



## City Research Online

### City, University of London Institutional Repository

---

**Citation:** Jarzabkowski, P., Le, J. K. & Van de Ven, A. H. (2013). Responding to competing strategic demands: How organizing, belonging, and performing paradoxes coevolve. *Strategic Organization*, 11(3), pp. 245-280. doi: 10.1177/1476127013481016

This is the accepted version of the paper.

This version of the publication may differ from the final published version.

---

**Permanent repository link:** <https://openaccess.city.ac.uk/id/eprint/3991/>

**Link to published version:** <https://doi.org/10.1177/1476127013481016>

**Copyright:** City Research Online aims to make research outputs of City, University of London available to a wider audience. Copyright and Moral Rights remain with the author(s) and/or copyright holders. URLs from City Research Online may be freely distributed and linked to.

**Reuse:** Copies of full items can be used for personal research or study, educational, or not-for-profit purposes without prior permission or charge. Provided that the authors, title and full bibliographic details are credited, a hyperlink and/or URL is given for the original metadata page and the content is not changed in any way.

---

---



# **Responding to Competing Strategic Demands: How Organizing, Belonging and Performing Paradoxes Co-Evolve<sup>1</sup>**

Paula Jarzabkowski<sup>1</sup>

Jane Lê<sup>2</sup>

Andrew Van de Ven<sup>3</sup>

<sup>1</sup>Cass Business School, City U., London

<sup>2</sup>The University of Sydney Business School, U. of Sydney, Sydney

<sup>3</sup>Carlson School of Management, U. of Minnesota, Minneapolis

## Contact Author

Paula Jarzabkowski

Science & Technology Studies

306 Rockefeller Hall

Cornell University

Ithaca, NY, 14850

Cell: +1 (607) 279-0272

Email: paj49@cornell.edu

## ***Final Version accepted for publication in Strategic Organization***

### **Abstract**

This paper develops an empirically-grounded process model of how managers in organizations respond to coexisting paradoxical tensions. With a longitudinal real-time study we examine how a telecommunications firm copes with an organizing paradox between market and regulatory demands, and how this paradox influences belonging and performing paradoxes for managers. These paradoxes co-evolve over time as managers shift from defensive responses that attempt to circumvent paradox to active responses that accept and work within paradox. Our process model clarifies the recursive relationship between different kinds of paradox, the cumulative impact of responses to paradox over time, and the way that responses to paradox become embedded in organizational structures.

### **Keywords**

Paradox; organizing; dialectics; restructuring; change; process

---

<sup>1</sup> The authors gratefully acknowledge funding from the Advanced Institute of Management / Economic and Social Research Council (grant number: RES-331-25-3013), the British Academy (grant number: SG-45273), The Freda and Len Lansbury Early Career Researcher Support Fund (U Sydney) and the University of Sydney Business School Faculty Research Grant. We are indebted to Senior Editor Ann Langley and three excellent anonymous reviewers. Their exemplary engagement with our work and helpful feedback on our manuscript has greatly enhanced the clarity and accessibility of our contribution.

## **Responding to Competing Strategic Demands: How Organizing, Belonging and Performing Paradoxes Co-Evolve**

Organizations are inherently paradoxical. Paradox refers to the contradictory yet interrelated elements of organization that seem logical in isolation but inconsistent and oppositional in conjunction and yet persist over time (Lewis, 2000; Smith and Lewis, 2011). While most organizations contain paradoxical elements, some contexts are more prone to producing tensions than others. For example, strategic alliances and networks are a source of paradoxical tension when managers attempt to simultaneously cooperate and compete with other organizations (de Rond and Bouchiki, 2004; Rosenkopf and Tushman, 1998). Similarly, managers in product development organizations experience paradoxical tension between the need to exploit existing products and explore innovations that may cannibalize them (Andriopoulos and Lewis, 2009; Smith and Tushman, 2005). Such paradoxes are at odds with the prevalent view of organizations as coherent entities with unity of command and structural alignment around a core set of activities. Paradox thus represents an on-going challenge to our understanding of organizational processes and practices.

A particularly salient example studied here is the paradox between market and regulatory demands experienced by a telecommunications utility. This firm, like energy and rail utilities, is a large, privatized company that comes to the market with a historical legacy of assets that give it monopolistic potential (Hancher and Moran, 1989; Schneiberg and Bartley, 2001; 2008). Government-imposed regulation thus aimed to prevent the utility from maximizing value from its monopoly assets in order to ensure a competitive market (Schneiberg and Bartley, 2008). Regulation required the utility to vertically disintegrate its distribution business from its sister retail divisions, and service these retail divisions and other competing industry players on a fair and equal trading basis (Marcus and Geffen, 1998; Hancher and Moran, 1989). This is contrary to

competitive behavior, in which companies typically maximize a dominant market position arising from an integrated value chain (Porter, 1985).

Utilities thus operate with a paradox as regulatory requirements to mitigate the structural advantages afforded by their market power (Marcus and Geffen, 1998; Sharratt et al, 2007) generate structural tensions between market and regulatory facing divisions. Such structural tensions are typically referred to in the literature as an *organizing paradox* arising from the inherent contradictions between different parts of the organizational whole (Lewis, 2000). Less often recognized is that for individual managers this organizing paradox spills over into contradictions within their roles; this is referred to as a *performing paradox* because of the tensions that arise for managers in performing contradictory roles and activities (Lüscher & Lewis, 2008). Additionally, paradoxes occur at the group and/or divisional level as managers face identity conflicts. This paradox, termed a *paradox of belonging*, arises from belonging to and identifying with structurally differentiated organizational units that are responsible for achieving different sides of the paradox, yet also being accountable for overall organization performance targets (Smith & Lewis, 2011). Although multiple paradoxes at organizational and individual levels have been recognized in the literature, these dynamics of how paradoxes in organization structure spill over to individual role and group identity paradoxes, and how these paradoxes at different levels co-evolve have not been addressed in prior research. With a few exceptions (e.g. Lüscher and Lewis, 2009), research has remained at either the organizational or the individual level, rather than examining how responses to paradox at different levels shape each other and how they may escalate or minimize the tension between paradoxes.

Our real-time longitudinal study features how managers experience these organizing, performing, and belonging paradoxes, and how they cope with them over time. As our case shows, an organization's survival is threatened when managers attempt

to avoid or circumvent these paradoxes, while proactive responses that accept the paradoxes permit an organization to move on and live with the paradox. We use these and other findings from our study to develop a conceptual framework of how paradoxes at different levels interrelate and how these paradoxes co-evolve over time. Our process model shows how managers shift from defensive responses that attempt to circumvent paradox, to active responses that accept paradox, and how these responses are amplified within different levels of paradox. As paradox is a prevalent condition for many organizations, we suggest that our model of how and why different kinds of paradoxes co-evolve, and how responses to paradox may become embedded in organizational structures, provides important insights for managers facing contradictory strategic demands.

## **THEORETICAL FRAMEWORK**

### **Types of Paradoxes and Restructuring**

The literature identifies four main types of paradox that occur at different levels of analysis: the paradoxes of organizing, performing, belonging, and learning. We now introduce each type of paradox and summarize existing knowledge about its role in organizational restructuring.

The paradox of organizing has long been identified as an ongoing tension of organizational differentiation and integration (Lawrence and Lorsch, 1967). Organizations comprise multiple subsystems that must act independently and yet are part of an interdependent overarching organizational system. Such parts-whole tensions (Smith & Berg, 1987) and systemic contradictions (Benson, 1977; Clegg et al, 2002; Cyert & March, 1963) are manifested in organizing tensions like empowerment and control (Clegg et al, 2002; Lüscher & Lewis, 2008; Smith & Lewis, 2011) and exploration and exploitation (Andriopoulos & Lewis, 2009; Smith & Tushman, 2005). Thus, the on-going process of organizing is innately paradoxical because of the tensions between different

organizational parts and tasks, and yet the need for the organization to cohere as a collective system (Thompson, 1963). There is also always a fundamental tension between the organizational structures that shape actions, and the actions through which organizational structures are constructed (Clegg et al, 2002; Zeitz, 1980). This tension is particularly salient during periods of restructuring (Abdallah et al, 2011; Lüscher & Lewis, 2008; Smith & Lewis, 2011) because change spurs tensions between the old structures and the new ones that emerge as actors struggle with simultaneous needs for stability and change (Lewis, 2000; Lüscher & Lewis, 2008). For example, Jay (forthcoming) found that hybrid organizations oscillate between different poles of paradoxical logics during periods of change.

The paradox of performing opposing roles arises from complex organizational goals and differentiated structural units (Denis et al, 2007; Jarzabkowski & Fenton, 2006; Smith & Lewis, 2011) that require individuals to perform multiple and often inconsistent roles and tasks (Lüscher & Lewis, 2008). This paradox becomes salient at the micro-level, as individuals struggle to respond to either the conflicting demands embodied within their own roles or the conflicting demands arising from the roles of others with whom they share joint tasks. These conditions lead to contradictory interpretations and actions as actors try to perform competing goals (Smith & Lewis, 2011) or work toward different visions of success and failure (Jay, forthcoming). During restructuring, new goals are established, roles altered, and relationships between actors redefined (Seo et al, 2004). Paradoxes of performing are thus likely to arise during restructuring. For instance, Lüscher & Lewis (2008: 230) found that paradoxes of performing arose as “managers’ roles morphed, blurred, and multiplied” in response to conflicting demands during major organizational change at Lego. As managers have no blueprint to follow during periods of intensive restructuring, they struggle to implement new goals within their new roles (Jarzabkowski et al, 2012), increasing the likelihood of paradoxes of performing.

The paradox of belonging or identity occurs at the meso-level as actors experience paradoxes between the values and beliefs of belonging to their immediate referent group (Lewis, 2000; Lüscher and Lewis, 2008), while also belonging to a wider organization. This paradox is prevalent because different divisions embody different values, beliefs and identities. As actors from different groups interact, they struggle to reconcile the values and beliefs of their work group with those of other groups and/or the wider organization. The paradox of belonging is exacerbated during restructuring because it shakes up divisional and organizational loyalties (Seo et al, 2004) by altering group membership or values (Smith & Lewis, 2011). For example, Lüscher and Lewis (2008) found that actors experienced paradoxical tensions between the need to trust their work colleagues and yet also to control their work during a change period when there were no existing work patterns or stable relationships to support trust (see also Lourenco & Glidewell, 1975). This reconfiguration of group membership, and associated values and identities, makes the paradox of belonging particularly salient during restructuring.

The final type of paradox reported is the paradox of learning, which arises from the contradictions between building on the past while simultaneously needing to destroy it in order to move forward (Lewis, 2000; Smith & Lewis, 2011). During change, all actors and organizations face learning as they struggle to come to terms with new procedures and frames of reference (Beech et al, 2004; Clegg et al, 2002). However, a true paradox of learning is more than simply the tensions experienced in moving between old and new, which may occur in any change process (Bartunek, 1984). Rather, it involves an innate tension between specific modes of knowing and knowledge acquisition. Examples include the tensions occurring in contexts or projects that are dependent on both radical and incremental innovation (Smith & Lewis, 2011), exploitation and exploration (Andriopoulos & Lewis, 2009; March, 1991; Smith & Tushman, 2005), or creative disruption. In these contexts organizations must both



capitalize on and cannibalize their existing product base in order to stay at the forefront of innovation (Christensen, 1997).

As learning is a multi-level construct occurring within both actors and organisations (Fiol & Lyles, 1985), it is likely to comprise an underlying condition that subsumes the other paradoxes discussed here. For example, firms might generate organizing paradoxes by separating potentially contradictory modes of knowledge acquisition, such as research and development and sales, into different divisions (Puranam, Singh & Zollo, 2006). Similarly, actors working to different modes of knowing might experience paradoxes of belonging if they are designated creative roles whilst also being expected to conform to strict operational activities (Gotsi, Andriopoulos, Lewis & Ingram, 2010). Hence, paradoxes of learning will be difficult to observe in isolation, but rather may be evidenced as an underpinning tension contributing to the other paradoxes discussed above.

This review reveals four types of paradoxes operating at different levels of analysis and indicates that these are particularly salient during periods of organizational restructuring. However, it is not just the type of paradox, but also the way in which actors respond to paradox, that shape its impact on restructuring (Lewis, 2000; Smith & Lewis, 2011). Hence, we now examine how actors respond to paradox.

### **Responses to Paradoxes**

A variety of responses to paradox have been reported (e.g. Poole & Van de Ven, 1989; Smith & Berg, 1987; Vince & Broussine, 1996). These may be clustered into defensive and active responses (cf. Lewis, 2000; see also Smith & Lewis, 2011). Defensive responses provide short-term relief. They may enable actors to temporarily overcome paradoxical tension but do not provide a new way to work within or understand paradox. These responses include splitting (see also Poole and Van de Ven, 1989), regression, repression (see also Kraatz & Block, 2008), projection, reaction

formation, and ambivalence. The splitting response is the least conflictual because it separates the two poles and prevents interaction that might occasion tension (Andriopoulos and Lewis, 2009). Splitting may be structural, with different poles compartmentalized into different organizational units or hierarchical levels, or temporal, with different poles taking dominance at different times (Poole & Van de Ven, 1989). The reaction formation response is the most conflictual because it involves excessively aligning with one pole of the paradox, so generating opposition with the other pole (Lewis, 2000). Such polarized responses are evident when actors become unwilling to engage in compromise (Lüscher & Lewis, 2008; Smith & Berg, 1987), potentially resulting in spiraling conflict and vicious circles (Bateson, 1972; Smith & Lewis, 2011; Werner & Baxter, 1994). While the extent of conflict arising from different defensive responses varies, critically, they are avoidance tactics, rather than longer-term ways to re-conceptualize actors' experience of paradox.

