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Leadership in project-based organizations: Dealing with complex and paradoxical demands

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CHAPTER 1

INTRODUCTION

Leadership is of crucial importance to the sustainable success of organizations (Smith & Lewis, 2011). Leadership can have a profound impact on individuals, groups, and organizations (Avolio, Walumbwa, & Weber, 2009; Burke et al., 2006; de Hoogh et al., 2004; Dvir, Eden, Avolio, & Shamir, 2002). For these reasons, leadership receives an overwhelming amount of attention in both research and practice. Given that leaders increasingly work in more flexible forms of organizations and face more complex and diverse contexts, studies that explore leadership in new forms of organizing are needed (Daft & Lewin, 1993; Osborn, Hunt, & Jauch, 2002; Shamir, 1999; Uhl-Bien, Marion, & McKelvey, 2007).

The increasing pace of environmental and technological change, together with computer-mediated technologies and globalization, have major implications for organizing (Shamir, 1999; Uhl-Bien et al., 2007). In this more global, dynamic and competitive landscape paradoxical demands, such as efficiency-adaptability and exploration-exploitation, become more salient (Smith & Lewis, 2011). The success of the organization will likely depend upon the ability of organizational members, and specifically leaders, to deal with these tensions (Smith & Lewis, 2011). More flexible organizational forms that rely less on stable structures and more on temporary systems, are required to deal with this complex environment (Shamir, 1999). Therefore we need to reconsider leadership in these more flexible forms of organizing (Shamir, 1999).

One increasingly prominent form of organizing that relies on temporary systems to deal with complex and paradoxical demands is the project-based organization (Sydow, Lindkvist, & DeFillippi, 2004). In project-based organizations most activities are organized in projects (Sydow et al., 2004) that tend to be novel, unique and transient (Turner & Keegan, 1999), and emerge in response to evolving pressures and market and technological demands (Hoegl & Weinkauff, 2005; Keegan & Turner, 2002). Project-based work is the dominant form of organizing in sectors such as IT, construction, and consulting, but is becoming increasingly widespread in many sectors of the economy. Calls have therefore been made to develop new models and theories that enrich our understanding of project reality by recognizing the importance as well as the complexity of projects (Cicmil, Hodgson, Lindgren, & Packendorff, 2009; Winter, Smith, Morris, & Cicmil, 2006).

Despite the importance of leadership and the overwhelming amount of attention for it, most theories of leadership have been developed to reflect leadership processes in traditional line organizations (Uhl-Bien & Marion, 2009), and most leadership studies have been conducted in non-project-based organizations (Keegan & Den Hartog, 2004; Turner & Müller, 2005). As such, current leadership theories may fail to fully capture leadership processes in project-based organizations, characterized by temporary systems, embedded in multiple organizational contexts (Keegan & Den Hartog, 2004; Sydow et al., 2004). Studies which explore, openly and qualitatively,

the role of leadership in project-based organizations could be valuable in advancing our understanding of leadership practices in this increasingly important context (Keegan & Den Hartog, 2004).

In order to shed light on leadership in project-based organizations, we can draw on the complexity sciences to view these organizations, their subsystems, and their broader environments as complex adaptive systems (Stacey, 1996). Complex adaptive systems consist of interacting, interdependent, agents who learn their way into the future through these processes of interaction (Holland, 1992; Stacey, 1996; Uhl-Bien et al., 2007). Projects and project-based organizations can be viewed as complex adaptive systems as they are composed of multiple people and teams that are interdependent in achieving their goals, interact with each other and the broader environment, and adapt and learn through these processes of interaction (Chang, Hatcher, & Kim, 2012; Cooke-Davies, Cicmil, Crawford, & Richardson, 2007). The complexity sciences are a developing paradigm that has only been tested minimally in organizational contexts, but that can provide some direction in exploring organizational processes (Plowman, Baker et al., 2007; Tsoukas & Dooley, 2011), specifically in processes of leadership (Avolio et al., 2009; Mulder, 2012; Stacey, 2010; Uhl-Bien et al., 2007; Uhl-Bien & Marion, 2009) and in project-based organizations (Aritua, Smith, & Bower, 2009; Chang et al., 2012; Cooke-Davies et al., 2007; Mulder, 2012).

