

Active and defensive strategies to cope with paradoxes in a change context: a middle managers' perspective

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Résumé:

This paper aims to understand how middle managers cope with paradoxical tensions. As it is increasingly common for organizations to have to simultaneously juggle with competing demands (Smith & Lewis, 2011), the juxtaposition of coexisting opposites has increased experiences of paradoxical tensions, challenging organizational actors in their daily work. Among these actors, middle managers are generally more prone to tensions (Wooldridge, Schmidt, & Floyd, 2008) as organizations have become flatter due to downsizing and reengineering, and responsibility is delegated downwards (Balogun & Johnson, 2004), with middle managers reporting a significant increase in their workload (Armstrong-Stassen, 2005). As tension is considered to lead to burnout and stress, more recent work has recognized that it is not the existence of contradictions per se that is productive or destructive, but the way they are managed (Tracy, 2004). Despite accumulate insights into the management of organizational paradoxes (Jarzabkowski, Lê, & Van de Ven, 2013), relatively little is known about coping strategies at the intermediate level (Lüscher & Lewis, 2008). In response, this longitudinal real-time analysis of an IT transformation program opens the black box of middle managers' responses to paradoxical tensions. Specifically, our original contributions are twofold: firstly, to identify seven dualities through which organizational paradoxes are perceived by middle managers, and secondly, to categorize their responses to cope with paradoxes into four active and three defensive strategies. We suggest that our overview of paradoxical tensions and related coping strategies provides significant insights for organizations as well as for their managers.

Mots-clés: Middle managers, Paradoxes, Coping strategies, Change context



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INTRODUCTION

As it is now common for organizations to simultaneously deal with competing demands such as exploration versus exploitation (Smith & Tushman, 2005), stability versus change (Farjoun, 2010; Stoltzfus, Stohl, & Seibold, 2011), and collaboration versus control (Sundaramurthy & Lewis, 2003), paradoxes are now considered as inescapable and something that need to be addressed (Josserand & Perret, 2003; Lewis, 2000; Smith & Lewis, 2011). If thinking in a dichotomous way and opting for an "either/or" approach might seem attractive in the short term, Lewis (2000) argues that long-term sustainability means that organizations need to consider such tensions through a paradoxical lens. While a paradoxical approach may be beneficial in the long run, the juxtaposition of "contradictory yet interrelated elements" (Smith & Lewis, 2011: 386) intensifies experiences of tensions, challenging organizational actors in their daily work.

Among these actors, middle managers appear to be more prone to tensions (Bryant & Stensaker, 2011; Huy, 2001, 2002; Sharam & Good, 2013; Wooldridge et al., 2008). Since organizations have become flatter due to downsizing and re-engineering, responsibilities are delegated downwards (Balogun & Johnson, 2004) and middle managers have reported a significant increase in workload demands (Armstrong-Stassen, 2005). Their mediating position means they are forced to juggle an increasing number of incompatible demands. They are under constant pressure, leading to a deterioration in their well-being at work (Maslach, Schaufeli, & Leiter, 2001; Truchot, 2004). Individuals are not the only ones affected by the consequences of these stressful situations. "The evidence shows clearly that work-related stress and psychosocial issues lead to increased absenteeism and staff turnover rates, along with decreased productivity and performance" (European Agency for Safety and Health at Work, 2014: 13). At societal level, the European commission (2002) calculated the cost of work-related stress in the EU-15 at €20 bilion a year.



As contradictions and tensions are considered to lead to stress and burnout (Katz & Kahn, 1966), more recent work has recognized that it is not the existence of contradictions per se that is productive or destructive, but the way they are perceived and managed (Gibbs, 2009; Tracy, 2004). In this regards, Lüscher and Lewis (2008: 239) argue that "a paradoxical lens may offer means for new and more enabling understandings of contradictory managerial demands and ubiquitous tensions". By entailing a "both/and" mindset, organizational actors are encouraged to solves problem through coexistence instead of fit (Lewis & Smith, 2014). Indeed, "paradoxical inquiry may fit instances of managers feeling stuck (Smith & Berg, 1987), in that they are unable to reach a solution or make a trade-off because divergent approaches trigger the need for opposite" (Lüscher & Lewis, 2008: 237).

