asked to be challenged by members of the research team and other academic advisors. There is also always a question of whether a study could be replicated or not. In this case, the methods and designs are well documented and should be possible to replicate – although the context will differ and potentially produce different results. The research designs used for the first and third studies, which provide data for papers 2, 3, and 4, are also replicated in studies that are ongoing.

Engaged scholarship: In a recent advocacy for the increased use of various qualitative methods in management research (Bansal et al., 2018), engaged scholarship is mentioned as a genre not given enough attention. According to Van de Ven (2007), engaged scholarship can give meaning to findings through the combination of scientific and practical knowledge. The research in this thesis is, to a large extent, based on such a combination. Notes on interventions that provoked reactions in the organizational system have been taken continuously and analyzed by the research team. The findings have been interpreted together with leaders in the investigated organizations. In addition, the conclusions and proposals have been tested and reflected upon together with practitioners.

As proposed by Van de Ven (2007), the idea of engaged scholarship could be a way to bridge the potential gap between academic contributions and usefulness in the society and organizations. Action research is one way of producing results for practice while learning about those actions for deeper understanding, potentially advancing knowledge for both academia and practice. Hence, action research could be seen as a part of an engaged scholarship.

Critics suggest that engaged scholarship as well considering researchers and practitioners as a collective is the wrong way to think about the gap between research and practice (McKelvey,

2006), since biases would cloud the judgement. However, as an action researcher, I argue that although it is not possible to eliminate biases and preconceptions, they could be handled by, for example, close relationships with the organizations under study and continuous testing of ideas with fellow researchers and organizational members. My aim with this research is that the conclusions could advance both theory and practice, and this dedication provides a foundation to discuss this research in light of engaged scholarship.

4.2 Empirical environment

The research question could only be answered through access to empirical settings wherein fast-paced changes needed to occur, and where the old and the new needed to co-exist in contextual ambidexterity. Moreover, there was a need for an empirical environment where it was possible to build a relationship based on trust, as suggested by Schein (1987). Papers 1, 2, and 3 are partly or entirely based on a research project in the media industry, fitting well with this description. The media industry in general and the newspaper industry in particular are undergoing major changes. Many media organizations have been unable to cope with digitalization, resulting in bleeding financials and an unsecure future. Established newspaper organizations have tried to transfer the traditional working and business models into a digital environment without success. New entrants to the news industry, such as Google, Netflix, and Facebook, have gained attention, whereas traditional newspapers have lost ground. The media organization that provided data for papers 1, 2, and 3 (and in another study also to paper 4) was going through a dramatic change, similar to many other media companies. This corresponds well with the rationale that a good case could be a typical case for a specific situation (Yin, 1994). According to Yin (1994), it is relevant to follow a case over time in an emerging context. This fits well with the media industry, since the future for this organization was blurry and difficult to predict.

Although papers 2 and 3 are based on data from a longitudinal research project within one organization – a media group – papers 1 and 4 draw upon data from several organizations. Paper 1 investigates the applicability of traditional change models in a contemporary context and is based on interactions with six organizations, from different industries and of various sizes and structures. The commonality between these organizations is that they all were in the midst of change processes that needed to go beyond improvements of the current trajectory. Importantly, I also had access to these organizations and the opportunity to create relations characterized by trust and openness (Schein, 1987), which were essential to be able to answer my research question. Paper 4 focuses on 11 entrepreneurial initiatives, driven by teams of 2–3 students, in 10 different organizations. All of these were established organizations, although of various sizes and industries. They all had an urge to become more entrepreneurial and were willing to allow teams of master students into their organizations to engage in such entrepreneurial activity. The empirical environments chosen for the three studies all shared the following features:

- Operating in a fast-paced environment
- Established organizations with strong alignment for leveraging the current model,
- Need for change beyond the improvement of merit (as identified by top management),
- Need for innovation and/or entrepreneurship (as identified by top management),
- Need to deliver its current offering efficiently, and

- Potential for collaboration and relationships characterized by trust with top management.

I argue that a combination of these features presented a clear opportunity to study how innovative initiatives can be a component for change in contextual ambidexterity.

4.3 Relation between theory and empirical environment

The empirical papers presented in this thesis all consider the theory and empirical environment as intertwined. Dubois and Gadde (2002) describe the intertwined nature of different activities in a social science research process, and they find that a researcher going back and forth between theory and empirical observation will obtain a higher level of understanding. This is also applicable in problem-based research (Schwarz & Stensaker, 2014, 2016). A closer and more intertwined relationship between scientific knowledge and practical knowledge is discussed as an advantage by other authors (Bansal et al., 2018; Birkinshaw, Brannen, & Tung, 2011). This allows theory to be understood together with empirical data and vice versa. Given the character of my research question and my ontological and epistemological stance, I strived to have a research design that allows me to refocus the theoretical framework and empirical emphasis as my understanding of the issue at hand improves. The schematic model for how I perceive the relation between theory and empirical environments is presented in Figure 4.

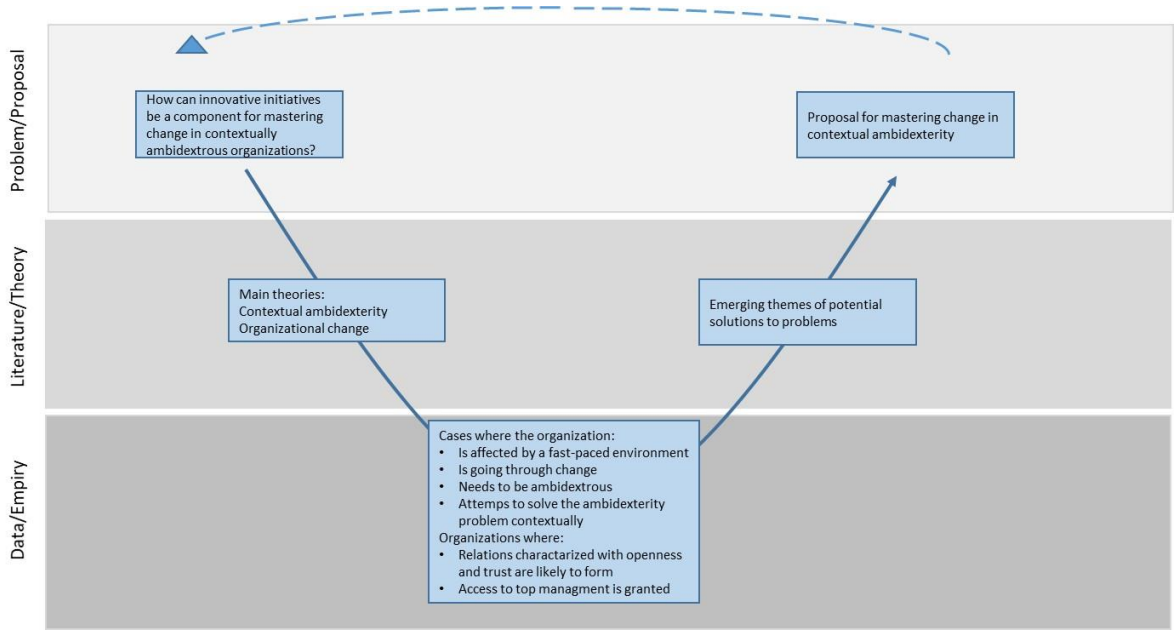

Figure 4. Research approach – connection problem, literature, and empirical environment

Figure 4 indicates that my research approach started with a perceived problem, derived from practice. The problem was expanded upon through literature studies for enhanced understanding and formulation of the research question and research design. After interaction with the empirical environment, I went back to literature to combine the insights into a new proposal or idea. This cycle was repeated several times on some occasions, especially when writing papers 1 and 2, which is symbolized by the dotted arrow in the figure.

4.4 Data collection and analysis

The methods for collecting and analyzing data for each of the five appended papers are briefly outlined in this section. Moreover, a summary of the data collection and different interactions with the empirical environment is presented in Table 2. For a more detailed description, see each paper.

Paper 1: This paper draws primarily on action research (Argyris et al., 1985; Coghlan & Shani, 2014). Experiences from leaders in the six organizations were noted to obtain data on their perception of traditional change models in a contemporary context. In this paper, the action research component varied between settings. In some cases, I followed leaders over time (the longest being two years), and in some organizations I had shorter, but deep, interactions with leaders (the shortest being a two-day intense interaction).

Data were collected continuously during the whole period. The data were organized around some core principles in traditional change models (vision, process, sense of urgency/dissatisfaction, and costs/resistance). Data indicating usefulness of these principles for change and indicating problems with incorporating these principles into the change efforts were noted. While trying to keep the essence of the principles' usefulness but adapting them to avoid the experienced problems, new principles were developed. These formed an early phase proposal for the key components required for succeeding with change in a contemporary context. The model was tested in the organizations for triangulation (Stake, 1995). This means that data were gathered from different actors on different levels in the organization to validate the observations.

In this paper, which is single authored, I had full responsibility for planning, data collection, and analysis myself.

Paper 2: Paper 2 is based on an action research study in the media industry, focusing on a newspaper group during an ongoing industry transition. Three innovative initiatives were followed over time to learn about how the organization could break through and change in a tightly aligned system. The data were gathered through the following interactions:

- The overall challenges were understood through continuous workshops with the TMT.
- Each initiative had monthly after-action reviews wherein at least one of the researchers was present.
- Moreover, a researcher had weekly check-ins with the leader of each project. The research team was involved in the initiatives through collaboration with the organization on planning, supporting, and learning from the initiatives. The action research components were complemented by semi-structured interviews and learning meetings with the management team.
- A sensemaking workshop was conducted with the TMT to learn from all three initiatives and to understand their implications for theory and practice for the TMT.

Data were collected in continuously updated learning logs/journals, written in a simple word-format. The learning logs were designed to encourage continuous reflections about what was going on in the organization, together with notes about quotes and especially important events.

The data were analyzed as an ongoing process to create a continuously updated theory of the case. Full-day reflective sessions were organized within the research team, wherein the notes and learning logs were synthesized. In these sessions, the data were synthesized into emerging themes and interpreted for meaning, as suggested by Taylor and Bogdan (1984). This was also done together with leaders in the investigated organizations. The findings were tested within the organization, primarily through workshops with the management team, but also with other parts of the organization for triangulation.

The planning and analysis of the study involved a shared effort by a research team of three members. I was a part of all TMT workshops and was responsible for one of the three initiatives.

Paper 3: This paper comes from the same study as paper 2. In this paper, seven (three of them the same as in paper 1) initiatives were followed through action research. This time, the research team investigated how the potential paradox of innovation and urgency could be resolved in a case of renewal and industry transition.

The data were collected continuously and gathered in learning logs. The research team grouped findings into emerging categories (Given, 2008; Taylor & Bogdan, 1984) and ended up with three relationships to manage when handling the tension created by urgency – the trust-engagement relationship, the success-failure relationship, and the operative-strategic relationship.

The same logic as for paper 2 was applied, with three researchers in the research team. In this case, I was a part of all TMT workshops and responsible for three of the seven initiatives, whereas the other researchers supported two each.

Paper 4: Paper 4 investigated corporate entrepreneurship. Master students, who were studying corporate entrepreneurship, were sent out in teams of two to three persons to established organizations to drive an entrepreneurial initiative. A total of 11 initiatives in 10 organizations were followed, each lasting 10 months. The students were asked to gather data on obstacles and levers for succeeding with corporate entrepreneurship and write down their findings in a structured format, writing down their findings in a structured format containing different perspectives on corporate entrepreneurship.

Each initiative had a coach who continuously supported and guided the data collection. I was in charge of coaching three of the eleven initiatives. In total, four researchers were involved in the study as coaches of initiatives, but the study design, data analysis, and writing were done by a team of two authors. I was the author in charge of deeply studying the vast data collected by the students. This author team then jointly analyzed the data from all 11 initiatives and coded them into categories, which were later developed into a conceptual model presented in paper 4.

Paper 5: This paper is conceptual, with illustrations from different leaders. It draws on interactions with organizations and leaders primarily during 2014–2018, which, together with previous literature, provided ideas for this paper. The main ideas were developed in four full-day learning sessions within the research team. The ideas and emerging model were thereafter

tested in three chief executive officer (CEO) summits, two chief human resources officer (CHRO) summits, and one transformation leader summit, hosted by the Center for Higher Ambition Europe and adjusted to its current form.

I was a part of all the learning sessions and led four sessions for testing the model, two in the CEO summits, one in a CHRO summit, and one in a transformation leader summit.

Four of the five papers have action research as the main method. In all these four papers, the action research was complemented by other qualitative methods, such as reflection sessions and semi-structured interviews. The data collection methods for each paper are summarized in Table 2.

Paper	Empirical context	Data collection methods	Main actors	Researcher role
Paper 1	Leaders from six organizations	• Action research • 40 TMT meetings • 19 rreflection sessions with CEO • 7 reflection sessions other with member of TMT • 2 two-day meetings/workshops • 14 interviews • Part taking in 5 strategy/vision processes • Part-taking in 7 innovative initiatives	• CEO • CHRO • Head of communication • Head of business development • Editor in chief • TMT	• Process consultant/ Facilitator/action researcher/workshop participant
Paper 2	Newsgroup, Media company	• Action research • Support in set up and execution of 3 innovative projects (also used for paper 3) • 8 Interviews (also used for paper 3) • 11 learning meetings (also used for paper 3) • Learning logs	• CEO • Head of business development • Editor in chief • Head of sales • TMT • Project leaders • Project groups	• Action researcher
Paper 3	Newsgroup, Media company	• Action research • Support in set up and execution of 7 innovative projects (3 of them the same as paper 2) • 24 interviews (8 of them also used for paper 2) • 28 learning meetings (11 of them also used for paper 2) • Learning logs	• CEO • Head of business development • Editor in chief • Head of sales • TMT • Project leaders • Project groups	• Action researcher
Paper 4	10 different organizations, 11 entrepreneurial initiatives	• Action research • 11 entrepreneural initiatives, each lasting 10 months • Data continously reported through action research (student teams as data collectors)	• TMT • Project leaders • Broader organization	• Action researcher
Paper 5	Conceptual	-N/A	N/A	N/A

Table 2. Summary of data collection

Table 2 demonstrates that there was extensive contact with the empirical environments. Of course, in phenomenon-driven research, it is important to spend time with the organizations to understand the problem deeply (von Krogh et al., 2012). I argue that this strengthens the trustworthiness of my research.