By contrast, active responses attempt to deal with paradox on a longer-term basis. Active responses, which acknowledge paradox as a natural condition of work, include acceptance, confrontation and transcendence (Lewis, 2000; Smith & Lewis, 2011). Acceptance indicates willingness to find a way to balance the elements that cause tension (Poole & Van de Ven, 1989; Sundramurthy and Lewis, 2003). Confrontation involves directly addressing and working through the sources of tension; this may best be done using external facilitation to manage the emotional and partisan responses that arise (Engeström & Sannino, 2011; Lewis, 2000; Lindblom, 1965; Lüscher & Lewis, 2008; Poole & Van de Ven, 1989). Finally, transcendence involves moving to a higher plane of understanding in which paradoxical elements are understood as complex interdependencies rather than competing interests (Andriopoulos & Lewis, 2009; Lüscher & Lewis, 2008; Smith & Lewis, 2011). This may be accomplished by reframing the paradox (Seo et al, 2004; Werner & Baxter, 1994), affirming interests as equally valid

(Kraatz & Block, 2008; Miron-Spektor, Gino & Argote, 2011), or via paradoxical leadership and thinking (Lewis, 2000; Smith & Tushman, 2005; Smith & Lewis, 2011; Sundaramurthy & Lewis, 2003). All active responses thus require partisan mutual adjustment between parties (Lindblom, 1965) in order to integrate paradoxes into the organization as a whole. However, Abdallah et al (2011) caution that even active responses only offer partial relief as the fundamental paradox remains and continuously needs to be addressed.

While some responses may be more closely associated with some paradoxes than others (Lüscher & Lewis, 2008), there is no clear one-to-one correspondence between paradox type and response. Rather, there is a repertoire of responses that have varying effects according to the context in which they are used. Indeed, a combination of responses is likely over time (Lüscher & Lewis, 2008; Poole & Van de Ven, 1989) in order to generate a dynamic balance between paradoxes (Smith & Lewis, 2011).

### **Relationship between Paradoxes**

Although different types of paradoxes and responses have been theorized, the way that paradox evolves (Demers, 2007; Groleau et al, 2011) and, particularly, the unfolding association between different types of paradoxes over time (Lüscher & Lewis, 2008; Smith & Lewis, 2011) remains a conundrum. While Putnam (1986) suggests that paradox escalates from the communicative actions of actors to become embedded in systemic contradictions, others such as Clegg et al (2002) propose a more structurationist (Giddens, 1984) association between the structures that shape action and the structuring behavior of actors. Lüscher & Lewis (2008) also suggest a mutually constitutive and recursive relationship between paradoxes. They develop a conceptual model in which the systemic contradictions inherent in organizing may spur paradoxes of performing, such as tension between leadership and team-based roles, which may also be associated with paradoxes of belonging as emotions are stirred by mixed messages about values. They

suggest that recursive associations between different paradoxes arise from interwoven communication patterns during change.

Smith and Lewis (2011) offer a more systematic conceptual framework, proposing that intersections between different pairs of paradoxes may give rise to varying types of tensions. For example, they demonstrate that the paradox of learning underpins other paradoxes, as learning takes place within responses to the organizational tensions spurred by systemic changes, as well as the individual tensions spurred by changing roles, goals, and values. Smith & Lewis (2011: 389) explicitly note systemic association between such paradoxes: “the adaptive nature of systems spurs temporal tensions associated with paradoxes of learning and organizing as the demands of today differ from the needs for tomorrow”. They also theorize that paradoxes of performing may give rise to tensions with paradoxes of learning as actors perform their current activities, whilst also attempting to develop new capabilities. Similarly, performing and belonging paradoxes emerge in the clashes between goals and identity respectively. The authors’ point is not to explore every possible relationship between paradoxes but, rather, to emphasize the importance of moving beyond studying paradoxes in isolation to examining the dynamic process through which they are balanced. In particular, given the prevalence and potentially problematic nature of paradox for many organizations, it is critical to go beyond the Smith & Lewis (2011) framework of matched pairs in order to understand the dynamics through which paradoxes are interlinked and the way they generate outcomes that shape the on-going response to paradox. That is the focus of this paper.

Our literature review examined three types of paradox, organizing, role performance, and belonging, each of which occurs at a different level of analysis, as well as a learning paradox that is a multi-level concept that will be manifest in the other paradoxes. In the main, these types of paradox have been studied independently of each other, motivating us to address two research questions:

1. How is the relationship between different paradoxes constructed?
2. How do different responses to paradox shape a processual relationship between paradoxes as they unfold over time?

Our research advances knowledge by examining how these types of paradox shape each other as they unfold over time (Groleau, Demers & Engeström, 2011). It also examines how defensive and active types of responses exacerbate or help to balance the paradoxical tensions experienced by managers in different organizational units and levels. In doing so, this research provides a more dynamic appreciation of how different types of paradox become embedded and co-evolve over time to influence organizational outcomes. As managers increasingly face paradoxical dilemmas, arising from the need to meet contradictory strategic goals and generate coherence across different parts of the organization, we expect our findings to provide deeper understanding about how different managerial responses shape the experience of paradox.

## **RESEARCH METHODS**

### **Case Setting**

Purposefully sampling for a case of restructuring, we conducted a real-time longitudinal case study of Telco<sup>2</sup>, a telecommunications company undergoing major restructuring in response to new government regulation. The new regulation required Telco to grant all industry players fair access to its distribution infrastructure. This had important structural and relationship implications for the restructuring. First, Telco had to create a new business division, Distribution. This new division would house all distribution network assets and personnel and act as an independent supplier to industry; that is Telco divisions *and* their competitors. Second, Telco had to separate all the products it offered through its integrated value chain so these could be traded by

---

<sup>2</sup> In order to preserve anonymity, we have disguised specific dates, names, products, and other contextual features. However, the nature and temporal sequence of events is faithfully reproduced.

Distribution on a fair and equal basis. This required unraveling the copper wire and fiber distribution system from its telephony and broadband products. Third, the relationship between Distribution and Telco divisions, and Distribution and industry had to change, as Distribution needed to interact in a comparable manner with all parties. This meant Distribution had to alter existing working practices with Telco divisions, no longer sharing commercial information nor allowing its decision-making to be affected by their commercial objectives. It also meant that Distribution had to establish new ways to work with external industry players, offering them access to infrastructure assets and systems.

Restructuring these relationships required new industry processes and practices that would be equally suitable for internal and external industry players. Thus, Telco had to alter its organizational structure, moving from an organization in which its divisions were integrated and interdependent to an organization in which one of its divisions, Distribution, was separated and had to develop new ways to work with other divisions. It also had to unbundle products/services, relationships, processes, and practices that spanned across divisions. This required divisions to initially work together to unbundle past ways of working in order to create new ways of working. Within the context of this restructuring, we study how types of paradox unfold via a series of responses. As others have shown (Abdallah et al, 2011; Beech et al, 2004; Jay, forthcoming; Lewis, 2000; Lüscher & Lewis, 2008; Seo & Creed, 2002; Smith & Lewis, 2011; Stoltzfus et al, 2011), these types of change contexts offer opportunity to observe salient paradoxes.

In order to give our analysis a focal point and enable comparison, we trace paradoxes and responses by following the implementation of three main Telco products: Broadnet, Corpnet and Linefix. These were the technology/service bundles underpinning broadband (Broadnet), corporate network extensions (Corpnet), and telephone landlines (Linefix). Under the new regulation, each of these had to be totally restructured and offered to Telco divisions and their competitors on an equal basis.

Restructuring each product involved interactions between the new division, Distribution, and one other Telco division: *Wholesale*, the division wholesaling Broadnet; *Retail*, the division retailing Linefix to domestic and small-business consumers; or *Corporate*, the division providing Corpnet to corporate consumers. Each fair product had to be available by an interim deadline and used by all customers by a final deadline, or Telco faced a substantial regulatory fine and possible legal action. Only Telco divisions had a legal obligation to use the new products by a specified date; other industry players could move to these products slowly. Figure 1 is a schematic of the divisions and products.

-- Insert Figure 1 about here --

### **Data Collection and Analysis**

We collected real-time longitudinal qualitative data over 24 months across three calendar years from April in Year 1 to March in Year 3 as Telco restructured. In this paper we draw mainly on data from non-participant observation conducted in 248 serial meetings dealing with either a specific product, or across all three products, as part or all of their agenda. We audiotaped these meetings, which were typically 2 hours long and occurred across the divisions and headquarter on a regular basis. They were the most salient meetings for focusing on the evolving paradoxes because their purpose was to implement the restructuring process. We took extensive notes during observations and supplemented these with transcriptions of audio-recording pertaining to the products. To avoid potential single source bias (Eisenhardt, 1989; Yin, 1994), we complemented this with 101 audiotaped interviews with key senior, middle and operational managers working either on a specific product, or working across the three products. Interviews, which were generally one hour long and transcribed verbatim, probed actors' experiences of the restructuring. Several of these were serial interviews, in order to trace our understanding of the unfolding process for each product. With these observational and interview data, we were able to trace the separate project teams responsible for

implementing each product at the middle and operational level, as well as to cover central understandings of the three products at the middle and senior level. A breakdown of these meetings and interviews is provided in Appendix 1. We also engaged in pre-and post-meeting observations, informal discussions, feedback sessions, and social functions. As Yin (1994) recommends, we wrote up observations within 24 hours. Detailed field notes and transcriptions were coded in NVivo 9.

In order to make sense of this data, we followed six analytic steps, during which we iterated between the data and the analytical constructs developed in the theoretical framework. First, the researchers who collected the data wrote separate ***chronological case stories*** of each product development process (Langley, 1999; 2007), employing a thick description mode of analysis (Geertz, 1973). We were assisted in writing separate case narratives because the first two authors each observed separate product implementations and so were familiar with their own cases, without contamination from the other cases. The case stories captured the unfolding interactions between actors as they restructured.

Second, we sought ***evidence of paradoxes*** by identifying contradictory yet interrelated elements within these stories (Lewis, 2000; Smith & Lewis, 2011). As paradoxes are persistent and unfold in an iterative fashion, we observed evidence of paradoxes throughout the study. However, our reading of the data also indicated specific points at which paradoxes were more salient because of the outcomes they created (Jay, forthcoming). Specifically, we found paradoxical tensions of such magnitude that progress was threatened in the development of each of the three products examined here. Assisted by our separate coding of the 3 products in NVivo, we were able to isolate data to examine only the specific tensions pertaining to each product separately, and to examine how these unfolded over time. We found four such incidents in the Corpnet product restructuring, four in the Broadnet product restructuring, and five in the Linefix



product restructuring. In sum, across the products, 13 such incidents were observed, which we labeled critical tension points (see Appendices 2-4). As each tension point, while specific to the restructuring of its own product, was an example of how actors experience and respond to paradoxical tension, we treated these 13 critical tension points as a corpus of events for analysis, examining them separately for the type of paradox and response, before examining the processual pattern through which they unfolded within their own specific product implementation.

Third, we identified and coded *types of paradoxes* evident in critical tension points. We iteratively developed a coding scheme using an abductive mode of analysis (Locke, Golden-Biddle & Feldman, 2008) by continuously moving between our data and the literature. For example, each time we identified paradoxical elements, we looked to the literature to see whether others had already reported these. Using this process, we found three of the paradoxes that have been identified in the literature: the paradoxes of organizing, belonging and performing. We thus used existing labels and definitions to describe these paradoxes and support coding. While the details of our empirics necessarily meant that our evidence was more nuanced than existing definitions (see Jay, *forthcoming* on service paradox), all data fit into one of these other three broad types of paradox, so that the creation of new types was not warranted. We also found some examples of adaptive behavior or learning, as actors bridged the association between past behaviors and the change they were bringing about as part of the restructuring. However, we could not categorize these tensions as a learning paradox, such as those brought about by opposing modes of knowing and knowledge acquisition. Rather, these data were more adequately coded to one of the other paradoxes we found. As others suggest, we found that these three paradoxes occurred at different levels (Smith & Lewis, 2011). The organizing paradox operated at the organizational-level, while the belonging paradox operated at the meso-level of groups and divisions, brought about by work group

affiliations and their tensions with the overarching restructuring. Performing occurred at the micro-level as individuals interacted over the way they were performing their roles.

Fourth, we identified *responses to paradoxes* via an inductive coding process (Strauss & Corbin, 1998). The responses we originally coded were separating, confronting, suppressing, and adjusting. We then checked how these fit with existing responses within the literature. This resulted in clustering our responses into four response types that we labeled splitting, suppressing, opposing, and adjusting. Working through our critical tension points, we coded the dominant response at each tension point, and identified the specific actions that made up these responses. All of these are further defined and illustrated in Table 1.

- *Splitting* comprised our original separating response and was relabeled in accordance with others' use of the word (e.g. Andriopoulos & Lewis, 2009; Lewis, 2000; Lüscher & Lewis, 2008). It involved responses to paradox that assumed the divisions and their objectives could be held separate, rather than being seen as interdependent during the restructuring.
- We retained our original label of *suppressing* because none of the existing responses in the paradox literature accurately fit our empirical observations. Suppressing responses involved a relatively one-sided power dynamic, as the objectives pertaining to one pole of the paradox were suppressed in favor of the other objectives. That is, the demands of one pole were seen as more important and able to be pursued at the expense of the other pole.
- *Opposing* comprised our confrontation response and was relabeled as it did not fit existing definitions of confrontation that deal with confronting paradox via open communication in order to achieve acceptance (e.g. Lewis, 2000; Lüscher & Lewis, 2008). Opposing responses occurred when parties working to each side of the paradox were determined to assert their own needs, despite evidence that these

would oppose the needs of the other party and occasion head-on confrontation.