Adopting a paradox perspective, the aim of this paper is twofold. First, we offer a clearer understanding of managerial challenges by identifying the opposing poles underlying their work. As change reveals and intensifies paradoxical situations (Smith & Lewis, 2011), this real-time longitudinal study has been conducted in a context of change that rendered latent tensions salient (Lewis, 2000). Second, by proposing a detailed model of active and defensive strategies used by middle managers to cope with paradoxical tensions, our contribution responds to the call for more research on the manifestations of paradox and the various strategies used to manage them (Groleau, Demers, Lalancette, & Barros, 2011). We suggest that our overview of paradoxical tensions and related coping strategies provides important insights for organizations as well as their managers.

This paper opens with an explanation of the different types of paradox and a discussion of the middle managers' coping strategies to deal with paradoxical tensions. We then explain our qualitative data and methods before turning to a case analysis that illustrates how paradoxes are perceived and coped with by middle managers. We then propose a theoretical model that synthesizes active and defensive strategies used by middle managers to cope with paradoxical tensions, each accompanied by detailed explanations. The paper closes with a discussion of the practical and theoretical implications.



THEORETICAL FRAMEWORK

Dialectics, dilemmas and paradoxes have all been identified as central elements in an analysis of organizational tensions. Although there are subtle differences between these concepts, they all belong to the larger 'tension' family, with tension being the most encompassing term (Michaud, 2013: 296). In their review, Smith and Lewis (2011: 386) define paradox as "contradictory yet interrelated elements (dualities), elements that seem logical when considered in isolation but irrational, inconsistent, and even absurd when juxtaposed." Paradoxical tensions are perceptual in the sense that the construction of paradoxes emanates from actors' responses to tensions (Smith & Tushman, 2005). Such a paradoxical perspective differs from dualistic or dilemmatic ones: a dialectic approach refers to "contradictory elements (thesis, antithesis) resolved through integration (synthesis) which, over time, will confront new opposition" (Smith & Lewis, 2011: 387), while a dilemmatic approach denotes a tension where competing alternatives can only be resolved by weighting the pros and cons (Smith & Lewis, 2011). Unlike dialectics or dilemmas, paradoxical tensions signify two sides of the same coin (Lewis, 2000). Following this clarification, we analyzed organizational tensions through a paradox perspective, making opposing poles "explicit" (Michaud, 2013: 296) and contemplating "how both poles can be simultaneously pursued" (Cameron & Quinn, 1988: 7)

Type of paradox

Over the years, scholars have identified different types of paradox. Based on Quinn's (1988) competing values, Lewis (2000) introduced the paradoxes of learning, belonging and organizing. The latter two were confirmed by Lüscher and Lewis (2008) and were completed by the performing paradox. Recently, Smith and Lewis's (2011) framework classified paradoxes into four categories: learning (knowledge), belonging (identity/ interpersonal relationship), organizing (processes), and performing (goals). (1) *Learning paradoxes* surface as dynamic systems change, renew and innovate. Such efforts involve building upon, as well as destroying the past to create the future (Lewis, 2000; O'Reilly & Tushman, 2008). Whereas all actors face learning as they struggle with change process, "a true paradox of learning is more than simply the tensions experienced in moving between old and new" (Jarzabkowski et al., 2013: 4). Examples include the tensions between radical and incremental innovation or episodic and continuous change. (2) *Belonging paradoxes* are driven by



complexity and plurality. These tensions arise between the individual and the collective, as individuals (Kreiner, Hollensbe & Sheep, 2006) and groups (Smith & Berg, 1987) seek both homogeneity and distinction. (3) Organizing paradoxes surface as complex systems that create competing designs and processes to achieve a desired outcome. According to Jarzabkowski et al. (2013), the ongoing process of organizing is innately paradoxical because of the tensions between different organizational parts and tasks, and the need for organizations to cohere as a collective system. Such paradox is manifested in organizing tensions such as collaboration and competition, empowerment and control, or exploration and exploitation. (4) Performing paradoxes stem from the plurality of stakeholders and result in competing strategies and goals. Tensions surface between the differing, and often conflicting, demands of diverse internal and external stakeholders (Donaldson & Preston, 1995). According to Smith and Lewis (2011), the four types of paradox may operate at the level of an individual (Leonardi, 2009), a dyad (Argyris, 1988), a group (Smith & Berg, 1987) or an organization (Cameron & Quinn, 1988). However, it is not just the type of paradox, but also the way in which actors respond to paradox that shape its impact (Jarzabkowski, et al., 2013; Lewis, 2000; Smith and Lewis, 2011). In this context, Tracy (2004: 120) suggests that "it is not paradox, per se, that is productive or unproductive, good or bad, liberating or paralyzing, but rather, that employees can react to contradictions in various ways, and that their framing techniques of workplace tensions can have various personal and organizational effects."