Leadership is embedded in multiple levels such as the behavioral, interpersonal, organizational and environmental, is characterized by dynamism, and has a symbolic, interpretative, dimension (Conger, 1998; Parry, 1998). The complexity of the phenomenon of leadership as a social influence process, specifically in project-based organizations, is currently underexplored and therefore qualitative research is commended (Morgan & Smircich, 1980; Silverman, 2011). Qualitative studies can help uncover the nature of leadership as they can provide depth and flexibility, while taking into account contextual factors and symbolic dimensions (Bryman, 2004; Conger, 1998; Klenke, 2008; Murphy & Ensher, 2008; Parry, 1998).

In this introduction we will describe project based organizing, the role of leadership in project-based organizations, and the need to explore leadership in project-based organizations. We will discuss the relevance of our exploration of leadership in project-based organizations for other contexts, and give an overview of the studies presented in this dissertation.

1 THE CONTEXT OF PROJECT-BASED ORGANIZATIONS

According to Sydow et al. (2004): 'Project-based organizations refer to a variety of organizational forms that involve the creation of temporary systems for the performance of project tasks'. Hobday (2000) distinguishes multiple organizational forms ranging from the pure functional form to the pure project form depending on the influence and importance of functional departments compared to that of projects. Projects are defined by Turner (2006) as 'a temporary organization to which resources are assigned to do work to bring about beneficial change.' They can be characterized as 'complex social settings characterized by tensions between unpredictability, control and collaborative interaction among diverse participants on any project' (Cicmil, Williams, Thomas, & Hodgson, 2006, p 676).

Projects can range from relatively small and simple, intra-organizational, endeavors, to complex megaprojects in which team members from multiple organizations from across the globe work together. Projects can therefore be categorized in a variety of different ways. For example, Turner and Cochrane (1993) categorize projects on the basis of whether the goals and methods are well-defined or not. Muller and Turner (2007a; 2007b) categorize projects on the basis of application area, complexity, strategic importance, contract type, life cycle stage, and culture.

Project teams generally bring together members with different specialties (Sydow et al., 2004). In addition, projects can be inter-organizational (Söderlund, 2004), and geographically dispersed (Espinosa, Slaughter, Kraut, & Herbsleb, 2007; Hinds & Mortensen, 2005). As projects are finite, these diverse and potentially geographically spread groups of people who might never have met before the start of the project, will have to develop an effective way of cooperating with each other in a limited period of time.

Though projects are temporary systems, they are usually to some extent embedded in more permanent contexts (Sydow et al., 2004). Projects are often not fully contained within hierarchical organizations, but tend to be embedded in multiple organizational and trans-organizational contexts (Clegg & Courpasson, 2004; Sydow et al., 2004). In multi-project firms, each project is usually embedded in a broader program and/or portfolio of projects (Blomquist & Müller, 2006; Payne, 1995; Söderlund, 2004). In addition, as work in the project team is a temporary assignment, project team members tend to have other 'homes' before, during, and after participating in the project (Lundin & Söderholm, 1995). Project workers often have multiple, temporary, shifting, and sometimes conflicting roles and work relationships (Bresnen, Goussevskaia, & Swan, 2004; Keegan & Den Hartog, 2004; Shamir, 1999; Söderlund & Bredin, 2006). As projects are likely at least loosely linked

to organizational contexts (Sydow et al., 2004), projects are both shaped by and shape the organizations that are involved in them (Levina & Orlikowski, 2009).

More functionally oriented forms of organizing are more suited to perform routine tasks, whereas more project oriented forms of organizing are more suited to non-routine, complex tasks (Hobday, 2000). In order to deal with new demands, projects are instigated. Because projects are generally instigated to complete a unique task (Turner & Keegan, 1999), flexible and creative actions are needed (Lundin & Söderholm, 1995). Project-based organizations tend to operate in environments that require solving complex issues and adapting to changing conditions (Bresnen et al., 2004). Throughout the course of these projects complex issues continuously emerge. Projects enable the organization to flexibly assign resources to deal with emergent issues. They are an essential medium through which organizations accomplish change (Keegan & Turner, 2001). As projects create a 'new' setting for action through which transformation should be achieved, projects could be a way of overcoming the inertia that can be found in permanent organizations (Lundin & Söderholm, 1995).