Opposition thus occasioned a different power dynamic than suppressing, because it assumed that the needs of both parties were important, but rather than realizing these as interdependent, they were pitted in opposition against each other, with each side trying to force the other to give way.

- We also retained our original label of *adjusting*; while we were unable to find adequate descriptors in the paradox literature for this response, we could in the literature on coordinating decision-making (e.g. Lindblom, 1965). Adjusting involved recognition that the needs of both parties were important and that they were interdependent and thus, had both to be achieved.

Insert Table 1 about here

Fifth, we closely examined the *relationships between paradoxes and responses*, and the *impact this had on restructuring*. We found that paradoxes were linked in paradox-response cycles; indeed, all three paradoxes co-occurred across critical tension points. Consistent with our previous labeling of responses, we therefore called these separating, suppressing, opposing, and adjusting cycles. Coding the CTPs to these responses indicated three examples of splitting, three examples of suppressing, two examples of opposing, and five examples of adjusting (see Appendices 2-4). In examining these paradox-response cycles, we found that the *organizing paradox* (Lüscher & Lewis, 2008) shaped actors' experience of meso- and micro-level paradoxes and that their responses, in return, shaped the on-going organizing paradox. Specifically, contradictions in the *organizing paradox* shaped a *performing paradox*, whereby actors experienced competing goals as they attempted to perform their roles, and a *belonging paradox*, as actors' divisional and work group values and identities were challenged or pitted against each other (Smith & Lewis, 2011). Actors experienced these paradoxes as they interacted over their work, generating *responses to paradox*, which consisted of *specific actions* that they

took. These actions then fed back into the *organizing paradox*, as they were embedded in the organizational procedures for restructuring. For example, an *adjusting response* might involve an *action* of trying to coordinate service provision, which would then be *embedded* within a formal operating procedure, such as a new trading contract to coordinate services between divisions. We studied this process of embedding, identifying a particular response as embedded when specific actions became part of a formal operating procedure or formalized process for responding to a particular situation; that is, they became part of what actors had to adhere to as part of the procedures for managing the restructuring. Examples of embedding included procedures such as timed consultation processes, design specification request forms, separation of management information systems, changed access codes to block divisional access to engineering appointment books, specifying transfer plans between divisions, co-locating integrated design teams working on an interlocked project plan, and so forth. Each of these procedures became the organizationally specified response for dealing with a particular aspect of the restructuring. This observation led to our first core finding that responses to the paradoxes of performing and belonging are not only informed by the organizing paradox, but also, as they become embedded in new organizational procedures, feedback into it, thereby ultimately enacting the restructuring. We thus present our findings around response cycles, using representative vignettes.

Finally, we compared the patterns of response cycles over time. We found some variation in the patterns, according to whether cycles moved through *a series of defensive responses*, such as splitting, suppressing or opposing, or whether there was a *shift from a defensive to an active response*, such as adjusting. We analyzed the reason for this variation by revisiting the outcomes from each cycle and how these shape the conditions for the next cycle. We found that different paths occurred according to whether the responses from the preceding cycle were embedded within the organizational procedures that shaped the

subsequent cycle. This explanation constitutes our second core finding, and, in combination with the response cycles, enabled us to develop the conceptual framework that comprises our contribution.

## FINDINGS

We found multiple examples of each paradox-response cycle within our 13 critical tension points (CTP). However, in order to present our findings concisely, based on their conceptual contributions, we provide one example of each type of paradox-response cycle: splitting, suppressing, opposing, and adjusting. While the multiple examples falling within a single paradox-response cycle necessarily demonstrate some variation in the detail of the response, they all correspond to the same substantive paradoxical tension and exhibited the same underlying dynamics. Illustrations offered below are thus representative examples of their respective paradox-response cycle. Hence, reporting on one provides evidence of the dynamics found in the others. Further evidence of each type may be found in the Appendices 2-4, where we summarize the paradox-response cycle of each CTP.

In the following examples, we first explain how the *organizing paradox* shapes the structural conditions through which actors experience the *paradoxes of belonging and performing*. We then explain the *actions* they take in response to those paradoxes, and, in turn, how their actions become *embedded in the restructuring outcomes* arising from that specific paradox-response cycle. We conclude with our findings on the patterns through which responses unfold over time.

### Splitting

The splitting response cycle involved managers separating contradictory elements into different divisions. The splitting response to paradox thus assumed the divisions and their objectives could be held separate during the restructuring, rather than being interdependent. Examples of splitting responses include interpreting goals as separate,

establishing independent divisional identities, working within divisional boundaries towards own goals, and developing separate procedures for each division. These actions split paradoxical elements into different divisions, with different actors and different roles, thereby minimizing interaction between the two. We demonstrate this cycle with a vignette from Corpnet (CTP 1, Appendix 2).

*Organizing Paradox.* Restructuring created a new division, Distribution, which had to operate independently from Corporate. In order to separate Distribution, Telco introduced a new organizing procedure called the wall. The ‘wall’ was an information barrier between divisions, involving separate access codes, computer systems, and buildings, across which no commercial information or influence could pass that might provide some competitive advantage to Corporate. Despite this barrier, Distribution and Corporate had to work together to create the new Corpnet and transfer all customers to it. This raised an organizing paradox by creating a contradiction between sharing information for the purpose of Corpnet development and not sharing information that might provide competitive advantage: “While we can’t share information with Corporate, the regulation also says ‘for the purpose of delivering fair products, people can work together and share information in pursuit of doing those products’. That’s contradictory.” (Distribution manager, interview).

*Mutually Reinforcing Paradoxes of Performing and Belonging.* The new organizing procedure made paradoxes of performing and belonging salient whenever people tried to interact across ‘the wall’. Specifically, the paradox of performing arose as managers attempted to perform their roles according to their different goals. Distribution managers had the regulatory goal of fairness, which meant performing their roles by not giving primacy to Corporate above other industry customers: “Corporate is just one of our customers. And we treat all customers the same” (Distribution meeting). Conversely, Corporate managers had a goal of providing differentiated service, which meant they

wanted their unique needs to be met: “You can’t treat high value, high volume customers like any other customer – We’ve got special requirements that need to be acknowledged!” (Corporate meeting); “The whole point is that we’re not like everyone else in industry. That’s why customers come to us” (Corporate meeting).

The wall also highlighted the paradox of belonging, as managers formed loyalty to their own division’s values and goals. Based on values of fairness, Distribution managers wanted to remain separate from Corporate managers during product development: “All I’m trying to do is build a fair product that is going to help the whole industry” (Distribution interview). However, based on their service values, Corporate managers wanted Distribution managers to help them develop a product that could meet their unique needs: “We are renowned for our service; so from a service perspective, Distribution needs to be more aggressive in their engagement with us” (Corporate interview).

*Actions arising from the splitting response.* As actors attempted to restructure Corpnet in the context of these paradoxes, the splitting response became untenable because it exacerbated the contradictions: “We created a mechanism whereby we can’t share confidential information with another division. That causes a bit of channel conflict between us and Corporate” (Distribution manager, interview); “Distribution tends to not want to tell us things that they tell industry. So things that we’ve done in the past – like working together on the products – they’re very reluctant to do. It gets pretty heated sometimes” (Corporate manager, interview). For instance, Distribution and Corporate managers did not interact at all on coordinating product delivery. These actions split different goals, identities and their associated actions into the different divisions, resulting in managers working on Corpnet separately within their divisions and not cross-divisionally: “We went through a phase of total separation where everyone was afraid to

talk; there was inefficiency because of people being reluctant to share information” (Telco manager, interview).

*Embedding Splitting into Restructuring Outcomes.* As managers enacted the splitting response, they advanced the goals of their respective divisions in isolation: “It means that when I’m doing things, I can take decisions based around my customers” (Distribution manager, interview). The outcome of the splitting response was that managers began to embed their separate goals and identities into the procedures for restructuring Telco; “We’re going to develop our own strategy. We’re not going to be the tail of the dog” (Corporate meeting). They thus embedded the splitting response within new organizing procedures, such as holding separate product development meetings and developing separate, uncoordinated product information and project deliverables. These procedures became embedded in the restructuring process to the extent that actors were no longer interacting over the product: “It has gotten to a point where no one will talk to anyone and we can’t advance Corpnet” (Telco manager, meeting). Given their need to interwork so Distribution managers could produce a product that Corporate systems could use, the splitting response jeopardised delivery of the restructuring.

### Suppressing

The suppressing response cycle involved one party giving priority to its goals and identity through a relatively one-sided power dynamic, as the demands of one pole were seen as more important and able to be pursued at the expense of the other pole. Examples of suppressing responses included ignoring goal-critical requests from the other party, and failing to incorporate these requests into new processes. These actions suppressed one element of the paradox. We demonstrate suppressing with an illustration from Linefix (CTP 2, Appendix 4).

*Organizing Paradox.* Distribution introduced a new procedure for product delivery that would enable fair engagement with all industry players about product design. It



provided industry with a standardized process for submitting product design requests. As the number of design requests exceeded capacity, requests had to go through a competitive process in which they were evaluated on the basis of industry value. This increased external industry players' involvement in design, as they had never been part of this process before. However, it decreased Retail's involvement in design since, as an internal industry player, it was used to having all its requests met and now had to compete with external players for design space. This raised an organizing paradox because the new procedures were contradictory with Retail managers' involvement in designing a product that they were also responsible for delivering: "The new process is hard for Retail. They're used to getting what they want. And we are saying 'whoa, hang on, we can no longer do this, this, and this'. But actually we've got to make them feel that 'you are our most important customer but we have to be fair'. It's tricky" (Distribution manager, interview).

*Mutually Reinforcing Paradoxes of Performing and Belonging.* The new procedure for design requests made salient the paradoxes of performing and belonging. Specifically, it highlighted the paradox of performing Distribution and Retail managers' different roles and goals in the design process: "Distribution has been created as a separate and standalone organization with its own goals and objectives. So you don't have much pressure on Distribution to say 'we need to deliver to the level that the Retail business needs'" (Telco manager, interview). While Distribution managers strove for fair design, by keeping Retail at a distance, Retail managers strove to be involved: "It has to be a fair process and that means we have to engage with you the same way we engage with industry" (Distribution manager, meeting); "If we can't communicate to get our requirements across, how can you make sure you meet our needs?" (Retail manager, meeting). Managers thus experienced paradoxical tensions about how to perform their roles within the restructuring.

Interaction over product design also highlighted the paradox of belonging with people in Distribution and Retail adhering to different divisional identities: “Distribution does not want to create a branding and identity for Telco, they want to create a brand and identity for themselves and for industry. And those two are very different” (Telco manager, interview). Based on their identity as a major industry player, Retail managers believed they needed close design involvement in order to deliver the high functionality on which their customer service values were built. This was in contrast to Distribution managers’ identities as independent industry suppliers, with beliefs and values based around fair interaction: “They don’t want to give us the functionality because it may create an unfair advantage, but we are a scale operator. We need this to deliver service” (Retail manager, meeting). By contrast, Distribution managers believed “We have commitments to many industry players. We must deliver equivalent service” (Distribution manager, meeting). The paradoxes of performing and belonging formed a recursive cycle as parties internalized goals as part of their identity and beliefs about their division, and this, in turn, reinforced their divisional roles in performing those goals: “We’ve given each division a label and some goals; that creates issues of identity” (Telco manager, interview).

*Actions arising from the suppressing response.* As actors interacted over Linefix, different goals and values surfaced, making contradictions between Distribution and Retail more salient. Distribution managers responded with suppression by overriding some of Retail’s goals: “I know that’s what they want, but that’s not what they’re going to get!” (Distribution meeting). For example, they built a new product specification that was the basis for the new technological platform but did not include much functionality requested by Retail. This suppressed the attention given to Retail managers’ goals within the new design. Retail managers felt that their identity and goals within the new Telco were less important than those of Distribution managers: “When did we go from being a

key part of the business to being the dog's breakfast?" (Retail manager, meeting). Retail managers tried to cope by creating manual workarounds to enhance service. However, they could not mitigate the suppressing actions taken by Distribution managers: "There are things we can't do that Distribution has to do" (Retail meeting).

*Embedding Suppressing into Restructuring Outcomes.* During the suppression response cycle, the Retail service goals were increasingly compromised: "In order to make the release available to industry on time, we have to drop some Retail requirements. There'll be tears before bedtime" (Distribution meeting); "They can just advance their goals without any regard for ours!" (Retail manager, meeting). In particular, managers embedded the suppressing responses into their procedures for managing the restructuring. For instance, Distribution delivered a Linefix product specification to Retail managers that they could not use because it was so inadequate to the systems they were developing. The specification built suppression of the Retail division's goals into the product design, so that the procedure itself exacerbated the paradox. Indeed, as Retail was the biggest Linefix customer, the procedure generated a serious problem in task delivery; "We told the Centre 'this is red' because for Retail to be successful, Distribution have to do their bit as well" (Retail, meeting). Embedding the suppression response into the new procedures for restructuring Telco thus jeopardized the balance between paradoxical elements.