Coping strategies

As paradoxical tensions are ever-present in everyday management, their impact on the organization depends on how they are managed. In this regard, Lewis (2000) asserts that tensions and reinforcing cycles cannot be managed in the sense that they can be controlled, since they can only be coped with. Transferring a key definition of coping from Lazarus and Launier (1978: 311) into paradox research, coping is defined here as "the combination of efforts to reconcile, use constructively, or accept paradoxical phenomena and to manage (i.e. master tolerate, reduce, minimize), or overcome the paradoxical tensions which strain or exceed a person's resources."



Poole and Van de Ven (1989: 565) provided the basis for systematizing coping strategies through four "modes of paradox resolution": (1) Opposition: accept the paradox and use it constructively; (2) Spatial separation: positioning the poles of a paradox at different levels of analysis; (3) Temporal separation: the poles of a paradox are considered one after the other; (4) Synthesis: introduction of new terms for reconciling a paradox.

A variety of responses to paradox have since been reported (Jarzabkowski, et al., 2013; Lewis, 2000; Lüscher & Lewis, 2008; Smith & Lewis, 2011). Based on 20 major contributions in the field (appendix 1), we observed some consensus with four defensive and three active responses (Table 1).

Defensive responses provide short-term relief. They may enable actors to temporarily overcome paradoxical tensions but do not provide a new way to work with or understand the paradox (Jarzabkowski, et al., 2013). These responses include temporal (Gibson & Birkinshaw, 2004; Gotsi, Andriopoulos, Lewis & Ingram, 2010; Poole & Van de Ven, 1989; Romanelli & Tushman, 1994) and spatial splitting (Andriopoulos & Lewis, 2009; O'Reilly & Tushman, 2008; Poole & Van de Ven, 1989), selecting (Jarzabkowski, et al., 2013; Gibbs, 2009; Poole & van de Ven, 1989; Seo, Putnam & Bartunek, 2004) and removing (Gibbs, 2009; Tracy, 2004). Splitting may be temporal, by separating different poles temporally in the same location, or spatial, by situating the different poles in different organizational units or hierarchical levels (Poole & Van de Ven, 1989). The selecting response is the most conflictual response because it involves considering one pole of the paradox as more important at the expense of the other (Jarzabkowski, et al., 2013). This can be observed when an organization or system is dedicated to one pole of the paradox only (Gupta, Smith & Shalley, 2006). Less conflictual than the latter, the removing response involves rejecting both poles by avoiding contact with the paradox (Tracy, 2004) or blocking unpleasant experiences from memory (Vince & Broussine, 1996). By suppressing the relatedness of contradictions and maintaining the false order, defensive strategies (spatial splitting, temporal splitting, selecting and removing) may temporarily reduce anxiety, but will result in the reinforcement of vicious cycles that perpetuate and intensify tension (Lewis, 2000).



Table 1: Literature review of defensive and active coping strategies

Construct	Definition Type o response		Practical implication		
Spatial splitting (Andriopoulos & Lewis, 2009; Gibson & Birkinshaw, 2004; O'Reilly & Tushman, 2008; Poole & Van de Ven, 1989)	A response to tension that involves separating contradictory elements spatially	Defensive	Creating separate structure for different kind of activities (Andriopoulos & Lewis, 2009) Introducing a dual structure (Gibson & Birkinshaw, 2004) Separating the different types of activities within a single business unit (O'Reilly & Tushman, 2008)		
Temporal splitting (Gibson & Birkinshaw, 2004; Jarzabkowski, et al., 2013; Poole & Van de Ven, 1989; Romanelli & Tushman, 1994)	A response to tension that involves separating contradictory elements temporally	Defensive	Relying on a punctuated equilibrium by sequentially allocating attention to divergent goals (Romanelli & Tushman, 1985) Different poles taking dominance at different times (Poole & Van de Ven, 1989)		
Selecting (Gibbs, 2009; Jarzbakowski, et al., 2013; Poole & Van de Ven, 1989; Seo, et al., 2004; Vince & Broussine, 1996)	Gibbs, 2009; involves prioritizing one element and allowing it to dominate or overrule the en, 1989; Seo, et al., one with the other element of the paradox		Ignoring one pole and selecting the other (Seo, et al., 2004) Excessively manifesting the feeling or practice contrary to the threatening one (Vince & Broussine, 1996)		
Removing (Gibbs, 2009; Tracy, 2004; Vince & Broussine, 1996)	A response to tension that involves rejecting both poles of the paradoxes	Defensive	Avoiding being in contact with the paradox (Tracy, 2004) Repressing the paradoxical tension by blocking unpleasant experiences from memory (Vince & Broussine, 1996)		
Confronting (Lewis, 2000; Lüscher & Lewis, 2008)	A response to tension that involves parties discussing the contradictory elements of a paradox to socially construct a more accommodating understanding or practice	Active	Addressing one's own defenses thanks to the intervention of someone who is not caught up in the emotions but is capable of empathizing with involved actors (L"scher & Lewis, 2008) Using humor (Hatch & Ehrlich, 1993)		
Adjusting (Jarzabkowski et al., 2013)	A response to tension that recognizes that both poles of the paradox are important and interdependent and thus both need to be answered	Active	Working out how to adjust their working practices to each other in order to support both sides of the paradox (Jarzabkowski, et al., 2013)		
Transcending (Gibbs, 2009; Lewis, 2000; Poole & Van de Ven, 1989; Smith & Tushman, 2005; Smith, et al., 2010; Smith & Lewis, 2011; Tracy, 2004)	A response to tension that involves finding some new perspective which eliminates the opposition between both poles	Active	Reframing the tension so that the two contrasts are no longer regarded as opposites (Tracy, 2004) Creating an integrated solution in which the solution is found in the same structure, with the same people (Smith, et al., 2010)		