4.5 Research quality

A common way to evaluate research quality is to assess reliability, replication, and validity (Flick, 2009). However, these features were developed by primarily considering quantitative methods. Lincoln and Guba (1985) propose that trustworthiness is a more relevant criterion for qualitative research. According to them, trustworthiness comprises the following four aspects:

- Credibility,
- Transferability,
- Dependability, and
- Confirmability.

The following describes how the presented research corresponds with these four aspects.

Credibility: This refers to the believability of the findings and corresponds with the more traditional measure of internal validity. I have strived to continuously write down findings and reflections in a learning log in each study. According to Shenton (2004), this method enhances the credibility of qualitative research. Another suggested action to ensure credibility is to spend a lot of time in the field, sometimes referred to as prolonged engagement (Lincoln & Guba, 1985). Prolonged engagement means that the researcher strives to spend enough time to

- Appreciate and understand the context,
- Be able to detect and account for possible distortions in the data,
- Rise above his or her own preconceptions, and
- Build trust.

In the three studies, a vast amount of time has been spent in the field. In the third study providing data for paper 4, student teams collecting the data spent the most time in the field. In the conducted studies, I collected data from different parts and levels of the studied organizations, allowing for triangulation, which is also a strategy suggested to ensure credibility. Conclusions and proposals have been tested continuously with the different actors within the organizations to enhance credibility.

Transferability: Transferability relates to external validity, and determines whether the findings could be transferred to other contexts. The qualitative methods used in this thesis make it difficult to generalize the findings into conclusions about what is true or not in a positive way. I argue that it is possible to use the conclusions, models, ideas, and proposals generated in this research as starting points to a conversation about interpreting their fit to other contexts. The methods and design are written down, and, especially in papers 2 and 3, the research team has strived to provide thick descriptions. Thick descriptions refer to detailed descriptions of field experiences in which the researcher indicates patterns and puts them in context. This is suggested to enhance transferability (Holloway, 1997; Lincoln & Guba, 1985).

Dependability: To evaluate dependability – which relates to reliability – the process for conceptualizing the study, collecting data, interpreting the findings, and reporting the results is examined (Lincoln & Guba, 1985; Shenton, 2004). The research process has been continuously documented during the research projects. Moreover, the research process used for papers 2 and 3 has been tested both before and after collaborating with organizations, with good results. This could indicate that this method is dependable.

Confirmability: Confirmability parallels objectivity and reflects how the researcher has allowed own values and beliefs to interfere with the research process. Action research is, per definition, not objective (Argyris et al., 1985; Schein, 1987). Thus, I do not claim that this

research has been done with complete objectivity. Instead, my aim has been to be as open and transparent about my background, potential biases and preconceptions, both during the research process and when writing this thesis. In addition, as suggested by several authors, multiple investigators have been involved in these studies, which enhanced the possibility for discussions that exposed potential biases. In action research, members of the studied organizations could be considered as fellow researchers, which expands the investigating team and the potential for fruitful discussions.

4.6 Rigor and relevance

Several influential papers have been published in the past decades stressing the need for methods allowing the researcher to get closer to the organization (Birkinshaw et al., 2011; Mohrman & Lawler, 2012) through qualitative methods and engaged scholarship (Bansal et al., 2018) and to understand a practical phenomenon fully (Schwarz & Stensaker, 2016).

There is ongoing debate about where to put emphasis – on rigor or on relevance. There are, however, authors striving to put this debate to rest, arguing for a balanced view. Authors have proposed that rigor and relevance are complementary and need to be merged to facilitate the production, translation, and implementation of instructional practices that are both rigorous and relevant (Senge, 1990; Stokes, 1997; Vermeulen, 2005). I agree with this view and have strived to investigate a relevant phenomenon, allowing for different methods and perspectives (Schwarz & Stensaker, 2014) but still designing and following a rigorous research scheme. In the case of this research, the relevance of my research question for practice should be high. Since this research relies heavily on action research, special care to ensure rigorous processes has been taken. Still, I would argue that its relevance is a strong point of this thesis.

When conducting action research, it is not possible to be uninvolved or impartial. Rather, the researcher deliberately intervenes in the organizational activities and influences the outcome. It is therefore important to thoroughly consider various ethical aspects. One core principle that we have strived to apply in all studies is the aim to be helpful (Schein, 1987) to the organizations under study. Thus, we as researchers need to believe that the interventions we suggest or participate in are positive for the organization. Following that, it was important for us to understand the intentions of the management team and find a common ground for what we see as beneficial for the organization. Moreover, it was important for us to acquire deep understanding of the relevant literature to be able to propose interventions and activities, which, we can determine with some certainty, will have a positive – or at least not harmful – effect on the organization. I argue that our serious approach to the ethical questions of action research has given way to enhanced relevance as well as enhanced rigor. By striving to fully understand the management intent, we have gained understanding that made us zoom in on the most pressing, relevant questions. The need to design interventions that, we argue, would have positive outcomes forced us to focus on the rigor of the study.

5 Descriptions of studies, findings, and papers

This section describes the studies and findings. It starts by briefly describing each study and its main conclusions. This is followed by a description of the appended papers.

5.1 Studies and overall findings

5.1.1 Study 1 – Innovation and change in tightly aligned systems

This study was conducted in the media industry. Newsgroup (pseudonym) was a media group deeply troubled by the winds of change caused primarily by digitalization. This media group ran several newspapers on the west coast of Sweden. Most of them had been successful for many years, with almost identical business models over the years – revenue came primarily from advertisements and subscribers of the printed newspapers. With digitalization and mobile units, this stable model did not work anymore. As they had the option to read free news on mobile units, subscribers of physical papers were diminishing in number, and consequently the market for ads was diminishing as well. Although ads could be sold for digital papers, they did not seem to result in nearly the same returns as before. The organization had a difficult time innovating to keep up and was in deep financial trouble along with low morale due to extensive layoffs.

The research team from Chalmers, supported by a Vinnova grant, was brought in to collaborate with the TMT to increase the level of innovative work and promote change in the organization. At the start of the study, the TMT created a statement of direction with support from the research team. The environment was turbulent, and no one knew for sure where the media industry would end up. Therefore, the statement of direction could be considered as the best possible guess from the TMT about where the organization needed to go and what capabilities needed to be developed to survive and prosper in the future. Barriers and strengths for executing those ideas, as well as ideas for alterations in the direction, were gathered through a strategic fitness process (Beer & Eisenstat, 2004). This led to some alterations in the created direction and resulted in a plan forward.

Together with the TMT, it was decided to work in a new way to address the organization's inability to break out from its current way of working. It was concluded that there was great need for innovation, but that they had to solve it within the context of the current operation and with the current staff, primarily due to lack of resources. The TMT and the research team decided to collaborate to launch innovative initiatives in short cycles and with clear and overambitious result-driven targets (Schaffer & Thomson, 1992). These were directed and sponsored by the TMT and promised high potential with a high degree of freedom, and the work was performed by cross-functional teams representing the organizational system (see papers 2 and 3 for a fuller description). This work in short cycles opened the possibility of iterative learning for both the organization and research team – as suggested by, for instance, Coghlan and Brannick (2005)

The TMT decided, based on its updated statement of direction, to start three innovative initiatives, all based on a three-month timeframe. Each initiative had a sponsor in the TMT and

a researcher assigned in a supporting role. After 30, 60, and 90 days, a review meeting with the initiative driver, co-driver, sponsor, and researcher was held, with the focus on progress (Amabile & Kramer, 2011) and learning (Edmondson, 2008, 2011). Moreover, after all three initiatives had ended, the TMT met with the research team and initiative drivers to discuss the results, the system changes that had been made on the initiative level, and what needed to be addressed on a strategic level both in terms of direction and changes to remove barriers in the system.

Thereafter, after adjusting the direction slightly and building on the learnings, three new initiatives were launched, using the same procedure, followed by the other initiatives. A total of seven initiatives were carried out, with direct results, system adjustments on the initiative/local level, and learnings affecting the whole system on a strategic level.

This study resulted in papers 2 and 3 in this thesis. These papers primarily address the dynamics and set up for the innovative work in relation to the established organization and overall direction. Paper 2 aims to explain how this set up with underlying dynamics enables innovation and change in a tightly nested system. Paper 3, on the other hand, focuses on how the sense of urgency as an enabler for change could be turned into a barrier or enabler from innovative work. However, the study provides even more data and insights on the connection between innovative work, strategy, and system change, such as the following:

- How TMT can provide the direction while letting the direction emerge;
- How innovative work could directly affect the system at the local level (e.g., a case wherein a new local system and structure for collaborating between papers emerged through learnings from the initiative – see case A in paper 2 and initiatives 3 and 7 in paper 3);
- How the innovative work provided the TMT with learnings about the organizational system as a whole (e.g., where a new joint part was created and influenced future structures, processes, and ways of collaborating between units – see case B in paper 2 and initiative 5 in paper 3);
- How the innovative work provided the TMT with learnings affecting their ideas of strategy, direction, and prioritization (see, e.g., how Newsgroup learned how to build and utilize platforms for communication with their audience by setting up a successful platform for a Eurovision song contest in only three months – see initiative 2 in paper 3); and
- How a multitude of initiatives could be coordinated with fewer control mechanisms through continuous progress reporting.

These findings are discussed – although they are not in immediate focus – in papers 2 and 3 and they also contribute to the conceptual paper 5. Development of a more focused paper on these issues is planned.

5.1.2 Study 2 – Traditional models for change in a contemporary context

The second study aimed to understand how traditional, well-known, and frequently used models (see, e.g., Beckhard & Harris, 1987; Hayes, 2018; Kotter, 1995) and frameworks for change are

working for the needed organizational changes in a contemporary VUCA world. The organizations were chosen primarily based the following prerequisites:

- Organization in need of change on a system level,
- Need for a change that is explorative in character,
- A change effort/program/plan that is already initiated,
- Change at least partly to be done within the current structure/context, and
- Access to and relationship with the top management.

Through interactions with six organizations fitting the above description, data on the commonly agreed prerequisites for change were gathered. In all organizations, one or more members of the TMT provided the data; this was, in some cases, complemented by data from other managers. The change factors (derived from theory) emphasized in this study were as follows:

- Need for vision (Beckhard & Harris, 1987; Block, 2008; Kotter, 1995),
- Need for a clear process (Armenakis & Bedeian, 1999; Dannemiller & Jacobs, 1992),
- Need for urgency/dissatisfaction with the current state (Beckhard & Harris, 1987; Kotter, 1995), and
- Overcoming of resistance/costs of change (Cady et al., 2014).

The data showed that there were major problems with using these factors as guides for change in a contemporary context. In some of the investigated organizations, a clear vision about the future was perceived as impossible to create when considering a rapidly shifting environment. Following this, it was not possible to create a clear process. The data also showed that the sense of urgency was widespread and had led to action – but it seemed to inhibit creativity and innovativeness and increase fear of failure. For instance, the CEO in one of the studied organizations concluded that the pressure she put on the organization to move forward worked well to speed things up but was less effective to create new ideas. A sales person in another organization described how he and his colleagues were subject to constant messages about crises and how that led him to push himself to sell more – but it also inhibited him from trying something new out of fear of not succeeding. Moreover, some leaders in the study identified that they needed to think about the relations and emotions connected to resistance in new ways – they shared that since they could foresee that they will be in a constant state of change, they needed to work harder on installing trust in the organization.

On the other hand, this study showed some strengths of the above-mentioned factors for change. Leaders of all the investigated organizations stated that a sense of common vision/direction was even more important in times when there was rapid change and when a multitude of initiatives needed to be coordinated. Data showed that a sense of being on the right track together was important, although it was not possible to create a process as a ready-built road. Urgency and motivation were also perceived by leaders of the organization as important, but they needed to be framed positively rather than in a fear-provoking manner. These data provided insights to propose an early-stage framework, honoring the traditional models but adapting the components to fit a contemporary context, as presented in paper 1.

5.1.3 Study 3 – Corporate entrepreneurship and organizational change

The third study was done in collaboration with master students of corporate entrepreneurship and partner organizations, to investigate obstacles and enablers for corporate entrepreneurship in established organizations (Birkinshaw & Fry, 1998; Marvel et al., 2007). A total of 24 corporate entrepreneurship master students in teams of two to three were assigned an entrepreneurial initiative to drive within a corporate context for 10 months. All initiatives were sponsored by a senior manager in the partner organization and chosen to be in line with the overall organizational purpose/vision, but they were at odds with the current way of working and doing business. Another important prerequisite was that the corporate entrepreneurs (here, the master students) were granted freedom to explore, test, and execute their ideas. The students were asked to collect data on how to lead entrepreneurial initiatives and handle barriers and enablers posed by the established organization by studying the four relations between

- Corporate entrepreneurship and strategy/structure,
- Corporate entrepreneurship and culture/change,
- Corporate entrepreneurship and finance/key performance indicators/reward systems, and
- Corporate entrepreneurship and sales/communication.

Data were collected through action research and complemented by interviews and continuously noted and reflected upon together with the Chalmers research team. By driving the initiatives – at odds with the day-to-day business in each organization – the corporate entrepreneurs (master students) provoked the system to respond. This led to discoveries about barriers in both the structure and the culture. They also discovered mechanisms and actions to remove those barriers. The idea was to take a bottom-up approach on the relation between innovative/entrepreneurial work and the organizational system. Thus, rather than considering how management could create a system and context wherein innovative work and change could flourish, the research focuses on how leaders of innovative work could act to succeed.

The data were coded by the research team and developed into the model presented in paper 4. This model shows the importance for leaders of innovative work to use relational means to resolve tensions and overcome barriers. In addition, the data showed that entrepreneurial initiatives not only are a product of a system but also, on several occasions, affected the system. For instance, the learnings and results from one initiative made the TMT of that partner organization (Photo store in paper 4) change its formal vision as well as created a new business area that hired people with new skills. Another example was that one partner organization (Parking Inc. in paper 4) changed not only its organizational structure but also its cross-collaborative work processes and reward system after evaluating the results and learnings from the initiative.