### Opposing

The opposing response cycle involved active confrontation as managers took actions that pitted contradictory elements against each other. Opposition thus occasioned a more confrontational power dynamic than suppressing, because each side assumed its goals were more important and tried to force the other to give way. Specific opposing responses included divisions rejecting goal-critical issues for the other party, such as Distribution ignoring service issues that affected Wholesale goals and Wholesale

affecting Distribution goals by refusing to transfer customers to the fair Broadnet product. Such actions polarized elements of the paradox into opposition. We demonstrate this response with a vignette from Broadnet (CTP 3, Appendix 3).

*Organizing Paradox.* Distribution introduced a new industry consultation procedure for restructuring product development. Specifically, all industry players were invited to respond to draft proposals for product design over a 90-day period. Distribution would then incorporate all responses in their final design in order to meet the base requirements of industry. This was a major restructuring procedure that, while giving all industry players equal input into the proposed product design, also slowed the design process. The new procedure raised an organizing paradox between giving everyone equal involvement through lengthy consultation processes and engaging differently with Wholesale in order to separate products quickly and meet tight deadlines: “We’ve been through an extensive consultation period. At some stage you have to stop talking and start developing; you can’t keep on arguing about the spec or you run out of time. And we’re up against very tight deadlines here.” (Distribution manager, interview).

*Mutually Reinforcing Paradoxes of Performing and Belonging.* The new procedure exacerbated the performing paradox by making it difficult for Distribution and Wholesale managers to perform their roles due to opposing goals: “We have different goals – While you want to keep appeasing industry through extensive consultation processes, we need to produce a serviceable product by the deadline” (Distribution-Wholesale meeting). Distribution managers wanted a lengthy industry consultation to create a design spec that satisfied their fairness goal, but Wholesale managers wanted a quick consultation to create a design spec with strong functionality that would satisfy their service differentiation goal: “I know you want it yesterday, but we have due process to follow and that means seeing out the consultation” (Distribution manager, meeting); “If we wait another ten weeks for the consultation to finish and the requirements to be

processed, there is no way we are going to be able to develop a high quality product on time” (Wholesale manager, meeting).

Interaction over the consultation process also made the paradox of belonging salient because managers adopted opposing divisional identities: “Distribution managers very quickly internalized the idea of fairness; they live it. Wholesale managers still have their market-based identity; for them being a good wholesaler means delivering good service” (Telco manager, interview). Distribution managers thus defined themselves through fair processes, which was contradictory to Wholesale managers’ values of service differentiation: “Your need to continuously consult industry is pushing back all our deliveries; how can we be a good wholesaler under these conditions?” (Wholesale manager, meeting); “Being a good industry supplier means taking account of all of our customer needs and that takes time” (Distribution manager, meeting). Paradoxes of performing and belonging reinforced each other as actors incorporated their roles and goals into their identity, making them an integral element of belonging: “Our goals are part of who we are” (Distribution manager, meeting).

*Actions arising from the opposing response.* As actors interacted within these paradoxes to restructure Broadnet, the contradictions between their different goals and identities surfaced in managerial actions that placed the goals in direct opposition. For example, consistent with its regulatory agenda, Distribution managers undertook a lengthy industry product consultation that Wholesale managers saw as directly opposing their goals and ability to fulfill their market-directed roles. Such actions by Distribution went beyond suppressing to opposing the Wholesale goals because they prevented Wholesale managers from doing their tasks, and hence, from realizing their goals: “This is ridiculous. It is preventing us from meeting our business goals!” (Wholesale manager, meeting). That is, Wholesale managers could not find some way to absorb or workaround this opposition to their needs or they would fail their goals; the new systems

produced could not deliver their service plans. Wholesale managers thus also responded in an oppositional way, refusing to use these systems and halting task progress until there was an acceptable solution. Opposing responses thus led to polarization, as each party became fixated on their own goals and beliefs and blocked the other party from pursuing their own tasks for completing the new product design.

*Embedding Opposing into Restructuring Outcomes.* Opposing responses escalated as managers learnt to block and obstruct each other. Their actions were grounded in the mutually reinforcing alignment between roles, goals and identities within divisions, which also increased opposition between divisions. Managers in each division thus became entrenched in their own views and unwilling to consider any form of compromise. For example, attempts to agree the transfer plan met with direct opposition and refusals to work around the tension: “Can you please confirm that you will be ready to receive our customer transfers on Monday morning?” – “No, I can’t” (Wholesale-Distribution managers, meeting). These opposing responses prevented progress, reaching such a point of crisis that Wholesale customers, who comprised 50% of the market, were experiencing serious service problems on Broadnet. Failure to meet service requirements drew the attention of the national media: “The Editor of [newspaper] called our CEO this morning to let him know that Broadnet wasn’t working. Can this *please* be given some attention now?” (Wholesale manager, meeting). The problem was that the new procedures had been built to incorporate the contradictions that managers were experiencing and so could not resolve tensions. For example, Wholesale managers could not use the consultation procedure to receive a response on their requests in sufficient time to develop their systems around those requests. Equally, as the consultation took so long, Distribution managers did not have time to develop a product with all the features that were requested; they were unable to design anything other than a very basic product that was of little use to their biggest customer. Yet no one seemed able to mitigate these

problems, as they had become embedded in the restructuring procedures. For example, Wholesale managers tried to work around it, but found that there was no system patch or manual process that could ameliorate the problem: “We’ve already thrown half of India at it” (Distribution meeting). The restructuring had reached an impasse where no one’s goals could be met; “Shit is really starting to hit the fan and I don’t know how we’re going to meet all of the Telco goals” (Distribution manager, meeting). Frustrated, they turned to senior management to help them move the restructuring forward.

### Adjusting

The adjusting response cycle involved acceptance of both sides of the paradox and recognition of their interdependence in achieving the restructuring. Adjusting meant that actors worked out how to adjust their work practices to each other in order to support both sides of the paradox. During this process, senior management gave support by arbitrating on adjustments that were necessary to enable both sides of the paradox. Examples of adjusting responses included intensive interworking between divisions in order to progress the task, such as working together to build more functionality into systems; and arbitration by the senior executive, such as instructing Retail managers to move to the new Linefix product despite some service risk. These actions accommodated both elements of the paradox. We illustrate the adjusting response with a vignette from Linefix (CTP 4, Appendix 4).

*Organizing Paradox.* This time the organizing paradox arose out of restructured procedures that failed to adequately consider both elements of the paradox. Specifically, the new Linefix systems provided insufficient functionality to meet the requirements of Retail customers. For example, the new systems had less than half the speed of response that Retail managers needed to meet existing customer service levels. These inadequate design features arose because responses in previous cycles had led to restructured systems with inherent contradictions that could not satisfy both paradoxical elements:

“The problem is that systems and service were built in a non-market way; we’re working to incorporate additional functionality but that will take time” (Telco manager, meeting). These procedures raised an organizing paradox by creating contradiction between the *intended goal* of the restructuring, which was to incorporate both fairness and service into the new Linefix product, and the *actual* restructuring, which produced procedures that, while fair, could not develop a functioning product: “We’ve got a fair product that no one wants to buy because it only works half the time” (Telco manager, meeting).

*Mutually Reinforcing Paradoxes of Performing and Belonging.* Working with restructured procedures with inherent contradiction built into them made the paradoxes of performing and belonging salient. While managers accepted that the goals of both divisions needed to be achieved, they experienced a paradox in performing their roles to include these goals within Linefix: “It’s clear that we’ve gotta be fair and we’ve gotta deliver good service. The question is how we can do both at the same time” (Distribution manager, meeting). While Distribution managers insisted on industry standard service levels based on its fairness goal, Retail managers’ main goal was above-average service: “We simply can’t raise the industry service standards to the level Retail would like. The systems would fall over” (Distribution manager, meeting); “Industry standard isn’t good enough from a market point of view” (Retail manager, meeting).

Interaction over these goals thus also surfaced the paradox of belonging by making salient the different divisional identities: “Retail is obsessed with service and understandably so; but all people in Distribution talk about is industry fairness” (Telco manager, interview). While Distribution managers’ firmly grounded their identity in fair service, Retail managers based their identity on good service: “The systems have been designed to cater to industry, not just Retail, so you can’t expect them to do everything you want” (Distribution manager, meeting); “The systems don’t allow us to deliver what we need” (Retail manager, meeting).



The paradoxes of performing and belonging were thus mutually reinforcing, as actors wove their own roles and goals into their divisional identity. However, at the same time, they were embracing the broader Telco identity and goals, which incorporated both fair access to its distribution networks and high quality service for its downstream divisions: “We have to be fair and we have to deliver high quality service – Failing regulatory or market goals isn’t an option” (Telco manager, meeting); “We obviously have to meet our fairness objectives, but we need to find a way to do that without instigating a service crisis!” (Distribution manager, meeting). Managers thus faced a dilemma. While embracing the goals and identity of their divisions, they were also aware that meeting the goals and identity of the other division was critical to successfully restructuring Telco, and that this was also part of their goals and identity. Unable to address both sides of the paradox within the procedures they had built, they appealed to senior management to arbitrate on how to move forward.

*Actions arising from the adjusting response.* Contradictions built into the restructuring through previous responses put the Linefix delivery in jeopardy; a large number of customers were now seriously affected by service failures on the product. Recognizing that the paradoxical tensions threatened delivery of a restructured Telco organization, senior executives took two key actions. First, they introduced new rules for restructuring the product delivery by forgoing the Linefix deadline, despite the regulatory penalties this incurred. This decision was a critical moment of paradoxical leadership because it emphasized the interdependence of goals and helped divisional managers confront the paradoxical tensions preventing them from restructuring Telco around both sets of goals.

Second, as previous actions had embedded inherent contradictions into the restructured procedures, divisional managers did not have a way forward. Rather, they had to undo some old procedures before they could rebuild them in a more interdependent way. As this required them to break down existing ways of doing, senior

executives became closely involved in on-going restructuring. They held weekly meetings with project teams, arbitrating micro-adjustments on specific aspects of Linefix, such as deciding when Retail had to move customers to the new product: “The executive has decided that we are going to ‘go live’ on Monday. They acknowledge the remaining service risk but are prepared to accept it” (Retail manager, meeting). This was an adjusting action because Retail managers began using the product despite some service risks, enabling both Retail and Distribution managers to then test and further develop the systems. These micro-adjustments facilitated progress on Linefix as divisional managers could interwork productively, with immediate arbitration as soon as tension arose. Adjusting enabled managers in both divisions to preserve their goals and identities: “Ultimately we will have a fair *and* functioning product, although slightly later than anticipated and with a little bit of help from the top” (Telco manager, meeting).

*Embedding Adjusting in Restructuring Outcome.* The adjusting response enabled managers to recognize the importance of both goals: “Fairness without service defeats the purpose” (Distribution manager, meeting); “Quality of service is very important, but we need to make sure that we achieve this in a fair and transparent way” (Retail manager, meeting). In doing so, managers in both divisions embraced the paradox at the heart of their restructured organization, recognizing that adjustment on both sides was needed to satisfy these goals: “We learnt how to work together to achieve our goals; who would have thought it would be that difficult?” (Retail manager, interview).

While the adjustment response allowed managers to advance Linefix, progress was not as quick as desired because previous organizing procedures had embedded contradictions that continued to sabotage goal achievement. Managers had to unravel and rebuild a number of processes and procedures that earlier responses to paradox had built in, such as: moving away from *splitting* to co-locating system design people from each division in order that they could interact; moving away from *suppressing* service needs

in the interests of fairness by developing new service contracts that enabled both Retail and other industry managers to pay a variable rate for different service levels; and by developing clear arbitration paths and giving some senior managers formally designated roles for determining how to adjust actions to each other whenever even minor tensions arose. All of these changes to earlier procedures took time and led to postponement of the original restructuring deadline. However, it was also part of the process of embedding the adjusting response into the new organizational procedures; managers recognized that, to advance the task, they needed to reconstruct their ways of working to be more interdependent. This rebuilding took time: “We’re getting a lot of failures here, but that’s a knock-on effect of the old systems and processes rather than what we’re trying to do right now” (Retail manager, meeting). As they embraced the adjusting response, managers could see a way to produce the necessary restructuring of Linefix: “We’re on the right track! I wish we’d started this process months ago” (Distribution manager, meeting). While the paradoxes of the restructured Telco organization continued to produce tensions, managers now had a way of interacting that met their sense of belonging to both their own divisions and also to Telco, and gave them ways of performing the paradox within their roles. They could thus cope with the tensions in a practical way by confronting them as they arose and working to resolve them in ways that became embedded in the new organisational procedures.

### **Patterns of responses**

Our findings show four responses to paradox, splitting, suppressing, opposing, and adjusting, that recursively link different types of paradox through the actions that actors take during these responses. We found multiple examples of each response, which are summarised in Appendices 2-4. We have shown each response separately in order to explain how paradoxes of organizing, performing and belonging shape each other at particular points in time through the dominant response taken.

Our longitudinal findings of the restructuring at Telco, displayed in the Appendices of the restructuring of each product, also show how sequences of responses evolve over time. Specifically, in Corpnet the splitting response was followed by the suppressing response and then two cycles of the adjusting response. By contrast, the Broadnet and Linefix, products followed the sequence in which we presented our findings above. Specifically, the splitting response was followed by a suppressing response and then an opposing response, before shifting to the adjusting response. A critical difference in these two pathways is thus whether the suppressing response is followed by an adjusting or opposing response. We attribute this difference to whether responses are embedded within organizational procedures as an outcome of the response-cycle and so become part of the organizing paradox in the next response-cycle.