By contrast, active responses, recently renamed strategic responses (Lewis & Smith, 2014), seek to embrace, cope with and thrive through tensions. Paradox literature suggests three active responses, namely, confronting, adjusting and transcending. Confrontation involves parties discussing the contradictory elements of a paradox to socially construct a more accommodating understanding or practice (Lewis, 2000; Lüscher & Lewis, 2008). Following Lüscher and Lewis (2008: 232), confrontation may "attempt to address one's own defenses thanks to the intervention of someone who is not caught up in the emotions but is capable of empathizing with involved actors". Hatch and Ehrlich (1993) describe humor as another means of confrontation. Coming from the literature on coordinating decision-making (e.g. Lindblom, 1965), the adjusting response recognizes that both poles of the paradox are important and interdependent, and that both need to be answered (Jarzabkowski, et al., 2013). Finally, through transcendence, organizational actors reframe the tension, which is characterized by a perceptual transformation of the elements, so that the two contrasts are no longer regarded as opposites (Gibbs, 2009; Lewis, 2000; Smith & Lewis, 2011; Smith & Tushman, 2005; Tracy, 2004). The advantage of this solution is that complexity is embraced in its wholeness, and potential synergies or overarching solutions can be found (Smith, Binns & Tushman, 2010). By acknowledging paradox as a natural condition of work, active responses (confronting, adjusting and transcending) lead to positive, virtuous reinforcing effects between the opposing poles.

While different types of paradoxes and responses have been theorized, the way such paradoxes are practically managed by organizational actors remains a conundrum (Jarzabkowski et al., 2013).

While actors across the organization may be concerned by paradoxes, middle managers are particularly prone to tensions. First, since they are located under top managers and above operational managers (Huy, 2002; Wooldridge et al., 2008), they are uniquely positioned to reflect on as well as operate within the constraints of both logics (Sharma & Good, 2013). Being close enough to the strategic direction and proximal to the frontlines, middle managers are forced to interpret the directives coming from their top managers, adapt them to the operational constraints of their employees, and try to get them accepted (Balogun, 2003). Secondly, Wooldridge et al. (2008: 1192) suggest that a focus on middle managers acknowledges the view that "complex, geographically dispersed organizations cannot be managed by single actors or even small groups, but require distributed and interactive