5.2 Appended papers

The following section describes the appended papers by title, abstract, and summary of the main contributions. The chapter finishes with a discussion on how the conclusions of the five different papers contribute to answering my research question.

5.2.1 Paper 1

Title: Change models in need of renewal: Towards a framework for organizational development

Status: Revise and resubmit, *Journal of Change Management*

Authors and roles: This is a single authored paper. The study design, data gathering, analysis, and writing was done by me solely.

Abstract: Since Lewin famously proposed that change requires unfreezing, moving, and refreezing, a number of change models have been introduced, many of which include similar factors such as the need for a vision, a clear process, and to motivate change. A fast-paced, uncertain, and volatile world with disruptive technologies and distributed organizations affects the applicability of these models, as does the need for organizations to be ambidextrous. Based on collaborations with leaders in six organizations, this paper examines the problems that arise when traditional change models are used in a contemporary context. The discussion leads to an early stage proposal for a framework for contemporary change and answers a call from authors in the field for a discussion around the need for improved models for organizational change and development. It is also an attempt to give practitioners a contemporary model to refine and apply to their change journeys.

Contribution: Many authors agree that we need to find new ways to guide change efforts (Bartunek & Woodman, 2014; Pasmore & Woodman, 2017). Yet, both academia and practice continue to use traditional models (Worley & Mohrman, 2016). This paper contributes by proposing a framework, more in line with contemporary needs but using the fundamentals of traditional models (Beckhard & Harris, 1987) that have stood the test of time. This research argues that, in a contemporary context, a clear view of the future, advocated in many models, could be replaced by a stronger sense of purpose. A clear process could be replaced by a shared and continuous display of progress and the widespread notion of the need for urgency, and crises or dissatisfaction could be replaced by focusing on desire. Moreover, instead of considering fear and resistance as things that occur naturally as part of change and therefore need to be accepted and overcome, this work argues for considering emotions as assets to build to spur positive energy, trust, and hope for the future.

Previous research on this topic has often been conceptual (Pasmore & Woodman, 2017) or in the form of reviews (Rosenbaum et al., 2018). This paper aims to contribute by providing empirical insights. This will hopefully make the paper interesting for practice.

5.2.2 Paper 2

Title: Transformation in a tightly nested system: Employing fast cycles of change

Status: Published as a book chapter in the *Research in Organizational Change and Development* (*ROCD*)

Authors and roles: This paper has been co-authored with Professor Tobias Fredberg, and both authors contributed equally in the study design, data gathering and analysis, and writing. The

research team also included Professor Flemming Norrgren, who contributed in the setup of the study as well as in the field work. Three innovative initiatives are followed in this research, and the participating researchers were responsible for one each.

Abstract: A reason why industry incumbents seldom survive technology transitions is their strong reliance on an efficient, but inflexible organizational system. We studied three digital transformation initiatives that created fast progress in a struggling newspaper group by working against the industry logic and established thinking in the area. The paper argues that management succeeded in introducing a new strategic practice through these transformation initiatives. We focus on three factors contributing to the success: complexity management, short time development of a long-term vision, and the introduction of impossible goals.

Contribution: This work suggests a structure for organizing issues related to contextual ambidexterity (Gibson & Birkinshaw, 2004) in fast cycles of change. In the paper, it is argued that the setup of the projects provided the organization with a shortcut to overcome the lock-in created by the organizational fit (Christensen, 1997; Danneels, 2002; Henderson, 2006). The projects were designed to have some clear features: The time limit was set to three months. Moreover, the project teams included members from all relevant departments, but they were kept as small as possible and the scope of the task was reduced; however, performance demands far exceeded what was currently seen as possible. In the paper, we argue that these specifications provided room for managing some of problems with traditional change factors in a renewal context. The lacking broad vision was substituted for a narrow and clear one in the projects. The lack of clear process ahead was compensated by both clarity in the projects and the sense that the projects would build the road ahead. The sense of urgency was clearly present overall, but the extremely ambitious goals within the projects provided the teams with a sense that they could not lose, only win; this released the pressure.

5.2.3 Paper 3

Title: The double-edged sword of urgency

Status: Revise and resubmit, *Long Range Planning*

Authors and roles: This paper is co-authored with Professor Tobias Fredberg, and both authors contributed equally in the study design, data gathering and analysis, and writing. The research team also included Professor Flemming Norrgren, who contributed to the setup of the study as well as in the field work. For this paper, seven innovative initiatives were followed. Norrgren and Fredberg were responsible for two each, and I was responsible for three initiatives.

Abstract: A central idea in organizational research and practice is that change efforts demand a sense of urgency. It is also commonly accepted that renewal beyond incremental improvements of demand innovation and creativity. However, there is no consensus on whether a sense of urgency supports creativity and the ability to innovate and renew the organization. On the contrary, studies indicate that pressure may lead to less creativity and a focus on reducing errors instead of supporting progress. As authors in the change management field almost univocally support a sense of urgency as an important success factor, we find a contradiction

since urgency seem to both support and inhibit renewal. A lingering question is how this contradiction can be managed. In this paper, we explore the role of urgency in the context of organization renewal where innovation and creativity are required for successful change. Based on an experimental clinical study of seven change initiatives at a large media company undergoing a serious crisis, we found that the project team members managed the contradicting outcomes of urgency by addressing three core relationships: (a) the trust-engagement relationship, (2) the success-failure relationship and (3) the operative-strategic relationship. We provide insight into the resolution process. In doing so, we contribute to the understanding of innovation-driven change in large organizations by advancing the argument that contextual ambidexterity can be managed on a team level by expanding the understanding of individual or team-based practices that help manage the contradictions and tensions. This paper contributes to practice by suggesting an approach to fast-cycle change.

Contribution: Prior literature (Conner, 1992; Kotter, 2008) and practice almost univocally support the need for an organization-wide sense of urgency (dissatisfaction, crises, or burning platform) as a prerequisite for successful change. However, the way it is described, it is easy to assume that this urgency could lead to stress and pressure. It is clear from literature that stress and pressure are not beneficial for supporting innovation and creativity (Amabile & Kramer, 2011; Huy, 2005). Rather, positive emotions such as fun, hope, and trust seem to support a climate for innovation and creativity. In a time when leaps are greater and speed is faster, the need for organizations to support innovation and creativity from the whole organization is growing (Bartunek & Woodman, 2014). Thus, urgency seems to be beneficial for leaving the old way of working but potentially not for innovatively creating the future. Some organizations seem to manage this paradox by separating the old and the new. This work provides insights on how this paradox between a sense of urgency and the need for innovation and creativity could be resolved in contextual ambidexterity.

5.2.4 Paper 4

Title: Organization renewal through entrepreneurial initiatives: When the seed changes the soil

Status: Published as a book chapter in the *ROCD*

Authors and roles: This paper is co-authored with Professor Tobias Fredberg, and both authors contributed equally in the study design, analysis, and writing. Master students of corporate entrepreneurship, however, played an important role as data collectors. Moreover, several researchers/faculty at the Corporate Entrepreneurship Track, Chalmers School of Entrepreneurship, were involved in supporting student teams during their projects and in their data collection efforts. Of the 11 investigated initiatives, I was responsible for three.

Abstract: The literature on innovation/change predicts that entrepreneurial initiatives will be killed by the established organizational system. The general answer is to put innovations in separate units. This is not possible for corporate entrepreneurship initiatives, however. In this action research study, we focus on corporate entrepreneurship initiatives' strategies for survival. We collected data by following 11 corporate entrepreneurship initiatives as they were pursued. We summarize their effort in three transformation mechanisms: aligning with purpose, creating

trust, and creating attachment with autonomy. The data indicate that these factors not only contributed to the success of the initiatives but also to renewing the organizational system.

Contribution: This study takes the perspective of a corporate entrepreneur rather than of top management. Thus, it focuses on discovering what drivers of entrepreneurial initiatives can do to overcome obstacles encountered in the structure and culture of the established organization. The mechanisms described in the study (creating trust, aligning with purpose, and creating attachment with autonomy) contribute to literature on contextual ambidexterity (Birkinshaw & Gibson, 2004) by providing an agenda for leading innovative work to overcome tensions between the old and the new.

Normally, literature on corporate entrepreneurship focuses on how the system influences the capability of corporate entrepreneurship to flourish (Marvel et al., 2007; Sakhdari, 2016). This paper is no exception. However, it also discusses how the initiatives actually influenced the system.

5.2.5 Paper 5

Title: Towards a Model for Organizational Transformation: Managing Structural-Relational Tensions in Multi-stakeholder Value Creation

Status: Published as working paper, *IMIT research reports*, 2019:2.

Authors and roles: This paper is co-authored with Professor Tobias Fredberg and Professor Fredrik Hacklin, Vlerick Business School. The three authors developed the ideas jointly. However, the main part of the writing has been done by Tobias Fredberg and me.

Abstract: The paper aims to contribute to the development of a systemic model for organizational transformation, set in a complex context of continuous change, market ambiguity, organizational polyphony and multi-stakeholder value creation. Prior work has largely focused on relational aspects of change, or on the structural components of organizing innovative work. To uncover the dynamics of organizational transformation over time, a systemic model needs to integrate both dimensions, as well as a factor that represents direction, or movement. The paper evolves in three stages. First, we create a conceptual framework based on two research strands in organization change. The first one is the literature on the creation and recreation of stakeholder relationships. This issue has been discussed as either externally oriented involving strategic networks and inter-organizational relationships, or internally as social exchange theory. The second research strand is innovation and the specific question on organization design, commonly discussed as the ambidexterity problem. The combination results in a framework that puts focus on different organizational tensions that are experienced. Second, we discuss how these tensions are resolved through structural and relational means. Third, we situate the framework in complex context where the organization engages multiple stakeholders in its value creation. We make propositions regarding managerial tensions, their resolution, and what this means for organizational transformation.

Contribution: This study conceptually lays out a framework for how to set up a leadership agenda in contextual ambidexterity (Gibson & Birkinshaw, 2004). The ambidexterity problem is often seen as a structural question (Smith et al., 2010; Tushman & O'Reilly, 1996). This study proposes that it is beneficial to take both relational and structural perspectives on the issue.

This study also stresses that the contextually ambidextrous organization exists in the context of an organizational direction/vision/purpose/higher ambition (Beer, Eisenstat, Foote, Fredberg, & Norrgren, 2011; Senge, 1990), and therefore it should be seen as a vehicle for successful change. Moreover, a foundation of trust (Zak, 2017) needs to be built to cope with the rapid changes. This connection between the ambidexterity and a strategic change agenda contributes to literature on contemporary change (Johansen, 2017; Pasmore, 2015). The proposed model could also contribute to practice as a framework for leading change in a contextually ambidextrous organization. However, more research needs to follow to bring the model into practice.

5.2.6 The appended papers and their connection to the research questions

In Table 3, the main contributions from each paper are outlined in relation to the stated research questions in this thesis.

Paper	a) How can innovative work be organized in contextual ambidexterity?	b) How can innovative work be led in contextual ambidexterity?	c) How can innovative work be connected to the strategic change agenda?
Paper 1		• The new needs to be discovered and coordinated through purpose • Innovative work requires trust, safe space and positivie emotions	• More explorative, innovative capacity needs to be incorporated in change process • Capabilities for such as learning, creativity needed for contemporary change • Need for trust and positive emotions for facilitating innovative change • Desire facilitating creativity better than urgency • Display of progress could be a way to create a shared road ahead
Paper 2	• Clear goals with connection to strategic agenda compensate for fuzzy overall vision for future • Unreasonably high goals – to release creativity and avoid fear of failure • Complexity built in in team and task but short time frame and minimal demands on project structure		• Learnings from projects could be compiled to adjust the overall direction • Overall highl level purpose/direction as guide for explorative work • Direction and priorities continously updated
Paper 3	• Set up for aspiring for success rather than avoiding failure	• Trust and engagement to facilitate both innovativeness and efficiency	• Continuous exchange of learning between the operational and strategic level
Paper 4	• Connection to strategic change agenda central for success • Management attention central for success • Explorative work (here entrepreneurial initiatves) can influence the system, strategic agenda and direction	• Tension can be released through aligning on purpose • Tension can be released through focusing on trust • Attachment with autonomy as tranformation mechanism	• Management attention central for success • Freedom/autonomy for the entrepreneurial teams • Permission to go outside the "normal" processes and routines
Paper 5	• Direction and autonomy	• Relational release of structural tensions	• Leaders need to create the direction while letting it emerge: • Creating alignment while continuously re-aligning • Establishing processes while allowing flexibility • Leading from the top and from the bottom

Table 3. Connection between the appended papers and research questions

Table 3 shows that papers 2, 3, and 4 are the main contributors for answering research question a), complemented by paper 5. Papers 2 and 3 both specifically describe how the innovative initiatives in an established media group were organized. These papers explain how the organizing principles contributed to success and resolved potential conflicts between the old and the new. Paper 4 describes both structural and cultural obstacles for entrepreneurial initiatives to prosper and found some of the answers in the organization of the entrepreneurial work. The conceptual paper 5 also considered the organization of explorative work in an established structure. Research question b) is primarily addressed by paper 4, complemented by findings from papers 1, 3, and 5. One of the main findings in paper 4 is that the relational aspects of entrepreneurial work, such as creation of trust and commitment to purpose, are key focus areas when leading entrepreneurial initiatives in a case of contextual ambidexterity. Data for question c) are primarily provided by papers 1, 4, and 5, with additional findings from the other two papers. Especially, papers 1 and 5 mainly emphasize how strategic change and transformation are connected to explorative work. Upon compiling the findings, I argue that the discussion about the research questions is well supported by data from the five different appended papers. The discussion is also fueled by additional findings described in the section titled *Studies and overall findings*.

6 Discussion

The empirical data in this thesis point toward the need for a revised model to examine how to deal with change in a contemporary VUCA context, encompassing the need for organizations to be ambidextrous. In the first study in the media industry, leaders stated that it was impossible to clearly map out a desired future state – which is suggested in many change models (see, e.g., Hayes, 2018; Kotter, 1995) – in the middle of an industry transition. In the second study, several leaders described that they perceived that the whole organization had a sense of urgency (see, e.g., Kotter, 1995), but they did not perceived that the required actions were taking place. In all the studies, organizational members describe the need for more innovative behavior, faster pace, and a way of working in a continuous mode of change. These comments are consistent with recent literature proposing the need for new models for change (Bartunek & Woodman, 2014; Worley & Mohrman, 2016).