For example, in Corpnet, actors in the suppressed division were able to work around the suppressing response by developing manual procedures, such as employing technicians to manually patch customers to the new systems to prevent a downturn in service while they tried to develop better systems. They were thus able to circumvent the suppression of their goals and the suppressing response was not built into organizational procedures. Rather, managers on both sides could see that these manual procedures would eventually need to be connected adequately to the Distribution network, giving them a tangible work focus to overcome suppressing in the subsequent response-cycle. By contrast, in Broadnet and Linefix the suppressing response was built into organizational procedures that were unable to account for the interests of managers from the suppressed pole, such as design consultation processes that did not acknowledge the requirements of Broadnet and Linefix managers. This built in suppression then spurred an opposing response in the subsequent cycle, which required arbitration to move to an adjustment response. These different sequences and the way that organizing outcomes

shape the tendency to move to an opposing or adjusting response will be discussed below, as the basis for our process framework on how paradoxes unfold over time.

## **DISCUSSION AND IMPLICATIONS**

This paper set out to answer two research questions: 1) How is the relationship between different paradoxes constructed? 2) How do different responses to paradox shape a processual relationship between paradoxes as they unfold over time? Our findings have shown four different responses to paradox, splitting, suppressing, opposing, and adjusting, that generate a recursive association between the paradoxes of organizing, belonging and performing. We now draw our findings together by developing a process model of the interrelationships between the three paradoxes and how they unfold over time. We explain this model by developing two linked processes shown in Figures 2 and 3. Figure 2 illustrates the core elements of our conceptual model while Figure 3 illustrates how responses shape the unfolding path of paradoxes over time. We reference our Telco case to illustrate the framework, which may also be extended to other contexts.

-- Insert Figure 2 about here --

Figure 2 captures the recursive relationships between paradoxes operating at different levels. Specifically, the model locates performing at the micro-level of actors interacting over their roles, belonging at the meso-level of identity with groups and divisions (Lewis, 2000; Lüscher & Lewis, 2008), and organizing at the macro-level of organizational procedures (Clegg et al, 2002; Lewis, 2000; Smith & Lewis, 2011). This is an important element of our model, as it demonstrates that paradoxes occur simultaneously but at different levels.

The second point in the model is the introduction of two key mechanisms that explain how the different types of paradoxes interact: responses (A) and embedding of responses (B). These mechanisms enable us to explain how actors' responses to paradox

are amplified into macro, organizational responses to paradox that then shape on-going responses, creating a recursive pattern of interaction between micro, meso and macro-level paradoxes. This pattern iteratively creates restructuring outcomes that fuel the next paradox-response cycle (C).

Specifically, our model shows that paradoxes of performing and belonging are mutually reinforcing as managers attempt to perform their roles, which require them to interact over their interpretations of goals and the group and divisional identities they attribute to those goals. This interaction invokes either defensive or active responses (Mechanism A) that take the form of specific actions, such as splitting by developing separate product plans, or adjusting by employing integrated project dashboards. The next mechanism (Mechanism B) links these responses to the macro-level as actions become embedded in the particular organisational procedures that actors develop to implement the restructuring. Because procedures specify the way that paradoxes will be dealt with, for example, by allocating the methods for interacting over product design requests, or managing service provision levels, they generate organisational level responses to paradox. These organisationally embedded responses to paradox then further shape the way that people perform their roles, perceive the goals, and consolidate their group identities and values, so shaping the meso- and micro-level responses to paradoxes of belonging and performing.

The process model illustrated in Figure 2 extends the literature on paradox and change by considering how paradoxes at different organizational levels are associated (Lüscher & Lewis, 2008; Smith & Lewis, 2011). There has been some debate about whether paradox escalates from the communicative actions of actors into organisational paradoxes (Putnam, 1986), what dynamics constitute the interstices between different types of paradoxes (Smith & Lewis, 2011), and how mutually reinforcing relationships between paradoxes are constructed (Lüscher & Lewis, 2008). However, there is no clear

consensus. Our model abstracts from our findings in order to analytically separate the different levels of paradox and show how they interact to reinforce particular approaches to paradox. We thus elaborate on Clegg et al.'s (2002) structurationist approach, which suggests that the seeds of paradox are inherent in the organisational systems that create structures for action, whilst those actions in turn construct the structures in which actors operate (Giddens, 1984).

While these responses are entangled, happening simultaneously, our model shows how responses arising in interaction are embedded, through the actions that people take, in organizational procedures that permeate structures, so constructing an on-going, complex system of inherent contradictions via the two key mechanisms described above: active or defensive responses and their embedding in organisational procedures (Clegg et al, 2002; Smith & Lewis, 2011; Zeitz, 1980). We show the reciprocal cycle through which responses emerge and shape the association between paradoxes at different levels. Our study thus extends the Smith & Lewis (2011) framework of matched pairs of paradoxes, and elaborates their concept of dynamic equilibrium through which paradoxes are balanced by illustrating the dynamics through which paradoxes are interlinked and the way they generate outcomes that shape the on-going response to paradox (Figure 2, C).

The second part of our model shown in Figure 3 further develops the processual nature of our findings by examining how defensive and active responses to paradoxes unfold over time (Lewis, 2000; Lüscher & Lewis, 2008; Poole & Van de Ven, 1989; Smith & Lewis, 2011). It illustrates a dynamic process model of how the four response-cycles of splitting (A), suppressing (B), opposing (C), and adjusting (D) evolve through *embedding* organizing outcomes in procedural approaches to paradox. As Figure 3 shows, responses may unfold along an active path (Path 1) that defuses contradiction by accepting and working with the paradox. Conversely, responses may unfold along a defensive path (Path 2) that escalates contradiction. The path that is taken depends on

whether the responses from the preceding cycle are embedded within organizational procedures as an ‘organizing outcome’ of paradox (see also Jay, forthcoming) that shapes the subsequent response. We now explain how these paths extend existing concepts of balancing paradox.

-- Insert Figure 3 about here --

As shown in Figure 3 (A), our study began with the defensive response of splitting. In our case, the splitting response was built into the organizational outcome as an embedded procedural approach to restructuring. This outcome was inadequate because restructuring tasks were interdependent and hence could not be achieved through independent poles (Lewis, 2000; Poole & Van de Ven, 1989). Embedding splitting into organizational outcomes thus creates paradoxical conditions that shape future responses. As Figure 3 shows, the splitting response may either spur an active path (1) or a defensive path (2), depending on whether splitting is embedded in organizing outcomes. While it is conceptually possible for the active path to arise from a splitting response, this did not occur in our case, as indicated by the dotted line.

Rather, the pattern followed the defensive path to a suppressing response cycle (Figure 3 B). Again, this response was inadequate to restructuring, because, in suppressing one side in favour of the other, it failed to embrace the paradoxical nature of the organization (Lewis, 2000; Poole & Van de Ven, 1989). Furthermore, depending on whether or not the suppressing response is embedded within organizational procedures as an outcome of the response cycle, an active or defensive path may follow. As illustrated in the arrow from B to D in Figure 3, the active path ensues when suppressing is not built into organizational procedures, enabling managers to accept and find ways to work within the paradox (Lewis, 2000; Smith & Lewis, 2011). This happened in our case when managers shifted to an adjusting response in restructuring Corpnet. Other studies have noted that actors are more likely to adopt active responses that surmount



paradoxical tensions and enable change when they maintain a dialogue (Abdallah, et al, 2011; Beech et al, 2004; Lüscher & Lewis, 2008). As our pathways show, it is easier to keep such dialogue open when defensive responses are not built into the organizational procedures that shape how actors subsequently interact. Thus, social mechanisms such as dialogue and interaction through which paradox can enable change are recursively linked to the way that prior response cycles shape organizational features of the change process.

By contrast embedding suppressing responses into the new organizational procedures shapes a defensive path for subsequent responses to paradox. As the arrow from B to C shows, building suppressing into organizing outcomes leads to an opposing response cycle, generating a process of escalating contradiction in responses to paradox. As Clegg et al (2002: 491) note, “most management practices create their own nemesis”. This was the case in our study of Broadnet and Linefix, where managers had an opposing response to organizational procedures that suppressed one side of the paradox. We thus elaborate existing studies on the cyclical nature of paradox (e.g. Jay, forthcoming; Smith & Lewis, 2011) by showing that cumulative defensive response cycles can exacerbate organizing paradoxes by building contradictions into organizational procedures. In-built organizing paradoxes may result in a feeling of ‘stuckness’ for managers (Jay, forthcoming; Lüscher & Lewis, 2008; Smith & Berg, 1987) that was characteristic of our opposing response. If these opposing responses are then further built into procedures that embed opposition into the way that roles, resources and attention are allocated within the organization, a vicious cycle is likely to ensue, as indicated by the dotted arrow from C in Figure 3.

However, based on the cumulative nature of our process model we also contribute to studies that suggest paradox may move a change initiative forward (e.g. Abdallah et al, 2011; Beech et al, 2004; Jay, forthcoming; Stoltzfus et al, 2011). Specifically, as illustrated by the active path indicated in the arrow from C to D in Figure

3, opposing responses may provide the necessary awareness for managers to confront the paradox. Rather than embedding the opposing response within the organizing outcome, actors in our case recognized that the restructuring was at an impasse and called on senior management to help move to an active response of adjusting. To move to an active response, it is necessary for actors to accept that paradox is a necessary condition of their organization (Lewis, 2000; Poole & Van de Ven, 1989; Smith & Lewis, 2011). We suggest that moments of opposition offer an opportunity to recognize the critical importance that each side attributes to its goals and values. That is, the extremeness of the opposing reaction (Smith & Berg, 1987; Vince & Broussine, 1996) is indicative of its importance for that party. When actors use this recognition to confront the paradox, they shift to an active response.

In practice, confrontation involves accepting and valuing differences between groups, which may be difficult to achieve without some external facilitation or removal from the emotional context in which tensions are experienced (Lewis, 2000; Smith & Lewis, 2011; Seo et al, 2004; Werner & Baxter, 1994). Indeed, the findings from Lüscher & Lewis' (2008) action research and Jay's (forthcoming) study show the valuable role researchers can play in facilitating the process of confronting paradox. Our findings extend these studies by showing that top managers do not always need to be involved, as shown in the Corpnet example, but that they are critical for facilitating the shift to an active response when contradictions become embedded within organizational procedures. When embedding of suppressing responses occurs, top managers go beyond helping others interpret, reframe and make sense of the interdependence between paradoxical goals (see Jay, forthcoming; Lüscher & Lewis, 2008; Quinn & Cameron, 1988; Seo et al, 2004), by actually becoming involved in the micro-actions and interactions of subordinate managers on each side of the paradox. We thus show the active way that external facilitation can enable confrontation of differences, as senior

executives helped managers unravel some of the contradictions that had been built into the restructuring in previous response cycles. In doing so they helped to develop and embed procedures that better accommodated the both/and responses critical for acceptance of paradox. We thus provide a more dynamic and active understanding of how external facilitation enables reframing of paradox to occur.

When paradoxes are recursively linked via active responses, the virtuous cycles that others suggest (see Andriopoulos & Lewis, 2009; Smith & Lewis, 2011) are likely to arise. While such active responses do not resolve or prevent the experience of paradox, they provide ways to work within it (Lewis, 2000). However, conceptually, regression (see Lewis, 2000), in which parties revert to defensive responses, may also arise if active responses are not continually managed and their embedding within organizational procedures revised. While we did not observe this in our case, we model the possibility in Figure 3 with the dotted arrow from D to regression.

Our process model in Figure 2 shows how the recursive relationship between paradoxes at different levels is constructed and Figure 3 shows the cumulative impact of *embedding responses to paradox within organizing outcomes*. While few studies have shown the specific implications of paradoxical outcomes for future cycles (see Jay, forthcoming for an exception), we show that the embedding of such outcomes in organizational procedures is critical to the way that paradoxes unfold over time. While our framework only explains the specific responses we found under the two key categories of active and defensive responses, our model may be used to examine the various responses other studies have found. For example, we expect the concept of embedding to provide deeper insights into the way that organizations “create their own nemesis” (Clegg et al, 2002: 491) and so to illuminate the fundamental tensions at the heart of the organizing paradox. In particular, we encourage future studies to investigate how different types of responses may or may not be embedded within organizing outcomes. In addition, future

research could study what contexts and actions repeat our pathways, when actors may shortcut our defensive path by moving directly to active responses, or when they may become stuck in a vicious circle of defensive responses.

## **CONCLUSIONS**

The findings and conceptual framework presented in this paper address three related gaps in the literature that limit current understanding of paradox. First, they enhance our understanding of how paradoxes at different levels shape each other, which has been the subject of calls for further research into the mutual constitution (Lüscher & Lewis, 2008) and dynamic balancing of paradoxes (Smith & Lewis, 2011). Our framework demonstrates how three paradoxes shape each other via a recursive paradox-response cycle. Specifically, paradoxes of organizing shape paradoxes of belonging and performing (Smith & Lewis, 2011). Interaction between these meso- and micro-level paradoxes spurs responses to paradox consisting of specific actions that are embedded in procedures for restructuring, and then feed back into the organizing paradox. Responses to the paradoxes of performing and belonging are thus not only informed by the macro-paradox of organizing but also incrementally shift this paradox over time.

Second and relatedly, it illustrates how new organizing procedures developed during restructuring shape the on-going structural contradictions that comprise paradoxes of organizing (Clegg et al, 2002; Smith & Lewis, 2011). Specifically, our model demonstrates that organizing, belonging and performing paradoxes interact in a structuration type process (Clegg et al, 2002; Giddens, 1984), whereby paradoxical organizational structures shape the way actors experience their identities and roles, and, consequently, the responses through which they (re)construct paradoxical organizational structures. Our model thus shows how actions are embedded in organizational procedures (Clegg et al, 2002; Zeitz, 1980), so constructing a complex system of inherent and on-going contradictions that predisposes a vicious cycle or one that incorporates

acceptance and so predisposes a virtuous cycle (Smith & Lewis, 2011). While others allude to these cycles, they do not provide a conceptual apparatus for unpacking the specific relationships through which such cycles emerge and unfold.