leadership throughout the organization, with middle managers as important mediators between levels and units (e.g. Balogun & Johnson, 2004)." This mediating position leads them to constantly manage diverse and conflicting demands from internal and external stakeholders. Finally, a growing body of research increasingly emphasizes the need for middle managers to balance competing roles such as exploration and exploitation (Huy, 2002) or change agent and change recipient (Balogun, 2003). Such a balancing act indicates that they may be predisposed to the balancing of opposites (Sharma & Good, 2013). Consequently, as demands become open to varied, even contradictory interpretations (Putnam, 1986), dynamic contexts intensify experiences of complexity, ambiguity and equivocality (Lüscher & Lewis, 2008: 222). As a result, the work of middle managers is often seen as nebulous (Wooldridge, et al., 2008) and sensemaking becomes exceptionally vital and difficult for these organizational actors. Whereas sensemaking has been defined quite broadly by Weick (1995), Rouleau and Balogun (2011: 955) conceptualize it as "a social process of meaning construction and reconstruction through which managers understand, interpret, and create sense for themselves and others of their changing organizational context and surroundings". In this line, a paradoxical approach may help managers moving sensemaking toward an understanding that accommodates, rather than eliminates persistent tensions (Lüscher & Lewis, 2008). Indeed, "a paradox lens may offer means for new and more enabling understandings of contradictory managerial demands and ubiquitous tensions" (Lüscher & Lewis, 2008: 239). More specifically, based on the distinction between sense reading and sense wrighting proposed by Mangham and Pye (1991) to better portray the intertwined cycles of interpretation and action, we suggest that adopting a both/and mindset (Lewis & Smith, 2014) would help actors to construct paradoxes as responses to tensions (sense reading) and learn to live and thrive with tensions (sense wrighting). Consequently, we expect our findings firstly, to offer a clearer understanding of managerial challenges by identifying the opposing poles underlying their work and secondly, to synthesize the active and defensive strategies used by middle managers to cope with paradoxical tensions.



RESEARCH METHODS

In order to address the central question – i.e. how middle managers cope with paradoxical tensions? – the in-depth study of a single case was conducted. In the following sections, we shall describe the methodological and analytical approach developed for this research. But prior to discussing data collection and analysis, we find it important to give some background information to explain the choice of Incabas (fictitious business name) as a single case.

Case setting

While most organizations contain paradoxical elements, some contexts are more prone to producing tensions than others (Jarzabkowski, et al., 2013). In this regard, Smith and Lewis (2011: 390) argue that "change spurs new opportunities for sensemaking as actors grapple with conflicting short- and long-term needs (Balogun & Johnson, 2004; Lüscher & Lewis, 2008) and with competing yet coexisting roles and emotions (Huy, 2002)." In this perspective, a particularly salient example studied here is the technological transformation experienced by a cable utility. Although tensions already existed within the organizational system, the technological transformation accentuated the oppositional and relational nature of the dualities. The context made latent tensions salient, enabling researchers to identify them more easily.

As a worldwide leader in the cable industry, Incabas provides complete cable and cabling solutions for power utilities, transport, telecommunications, oil and gas, the nuclear industry and aerospace. With an industrial presence in 40 countries and commercial activities worldwide, Incabas employs 26,000 people and chalked up sales of 6.7 billion euros in 2013.

To strengthen its position, the group optimizes its resources in mature markets while stepping up deployment in emerging countries (Brazil, Russia, India, China, the Gulf States, Asia Pacific and Africa). Whereas its turnover in Europe accounted for 70% a few years ago, it stood at only 56% in 2012. This new distribution is mainly due to sizeable acquisitions in the South American market and Australia, as well as several investments in Asia. In order to integrate these developments, Incabas recently decided to move from a country-based structure to a transnational structure. In this regard, Johnson, Scholes, Whittington & Frery (2011) point out that the success of such a structure depends on the ability to simultaneously build global expertise, local responsiveness and collective learning. To optimize its new organization, the group regularly conducts organizational change projects. Especially, an



extensive Information Technology (IT) change program was implemented, designed to obtain a global IT infrastructure that matches the maturity stages of different geographical areas. To this end, the group decided to change the computer system to a more advanced version of SAP (SAP ECC6). Beyond the technological challenge, this migration offered an opportunity to optimize current flows in order to improve the overall efficiency of the organization.

From an operational standpoint, Switzerland was chosen as a pilot country for the implementation of the ECC6 project. Benelux was the second region to deploy the new system. While the Swiss project lasted from late 2010 to mid-2012, the Belgian project has meanwhile started in early 2012 and was completed in mid-2013. A total of 370 SAP users have been affected by the project in Benelux. For reasons of proximity, the scope of this research was limited to the five entities located in Belgium. However, the researcher remained aware of the progress of the project in the Netherlands by its regular contacts with the General Director.

As far as Belgium is concerned, the context in which unfolds the implementation of the latest version of SAP was the same for the five entities as they had each reached the same level of IT maturity. While the first version of SAP was introduced gradually (between 1999 and 2003) through various entities, the transition to version 4.6 was conducted simultaneously across the five sites in 2005. So that the five Belgian entities each had the necessary time to achieve the same level of mastery of the computer system.