Paradoxically, though organizations instigate projects to flexibly respond to emergent demands, time pressure limits this ability (Keegan & Turner, 2001). As projects are finite by nature, time is always running out, often leading to perceptions of time scarcity and the development of highly organized ways to deal with time problems (Lundin & Söderholm, 1995). Projects tend to be characterized in the literature as flat, fast and flexible, but Keegan and Turner (2002) find that projects are often managed in a mechanistic manner, relying on strict project control and evaluation methods. Most project management methods have been developed to enable efficient use of resources to stay within predetermined time, cost and quality constraints (Cicmil & Hodgson, 2006). These paradoxical promises of both adaptability and efficiency might be an important reason for the major interest in project-based organizing (Cicmil & Hodgson, 2006).

2 LEADERSHIP IN PROJECT-BASED ORGANIZATIONS

Researchers have long recognized the demands for efficiency and adaptability as a key tension faced by leaders (e.g. Burns & Stalker, 1961; Mintzberg, 1983; Schumpeter, 1934). Sustainable success in organizing is increasingly held to be a function of being able to exploit current strengths and knowledge as well as explore new possibilities and develop new knowledge (Levinthal & March, 1993; March, 1991). The simultaneous pursuit of exploration and exploitation is conceptualized as ambidexterity (Duncan, 1976; Gibson & Birkinshaw, 2004). Ambidexterity can

be defined as the capacity of an organization to be ‘aligned and efficient in their management of today’s business demands while simultaneously adaptive to changes in the environment’ (Raisch & Birkinshaw, 2008, p 375). At the individual and group level, the pursuit of simultaneous exploration and exploitation within a subsystem, is conceptualized as contextual ambidexterity (Gibson & Birkinshaw, 2004; Lavie, Stettner, & Tushman, 2010).

In order to be sustainably successful, project based organizations will have to be both adaptable and efficient, both explore new possibilities and exploit current strengths (Eisenhardt, Furr, & Bingham, 2010; Farjoun, 2010; March, 1991; Raisch, Birkinshaw, Probst, & Tushman, 2009). Paradoxical demands, such as those for efficiency and adaptability, and for exploitation and exploration, are clearly observable in project-based organizations (Cicmil & Hodgson, 2006; Keegan & Turner, 2002; Lee, DeLone, & Espinosa, 2007; Lewis, Welsh, Dehler, & Green, 2002; Sydow et al., 2004). Project-based organizations embody the twin pressures to respond to novel market and technological demands and to deliver projects on time and within cost and quality constraints (Keegan & Turner, 2002). Projects are set up to accomplish new tasks and are thus often explorative in nature (Lindkvist, 2008). Resources can be flexibly reconfigured in projects in response to emerging marketplace demands (Schreyogg & Sydow, 2010; Sydow et al., 2004). At the same time the clear resource constraints call for efficient use of resources, and exploitation of current strengths (Lindkvist, 2008).

Leaders play an important role in enabling organizations to deal with paradoxical demands (Lewis et al., 2002; Smith & Lewis, 2011). However, the traditionally mechanistic focus of the project management field on efficiency has come with a predominantly narrow perspective on the role of project managers as implementers, focusing on how they keep the project within time, budget and planned scope of the work (Atkinson, 1999; Cicmil et al., 2009; Söderlund, 2004). How do leaders stimulate paradoxical forces in project based organizations, in which the challenges of achieving both adaptability and efficiency, exploring new opportunities and exploiting current strengths (March, 1991) are so directly visible, not just at the organizational level but also at the project level?

In project-based organizations and the projects that are embedded in them, which often cross both functional and organizational boundaries, leading for effective collaboration can pose quite a challenge (Cleland, 1995). Leaders can play an important role in bringing people together over a shared purpose, motivating and inspiring them to collaborate and enabling them to bridge their differences (Alvesson, 1992; Keegan & Den Hartog, 2004; Ospina & Foldy, 2010). However, how do leaders do this in project based-organizations, in which shifting patterns of relationships, complex and paradoxical demands, diversity and finiteness are common in the way of working?

A major challenge in novel projects, in which the goals and methods to attain them are not well defined (Turner & Cochrane, 1993), is solving complex emergent problems. In these novel projects communication is especially important (Turner & Cochrane, 1993) as they require project leaders and participants in the project to constantly try to develop an understanding of the situation and the methods that are needed to reach a moving target.