Third, it demonstrates managerial responses to paradox that have practical implications. The extent to which defensive or active responses to paradox (Lewis, 2000) are built into the organizing outcomes of any particular response cycle shape the responses that are likely in the next cycle. Our findings highlight the cumulative nature of defensive and active responses to paradox over time, and shows how managers may move between these responses. Specifically, a shift from a defensive to an active response occurs when managers accept that paradox is a necessary condition of their organization. This may occur by maintaining flexibility so that defensive responses are not embedded within organizational procedures. However, opposing responses, while defensive, may also provide opportunity for such acceptance by presenting managers with the need to confront the paradox. Managers can thus use the responses and pathways found here to manage the practical implications of paradox in their own organizations.

Finally, our study did not find the learning paradox, which involves an innate tension between specific modes of knowing and knowledge acquisition. This is because in our case, the restructuring was an externally-mandated, life-cycle process (Van de Ven & Poole, 1995) imposed by the regulator. While the method for achieving the end required by the regulator was not clear, necessitating a highly adaptive change process in which actors learnt to act in new ways, it was not a learning paradox *per se*. We expect that other firms facing a similar mandated, life-cycle change process, might respond in a similar way to the responses in our conceptual framework. By contrast, organisations that are dependent on creative disruption for survival might experience a learning paradox. For example, a wave of firms that made their reputations as innovative technology start-

ups, such as Facebook, Google and Yahoo, are now incumbents that need to exploit their existing technology bases and assets to provide shareholder returns, even as they seek to remain the key innovators bringing out disruptive technologies (Christensen, 1997). Such firms are likely to experience a learning paradox in which they must cannibalise their existing technologies, even as they capitalize on them for revenue. Future research might examine organisations that are particularly prone to a learning paradox, and study how it underpins the experience of, and relationship between, paradoxes at different levels of analysis.

In conclusion, our conceptual framework contributes to understanding of the cumulative process through which paradoxes co-evolve and their impact on organizational restructuring. While the paper is based on a case study, this framework provides a basis for theoretical generalizability (Eisenhardt and Graebner, 2007). Paradox in organizations is an increasingly prevalent phenomenon (Lewis, 2000; Smith and Lewis, 2011). Our findings are therefore relevant to other organizations that face similar paradoxical conditions created by competing strategic demands. For instance, we would expect our findings to be relevant to other cases of restructuring. For example, mergers are notoriously difficult examples of restructuring because of the need to retain the distinctive qualities of each party in the merger, whilst attempting to knit the two organizations into a whole (Angwin & Vaara, 2005). In such situations, rather than the structural separation that drove the organizing paradox in our case, structural integration would generate tensions. We might thus expect paradoxes of belonging to be particularly salient as managers face tensions between their former separate-firm and new merged-firm identities. This could occasion a different dynamic in the way that tensions arise and are embedded within different levels of paradox as new structural solutions and managerial roles are attempted to manage the identity conflicts within the merger. Hence, further research into responses to paradox during restructuring is needed to see how the

level at which paradox emerges shapes the process through which paradoxes co-evolve.

## REFERENCES

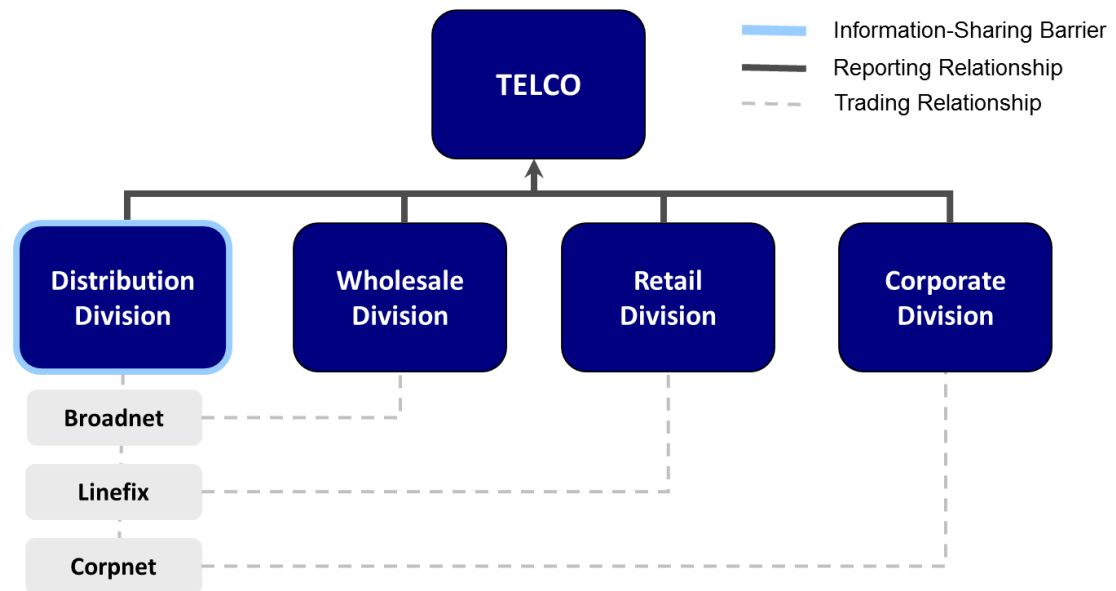
- Abdallah, C., Denis, J.-L. and Langley, A. 2011 "Having your cake and eating it too: Discourses of transcendence and their role in organizational change dynamics. *Journal of Organizational Change Management*, 24 (3): 333-348.
- Andriopoulos, C. and Lewis, M.W. 2009 "Exploitation-exploration tensions and organizational ambidexterity: Managing paradoxes of innovation". *Organization Science*, 20(4): 696-717.
- Bateson, G. 1972 "Steps to ecology of the mind". New York: Ballentine Books.
- Beech, N., Burns, H., de Caestecker, L., MacIntosh, R. And MacLean, D. 2004 "Paradox as invitation to act in problematic change situations". *Human Relations*, 57(10):1313-1332.
- Benson, J.K. 1977 "Organizations: A dialectical view". *Administrative Science Quarterly*, 22(1): 3-21.
- Christensen, C. 1997. *The Innovator's Dilemma When New Technologies Cause Great Firms to Fail*. Harvard Business School Press
- Clegg, S., Cunha, J.V. and Cunha, M.P. 2002 "Management paradoxes: A relational view". *Human Relations*, 55(5): 483-503.
- Cyert, R.M. and March, J.G. 1963. "Behavioral theory of the firm". Englewood Cliffs: Prentice-Hall.
- Demers, C. 2007. *Organizational change theories: A synthesis*. Thousand Oaks CA: Sage.
- Denis, J.-L., Langley, A. and Rouleau, L. 2007 "Strategizing in pluralistic contexts: Rethinking theoretical frames". *Human Relations*, 60(1): 179-215.
- Eisenhardt K.M. 1989 "Building theories from case study research". *Academy of Management Review*, 14(4): 532-50.
- Eisenhardt, K.M. and Graebner, M.E. 2007 "Theory building from case studies: Opportunities and challenges". *Academy of Management Journal*, 50(1): 25-32.
- Engeström, Y. and Sannino, A. 2011 "Discursive manifestations of contradictions in organizational change efforts: A methodological framework". *Journal of Organizational Change Management*, 24(3): 368-387.
- Fiol, C.M. and Lyles, M. 1985 "Organizational Learning". *Academy of Management Review*, 10(4): 803-813.
- Giddens, A. 1984. "The Constitution of Society". Cambridge: Polity Press.
- Geertz, C. 1973 "The Interpretation of Cultures". New York: Basic Books.
- Groleau, C., Demers, C. and Engeström, Y. 2011 "Guest editorial". *Journal of Organizational Change Management*, 24(3): 330-332.
- Jarzabkowski, P.A. and Fenton, E. 2006 "Strategizing and organizing in pluralistic contexts". *Long Range Planning*, 39(6): 631-648.
- Jarzabkowski, P.A, Lê, J.K. and Feldman, M. 2012 "Toward a theory of coordinating: Creating coordinating mechanisms in practice". *Organization Science*, 23(4): 907-27.

- Jay, J. 2012 "Navigating paradox as a mechanism of change and innovation in hybrid organizations" *Academy of Management Journal*, forthcoming.
- Kraatz, M.S. and Block, E.S. 2008. Organizational implications of institutional pluralism. In, R. Greenwood, C. Oliver, K. Sahlin & R. Suddaby (Eds.), "The SAGE Handbook of Organizational Institutionalism". London: Sage.
- Langley, A. 1999 "Strategies for theorizing from process data". *Academy of Management Review*, 24(4): 691-710.
- Langley, A. 2007. Process thinking in strategic organization. *Strategic Organization*, 5(3): 271-282.
- Lourenço, S.V. & Glidewell, J.C. 1975 "A dialectical analysis of organizational conflict". *Administrative Science Quarterly*, 20(4): 489-508.
- Lawrence, P.R. and J.W. Lorsch. 1967 "Organization and environment: Managing differentiation and integration". Boston: Harvard University Press.
- Lewis, M.W. 2000 "Exploring paradox: Toward a more comprehensive guide". *Academy of Management Review*, 25: 760-776.
- Lindblom, C.E. 1965 "The Intelligence of Democracy". New York: Free Press.
- Locke, K., Golden-Biddle, K. and Feldman, M.S. 2008 "Making doubt generative: Rethinking the role of doubt in the research process. *Organization Science*, 19(6): 907-918.
- Lüscher, L. and Lewis, M.W. 2008 "Organizational change and managerial sensemaking: Working through paradox". *Academy of Management Journal*, 51(2): 221-240.
- March, J. 1991 "Exploration and exploitation in organizational learning". *Organization Science*, 2: 71-87.
- Miron-Spektor, E. Gino, F. and Argote, L. 2011 "Paradoxical frames and creative sparks: Enhancing individual creativity through conflict and integration". *Organizational Behavior and Human Decision Processes*, 116: 229-240.
- Poole, M.S. and Van de Ven, A.H. 1989 "Using paradox to build management and organization theories". *Academy of Management Review*, 14(4): 562-578.
- Puranam, P., Singh, H., & Zollo, M. (2006). Organizing for innovation: Managing the coordination-autonomy dilemma in technology acquisitions. *Academy of Management Journal*, 49.2.
- Putnam, L.L. 1986 "Contradictions and paradoxes in organizations" In L. Thayer (Eds). *Organization-Communication: Emerging perspectives*. Norwood, Ablex: 151-167.
- Quinn, R.E. and Cameron, K.S. 1988. "Paradox and transformation: Toward a theory of change in organization and management". Cambridge: Ballinger.
- Seo, M. and Creed, W.E.D. 2002 "Institutional contradictions, praxis, and institutional change: A dialectical perspective". *Academy of Management Review*, 27: 222-247.
- Seo, M.G., Putnam, L.L. and Bartunek, J.M. 2004 "Dualities and tensions of planned organizational change". In M.S. Poole and A.H. Van de Ven (eds.) *Handbook of Organizational Change and Innovation*: 73-107, New York: Oxford University Press.
- Smith, W.K. and Lewis, M. W. 2011 "Toward a theory of paradox: A dynamic equilibrium model of organizing". *Academy of Management Review*, 36(2): 381-403.