Leaders providing data to this thesis recognize the ambidexterity problem. They claim to be on a change journey on which they need to innovate, while under pressure to perform in accordance with the current model. In the media group providing the empirical context for papers 2 and 3, for instance, the top CEO described an urgent need for exploiting and refining the current business – but the CEO also argued that without radically innovative work, the media group would go out of business. In paper 1, leaders describe how they do not seem to find their way forward, neither by using their experience or existing management toolbox, nor by exploring literature to find models.

Much of the ambidexterity literature (March, 1991; Tushman & O'Reilly, 1996) focuses on the need to organize, balance, and manage tensions between exploitative and explorative work. Organizations investigated in this thesis need to find that balance, at least partially, through contextual ambidexterity, but they struggle to find mechanisms that support both logics within the same organizational entity. Previous research has outlined problems with contextual ambidexterity (Gupta et al., 2006; O'Reilly & Tushman, 2013), such as the following:

- It is difficult to manage two different logics in the same structure (Gupta et al., 2006).
- Innovation is harder to pursue when the established model needs to be safe guarded simultaneously (Kauppila, 2010).
- It is difficult to find a balance in resource allocation when leading both explorative and exploitive work (O'Reilly & Tushman, 2013).
- Radical and strategic decisions must be escalated to the top, which goes against the idea that contextual ambidexterity functions well when work is prioritized on a team or individual level (Gilbert, 2005).
- Contextual ambidexterity requires ambidextrous individuals with capabilities such as collaboration, multitasking, and initiative taking, which are not always easy to find (Birkinshaw & Gibson, 2004; Gibson & Birkinshaw, 2004)

Some of these problems are addressed in this discussion section. Leaders in the investigated organizations point toward another problem, however. They describe the problem in connecting the explorative and exploitive work in a way that collectively moves the organization forward in the desired direction. Models for change (Hayes, 2018; Kotter, 1995; Taffinder, 1998) are

often intended to direct organizational attention toward a common vision and mobilize the organization to move through a process toward that vision. Particularly the data presented in paper 1, as well as recent literature (Bartunek & Woodman, 2014; Pasmore & Woodman, 2017; Worley & Mohrman, 2016), point out that traditional models fail to acknowledge the importance of components such as innovativeness, polyphony, and speed. However, data in this thesis, as well as mentioned literature, indicate that a common vision and direction are more important than ever when organizations need to let a multitude of initiatives flourish to keep the organization together and coordinate without controlling. Bonchek (2016), for instance, points out the importance of that a shared sense of direction and purpose as well as a shared set of decision principles (doctrine) provide a way for leaders to let go of control and encourage innovativeness.

Thus, although literature on ambidexterity provides support for examining how to structure organizations with a dual focus on exploration and exploitation, it does not provide extensive insight on how ambidexterity could be connected to a strategic change agenda or a process for change. Change models can bring clarity about the process for change, but many models do not consider the need for innovativeness and ambidexterity. In addition, I argue that many traditional models in use consider change as a process between two aligned organizational systems rather than as a continuous interplay between exploration and exploitation. The findings of the conducted studies point toward the possibility to combine key aspects of these streams of literature into an improved framework that re-conceptualizes the relationship between contextual ambidexterity and change.

Based on the findings presented in the five papers, I discuss how innovative work can be a component for mastering change in the case of contextual ambidexterity. In this thesis, mastering change does not relate to the ability to design the perfect process for change, but rather the ability to continuously mobilize the organizational system to respond and adapt. This corresponds with the systems view of change (Beer & Eisenstat, 2000; Burns, 2007).

This chapter is structured to correspond with the research question (main question and sub-questions), as outlined in Figure 5.

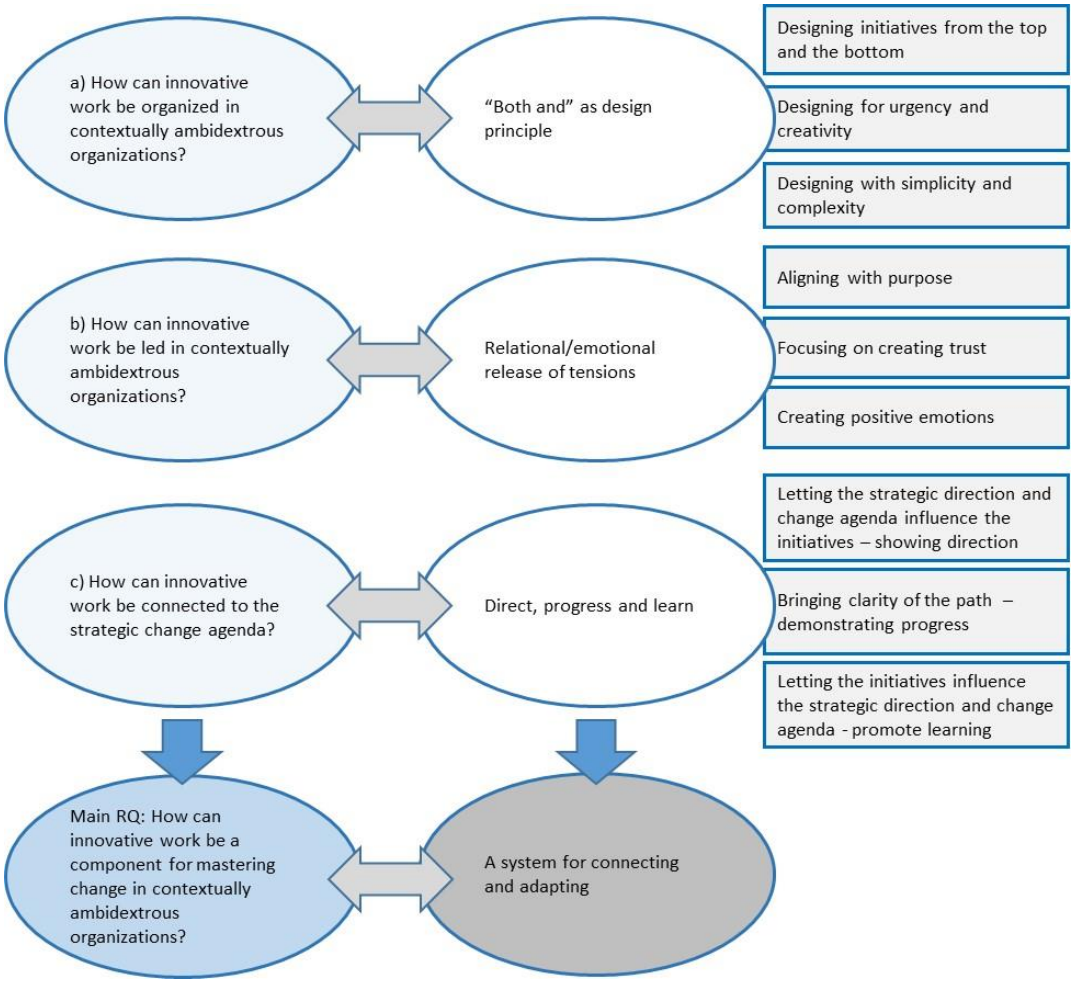

Figure 5. Outlay of discussion and relation to research question. RQ = research question.

I argue that when gaining a thorough understanding of the phenomenon, it is useful to include multiple levels of the organizational system. Hence, I present and discuss findings on the level of the innovative initiatives as such as well as on the strategic management level. The argument is that these levels need to be connected as a system for better understanding of the investigated problem. I put forward ideas on a) how the explorative work could be organized in contextual ambidexterity, b) how explorative work can be led from a relational perspective, and c) how a change journey can combine the direction and polyphony by taking advantage of being contextually ambidextrous. This chapter finishes with a proposed model for how innovative work can be a component for mastering change.

6.1 Organizing explorative initiatives in contextually ambidextrous organizations: Both-and as a design principle

In this section, I discuss the first research question a) How can innovative work be organized in contextually ambidextrous organizations? I propose three design principles as indicated in Figure 5. As previously defined, I have studied how innovative initiatives not only produce an actual result but also affect the established organizational system and/or strategic agenda.

Therefore, I focus on the innovative work and its relation to the established organization and exploitive work.

Literature promoting contextual ambidexterity often emphasizes the benefits of putting both exploitive and explorative work in the same structure, such as integrational advantages (Kang & Snell, 2009; Wang & Rafiq, 2014), low transition costs (Simsek et al., 2009), and potentially efficient use of resources (Birkinshaw & Gibson, 2004). Moreover, characteristics of the context wherein contextual ambidexterity can flourish are discussed in previous literature, for example, a context characterized by stretch, discipline, support, and trust (Birkinshaw & Gibson, 2004). Less is discussed in literature about how the explorative work should be organized. To shed light on this issue, I discuss findings from the innovative initiatives investigated in papers 2 and 3 (study 2), as well as findings from 11 corporate entrepreneurship initiatives in paper 4 (study 3). The initiatives and projects discussed in this thesis, although different in content and set up, could all be characterized as explorative work in an established context in organizations pursuing contextual ambidexterity. The characteristics of these initiatives can also be related to modular transformation (Dunphy & Stace, 1993) or unit-by-unit change (Beer et al., 1990a); the difference is that the initiatives in this research are not necessarily hosted by one organizational unit, but rather by temporal, cross-functional structures.

Papers 2, 3, and 4 find different paradoxical relationships to manage when organizing explorative work in contextual ambidexterity. The three principles I found to be important for organizing explorative work in contextual ambidexterity are as follows:

- Designing from the top and the bottom: This implies that the overall focus area and direction should be imposed from the top. The specific targets should be a negotiation between the top and bottom, and the work content of the initiative/project should be an issue for the project team.
- Designing for urgency and creativity: This principle means that there is a need to combine the pressure to act with a space where it is safe to explore.
- Designing with simplicity and complexity: This principle points toward the need to adopt a simple project structure and goal formulation with minimum administration to allow for enough speed and encourage acting rather than investigating. Simultaneously, the principle illustrates the need to embrace the complexity of the organizational system and its surrounding environment when putting together a team to create solutions to address a challenge rather than just a part of a solution.

Below, each principle is explained in more detail.

Designing initiatives from the top and the bottom: The first both-and principle indicated in Figure 5 involves designing both from the top and the bottom. Although literature on exploration focuses on the freedom to search (Shani et al., 2009), take risk, experiment, and be playful (March, 1991; Shani et al., 2009), studies contributing to this thesis show that they also need boundaries to work in contextually ambidextrous organizations. Paper 4 describes 11 entrepreneurial initiatives, each driven by student teams within established organizations. The study uncovers structural and cultural issues creating barriers for the initiatives' success. A

major conclusion was that one key factor for removing those obstacles – referred to in the paper as the transformation mechanism – was to create close and clear connections with the organization's overall purpose. This is in line with the idea that a shared purpose could create possibilities for both adaptability and autonomy and help leaders let go of control (Bonchek, 2016). The connection with a shared purpose – or a higher ambition (Beer et al., 2011) – is also discussed on a conceptual level in paper 5. In paper 5, it is argued that a dual focus on direction and autonomy is needed to succeed with innovation and entrepreneurship within an organization.

In papers 2 and 3, innovation was pursued in explorative work in breakthrough projects. Breakthrough projects in this context were temporary structures, with short timeframes and wherein team members were sanctioned to participate but had freedom to allocate their time in relation to their ordinary work. Paper 2 concludes that a success factor of these projects was that they were directly derived from the top management's strategic agenda, and hence they were designed from the top. This seemingly contributed to the team members sensing the importance of the projects. Moreover, all projects had a TMT sponsor, who could both support the projects and keep them relevant for exploitation. This is also suggested as a success factor for corporate entrepreneurship (Marvel et al., 2007) to overcome a similar problem of gaining legitimacy in an established organization. The project sponsor was ultimately responsible for setting the goal – in close collaboration with the project leader and colleagues in the management team. This gave a shared sense of direction or purpose, which, in turn, seemed to allow for autonomy and innovativeness.

The very tough goals in the projects discussed in papers 2 and 3 played an important role in pushing the explorative agenda. The goals were deliberately set on a level that could not be reached without innovative thinking and behavior. Moreover, the projects teams, their TMT sponsor, and the whole TMT were in joint agreement about how tough the goals were. In paper 2, one team member was quoted stating that these very high goals created a sense that there was only a chance of winning and not a risk of losing. Arguably, this promoted risk-taking and experimentation, in line with the suggestions from, for instance, March (1991) and Gupta et al. (2006).

The explorative initiatives described in papers 2, 3, and 4 all had clear guidance from the top, but the initiatives' design also provided autonomy for the teams and individuals leading the initiatives. The project teams entered the breakthrough projects (papers 2 and 3) with set, high goals, but they had almost unlimited freedom to design the process for solving the challenge. The short timeframe pushed the teams to start experimenting and taking risks, which has been identified as a needed explorative behavior (March, 1991). This is also in line with activities that literature on dynamic capabilities would include in sensing (Teece, 2007). Apart from the short timeframe and goals, a minimal project structure was imposed on the teams. The project leaders and their teams were encouraged to design their projects from start to finish by themselves – thus, the design was also from the bottom. As discussed in paper 2, the simplicity in structure but complexity in teams – with members from different parts of the organization – made it possible to design all the way to a proposed solution and goal achievement, freeing up

the solution space. This is in line with the idea that a bottom-up approach needs to be taken to achieve contextual ambidexterity (Ghoshal & Bartlett, 1994; Gibson & Birkinshaw, 2004).

Management attention is claimed to be key for succeeding with innovative work in established organizations (Van de Ven, 1986). The issue of management attention could be a way to touch upon a solution to the problem wherein radical and strategic decisions need to be taken at the top (O'Reilly & Tushman, 2013). Paper 2 describes how the projects had a clear connection with the strategic agenda, explicit goals, and high attention from the top team. Continuous conversations between the project and top team sponsor helped push radical decisions to the top, while allowing judgement to rule the priorities within that framework.