The linguistic turn draws our attention to the way in which we construct events through interaction (Phillips & Oswick, 2012). The linguistic turn, which places the shaping role of language in action and organizing center stage, is an important development in organizational studies (Alvesson & Kärreman, 2000; Boden, 1994; Boje, Oswick, & Ford, 2004; Phillips & Oswick, 2012; Weick, 2004). Though studies of organizations increasingly focus on language to shed light on complex organizational phenomena (Alvesson & Kärreman, 2000; Oswick, Keenoy, & Grant, 2000), this perspective is still relatively new to the project management literature (Cicmil et al., 2006; Cooke-Davies et al., 2007; Lindgren & Packendorff, 2007). A view of project management informed by the linguistic turn includes an appreciation of the ongoing emergence of events, processes of social interaction, and framing of events and projects (Winter et al., 2006).

Leaders play an important role in interpreting the complexity of the context, shaping the way in which others interpret it, and guiding people through it (Beck & Plowman, 2009; Fairhurst, 2009; Levin, Schneider, & Gaeth, 1998; Ospina & Foldy, 2010; Plowman et al., 2007; Shamir, House, & Arthur, 1993; Smith, Ashmos Plowman, & Duchon, 2010). How do leaders in project-based organizations deal with complex emergent issues?

3 RELEVANCE FOR OTHER CONTEXTS

Organizations today are facing increasingly complex and paradoxical demands, calling for a reconsideration of the role of leadership in dealing with these demands (Shamir, 1999; Smith & Lewis, 2011; Uhl-Bien et al., 2007). In project-based organizations, most emergent complexity is dealt with within projects, in which a solution has to be developed within a finite amount of time. In more traditional line organizations, these complex demands will mainly have to be responded to through changes in ongoing operations. Whether a new and temporary team is set up to deal with an emergent issues, or this issue will have to be dealt with within the standing hierarchy of daily operations will have an impact of the way in which leadership is enacted and rendered effective.

When dealing specifically with paradoxical demands, in most organizations this might mainly be seen as an issue to be dealt with by top management. However,

it is unlikely that all emergent issues can be appropriately dealt with by a few top managers (Stacey, 2010; Uhl-Bien et al., 2007). Though projects are history dependent and tend to be organizationally embedded (Engwall, 2003), projects are relatively autonomous (especially cross organizational projects), as they create a ‘new’ setting for action and transformation (Lundin & Söderholm, 1995). This more loose embedding in permanent hierarchical organizations can facilitate problem solving and dealing with paradoxical demands at lower organizational levels, i.e. within the project. Thus, the context of project-based organizations can help us shed light on leadership processes of dealing with complex and paradoxical demands at lower levels of organizing. Other types of organizations might be able to learn from the more distributed problem solving processes that can be expected in project-based organizations.

In order to deal with complex and paradoxical demands it is increasingly important to involve a high diversity of people (Uhl-Bien et al., 2007; Uhl-Bien & Marion, 2009). The tension between different ideas and perspectives that emerges in interaction between diverse individuals can help to generate insight into issues from multiple perspectives and develop a more integrated understanding of emergent issues (Uhl-Bien et al., 2007; Uhl-Bien & Marion, 2009). However, diversity can also be seen as a disintegrative tendency that can pull the group apart. In order to accomplish the benefits of diversity, differences between groups and individuals will have to be bridged. In project-based organizations, a functionally diverse group of people is usually brought together within projects to solve issues together (Sydow et al., 2004), whereas in line organizations collaboration between people with different perspectives is often inhibited by assigning them to functional groups. But even when units in line organizations are organized in a more cross functional way to capitalize on a diversity of perspectives, this is still an intra-organizational arrangement, whereas projects often have an added layer of diversity as they tend to be embedded in inter-organizational contexts (Clegg & Courpasson, 2004; Sydow et al., 2004). As most organizations will increasingly have to leverage the potential benefits from including different perspectives in problem solving processes the results found in project-based organizations can help them develop an understanding of how the challenges of bridging differences between diverse individuals and groups can be dealt with.

4 OVERVIEW OF THE DISSERTATION

In order to understand leadership in this context more targeted research attention is needed (Keegan & Den Hartog, 2004). Despite calls, research on leadership in project-based organizations is still limited (Keegan & Den Hartog, 2004; Kolltveit, Karlsen, & Grønhaug, 2007; Turner & Müller, 2005). In order to examine leadership

in project-based organizations we will shed light on how leaders deal with a number of important challenges.