To support this change, a project team of about forty people, was created. Among them, we found six members of the IT team, 12 heads of department (sales, purchasing, finance, production, infrastructure, etc.) and 22 key users chosen among middle managers responsible for representing their peers and their team. To share their views about the project, these team members met every month.

We gained access to the case immediately after the technological change had been decided by the top management. This led to a longitudinal research study in which we followed the unfolding SAP implementation for four years in total (from April 2010 to March 2014). From the outset, our intention was to focus on the complexity of the middle managers' work. In the course of the study, we realized that paradox management formed a fundamental part of their work.



Data sources

Our empirical data comprise interviews, documents and observations. Appendix 2 gives information about which specific data have been collected throughout the four years project.

Interviews. Semi-structured interviews served as the primary source of data. Interviews were solicited by email and telephone after one of the authors spent six months gaining the confidence of leaders and managers. Respondents were selected according to the following two criteria: 1) positioned below the site manager and above operational managers and, 2) having a team under their responsibility (Huy, 2002, p. 38). Among middle managers who met these two criteria, we selected middle managers so that the different functions (finance, sales, production, maintenance, etc.) and the five Belgian sites were represented. The evidence presented in this paper is drawn from three series of interviews conducted with 21 middle managers. These three phases of interviews were held respectively in June 2011, January 2013 and September 2013. Among the selected sample, one middle manager retired and another left the company after the first phase of interviews. The latter was replaced for the other phases of interviews. In total, 61 interviews were conducted. Appendix 3 gives an outline of each participant. Ranging from 31 to 128 minutes, the interviews were recorded and transcribed verbatim.

Observations. Throughout the study, we remained in close contact with Incabas. During the four years of the project, we attended 17 steering committees as well as 15 SAP team members meetings. One of the researchers also accompanied several middle managers in everyday life, which allowed her to become familiar with the company and to analyze the specific work of middle managers. Finally, the researcher also had the opportunity to participate in a training course for middle managers to prepare them to support their team during the transition to the new version of the computer system. Overall, these observations were useful for various reasons. First, the continued presence helped to gain a thorough understanding of organizational reality and achieve a level of "distant familiarity" (Pettigrew, 1990). Second, participation in meetings allowed to identify which were the subjects of concerns of middle managers. Finally, this proximity provided numerous opportunities for formal and informal discussions.



Documents. We gathered relevant internal documentary material amounting to over 60 documents: job descriptions, flowcharts, steering committee presentations and internal memos about the project. To understand the wider context in which the middle managers evolve, we also collected media coverage.

Data analysis

Our analytical approach is best described as analytic abduction, an iteration between empirical data and pre-existing theoretical constructs (Snow, Morrill & Anderson, 2003). Accordingly, we developed our theoretical ideas alongside increasingly detailed analyses of the interviews. We proceeded in three stages. First, we performed an in-depth analysis of the work of middle managers. The interviews began with a biographical format, asking individuals to describe a typical working day in detail, and illustrating their day with both positive and negative events. We supplemented this first phase of interviews with a comprehensive set of job descriptions. We then conducted an in-depth analysis of the different types of paradoxical tensions middle managers face on a daily basis. The managerial themes became then conceptualized as paradoxes of performing, organizing, belonging and learning. Finally, we focused on the coping strategies used by middle managers in response to the paradoxes involved in their daily work. Concretely, the authors used reflexive questioning, which incited managers to examine the consequences of their understanding. According to Argyris (1983), reflexive questions can spur double-loop learning. Moving to a higher level of abstraction, managers seek a link between the contradictory elements. In other words, they seek to understand how they make sense of incompatible demands. This kind of qualitative process analysis allows deepening our understanding of paradoxical issues encountered by middle managers with additional information about their daily work and puts our findings into perspective.

FINDINGS

We present our findings in two stages: we first identify which are the dualities through which organizational paradoxes are perceived by middle managers. We then explain the active and defensive strategies they take to cope with those dualities.

Types of paradox

We found applications of three of the four paradoxes proposed by Smith & Lewis (2011) within our data collected from middle managers (Table 2).



Our data analysis suggested that the *belonging paradox* is rooted in two interwoven tensions arising from belonging to and identifying with structurally differentiated organizational units. First, the analysis underscored the difficulty of being located between top managers and employees. Indeed, because of their in-between position, middle managers are responsible for translating the business strategy into operational terms. As intermediaries, they are required to listen to both senior managers and operational workers. As a result, middle managers feel torn between the demands of their superiors and the difficulties expressed by their employees. Second, change context intensifies identity conflicts perceived by middle managers as they come up against the challenge of having to work out the details of the change even before they have had time to interpret the implications of the espoused change for themselves. Being both the change recipient and the change agent, they are simultaneously expected to undertake personal change and to implement changes in their side of the business.