Another identified challenge in pursuing contextual ambidexterity is resource allocation (O'Reilly & Tushman, 2013). The data in this thesis do not answer this challenge completely. In innovative projects in the media industry, as described in papers 2 and 3, individuals needed to be contextually ambidextrous (Birkinshaw & Gibson, 2004). Thus, they needed to use their judgement and allocate time to both exploitive and explorative work. In some projects, this seemed difficult in the beginning, and the explorative projects lost the initial battle of resources when the pressure increased. However, the data indicate that engagement for the explorative work increased as the projects picked up speed and showed progress and when management showed interest in the result. In the corporate entrepreneurship initiatives (paper 4), the explorative work was allocated to teams (Lavie et al., 2010). A combination of high attention and commitment from the management seemed to protect this explorative work. When the corporate entrepreneurs needed input and resources from the regular business, they described the importance of their freedom to work independently on, for instance, creating trust and a connection purpose. This could indicate that designing from the top and the bottom could be a useful framework to use when discussing resource allocation in contextual ambidexterity.

To some extent, the findings in papers 2, 3, and 4 question the above addressed problem wherein contextual ambidexterity does not promote radical innovation (Kauppila, 2010). For instance, in paper 2, one described project was able to sell an advertisement through a radically new tool based on big data in only three months, and in paper 4, one entrepreneurial initiative created a new business area with a radically different business model and affected the agenda of the company going forward.

Designing for urgency and creativity: In this section, the second suggested design parameter is discussed – designing for urgency and creativity (see Figure 5). Many authors on change advocate an organization-wide motivation for the change ahead. This motivation has, for instance, been described as dissatisfaction with the current state (Beckhard & Harris, 1987; Cady et al., 2014) or a sense of urgency (Kotter, 2008). It is frequently argued that this sense of urgency must be conveyed by bringing threats from the external environment to attention and conveying messages of pain (Conner, 1992). The findings in paper 4 point toward identification and the feeling of comfort in the current business as a problem for innovative/entrepreneurial work to gain foothold, indicating that a sense of urgency would be beneficial. In paper 4, however, the data also point toward the opposite – that pressure from a turbulent environment (in, for instance, the media business or mobility business) could result in an emphasis on

efficiency in the current business, in line with findings from Christensen (1997), thereby neglecting innovation. Hence, it seems that organizations need to both create a sense of urgency and refrain from it.

In paper 1, the assumption that urgency and dissatisfaction are indisputably beneficial in organizational change is challenged. Leaders of six organizations describe issues with applying traditional models for change in a contemporary context. In five of the organizations, leaders clearly perceived that they had managed to convey urgency but did not see the actions they needed in terms of innovation and creativity. This is in line with literature stressing that creativity is evoked through positive emotions (Amabile & Kramer, 2011; Huy, 2005) rather than pressure. Both papers 2 and 3 bring up the potential tension between the need for urgency and pressure and the simultaneous release of creativity and innovativeness. Paper 2 describes how the urgent situation in a media company under severe pressure seemed to provoke action but inhibit creativity. In paper 3, urgency is discussed as a double-edged sword – potentially both necessary (as a motivation to leave the old behind) and detrimental (when producing stress, which could inhibit creativity) for change.

In papers 2 and 3, it is described how the urgent situation from the industry transition was accentuated in the investigated projects, through the tight timeframe, high management attention, and seemingly impossible goals. However, the pressure did not seem to block creativity, as it was described to do by leaders in paper 1. In paper 3, it was concluded that the set up and monitoring of the projects provided a space for psychological safety (Edmondson & Lei, 2014), characterized by trust, commitment, and fun. These positive characteristics seemed to support creativity, playfulness, and learning (Huy, 2005) – capabilities needed in explorative and innovative work (March, 1991; Rosenkopf & Nerkar, 2001).

The findings in papers 1, 2, 3, and 4 point toward the need to design innovative work with both urgency and creativity. In short, this seemingly paradoxical design principle could be put to action by keeping the overall pressure of an urgent situation, but by creating a container of trust and positive energy that is free from fear of failure and promoting progress to spur creativity. Important factors for creating such a container include accentuating the sense of being in a team and working toward a tough but clear goal in collaboration with management. In addition, it seemed important that the team was trusted to solve the evolving problems and not only to identify or investigate them.

Designing with simplicity and complexity: The third proposed both-and design parameter, described in Figure 5, is to design with simplicity and complexity. Complex structures and rigid processes are often referred to as obstacles for innovation in established organizations (Shani et al., 2009; Wei et al., 2014). This is confirmed in paper 4, which outlines several structural issues blocking the entrepreneurial initiatives, such as strong and/or time-consuming processes, requests for detailed plans and business cases, stage-gate models, and rigid roles.

In an established environment, the processes and structures are often optimized for efficiency and revised incrementally, in contrast with the dynamic and iterative processes required for innovative work (Winby & Worley, 2014). Thus, these types of processes and structures might

be efficient to create an alignment in the current business, but they seem to block more explorative work. Consequently, many authors advocate that it is difficult to incorporate explorative and exploitive work within the same organizational structure (Gupta et al., 2006; Tushman & O'Reilly, 1996). This has been put forward as a reason to pursue structural ambidexterity before contextual ambidexterity. However, the projects discussed in both papers 2 and 3 were set up with a simplified structure, only giving guidance for the basics – the goal, team, and monthly check-ins. The projects were clearly connected to the overall strategic agenda but detached from the normal processes. Moreover, the data in paper 4 reveal that success of the initiatives came when they deviated from the normal processes and structures. This demonstrates that innovative initiatives can gain acceptance in an established organization, even if they do not follow the normal processes and procedures. I argue that the set-up/design of the initiatives contributed to the acceptance.

The task and goal of the projects and initiatives were all difficult and required a broad range of knowledge, relations, and activities. As an example, in one breakthrough project in the media industry, as described in papers 2 and 3, it was decided that section two in all paid newspapers in the group should be 80% the same – affecting the local journalism, the heart of the newspapers. This complex task, requiring radically new ways of working in terms of technology, journalism, logistics, and sales, was to be completed in only three months, in a context wherein every change affecting journalism was usually planned, slow, and incremental. Instead of setting up large complex projects structure-wise, the complexity of the tasks was mirrored in the teams (papers 2 and 3) by creating cross-functional, multi-level representation. In the entrepreneurial initiatives (paper 4), the same type of complexity in competence was invited into the initiatives through continuous contact points with different parts of the organization. For instance, the corporate entrepreneurs continuously conducted cross-functional workshops and interviews with representatives for different parts and levels. It could be argued that the projects had the whole represented in the parts, as discussed by Van de Ven (1986), as the organizational complexity was represented in the teams. This is consistent with the thinking on system change – that the whole system needs to be addressed at the same time (Beer & Eisenstat, 2000; Burns, 2007). How to address the whole system in change work has been discussed before (Beer & Eisenstat, 2004; Burns, 2007), but, specifically, the use of innovative/entrepreneurial projects to address system change has not been extensively investigated.

The breakthrough projects in papers 2 & 3 and the entrepreneurship initiatives in paper 4 shared some common features represented by the design parameters just described. They were all directed but not top-down controlled and connected to the strategic agenda. This is in line with the conceptual model discussed in paper 5, wherein connection to a shared purpose/ambition and trust are proposed as key for providing a relational release to structural tension. These types of explorative initiatives in established organizations could also be a way to address the need for polyphony, as discussed in paper 1 and called for by authors such as Bartunek and Woodman (2014) and Pasmore and Woodman (2017).

I argue that the design principles presented in this section create the structure for innovative work to succeed in a contextually ambidextrous organization, thereby complementing literature

that describes context (Ghoshal & Bartlett, 1994) and individual capabilities (Birkinshaw & Gibson, 2004). The design parameters could also support polyphony (Bartunek & Woodman, 2014) in the change process, by encouraging both direction and initiative taking.

6.2 Leading explorative initiatives in established organizations: Relational release of tensions

In the previous section, I proposed ideas for how innovative initiatives should be designed. In this section, I attempt to answer research question b) How can innovative work be led in contextually ambidextrous organizations (see Figure 5). Data indicate that an appropriate design of initiatives is not enough for them to succeed. Rather, structural and cultural obstacles posed by the established organization need to be overcome by preparing the organizational context, as proposed by Birkinshaw and Gibson (2004). Previous literature discusses how the new and innovative can be perceived as a threat to the organization, expressed as the not-invented-here syndrome (Antons & Piller, 2015). Moreover, literature on change has identified how introduction of new technology or ways of working can evoke resistance and fear (Beer, 2007; Coch & French, 1948; Lawrence, 1969). In the following section, problems identified in the organizational context are described, followed by an outline of the three focus areas for removing obstacles and releasing tensions.

The most prominent structural obstacle identified in paper 4 was the rigidity and lack of speed in processes, confirming findings from previous authors (Shani et al., 2009; Wei et al., 2014). This was not found in the breakthrough projects in papers 2 and 3. These projects were already approved as being of special types from the beginning. The short timeframe, high targets, and high management attention were very different from how the projects were normally driven in the media company. These projects were already awarded permission to deviate from the standard procedure. Another obstacle produced by the established organization was the lack of time and space to learn and exchange ideas. This could be a sign of problems in balancing resources in contextual ambidexterity, as identified by, for instance, O'Reilly and Tushman (2013). This problem was even more prominent in the projects discussed in papers 2 and 3. The members of those projects still put most of their time on their ordinary, more exploitive work. Some of the project managers reported, especially initially, the problem of obtaining commitment from the team members. A last identified structural obstacle, as shown in papers 2, 3, and 4, was that the established organizations were silo oriented and/or had few possibilities for cross-functional collaboration. Thus, the investigated organizations seemed to be set up to strengthen only parts of the organization (Van de Ven, 1986), but the innovative work needed contributions from representatives from the whole organization to deliver a full solution.

Cultural/behavioral obstacles were also reported by the corporate entrepreneurs in paper 4. One obstacle had to do with employees with a strong identity in the current model. This could be compared with previous research showing that resistance to change could be strong when members of the organization are afraid of losing status (Rock, 2008; Trader-Leigh, 2002) or the sense of identity (Beer, 2007). Fear of failure was also brought up as an obstacle in three organizations in paper 4. This is also discussed in papers 2 and 3 as an obstacle. Previous research has discussed how organizations can take a promotion or prevention approach

(Higgins, 1997). Prevention is beneficial when moving away from a perceived threat, whereas promotion is beneficial for aspirational goals. How different focuses could be relevant when attempting to lead innovative work in relation to the exploitive work could be an interesting perspective to investigate further.

It seems clear from both previous research and papers appended in this thesis that there are challenges connected to the interface between explorative and exploitive work. Previous literature has primarily focused on what can be done by management to release tensions (Wang & Rafiq, 2014). In this section, I attempt to focus on a more bottom-up approach. Based on the findings in the appended papers, I find three main areas that seem to shape the context in a bottom-up direction:

- Aligning with purpose: To release energy and overcome tensions, connecting with a purpose shared by the whole organization seems important.
- Focusing on creating trust: An unexpected amount of effort to create relations and trust is necessary when leading explorative work. When the exploitive part of the business trusted that the explorative work was done to reach a shared and meaningful purpose, the potential for fruitful collaboration between the old and the new increased.
- Creating positive emotions: Data in this thesis show that leading innovative initiatives in established structures demands a focus on creating positive emotions, not only within the team but also outside the team. Hope, fun, and a sense of inclusion in the progress toward a promising future seems important to ensure creativity, engagement, and acceptance of the innovative work.

These areas have, of course, been discussed before as the focus of leadership, especially in a in a VUCA world (Johansen, 2017). In this case, however, I focus on important areas for project leaders of innovative work, not leadership in general. Below, each area is described further.

Aligning with purpose: In this section, I discuss aligning with purpose – the first of the three suggested focus areas for leaders of innovative work – as indicated in Figure 5. Paper 5 elaborates on the role of a shared purpose or higher ambition to facilitate contextual ambidexterity and release tensions between the old and the new. It argues that a shared purpose can be a way to create both direction and autonomy while simultaneously allowing for optimization of the current business model. Moreover, paper 1 strengthens the idea that a shared purpose allows for creativity and innovativeness within the framework of an established organization, especially in the context wherein the future is difficult to grasp.

In paper 4, in the 11 initiatives, the corporate entrepreneurs recorded their actions to remove obstacles and succeed with their projects. While coding the data, aligning with purpose emerged as a clear category. By actively engaging with the organizational purpose, the corporate entrepreneurs in paper 4 seemed to create a connection with the current business while being allowed autonomy – referred to as attachment with autonomy in paper 4. This constant contact between the innovative work and established organization is also mentioned in the subsection titled *Designing initiatives from the top and the bottom*.

Aligning an organization toward a shared purpose has previously been discussed as crucial by change literature (Bonchek, 2016; Senge, 1990). This has often been described as the responsibility of top management. Paper 4, however, describes aligning with purpose from the perspective of leaders of innovative initiatives. The corporate entrepreneurs in six of the initiatives clearly demonstrated activities to align with the overall organizational purpose. This seemed to be a key mechanism to manage the interface between established organizations. They did this in various ways, such as by questioning decisions with arguments based on the company vision or communicating how the initiative was connected to the overall purpose in different meetings. Purpose has been discussed in previous literature as a facilitator between alignment and adaptability (Bonchek, 2016) and for collaboration for innovation (Maria et al., 2010). However, its role in facilitating a bottom-up approach in contextual ambidexterity, which I advocate in this section, has not been to my knowledge thoroughly explained before (O'Reilly & Tushman, 2013; Turner et al., 2013).

Focus on creating trust: Focus on trust is proposed as a second relational/emotional component for leading innovative work in contextual ambidexterity (see Figure 5). In paper 4, creating trust (Dougherty & Hardy, 1996; Zak, 2017) is described as a key mechanism to adopt when leading innovative work for overcoming structural and cultural obstacles. In addition, Birkinshaw and Gibson (2004) identify trust as key for achieving contextual ambidexterity. However, they emphasize more on trust as a component in the context that management should target to create. In paper 4, the focus is on the entrepreneurs and how they can lead to contribute to trust. The data show that the corporate entrepreneurs spent much more time networking and creating relationships than expected. Moreover, they describe the relationship with and support from management as crucial for building trust, which strengthens the argument of Van de Ven (1986) that managerial support is key for innovation in an established organization.