In chapter 2 we address the role of leaders in project-based organizations in enabling both adaptability and efficiency (Smith & Lewis, 2011). In this chapter we aim to answer the following research question: How do leaders in project-based organizations use indirect leadership practices to enable adaptability and efficiency? An emergent perspective on leadership we draw on in this dissertation that begins to address the leadership challenge of enabling both adaptability and efficiency is complexity leadership theory (Uhl-Bien et al., 2007; Uhl-Bien & Marion, 2009). Enabling leadership entangles the efficiency focused administrative function and the adaptability focused adaptive function. However, the way in which enabling leaders have been theorized to do this is by enabling adaptability, not efficiency. We draw on the concept of enabling leadership to explore the role of leadership in dealing with the paradoxical demands for adaptability and efficiency.

In chapter 2 we provide one of the first empirical explorations to further develop complexity leadership theory. We inform complexity leadership theory (Uhl-Bien et al., 2007; Uhl-Bien & Marion, 2009) by showing how complexity leaders not only stimulate adaptability, but also efficiency, by approaching requisite complexity through the paradoxical leadership strategies of complexity absorption and complexity reduction. On a more fine grained level we identify the indirect leadership practices in the form of semistuctures (Brown & Eisenhardt, 1997) that these leaders use to enact their opposing leadership strategies (Gebert, Boerner, & Kearney, 2010).

In chapter 3 we address the related paradox of simultaneously exploiting current strengths and exploring new possibilities within a sub-system, i.e. creating and sustaining contextual ambidexterity (Gibson & Birkinshaw, 2004). In this chapter we investigate the following research question: How do leaders in project-based organizations use direct leadership practices to create and sustain contextual ambidexterity? Project-based organizations are a context in which the need for contextual ambidexterity is especially pronounced as on the one hand projects are set up to explore new possibilities to adapt to changing demands, while on the other hand the finite nature of projects pushes for exploitation of current knowledge (Keegan & Turner, 2002). This chapter informs the ambidexterity literature by shedding light on the microfoundations of ambidextrous organizing (Eisenhardt et al., 2010) by exploring the role of leadership in achieving contextual ambidexterity as a dynamic accomplishment rooted in day to day practices. We show the leadership strategies and direct leadership practices enacted by leaders to achieve contextual ambidexterity. In addition, this paper builds upon the results presented in chapter 2 related to leaders' influence on the complexity of responses by identifying leadership practices aimed at both the complexity of beliefs and the complexity of actions.

In chapter 4 we examine the challenge of disintegrative tendencies which can pull the project apart (Kolb & Putnam, 1992; Morgan, 1981) to answer the following research question: How do leaders in project-based organizations use leadership practices to balance the disintegrative tendencies of diversity and finiteness with the integrative tendency of project identification? In projects, a wide diversity of people have to bridge their differences to collaborate in a finite period of time. In order to facilitate teamwork, leadership is needed to overcome these disintegrative tendencies. However, this is not achieved by limiting them, rather it is achieved by strengthening integrative tendencies, such as shared project identification (Rousseau, 1998). In chapter 4 we examine integrative and disintegrative tendencies in projects, and the leadership practices used to stimulate shared project identification in a mixed methods study.

In chapter 5 we explore the challenge of dealing with complex emergent problems by examining how project and program manager's construct complex emergent issues through language. We do so to answer the research question: How do leaders in project-based organizations construct complex emergent problems through language, what is the nature of their constructions, and what are the possible implications of their constructions for the resolution of complex emergent problems? Projects and programs are an important context within an organization in which complex emergent problems get solved (Turner & Keegan, 1999). How people perceive and deal with complex emergent issues is shaped through language in processes of collective meaning making (Alvesson & Kärreman, 2000; Boje et al., 2004; Phillips & Oswick, 2012). In these processes of collective meaning making, managers' narratives play a particularly significant role (Tsoukas & Chia, 2002). In chapter 5 we surface narratives project and program manager's use to frame complex emergent issues.

Chapter 6 is dedicated to the overall theoretical and practical implications of this collection of studies. We address the theoretical implications of these studies for leadership in project-based organizations, and the extent to which these results are generalizable to other contexts. We highlight the implications of our findings for practice, and address the limitations of this dissertation and how these can be addressed in future research.