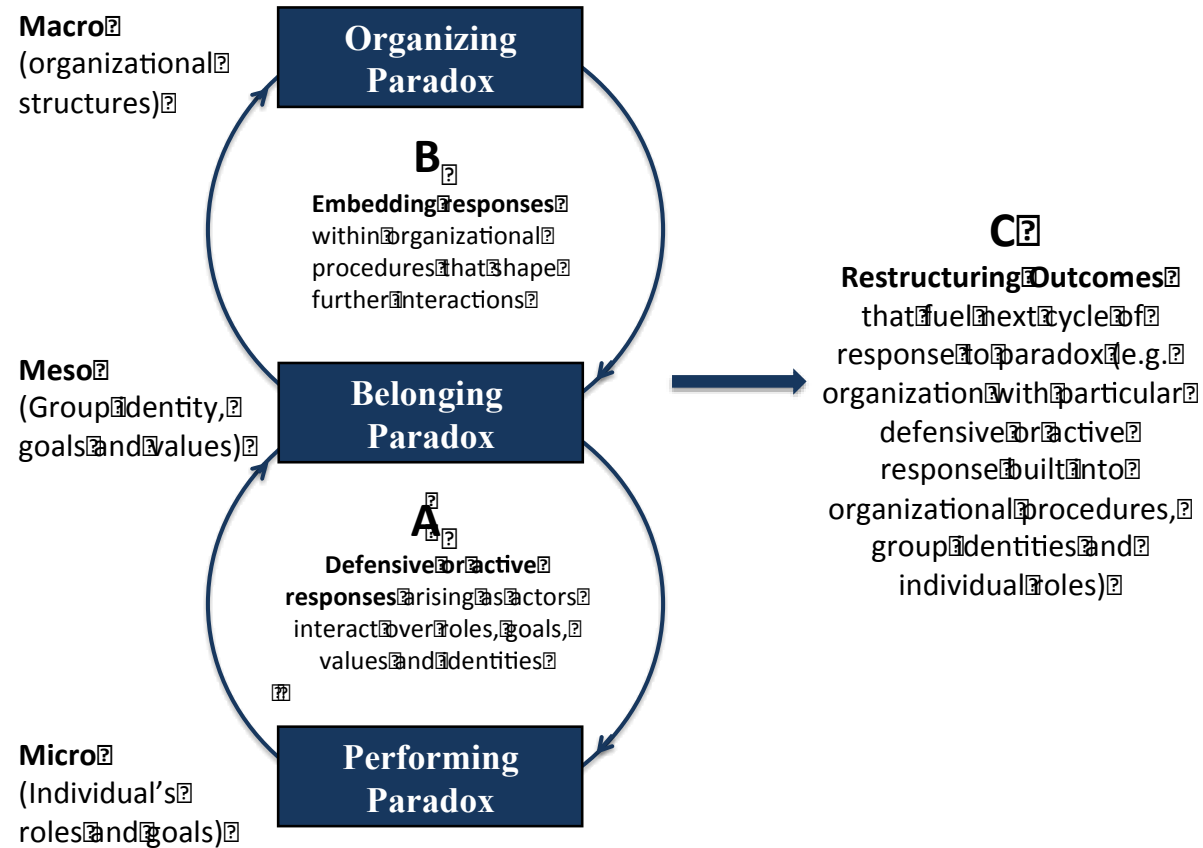


- Smith, W.K. and Tushman, M.L. 2005 “Managing strategic contradictions: A top management model for managing innovation streams”. *Organization Science*, 16(5): 522-536.
- Smith, K. K. and Berg, D. N. 1987 “Paradoxes of group life”. San Francisco: Jossey-Bass.
- Stoltzfus, K., Stohl, C. & Seibold, D.R. 2011 “Managing organizational change: paradoxical problems, solutions, and consequences”. *Journal of Organizational Change Management*, 24(3): 349-367.
- Strauss, A. and Corbin, J. 1998. “Basics of qualitative research: Techniques and procedures for developing grounded theory (2nd ed.)”. Thousand Oaks: Sage.
- Sundaramurthy, C. and Lewis, M.W. 2003 “Paradoxes of governance: Managing control and collaboration”. *Academy of Management Review*, 28(3): 397-415.
- Van de Ven, A. H. and Poole, M. S. 1995 “Explaining development and change in organizations”. *Academy of Management Review*, 20: 510-540.
- Vince, R. and Broussine, M. 1996 “Paradox, defense and attachment: Accessing and working with emotions and relations underlying organizational change”. *Organization Studies*, 17: 1-21.
- Werner, C.M. and Baxter, L.A. 1994 “Temporal qualities of relationships: Organismic, transactional, and dialectical views”. In M. Knapp and G. R. Miller (Eds.), *Handbook of interpersonal communication* (2nd Ed): 323-379. Thousand Oaks: Sage.
- Yin, R.K. 1994 “Case Study Research”. London, UK: SAGE Publications.
- Zeitz, G. 1980. “Interorganizational dialectics”. *Administrative Science Quarterly*, 25: 72-88.

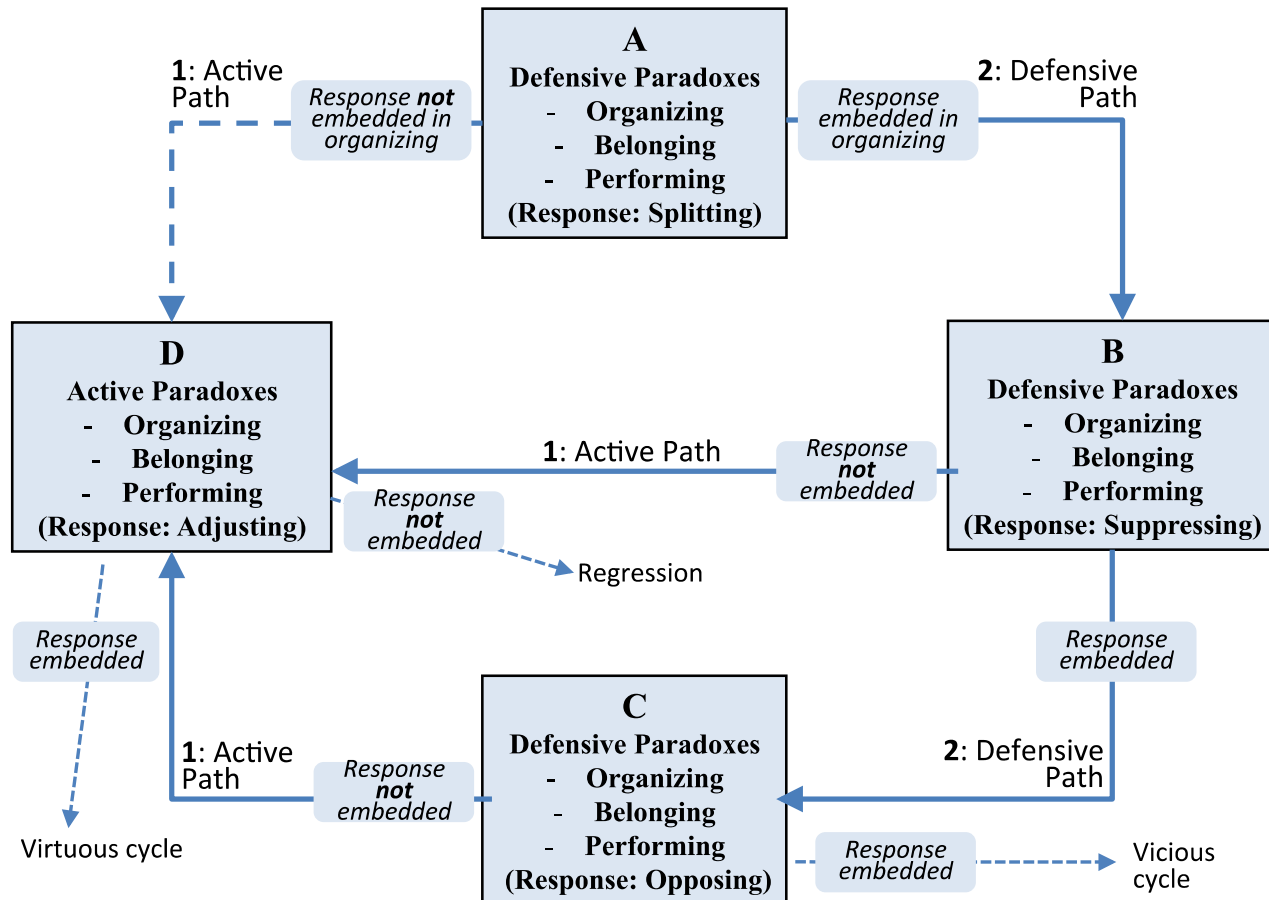
**Figure 1.** New organizational structure



**Figure 2.** Mutually constitutive relationship between paradoxes



**Figure 3.** Cumulative and co-evolving responses to paradox over time



**Table 1.** Definitions and Illustrations of Responses

Construct	Definition	Characteristics	Impact	Illustration
Splitting Response	A <u>response</u> to tension that involves separating contradictory elements either temporally (dealing with one, then the other) or spatially (compartmentalizing elements into different areas)	<ul style="list-style-type: none"> <li>- Type of response to paradoxical tension (defensive)</li> <li>- Core focus: Dealing with tension by separating elements</li> </ul>	<ul style="list-style-type: none"> <li>- Temporary relief from tension</li> <li>- Potential for progress</li> </ul>	<u>Compartmentalizing goals</u> , e.g. compartmentalizing goals of industry cooperation into Distribution division and goals of industry competition into the other Telco divisions.
Suppressing Response	A <u>response</u> to tension that involves prioritizing one element and allowing it to dominate or overrule the other element of a paradox	<ul style="list-style-type: none"> <li>- Type of response to paradoxical tension (defensive)</li> <li>- Core focus: Dealing with tension by overruling/dominating</li> </ul>	<ul style="list-style-type: none"> <li>- Temporary relief from tension</li> <li>- Potential for progress</li> </ul>	<u>Overruling requests</u> from the other party, e.g. Distribution overruling Retail's requests for some functionality in the new product design. The suppressed party tries to work around suppression of its needs, such as Retail trying to manually compensate for the lack of technical functionality, rather than directly confronting the suppression
Opposing Response	A <u>response</u> to tension that involves parties supporting contradictory elements of a paradox engaging in active confrontation and conflict that polarise paradoxical elements	<ul style="list-style-type: none"> <li>- Type of response to paradoxical tension (defensive)</li> <li>- Core focus: Dealing with tension by opposing and polarising</li> </ul>	<ul style="list-style-type: none"> <li>- Temporary relief from tension</li> <li>- Potential for progress</li> <li>- Potential for vicious cycle</li> </ul>	<u>Having direct confrontations</u> that polarize positions, such as Distribution producing a product specification that could not meet Wholesale's agreed service plans. Wholesale managers then refused to use the specification, which halted task progress, as each side stuck to their own view of tasks and goals, with no compromise on either side.
Adjusting Response	A <u>response</u> to tension that recognizes that both poles of the paradox are important and interdependent and thus, both need to be accommodated	<ul style="list-style-type: none"> <li>- Type of response to paradoxical tension (active)</li> <li>- Core focus: Dealing with tension by accommodating each other's needs</li> </ul>	<ul style="list-style-type: none"> <li>- Longer-term relief from tension</li> <li>- Potential for progress</li> <li>- Potential for virtuous cycle</li> </ul>	<u>Sides accommodating each other</u> , e.g. by Distribution and Retail developing interlocked project plans that would enable them to mutually adjust their specific deliverables to enable the other party to progress their own side.

## Appendix 1. Data Summary Table

Title / Description	Level	Date	Total
Interviews with 27 Managers working on all products	Senior = 16 Middle = 9 Operational = 2	Year 1 = 33 Year 2 = 9 Year 3 = 6	48
Interviews with 10 Managers working on Corpnet	Senior = 3 Middle = 2 Operational = 5	Year 1 = 11 Year 2 = 2 Year 3 = 2	15
Interviews with 9 Managers working on Linefix	Senior = 3 Middle = 3 Operational = 3	Year 1 = 12 Year 2 = 5 Year 3 = 2	19
Interviews with 10 Managers working on Broadnet	Senior = 2 Middle = 4 Operational = 4	Year 1 = 12 Year 2 = 6 Year 3 = 1	19
Meetings dealing with all products	72 x Senior 35 x Middle/ Operational	Year 1 = 48 Year 2 = 55 Year 3 = 4	107
Meetings dealing with Broadnet	Middle/ Operational	Year 1 = 31 Year 2 = 12 Year 3 = 0	43
Meetings dealing with Linefix	6 x Senior 32 x Middle/ Operational	Year 1 = 18 Year 2 = 20 Year 3 = 0	38
Meetings dealing with Corpnet	Middle/ Operational	Year 1 = 36 Year 2 = 22 Year 3 = 2	60

## Appendix 2. Coded Critical Tension Points for Corpnet

#	M	Paradox of Organizing	Mutually Reinforcing Paradoxes of Performing / Belonging	Actions in Response to Paradox	Organizing Outcomes Fuelling Next Cycle
1	3	<b>Corpnet CTP1 (Month 3)</b> <i>New organizing procedure</i> - Distribution and Telco divisions separated by 'wall' - Distribution is independent; cannot share commercial information with Corporate - Divisions must collaborate on new Corpnet product	New 'wall' procedure created: (1) Paradox of <u>performing</u> about <i>different divisional goals</i> ; Distribution has regulatory goal of fairness, Corporate has market goal of service (2) Paradox of <u>belonging</u> about <i>values of interaction</i> ; Distribution will not work with Corporate on development but Corporate needs this to develop its part	<b>Splitting:</b> As actors did not know how to engage, they retreated to their own division  <u>Specific Actions</u> - Work within own boundaries (e.g. plan for fallout) - Not engage across divisions (e.g. not share info)	Able to progress work within new divisions via internally-focused organizing; but realize some cross-divisional awareness is needed; do not <i>embed</i> splitting into organizing mechanisms
2	6	↓ <b>Corpnet CTP2 (Month 6)</b> <i>New organizing procedure</i> - Industry consultation process introduced - Increased industry involvement in design - Reduced Corporate involvement in design	New consultation process created: (1) Paradox of <u>performing</u> about <i>different design process goals</i> ; Distribution strives for fair design (distant Corporate involvement), Corporate for strong design (close involvement) (2) Paradox of <u>belonging</u> about <i>divisional identity</i> ; as major player Corporate feels it should be closely involved in design, but as <u>independent industry supplier</u> Distribution feels it should shield against excessive involvement	<b>Suppressing:</b> Distribution overrides Corporate needs by ignoring design requirements; Corporate could only partially mitigate these actions  <u>Specific Actions</u> - Fail to account for others' needs (e.g. reduced design) - Try to mitigate (e.g. manual solution, working on several product delivery systems)	Able to progress work across divisions by suppressing some goals; but suppression is <i>not embedded</i> within organizing practices as actors see that suppressing produces inadequate delivery elements (insufficient service levels) and must be addressed.
3	10	↓ <b>Corpnet CTP3 (Month 10)</b> <i>New organizing procedure</i> - Creating spec via industry consultation - Unusable PDS spec created	New PDS spec created: (1) Paradox of <u>performing</u> about <i>different system design goals</i> ; Distribution needs fair PDS (usable by industry), Corporate good PDS (usable by them)	<b>Adjusting:</b> On-going adjusting to surmount potential impasse; compromise on both sides  <u>Specific Actions</u> - Workarounds to fix service	Realize they are unable to progress work within new divisions and need to work across divisions; start interworking on targeted issues (e.g. unusable spec); develop organizing processes that <i>embed</i> adjusting