In paper 3, the trust-engagement relationship is described as important for turning pressure into energy for change instead of friction. This paper argues that trust, to a large extent, comes from the close collaboration between projects and management. This is in line with the argument of Amabile and Kramer (2011) that leaders should work as catalysts to enable risk taking. A close collaboration between different levels in an organization, characterized by trust, could also be connected to ideas for system change (Beer & Eisenstat, 2004; Johansen, 2017).

Creating positive emotions: Apart from creating trust and aligning with the purpose, papers 1, 2, and 3 discuss, to some extent, the role of an aspirational approach (Higgins, 1997) and positive emotions (Johansen, 2017). This is the third suggested focus area for leading innovative work in contextual ambidexterity (see Figure 5). Previous literature on change proposes that models fit for a contemporary context need to encourage creativity, initiative taking, and innovativeness in the whole organization (Bartunek & Woodman, 2014). Previous research also suggests that these abilities primarily come from positive emotions (Huy, 2005). Findings in this thesis confirm this suggestion.

Papers 2 and 3 put forward how the framework of the innovative work, with great freedom, high attention, and very aspirational goals, seemed to evoke the team spirit of fun and hope, which in turn released creativity and collaboration. In paper 1, a member of an investigated

organization was quoted discussing that the overall communication was more focused on conveying threat and urgency than hope. The data indicate that this led to action but not the innovative action they needed. This could be connected to the findings by Huy (1999), who claims that hope is crucial for mobilizing for radical change. The absence of fear and presence of hope, fun (Huy, 2005), and engagement seem to open up conversations and create interest to bridge the gap between the established and new models. This could strengthen the argument of Johansen (2017) that leaders of the future need to find ways to convey positive energy.

In Figure 6, the findings from sections titled *Organizing explorative initiatives in contextually ambidextrous organizations: Both-and as a* design principle and *Leading explorative initiatives in established organizations: Relational release of tensions* are combined.

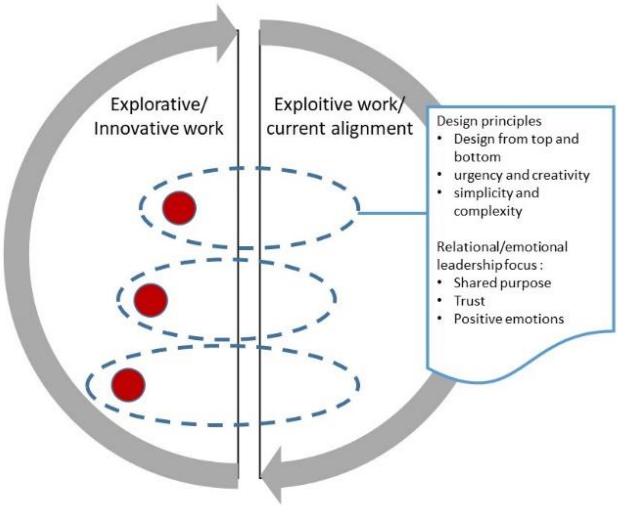

Figure 6. Connecting the innovative initiatives to the current alignment/established model and system

First, Figure 6 indicates that the explorative initiatives/projects (red dots) must be designed for anchorage (here symbolized by the oval shape – dashed line indicating a temporal connection but not a stable structure) in the exploitive work and the current organizational system, as described in previous sections. In the innovative work investigated in this thesis, this anchorage was demonstrated to come from different sources – such as management support and involvement, shared resources, and clear connection to the strategic agenda. To strengthen the anchorage and create a context wherein the innovative work seemed to be awarded enough freedom and yet enough attachment to the established work, three both-and relationships were found – described as design principles in Figure 6. This could be a way to combine the strengths of structural and contextual ambidexterity. These projects were encouraged to work autonomously in an innovative and entrepreneurial way – consistent with suggestions from proponents of structural ambidexterity (Smith et al., 2010; Tushman & O'Reilly, 1996). Still, their constant anchorage in the current business ensured relevance and integration, suggested as advantages of contextual ambidexterity by, for instance, Wang and Rafiq (2014).

Second, designing innovative initiatives with the both-and principles did not seem to be enough to overcome some structural and cultural tensions. Leading innovative work in organizations under pressure to deliver its current promises arguably requires a relational/emotional

leadership focus. Thus, to be accepted into the established model, explorative initiatives need to be led in a way that considers relational and emotional resistance (Beer, 2007). By aligning with purpose, creating trust, and focusing on creating positive emotions, the innovative ideas seemed to be granted the needed autonomy. In previous literature, these relational/emotional prerequisites for avoiding resistance and promoting a context wherein innovation can flourish (Birkinshaw & Gibson, 2004) has been primarily explained as the responsibility for management. In this thesis, I argue that this responsibility needs to also trickle down to leaders of innovative work in an established organization.

The outer arrows are meant to indicate a flywheel, with continuous, mutual exchange between exploration and exploitation. Recourses, knowledge, and relations in the current alignment can be shared with the explorative work, utilizing strengths with contextual ambidexterity identified by previous research (Birkinshaw & Gibson, 2004; Kang & Snell, 2009). The explorative initiatives (red dots) – when successful – are meant to move into the exploitation domain, thereby continuously renewing the organization. Through the constant structural and relational interplay between the old and the new, the transition seemed to be smoother, as suggested by Simsek (2009). Previous research has stressed that not enough is known about the cultural and structural mechanisms that would allow such an integration (Wang & Rafiq, 2014). The principles suggested in this thesis could contribute to enhancing the understanding of that issue. Moreover, I argue that this exchange between exploration and exploitation that could form the basis for an idea of ambidexterity as a process for change, wherein the explorative initiatives ensure the polyphony and innovativeness asked for by Bartunek and Woodman (2014) and pull the organization forward through a change process by continuously exploiting the initiatives with great potential.

6.3 Mastering the intersection between the innovative work and strategic change agenda: Direct, progress, and learn

This section aims to answer research question c) How can innovative work be connected to the strategic change agenda? (see Figure 5). I discuss which mechanisms need to be in place to take advantage of the outcome of the innovative initiatives and, thereby, consider contextual ambidexterity as a core process in strategic change. O'Reilly and Tushman (2013) describe a variety of areas in which the ambidexterity construct has been applicable, for instance regarding learning (March, 1991), organizational design (Rivkin & Siggelkow, 2003), and innovation (Smith et al., 2010). Less has been said about how ambidexterity connects with the overall strategic change agenda and system.

In paper 1, the leaders in six organizations are on a strategic change journey. They all use change models (Hayes, 2018; Kotter, 1995; Taffinder, 1998) and frameworks but do not perceive that these models provide support for innovative work. Previous research has concluded, consistent with these findings, that major/radical innovation has not been well connected with system change (O'Connor, 2008). All leaders providing data to paper 1 lead organizations where at least parts of the innovative work is being done within the established structure, hence they pursue contextual ambidexterity. Still, the ambidextrous way of working does not seem to take a prominent role when the leaders work on their change agenda. In paper 5, a framework is

introduced, proposing how leaders can set up an agenda to promote both explorative (called new in paper 5) and exploitive (called renew in paper 5) work in the direction of higher ambition. This is also touched upon in paper 4. However, how this work can unfold over time is less discussed in papers 4 and 5.

In papers 2, 3, and 4, the connection between innovative work and the management team as well as the strategic agenda was emphasized as a success factor, consistent with findings from, for instance, Van de Ven (1986). Mainly, the papers discuss how the initiatives in paper 4 and projects in papers 2 and 3 are derived from the strategic agenda. However, both papers 2 and 4 describe how the innovative work contributed to strategic change. In study 1 (papers 2 and 3), the research team interacted with the TMT during three cycles of innovative initiatives and could observe how the system and strategic direction were continuously adapted based on learnings from the initiatives. Below, three mechanisms for connecting innovative work to the strategic change agenda are described;

- Letting the strategic agenda influence the initiatives – prioritizing and demonstrating the direction: This mechanism shows how the direction can be clear while letting go of the control of detail.
- Letting the organization build its way by displaying progress: Innovative initiatives need to be autonomous, and hierarchical models for coordination and control seem counterproductive. A continuous display of shared progress could serve as a coordinating mechanism while simultaneously shaping a road toward the future.
- Letting the initiatives influence the strategic direction and change agenda – promoting learning: The finding in this thesis shows the importance of the learnings from innovative work being transferred to top management for adjusting the system, direction, and strategy.

Letting the strategic direction and change agenda influence the initiatives – prioritizing and demonstrating the direction: Papers 2, 3, and 4 all propose that a connection with the overall change agenda and strategy is key for success in the explorative work. This relates to the core routines of agile organizations, wherein the connection to the organizational purpose and strategic intent are described as crucial (Williams et al., 2013). Papers 2 and 3 propose that the urgency to succeed partly came from the awareness that the projects were directly derived from the strategic agenda and that the management attention was high. In paper 4, the corporate entrepreneurs described how they managed to tap into the overall organizational purpose, which seemed to have enhanced the possibility for the initiatives to be accepted and integrated into the organization. How a continuous connection to a more long-term strategic direction could be designed is less explained in paper 2 and 3, however.

Previous literature around change has extensively discussed different components, factors, and steps that need to be in place for change plans to be executed successfully (Armenakis & Bedeian, 1999; Kotter, 1995; Rosenbaum et al., 2018). Literature on change on a strategic level, requiring system change (Burns, 2007), often describes the need for a vision, process, and motivation for change (Beckhard & Harris, 1987; Cady et al., 2014; Kotter, 1995). Recently, authors have advocated that these models and frameworks do not provide enough room for components such as learning (Worley & Mohrman, 2016), speed, polyphony, (Bartunek &

Woodman, 2014), and creativity (Huy, 2005). Problems with traditional models for change are also discussed in paper 1. The conclusions in that paper point toward the following: 1) The need for management to sketch out a direction is still valid in a contemporary context. 2) The contemporary environment makes it difficult to craft clear visions and plans. 3) Traditional models for change do not leave enough room for innovation to match the contemporary context. The lack of theoretical connection between innovation and system change is also discussed by O'Connor (2008). Thus, leaders need to plan the change ahead while simultaneously making room for explorative work. The ability to do so could be considered a dynamic capability (O'Connor et al., 2008). However, the capabilities are embedded in a nested system that needs to be aligned and seen as a whole. This is also discussed in paper 5 as the need for creating a direction and autonomy within a system, in line with what Bonchek (2016) discusses as alignment and autonomy.

It seems necessary to find ways to accept the need for management to create a strategic direction and propose a plan for the change ahead, while simultaneously allowing for adjustments. This is consistent with findings from research regarding agile management and organizations (Williams et al., 2013). Previous research (Bonchek, 2016; Johansen, 2017) and findings in paper 1 suggests that a common sense of direction is equally important in a contemporary context – although it is harder to determine in a fast-moving world. Teece (2018) argues that "the strength of a firm's dynamic capabilities determines the speed and degree to which the firm's idiosyncratic resources can be aligned and re-aligned consistent with the firm's strategy" (p. 366). It could be argued that leaders in a volatile world need to provide clarity by proposing a direction and provide space to the organization to find ways to adapt. This is similar to the idea of creating attachment with autonomy, as proposed in paper 4.

Providing a clear direction for the change ahead while refraining from detailing the agenda could also make way to embrace the polyphonic nature of change (Bartunek & Woodman, 2014). A critical way of embracing polyphony and innovativeness is letting go of control (Bonchek, 2016) and instead encouraging judgement (Birkinshaw & Gibson, 2004). A contribution of this thesis to change literature is the clear demonstration of the importance of creating a strong connection between the strategic agenda and innovative work – as discussed especially in paper 2 and 4 – to embrace and utilize the polyphonic nature of change. As discussed by Teece (2018), this connection must be updated continuously.

Letting the organization build its way by displaying progress: Change models often argue for the need for management to come up with a clear process for the change ahead (Beckhard & Harris, 1987; Bridges, 2009; Kotter, 1995). I argue that creating a clear process ahead is difficult when simultaneously embracing the need for adaptability and flexibility. However, data in this thesis show the need for a sense of clarity about the road toward a common direction. I argue that this need could be fulfilled by continuously displaying shared progress in the organization. In paper 1, demonstration of shared progress toward a vision or purpose is proposed as a substitute for creating a clear process. Hence, when the road toward the future is hard to explain, continuously and strategically presenting examples demonstrating our collective journey could be a way to build the path while working on it. Therefore, I propose

the enhanced role of shared progress – amplifying the findings of Amabile and Kramer (2011) to a more strategic level – in relation to the direction.

Clearly compiling and displaying the shared progress can have many benefits. The learnings from the progress could adjust the direction. Moreover, it could be a way of creating a coordinating mechanism, making sure the organization is on the same track. In a contemporary context, the coordination of initiatives seems to be key, as discussed in papers 1 and 5.

Letting the initiatives influence the strategic direction and change agenda – promoting learning: Both change literature and ambidexterity literature often take a top-down view. Top-down planned approaches have been criticized over the years (Brown & Eisenhardt, 1997; Tsoukas & Chia, 2002); however, these models are still used in both research and practice (Rosenbaum et al., 2018; Worley & Mohrman, 2016). Some authors, however, discuss that initiatives can affect the organizational system and organizational direction (Baden-Fuller & Stopford, 1992; Beer et al., 1990a). Paper 4 discusses how entrepreneurial initiatives influenced the organizational system, purpose, and direction. The outcome of one initiative in the photo industry literally affected and changed the company vision. In the parking industry, the CEO of the organization described that learnings from the initiatives influenced the organizational system – such as the direction, organizational structure, and method of organization for innovation. Paper 4 identified structures for continuous learning opportunities between the initiatives and top management as key mechanisms.