Given the middle managers position as lynchpins, the *performing paradox* arises from the multitude of conflicting demands. As an illustration, middle managers must meet the diversity of customers' orders while taking the operational constraints into account. In a change context, the plurality of actors intensifies this paradox, as middle managers must manage both the business-as-usual demands and those expressed by the change project manager. Beyond the plurality of actors making competing demands, the performing paradox may also come from the difficult balance to achieve between planning and improvisation. In this regard, our data analysis emphasized the increasing number of unforeseen events that middle managers have to manage. Thus, their role involves managing daily emergencies without neglecting the long-term projects.

Subsequently, the evidence showed that the *organizing paradox* is seen through two ongoing tensions of organizational differentiation and integration. First, middle managers have to find the right balance between empowerment and control. In line with the trust/ control duality (Mollering, 2005), they are asked to give their team a certain degree of freedom while ensuring the completion of organizational targets. Secondly, the organizing paradox is perceived by middle managers through the management of different profiles within their team. In reality, they must ensure that everyone supports the organizational strategy, even if the underlying reasons are different. To do this, they need to understand each of their team members and regularly switch between an individual approach and collective management.



Table 2: Abductive analysis of middle managers' paradoxical tensions

First-order data	Second-order concepts	Aggregate dimensions	
I think the world of top management is far removed from the daily work of a team, that's why we are always torn in two [Finance manager/Division 2] The needs expressed by my team and the top management decisions are not in sync, but it's my job to try to align both sides. [Maintenance Manager/Division 2] I act as a transmission belt, but therefore I also act as a buffer. As I'm in the middle of the organization, I frequently hear on one side: "If I tell you that it's possible, then it is" and on the other: "No, it's not possible." I'm in the middle and it's tiring [Purchase & Planning Manager/Division 3].	Top management vs Employees	Belonging "Identity fosters tensions between the individual and the collective and between competing values, roles and memberships" (Smith & Lewis, 2011)	
Yes, I was sometimes in situations like you say, difficult because I didn't feel very comfortable explaining such things [the change project] because I still had some doubts about it. [Finance Manager/ Division 3] Among middle managers, no one is optimistic about the project. There will certainly be another message to employees and operators in order to mask the reality. [Production Manager/ Division 5]	Change agent vs Change recipient		
There's a moment where you either meet the sales department or the production department [Purchase & Planning Manager/ Division 3] I'm a mediator between customers, sales representatives and operational workers. I play an arbitration role as I have to take into account both the customers' needs and the organizational constraints in terms of production, shipping and delivery, etc. It's difficult to find the optimum point. We can never fully satisfy both stakeholders. We have to find a balance between the two parties [Sales Manager/ Division 1]	Production constraints vs Commercial demands	Performing "Plurality fosters multiple and competing goals as stakeholders seek divergent organizational	
I was unable to respond to all the requests. We already have a workforce that's not very big, so it's hard enough. If in addition you have to follow a project like this, we automatically run straight into the wall. [Maintenance Manager/Division 5] The challenge for companies like ours is the fact that we cannot be completely devoted to the project. We have a number of other tasks to be processed in parallel, so we have to share and manage daily priorities with respect to long-term projects [Production Manager: Division 3] For two years my colleagues and me felt in-between. On the one hand, there was the change project and on the other, there was the business-asusual. Even by working a lot we couldn't manage everything [Sales Manager/Division 4].	Change demands/ Business as usual	success" (Smith & Lewis, 2011)	
The big problem is not to be overtaken by the unexpected. [] Sometimes I spend my whole day managing the unexpected, it's not good. It's complicated. [Production Manager/ Division 2] Before we worked with a lot more anticipation. Now it's the "firefighting " method [Sales Manager/ Division 1] I have so many unexpected events to manage that I can't do what I planned. [Finance Manager/ Division 4]	Short-term demands vs Long- term demands		
ween control and autonomy to give the impression that they're left on ir own. Sometimes you give them some autonomy but after they ask to explain to them in detail what's expected of them. In this context, useless to give them autonomy [Production Manager/ Division 5] on't like the term "supervision" because team members are sufficiently to work autonomously on their own. But actually, although they can rk independently, I need to ensure that the priorities are set and the als are met [Production Manager/ Division 5]		"Structuring and leading foster collaboration and competition, empowerment and direction, and control and flexibility" (Smith	
Among my staff, I only have strong characters, which is not necessarily easy to manage [Sales Manager/ Division 1] Every day, I have to do coaching. As you may know, I work with people who all have a different character. People react differently to a situation which is why I need to adapt my management style to each of them. I sometimes have to manage conflicts and disagreements between the staff too [Maintenance Manager/ Division 5]	ff, I only have strong characters, which is not necessarily Individual management vs & Lewis, e [Sales Manager/ Division 1] Collective management are to do coaching. As you may know, I work with people different character. People react differently to a situation I need to adapt my management style to each of them. I e to manage conflicts and disagreements between the staff		