#	M	Paradox of Organizing	Mutually Reinforcing Paradoxes of Performing / Belonging	Actions in Response to Paradox	Organizing Outcomes Fuelling Next Cycle
		- No planned system will support Corporate  →	(2) Paradox of <u>belonging</u> about <i>industry identity</i> ; as industry member Corporate wants same focus but Distribution sees Corporate as incumbent needing less →	- Working on multiple PDS - Absorbing price increase - Intense interworking on PDS →	→
4	12	↓ <b>Corpnet CTP4 (Month 12)</b> <i>New organizing procedure</i> - Base design on feedback from industry consultation - Remove PDS automation due to limited demand	New automation created: (1) Paradox of <u>performing</u> about <i>different system design goals</i> ; Distribution has fairness goal (design based on industry requirements), Corporate service goal (some unique requirements) (2) Paradox of <u>belonging</u> about <i>values</i> ; whether Distribution will deliver on its promises to Corporate	<b>Adjusting:</b> On-going adjusting to surmount potential impasse; compromise on both sides  <u>Specific Actions</u> - Workarounds to fix service - Introduce new order types - Increase price to recoup cost - Interworking on automation	Able to iteratively progress work with new cross-divisional organizing mechanisms that <i>embedded</i> adjusting; interwork on increasing number of issues (e.g. spec and automation)



### Appendix 3. Coded Critical Tension Points for Broadnet

#	M	Paradox of Organizing	Mutually Reinforcing Paradoxes of Performing / Belonging	Actions in Response to Paradox	Organizing Outcomes Fuelling Next Cycle
1	3	<b>Broadnet CTP1 (Month 3)</b> <i>New organizing procedure</i> - Distribution and Telco divisions separated by 'wall' - Distribution is independent; cannot share commercial information with Wholesale - Divisions must collaborate on new Broadnet product	New 'wall' procedure created: (1) Paradox of <u>performing</u> about <i>different divisional goals</i> ; Distribution has regulatory goal of fairness, Wholesale has market goal of service (2) Paradox of <u>belonging</u> about <i>values of interaction</i> ; Distribution will not work with Wholesale on development but Wholesale needs it to develop its part	<b>Splitting:</b> As actors did not know how to engage, they retreated to their own division  <u>Specific Actions</u> - Work within own boundaries (e.g. plan for fallout) - Not engage across divisions (e.g. not share info)	Able to progress work within new divisions via internally-focused organizing; but realize some cross-divisional awareness is needed; do not <i>embed</i> suppressing into organizing mechanisms
2	7	↓ <b>Broadnet CTP2 (Month 7)</b> <i>New organizing procedure</i> - New resourcing process - Change how they resource ops/service capacity: based on broad consultation with industry, rather than single industry player requirements	New resourcing process created: (1) Paradox of <u>performing</u> about <i>different resourcing goals</i> ; Distribution needs equal resourcing (fairness), Wholesale needs sufficient resourcing (service) (2) Paradox of <u>belonging</u> about <i>values of resourcing</i> ; Distribution resources on holistic industry need, but Wholesale resources based on unique needs	<b>Suppressing:</b> Distribution overrides Wholesale needs by not supporting market plans; Wholesale cannot mitigate  <u>Specific Actions</u> - Not take Wholesale requests - (Partly) ignore requests - Try to mitigate (e.g. manual solution, working on several product delivery systems)	Able to progress work across divisions by suppressing some goals; develop organizing practices with <i>embedded</i> compromises that suppress goals; later see this results in inadequate delivery elements (service/ transfer plans cannot be met)
3	9	↓ <b>Broadnet CTP3 (Month 9)</b> <i>New organizing procedure</i> - Base design on feedback from industry consultation - Remove certain service functionality from design	New design created: (1) Paradox of <u>performing</u> re <i>consultation goals (violation)</i> ; Distribution needs standard functionality via extensive consultation, Wholesale needs unique functionality via quick	<b>Opposing:</b> Parties see no way forward (cannot meet plan); enter confrontation; become fixated on own goals & values  <u>Specific Actions</u> - Distribution refuses to address	Realize they cannot progress work and will meet neither goal; as compromise <i>embedded</i> in organizing and will continue to impact goals (service/transfer plans); must undo organizing before they can rebuild; opposing not <i>embedded</i>

			consultation (2) Paradox of <u>belonging</u> about <i>divisional identity (violation)</i> ; Wholesale defines itself via service differentiation but Distribution sees all players as equal	Wholesale issues - Wholesale slowed, then halted the customer transfer	
4	13	<b>Broadnet CTP4 (Month 13)</b> <i>Organizing procedure</i> - Base design on feedback from industry consultation - Certain service functionality can no longer be included in design, produce substandard service levels	New design created: (1) Paradox of <u>performing</u> about how to incorporate <i>different product goals</i> ; both parties work to include fairness goal (industry standard service) and market goal (above-average service) (2) Paradox of <u>belonging</u> about <i>Telco values</i> ; Distribution is failing to deliver enough to satisfy customer needs and thus not true to Telco service values	<b>Adjusting:</b> On-going adjusting to surmount potential impasse; supported by senior managers  <u>Specific Actions</u> - Heavy SMT involvement - SMT arbitrate key micro-adjustments, e.g. Wholesale must move users to Broadnet - Intense interworking	Realize they cannot progress work as fast as needed; organizing structures contain <i>embedded</i> compromise (fail deadline; sub-standard service); takes time to untangle and rebuild structures; adjusting <i>embedded</i>

#### Appendix 4. Coded Critical Tension Points for Linefix

#	M	Paradox of Organizing	Mutually Reinforcing Paradoxes of Performing / Belonging	Actions in Response to Paradox	Organizing Outcomes Fuelling Next Cycle
1	3	<b>Linefix CTP1 (Month 3)</b> <i>New organizing procedure</i> - Distribution and Telco divisions separated by 'wall' - Distribution is independent; cannot share commercial information with Retail - Divisions must collaborate on new Corpnet product	New 'wall' procedure created: (1) Paradox of <u>performing</u> about <i>different divisional goals</i> ; Distribution has regulatory goal of fairness, Retail has market goal of service (2) Paradox of <u>belonging</u> about <i>values of interaction</i> ; Distribution will not work with Retail on development but Retail needs this to develop its part	<b>Splitting:</b> As actors did not know how to engage, they retreated to their own division  <u>Specific Actions</u> - Work within own boundaries (e.g. plan for fallout) - Not engage across divisions (e.g. not share info)	Able to progress work within new divisions via internally-focused organizing; but realize some cross-divisional awareness is needed; do not <i>embed</i> splitting into organizing mechanisms
2	7	↓ <b>Linefix CTP2 (Month 7)</b> <i>New organizing procedure</i> - Industry consultation process introduced - Increased industry involvement in design - Reduced Retail involvement	New consultation process created: (1) Paradox of <u>performing</u> about <i>design process goals</i> ; Distribution wants fair design (distant Retail involvement), Retail good design (close involvement) (2) Paradox of <u>belonging</u> about <i>divisional identity</i> ; as major player Retail feels it must be closely involved, but industry supplier Distribution must shield against excessive involvement	<b>Suppressing:</b> Distribution overrides Retail needs (work to inadequate spec); Retail cannot mitigate these actions.  <u>Specific Actions</u> - Not take Retail requests - (Partly) ignore requests - Try to mitigate (e.g. manual workaround solution)	Able to progress work across divisions by suppressing some goals; develop organizing <i>embedded</i> compromises that suppress goals, but later realize this results in some inadequate delivery elements (inadequate spec)
3	10	↓ <b>Linefix CTP3 (Month 10)</b> <i>New organizing procedure</i> - Base design on feedback from industry consultation - Remove certain service functionality from design	New design created: (1) Paradox of <u>performing</u> about <i>different consultation goals (violation)</i> ; Retail goal means unique functionality via quick consultation, Distribution needs standard features via long consultation	<b>Opposing:</b> Parties see no way forward (cannot meet plan); enter confrontation; become fixated on own goals & values  <u>Specific Actions</u> - Distribution refuses to address Retail issues	Realize they cannot progress work and will meet neither goal; as compromise <i>embedded</i> in organizing and will continue to impact goals (service/transfer plans); must undo organizing before they can rebuild; opposing not <i>embedded</i>

			(2) Paradox of <u>belonging</u> about <i>divisional identity (violation)</i> ; Retail defines itself via service differentiation but Distribution sees all players as equal	- Retail refused to transfer any customers to the new product	
4	13	<p>↓</p> <p><b>Linefix CTP4 (Month 13)</b>  <i>Organizing procedure</i></p> <ul style="list-style-type: none"> <li>- Base design on feedback from industry consultation</li> <li>- Certain service functionality can no longer be included in design, affecting large number of customers</li> </ul>	<p>New design created:</p> <p>(1) Paradox of <u>performing</u> about how to incorporate <i>different product goals</i>; both parties work to include fairness goal (industry standard service) and market goal (above-average service)</p> <p>(2) Paradox of <u>belonging</u> about <i>Telco values</i>; Distribution is failing to deliver enough to satisfy customer needs and thus not true to Telco service values</p>	<p><b>Adjusting:</b> On-going adjusting to surmount potential impasse; supported by senior managers</p> <p><u>Specific Actions</u></p> <ul style="list-style-type: none"> <li>- Heavy SMT involvement</li> <li>- SMT arbitrate key micro-adjustments, e.g. Retail must move users to Linefix</li> <li>- Intense interworking</li> </ul>	<p>Realize they cannot progress work as fast as needed; organizing structures contain <i>embedded</i> compromise (fail deadline; sub-standard service); takes time to untangle and rebuild structures; adjusting <i>embedded</i></p>
5	17	<p>↓</p> <p><b>Linefix CTP5 (Month 17)</b>  <i>Organizing procedure</i></p> <ul style="list-style-type: none"> <li>- Base design on feedback from industry consultation</li> <li>- Certain service functionality still cannot be included in design</li> </ul>	<p>New design created:</p> <p>(1) Paradox of <u>performing</u> about how to incorporate <i>different product goals</i>; both parties work to include fairness goal (industry standard service) and market goal (above-average service)</p> <p>(2) Paradox of <u>belonging</u> about <i>Telco values</i>; Distribution is failing to deliver enough to satisfy customer needs and thus not true to Telco service values</p>	<p><b>Adjusting:</b> On-going adjusting to surmount potential impasse; supported by senior managers</p> <p><u>Specific Actions</u></p> <ul style="list-style-type: none"> <li>- Heavy SMT involvement</li> <li>- SMT arbitrate key micro-adjustments, e.g. instruct Wholesale to keep moving users to new product</li> <li>- Intense interworking</li> </ul>	<p>Realize they still cannot progress work as fast as needed; organizing structures contain <i>embedded</i> compromise (substandard service); takes time to untangle and rebuild structures; adjusting <i>embedded</i> in some structures but more needed as multiple goals require adjusting</p>

## Authors' Biographies

**Paula Jarzabkowski** is a Professor of Strategic Management at City University and, from 2012-2014, holds a Marie Curie Fellowship at Cornell University. Paula's research focuses on strategy-as-practice in complex and pluralistic contexts, such as regulated infrastructure firms, third sector organizations and financial services, particularly insurance and reinsurance. She focuses primarily on qualitative and ethnographic research methods as a means of studying business problems. In this endeavor, she has been fortunate in winning a series of prestigious fellowships that have enabled her to conduct detailed ethnographic studies in different industries. For example, from 2009-2012, she held the inaugural Insurance Intellectual Capital Initiative (IICI) fellowship, under which she and her research team conducted a 3-year audio and video ethnography of the global reinsurance industry. Jarzabkowski 'enjoys' the challenge of publishing such work in leading journals. Her work has appeared in a number of such journals including *Academy of Management Journal*, *Organization Science*, *Journal of Management Studies* and *Organization Studies* and in 2005, she published the first book on strategy-as-practice, *Strategy as Practice: An Activity-Based Approach* (Sage).

**Jane K. Lê** is a Lecturer in Work & Organisational Studies at the University of Sydney. Her research centers on organizational practices and processes in complex, dynamic and pluralistic organizations. She is particularly interested in social processes like conflict, coordination and information sharing. Jane has a passion for qualitative research and qualitative research methods. She received her Ph.D. from Aston Business School. Jane has published in journals like *Organization Science* and the *International Journal of Human Resource Management*. Address: N305, Institute H03, The University of Sydney, Sydney NSW 2006; e-mail: [jane.le@sydney.edu.au](mailto:jane.le@sydney.edu.au).

**Andrew H. Van de Ven** is Vernon H. Heath Professor of Organizational Innovation and Change in the Carlson School of the University of Minnesota. He received his Ph.D. from the University of Wisconsin at Madison in 1972, and taught at Kent State University and the Wharton School of the University of Pennsylvania before his present appointment. He teaches courses on the management of innovation and change, organizational behavior, and engaged scholarship. Van de Ven directed the Minnesota Innovation Research Program that tracked a wide variety of innovations from concept to implementation during the 1980's and 1990's. Since 1994, he has been studying changes unfolding in health care organizations. In addition to organizational innovation and change, Van de Ven's research has dealt with the Nominal Group Technique, program planning, organization assessment, and inter-organizational relationships. He is co-author of 12 books, including: *The Innovation Journey* (1999, 2008), *Organization Change and Innovation Processes* (2000), *Handbook of Organizational Change and Innovation* (2004), and *Engaged Scholarship* (2007) which won the 2008 Terry best book award from the Academy of Management. During 2000-2001 Van de Ven was President of the Academy of Management.