Paper 2 discusses how the combined learnings from several projects created the next version of the top management strategic change agenda and influenced several components in the organizational system. This way of creating continuous learning conversations could help overcome the problem with top managers needing to make strategic decisions, an identified barrier for succeeding with contextual ambidexterity (Gilbert, 2005). Creating a structure for iterative learning between initiatives/projects and top management could be a part of a routine (Gibson & Birkinshaw, 2004) that creates a beneficial context for contextual ambidexterity. In addition to creating a structure, papers 2 and 4 also discuss how the intersection between the top management change agenda and explorative work needs to be characterized by trust (Zak, 2017) and a sense of being in the same team (Rock, 2008). Thus, creating a routine or structure does not seem to be enough without an environment of trust and open communication (Senge, 1990).

To summarize, in this thesis, three major components are identified as crucial to connect the innovative work to change, as illustrated in Figure 7.

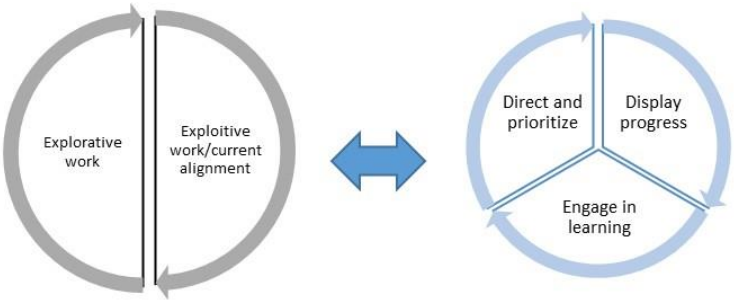

Figure 7. Components of the change process domain

In Figure 7, two flywheel processes are demonstrated to create a connected and adaptive system – the ambidextrous organization – in which new ideas continuously need to be included in the established way of working, and there is a process of creating space for learning, adjusting the direction, and displaying progress. These flywheels need to be connected in continuous iterations to create a change journey, guided from the top but powered from the bottom.

In this thesis, it is argued that a strategic change journey benefits from being roughly sketched out by management (see paper 1) to provide support and direction, bring people together, and demonstrate progress. At the same time, organizations should not only allow entrepreneurial initiatives, explorative work, and polyphony, but also learn from them. Thus, the road ahead is simultaneously created from the top and the bottom. Literature on system change (Beer & Eisenstat, 2000; Burns, 2007; Galbraith, 2014; Nadler & Tushman, 1980) often refers to strategies to change the whole system from the top. In this thesis, it is argued that system change, in a fast-paced and volatile world, is better approached by changes/initiatives initiated from the top and the bottom simultaneously. In the first study in the media industry, innovative initiatives derived directly from the strategic change agenda – and learnings and results from the innovative work – were used in TMT workshops to create the next version of the direction and make changes in the organizational system. This was described by the TMT as key to success.

A similar argument is made by Beer and Eisenstat (2004), who describe the need for management to learn about blockers and enablers for strategy execution by the whole organizational system through honest conversations. In this thesis, however, an even stronger role of the bottom-up approach is advocated, wherein learnings and ideas from explorative work have direct impacts on the strategic agenda and system. This could be a way to combine planned and emergent change, as suggested by, for instance, Livne-Tarandach and Bartunek (2009).

6.4 Mastering change in contextual ambidexterity through innovative initiatives

In the above discussion, I have outlined three areas to work on when aspiring to master change through innovative work in contextual ambidexterity: a) It requires efficient ways to design explorative initiatives to be successful in contextual ambidexterity. b) Innovative work in

established contexts requires careful relational leadership. c) It requires organizations to manage ambidextrous work in connection with the strategic agenda. In this section, by combining insights from these findings, I propose a change model built on the continuous connection between the old and new to facilitate system adaption.

Literature on models for change (Armenakis & Bedeian, 1999; Cady et al., 2014; Kotter, 1995) often points to the need for direction and process, but it lacks an understanding of innovation, speed, and polyphony (Bartunek & Woodman, 2014; Worley & Mohrman, 2016). Literature on ambidexterity (Smith et al., 2010; Tushman & O'Reilly, 1996), on the other hand, often encompasses these features but focuses on how to design for both exploration and exploitation and manage the balance, rather than on the connection between the direction and the strategic change agenda. Research on other topics relevant to this thesis, such as dynamic capabilities or corporate entrepreneurship/innovation, rarely cover both the direction of change and the need for an ambidextrous, fast-moving organization – with some clear exceptions such as Teece (2018) and O'Connor (2008).

I propose a framework wherein the idea is to consider the interplay between innovative initiatives and the established, contextually ambidextrous, organization as an engine in the change journey. The framework is presented in Figure 8.

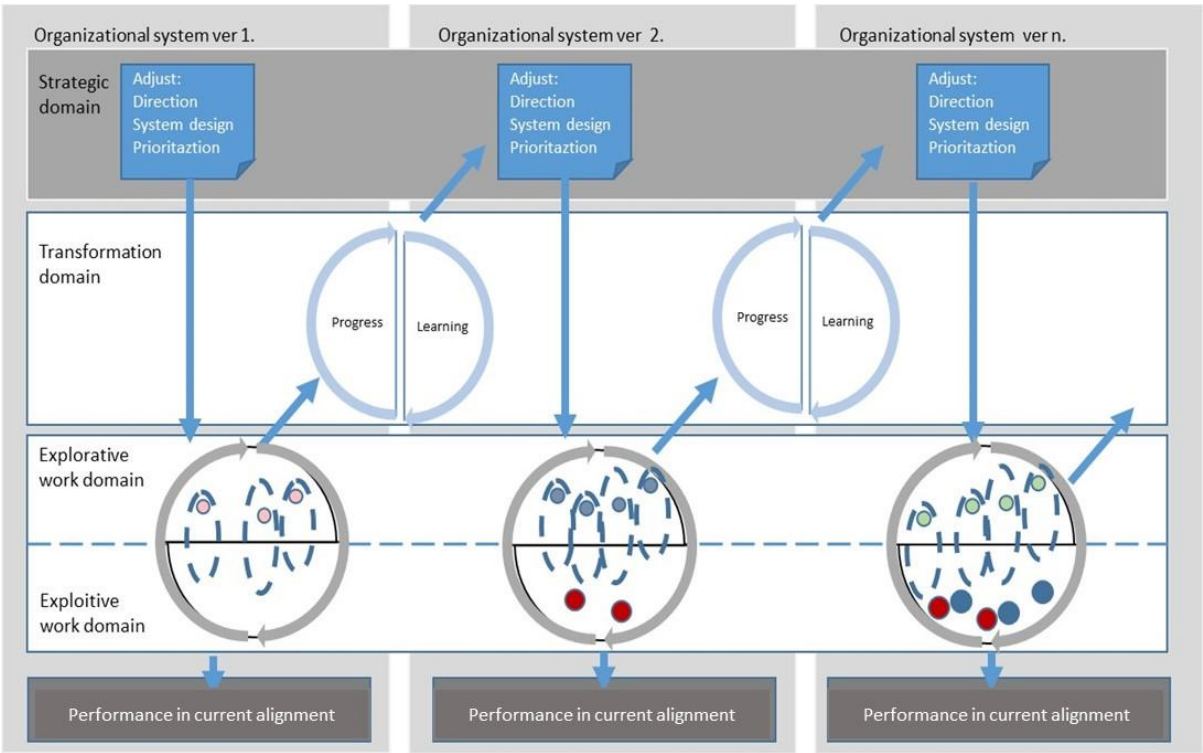

Figure 8. Model for mastering change in contextual ambidexterity

The above model argues for a process that continuously adjusts the direction, system, and priorities (strategic domain). The explorative work is shaped by the strategic agenda and designed to test the ideas in fast cycles (work domain). After each cycle, progress toward the direction is displayed and learnings are aggregated (transformation domain) – this, in turn, provides opportunities for adjusting the direction, system, and priorities. Successful innovative

initiatives – already connected to the exploitive work – are meant to grow to be exploited and, in time, be a driving force for change. In the model, this is symbolized by some of the pink dots in the explorative work domain that grow stronger in size and color (red dots) and move to the exploitive work domain in the next system alignment. Similarly, some of the new initiatives in this alignment (light blue dots) move to the exploitation work domain in the following system alignment (dark blue dots). Thus, the core of the organization that delivers the performance is in constant change.

This model proposes a change journey that needs to be guided from the top, but in which the power comes from creating a contextually ambidextrous engine, constantly working to innovate and integrate what seems to be working. According to research presented in this thesis, that engine needs to be culturally (purpose, trust, and positive emotions) and structurally (initiatives designed with both-and as principle) fitted together. However, to take advantage of such an engine, I argue that the transformation domain needs to be more concerned with creating space for learning (Edmondson, 2008; Worley & Mohrman, 2016) and displaying progress (Amabile & Kramer, 2011) than building firm plans and detailed processes. Without finding routines for compiling data and learning from the explorative initiatives, its full potential for impacting the change journey would not be reached. Furthermore, in the strategic domain, compiled learnings could alter the direction, resulting in new priorities for the organization. Therefore, I argue that there needs to be a strong routine for connecting the innovative part of the ambidextrous organization, the space for learning, and progress toward the shared direction and strategic/directional domain.

7 Conclusions and implications

7.1 Conclusions: Innovative work powering a system for connecting and adapting

This thesis argues that innovative work can be a component for mastering change, wherein the contextually ambidextrous organizing of work can be seen as an iterative process. When connecting explorative work with the current operation, the results in terms of both progress and learning can imply the need for changes in both the direction and organizational system. Through fast cycles of learning between the strategic domain and actual work, an adaptive system can be created.

The reasoning in the discussion section of this thesis leads me to conclude that innovative work can be a component for mastering change through its role in creating a connected and adaptive system. I argue for four concepts, presented below, that promotes this role:

- Connect the explorative and exploitive work through structural and cultural means,
- Consider ambidexterity as a process for change,
- Support a practice promoting learning, display of progress, and strategic adaption, and
- Guide from the top, learn from the bottom

Connect the explorative and exploitive work through structural and cultural means: What are considered as explorative initiatives in the current version of an organization would become the exploitive core in the next version. To succeed in a contextually ambidextrous organization, I argue that the innovative work needs to be constantly in contact with the established organization.

I find that if the innovative projects/initiatives are to survive and be exploited, they need to tap into an environment of trust, purpose, and positive emotions. Connecting the innovative work with the overall purpose also safeguards the relevance, applicability, and legitimacy of the explorative work.

Moreover, I argue that the explorative and exploitive worlds need to be connected through the design of the innovative initiatives. Thus, in contextual ambidexterity, the innovative work needs one foot in the established world and one in the new world. This could be achieved by applying the both-and principles discussed above. These findings primarily contribute to literature on contextual ambidexterity by proposing a structure for integration between exploration and exploitation, as called for by Wang and Rafiq (2014).

Consider the ambidextrous organizing as a process for change: Literature on ambidexterity sometimes gives the impression that an ambidextrous organization is the goal itself (see, e.g., Papachroni et al., 2016). I argue that the ambidextrous organization – like any organization – is only a means to an end. Therefore, I propose that the interplay between the explorative initiatives/projects and the established organization, wherein the explorative work gets integrated to be exploited, should be considered as an opportunity to learn for future strategic adjustments as well as for executing on priorities.

Hence, I argue that the focus should shift – from ambidexterity as an organizational issue to ambidexterity as part of an iterative process for shaping the direction, adapting the systems, and executing change. This proposal opens up new discussions on the benefits of contextual ambidexterity (Gibson & Birkinshaw, 2004). Moreover, it could support the development of a change model including polyphony and speed, as asked for by several authors (see, e.g., Bartunek & Woodman, 2014).

Support a practice for shared progress, learning, and strategic adaption: To utilize the innovative initiatives as components for change, this thesis argues for the importance of continuously consolidating and displaying progress on a shared road toward the future. In this way, a shared sense of progress could be created. Additionally, this research shows that the innovative initiatives investigated not only tested the direction and contributed to progress but also provoked reactions in the system, which, in turn, provided insights and learnings.

To fully take advantage of the innovative initiatives, there should therefore be a clear mechanism to aggregate and utilize learnings about the direction and the system. Additionally, practices, culture, and capabilities to quickly adapt need to be developed. How to develop these features is not investigated extensively in this thesis and needs further research. This is potentially continuing the agenda for understanding the relation between innovation and system change (O'Connor, 2008).

Guide from the top, learn from the bottom: This notion is of course not new. However, in this thesis, I find that it still needs to be emphasized. Organizations exist in a VUCA world (Horney et al., 2010; Johansen, 2017), and the future is difficult to predict. Still, an organization and its members seem to need direction and guidance. I would argue that they need direction and guidance for being able to prioritize what should be tested in the explorative, polyphonic work. The learnings from that explorative work must be fed back into the direction-shaping activities in fast cycles to enable an iterative way of shaping the system and direction. In this way, the need for clarity and shared meaning could be fulfilled, while allowing an iterative adaptive organization to find its path while walking on it.

This proposal could contribute to the work on agile organizations (Williams et al., 2013), by adding a dimension of practical mechanisms to the core routines described in the section titled *Agile organizations*. Moreover, this could continue a conversation about connecting the top and bottom for successful system change (Beer & Eisenstat, 2004) by suggesting a stronger role of testing innovative ideas for shaping the version of an organizational system.

7.2 Implications

This section outlines the main contributions of this thesis to theory and practice. Below, I try to distinguish the specific contributions for academia and practice. I strive to focus on the most important contributions in relation to my research question.

Since this is a phenomenon-driven research (Schwarz & Stensaker, 2014), where the starting point was a problem in practice, my hope is that both academics and practitioners can benefit from the findings equally.

7.3 Implications for theory

I argue that this thesis contributes to a new understanding of how innovative initiatives can be a component for mastering change in a contextually ambidextrous organization. This is a contribution since previous literature on contextual ambidexterity primarily focuses on investigating the circumstances under which contextual ambidexterity could and should be achieved (Ghoshal & Bartlett, 1994; Gibson & Birkinshaw, 2004) or the potential benefits (Ghoshal & Bartlett, 1994; Simsek, 2009; Wang & Rafiq, 2014) or downsides (Khazanchi et al., 2007; O'Reilly & Tushman, 2013) of solving the ambidexterity problem contextually.

I argue that this thesis contributes to this stream of literature by proposing ideas on how explorative work can be organized in a contextually ambidextrous organization. Previous research concludes that the explorative and exploitive work benefits from different structuring and organizing (Gupta et al., 2006; Tushman & O'Reilly, 1996). I do not argue against this point. However, this thesis argues for a way of organizing innovative work with the basic principles of exploration as the core, but with careful consideration of the established structure and exploitive work in the set up. This resulted in three design principles – designing from the top and the bottom, designing for urgency and creativity, and designing with simplicity and complexity – as described in the section titled *Organizing explorative initiatives in contextually* . These principles could complement previous work on contextual ambidexterity, which often emphasizes more on context rather than the actual explorative work (Birkinshaw & Gibson, 2004; Gordon & McCarthy, 2011). Moreover, these principles could contribute to the development of a structure for promoting integration in contextual ambidexterity, as asked for by Wang and Rafiq (2014).

I also argue that the research presented in papers 2, 3, and 4 shows that it is possible to pursue radically new ideas in exploratory form within an organization. This contradicts the argument that radical innovation or exploration needs to come from the outside (March, 1991) as well as the criticism that radical ideas are difficult to pursue in contextual ambidexterity (Kauppila, 2010).

This thesis also contributes to the ambidexterity literature by emphasizing the leaders of innovative work in cases of contextual ambidexterity. Previous research has outlined several structural and cultural obstacles for driving innovative work in an established context (Marvel et al., 2007; Van de Ven, 1986; Winby & Worley, 2014). Several researchers point toward structural solutions to these problems, advocating that ambidexterity is best pursued structurally. In this thesis, however, the findings point toward relational/emotional aspects as keys for overcoming barriers and release tensions between the new and established models. Researchers have brought up relational/emotional aspects before. For instance, trust is mentioned as a key aspect for success in solving ambidexterity contextually (Birkinshaw & Gibson, 2004; Gibson & Birkinshaw, 2004). This thesis strengthens the relational/emotional argument by adding the importance of a shared purpose and positive emotions. Moreover, in previous research, the relational/emotional component is described as a part of a context mainly created by management. In this thesis, I argue that this context can also be created by corporate innovators.

The last contribution in relation to literature on ambidexterity is the argument that the discussion would benefit from a new focus. Parts of previous literature have a preponderance toward discussing ambidexterity as an end goal - as something that organizations should strive to achieve (Gibson & Birkinshaw, 2004; O'Reilly & Tushman, 2013; Papachroni et al., 2016). In this thesis, I argue that more emphasis should be put on how an ambidextrous organization should be used in relation to the set direction/purpose. Hence, as any organizational design, an ambidextrous design in only a means to an end, not as a goal. I argue that the exchange between the established organization and innovative work should be seen as a part of a strategic change process, contributing to both the execution and ongoing reshaping of a strategic direction and system.

This thesis also contributes to literature on change. It is of increasing importance to understand change in a fast-paced world (Johansen, 2017; Pasmore, 2015; Reeves & Deimler, 2011). Still, as argued by Beer (as cited in Fredberg & Pregmark, 2017), the research community is struggling to fully understand system change. Both theory and practice seem, to some extent, to be stuck in old models and frameworks. In recent calls for new and improved frameworks and models for change (Bartunek & Woodman, 2014; Pasmore & Woodman, 2017; Worley & Mohrman, 2016), it is argued that many models (Beckhard & Harris, 1987; Kotter, 1995; Taffinder, 1998) in use today are not up to date with the contemporary context, for instance, regarding the need for tempo, polyphony, creativity, and innovativeness. This thesis attempts to answer that call.

I argue that seeing explorative initiatives in contextual ambidexterity as part of the change process could be a way of incorporating more of polyphony and innovativeness, as called for by, for instance, Bartunek and Woodman (2014). If an organization pursues contextual ambidexterity, it follows that parts of the operative work is exploratory in character. I suggest that the exploratory work is formed in initiatives in close connection with the current alignment (see Figure 6). These initiatives could fuel the change process with ideas, developments and system adjustments in a polyphonic manner – in line with an overall direction but at odds with the current way of working.

Previous research has advocated that ambidexterity could be seen as a dynamic capability (O'Reilly & Tushman, 2008), thereby pointing toward a connection between ambidexterity and change. However, the mechanisms or routines for how to connect ambidexterity to the strategic agenda or system change are less investigated, as discussed by O'Connor (2008). In this thesis, I do not claim to have the full answer to these questions but argue that the findings point toward the strong impact of creating a domain for escalating learnings from innovative work to the strategic domain.

This thesis provides ideas for how organizational change in a contemporary context could be led from the top but be powered from the bottom, which could be seen as a development of ideas from authors advocating a combination of planned and emergent change (Beer & Eisenstat, 2004; Liebhart & Garcia-Lorenzo, 2010; Livne-Tarandach & Bartunek, 2009). Beer and Eisenstat (2004) argue for a process wherein the strategic direction (developed by the top team) is tested for barriers and enablers for execution through honest conversations with the

organizational community. This thesis proposes a similar idea but with two distinct differences – a) the learnings from the system do not rely only on conversations with the organizational community, but also on the system reactions to real innovative work, and b) the innovative work is designed to not only test a direction but also shape the direction. Thus, by proposing ways to continuously learn from explorative initiatives, the direction can be clear enough to give guidance but flexible enough to be altered.

Previous research lays out different models for describing an organizational system (Galbraith, 1984, 2014; Nadler & Tushman, 1980). This thesis does not add to the understanding about different components of a system. Rather, it seeks to address the process and mechanism that is necessary to be in place for connecting the different levels in an organization and contributing to system change. Although Nadler and Tushman (1980) explain the different components in their version of an organizational system, they are less clear on what the process for change would entail. In this thesis, I aspire to do the opposite – I lay out ideas for a change process that could affect the system, but I focus less on explaining different components of the organizational system.

7.4 Implications for practice

Keeping up with pressure to change, innovate, and adapt while simultaneously delivering on the current promises are key issues for practice. Leaders and organizations providing data for papers in this thesis confirm this notion. This research contributes with high-level understanding of components of a change journey, potentially putting new demands on leaders in a contemporary world. The proposals in this thesis point toward a model incorporating innovative work in a continuously ongoing change process. Both previous research and data in this thesis show that this is a common problem in practice.

This thesis provides tangible ideas for how to practically design explorative initiatives in contextual ambidexterity. The design principles presented could be used as a starting point for leaders attempting to pursue explorative work in the organizational context wherein the exploitive work is performed. This could prevent innovative ideas from encountering the not-invented-here syndrome. It could also support a practice wherein leaders of innovative work are encouraged to pay more attention to relational/emotional aspects when connecting to the established organization.

The thesis stresses the importance of connecting the strategic domain with the organizational reality. Many leaders seem to have good practices in place for how the work (exploitive or explorative) should be influenced by the set strategic direction. Fewer processes and practices seem to be in place to ensure that the actual work can influence the strategic direction and the design of the organizational system. Research presented in this thesis gives indications of mechanisms that need to be in place for organizations to continuously learn and adapt. Connecting different levels in the organization as well as different parts could help leaders to better understand the system. Moreover, it could help leaders – sometimes stuck in old frameworks – to connect with great ideas from the front line.

Previous research shows that most change efforts fail (Jacquemont et al., 2015). I hope that research presented in this thesis could contribute to increasing the effectiveness of change efforts in organizations.

7.5 Delimitations

I argue that I have a rich set of empirical data from the field to draw conclusions from. However, the nature of this data has some issues to consider. First, all organizations but one (Webserv, paper 1) are Scandinavia-based organizations. Although some of them are global organizations, they have their base in Scandinavia, many of them with primarily Scandinavian TMTs. This has potentially influenced the data, conclusions, and their transferability to other parts of the world. Moreover, no quantitative data have been collected for this thesis. Although I argue that the methods chosen are appropriate for the research question, I see potential to further test ideas by conducting quantitative research as well. Moreover, as an action researcher, it is not possible to determine that no biases or preconceptions have influenced the research.

When studying the innovative initiatives described in papers 2, 3, and 4, I have interacted with multiple levels in the organizations, but the follow up interviews have mostly been done at the middle management and TMT levels. This can potentially have skewed the data and analysis, since the organizational community on other levels potentially could have contributed with other perceptions and interpretations.

In this thesis, my main aim has not been to thoroughly investigate under what circumstances contextual ambidexterity is the most viable approach, Rather, I have tried to contribute to ideas on how to make innovative initiatives work in contextual ambidexterity. Moreover, this research focuses on explorative work in contextual ambidexterity and its connection to change. There are most likely situations where no such connection exists. I have not considered these situations.

In the research, I take a systems perspective on organizations. Hence, I have aspired to relate the findings to the organizational system and have chosen the research method to be able to engage with multiple levels and parts of the studied organizations. I have not, however, strived to add to theories and models explaining components and connections within a system.

Moreover, other streams of research point toward the need to widen the scope of what should be included when researching organizations. Networks are gaining in importance, gig economy is winning ground, and customer-driven innovation is a hot topic. In this research, however, I have primarily emphasized work within an organization.

This thesis attempts to examine a phenomenon that is well-known in both practice and academia. I do so by discussing different levels, angles, and streams of literature. However, there are, of course, pieces missing from the puzzle. For instance, the role of the organizational structure has not been extensively investigated, nor has a deeper investigation on the capabilities needed for different roles and levels been conducted. The issue of resource allocation has only been discussed briefly and would need further investigation. These – and other – angles could shed more light on the issue.

Lastly, I want to recognize that I do not claim to have uncovered the one and only solution to mastering change through innovative initiatives in a case of contextual ambidexterity. Neither do I claim that the findings, if applied, would perfect any change journey. Rather, I consider the findings and conclusions from this thesis as a framework, wherein agents of change could find guidance to consider themselves equipped to master change and shed light on the phenomenon as such.

7.6 Implications for future research

This doctoral thesis has discussed mastery of change in contextual ambidexterity. It attempts to incorporate innovative work in contextual ambidexterity into a change journey. However, researchers increasingly emphasize that change should be seen not as a process but as an organization (Johansen, 2017; Satell, 2014). In addition, many authors advocate that future organizations need to be less hierarchical and rely on mechanisms other than hierarchy. Johansen (2017) discusses the need for creating and leading shape-shifting organizations, continuously re-focusing energy, attention, activities, and structures. How to design such an organization needs further research, however.

In addition, researchers stress the need to increasingly incorporate a wider community of stakeholders in the research on organizational issues. As the boundaries of an organization become blurrier, research on organizational change increasingly needs to consider stakeholders outside the organization as key players. How to change in such an eco-system with multiple stakeholders needs further research.

The conclusions and proposals in this thesis do not fully take on the challenge of new demands of shape-shifting organizational designs nor the challenge of understanding organizational change in an ecosystem. It would be interesting to investigate how the findings presented in this thesis could be used as a contribution for designing such a shape-shifting, boundaryless organization.

In Figure 9, I hypothesize how the framework concluding this thesis could be reworked into a model for organizing constant re-directing and re-shaping.

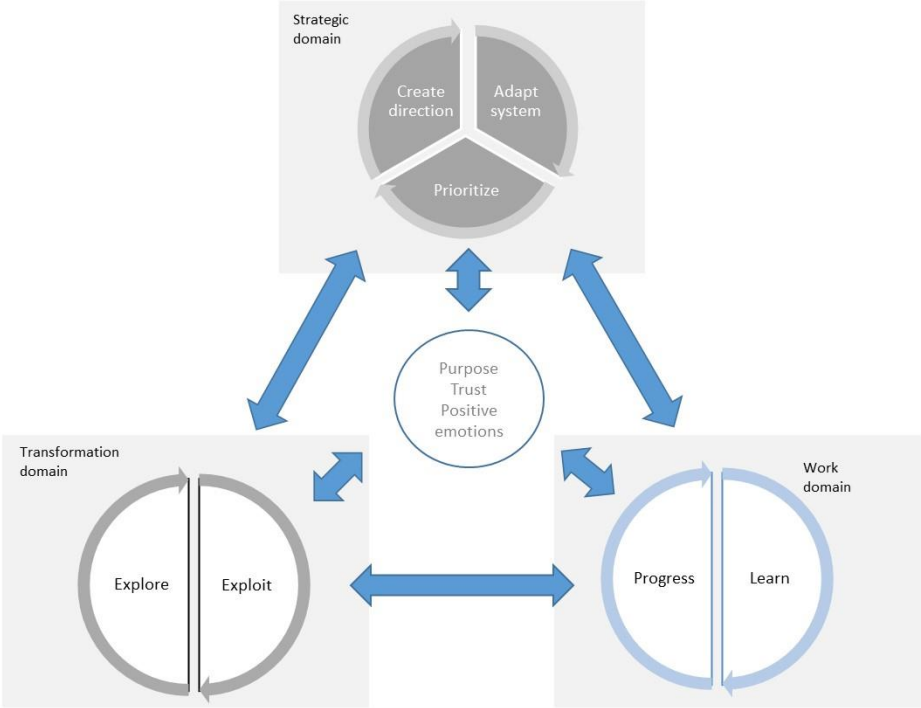

Figure 9. Future directions – designing shape-shifting organizations

In this model, it is hypothesized that a shape-shifting organization could be built using three mutually reinforcing fly-wheels in three domains: the strategic domain, transformation domain, and work domain. To make this fairly loose system work, it would need to be based on a shared purpose, trust, and positive emotions. How this model could extend into a model for designing organizations needs further investigation. For instance, this model does not give any guidance about who could be included in the different domains, nor does it provide any insight into how decisions should be made. On the other hand, the model does not include any hierarchical limitations or any clear indication for organizational boundaries. I argue that it could serve as a starting point for an onward research journey attempting to incorporate change into the construction of the organization.

This research would also benefit from further investigation around how digitalization, artificial intelligence, and machine learning could be incorporated to enhance the proposed model. It could be interesting to explore how the proposed model could potentially be supported by modern technology. This could possibly create opportunities for learning cycles to become even faster and create a truly adaptive organization.

This research presents ideas for how innovative work can be a component for change. Nevertheless, there is need for further investigation on practices. This could be incorporated in the strategy as practice field of research (Jarzabkowski, 2005). Alternatively, there is a potential need for advancing the field of change/adaptation as a practice.

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