Finally, except the tensions experienced in moving between stability and change, no duality related to specific modes of knowledge acquisition has been put forward in the data. This result is not surprising as learning is a multilevel construct which is difficult to observe in isolation. In line with Jarzabkowski et al. (2014: 4), data confirm that the learning paradox has to be considered as "an underpinning tension contributing to the other paradoxes".

Coping strategies

We identified responses to paradoxes via an abductive coding process. The responses we originally coded were inside splitting, outside splitting, undulating, oscillating, deciding, explaining, behavioural fitting, structural fitting and reframing. We then checked how these fit with existing responses within the literature. This resulted in clustering our responses into seven responses types that we labelled spatial splitting, temporal splitting, selecting, translating, behavioural adjusting, structural adjusting and transcending.

Defensive responses

We identified five responses to cope with paradoxical tensions in a change context that we then clustered into three defensive strategies: spatial splitting, temporal splitting and selecting. Through the case analysis, it should be noted that these strategies were observed above all for the performing paradox (Table 3).

First, middle managers explained they deal with paradoxical situations by splitting different poles within the organization (inside splitting) or by contracting out (outside splitting). As these two strategies split the paradoxical elements into different areas, they are to be connected to the existing *spatial splitting* strategy. In this case study, examples of spatial splitting responses included sharing out tasks with colleagues, delegating work to employees or asking for outside subcontractors. Specifically, the change context strengthened the performing paradox since it became difficult for managers to manage both the project and the business-as-usual aspects. To cope with this tension, one manager decided to entrust his daily work to an employee in order to devote himself to the project. Another middle manager mentioned that they needed external consultants fully dedicated to monitor the project on a daily basis.



Table 3: Defensive strategies used by middle managers to deal with tensions

First order	data	Second order concepts	Aggregate dimensions
Examples of paradoxical tensions	Examples of responses	F	
CHANGE PROJECT VS BUSINESS-AS-USUAL: It's a race against time; the problem is always the lack of time. Unfortunately, I don't have enough time for the project [] I'm always juggling activities but it's not always easy as there are priorities in the financial sector that I can't drop. It's very difficult to manage. It's even unmanageable. [Finance manager/ Division 2]	It's obvious that it was not easy to manage both activities. A choice had to be made: my staff worked on the "old system" to ensure the everyday work and I was involved in the change project. [Finance manager/ Division 2]	Inside splitting	Spatial splitting
CHANGE PROJECT VS BUSINESS-AS-USUAL I think the management was not always 100% ready to support the project. They didn't encourage managers to get fully involved in the project. This is understandable because if the business doesn't continue to operate, they have to deal with the poor figures. It's difficult to explain if the group's results are less good because an IT program is being implemented. That's why middle managers have the impression of being in-between [Sales manager/Division 4].	What I learned in the last six months is to delegate to my team. There are some tasks that I used to do myself that I now delegate to my staff. If I hadn't done that, we would've been completely stuck. If my staff hadn't been willing to take on these tasks, I don't know what I would have done to manage both the project and the business [Sales manager/Division 4]		
PRODUCTION CONSTRAINTS VS SALES DEMANDS: When production is extremely tight, the slightest delay can impact directly on customers. If we only listen to the sales' demands, everything is a priority, but it's not feasible. [Production manager/ Division 5].	We had to ask for outside subcontractors [Production manager/Division 5].	Outside splitting	
CHANGE PROJECT VS BUSINESS-AS-USUAL: It's a race against time; the problem is always the lack of time. Unfortunately, I don't have enough time for the project [] I'm always juggling activities but it's not always easy as there are priorities in the financial sector that I can't drop. It's very difficult to manage. It's even unmanageable. [Finance manager/ Division 2]	We didn't have enough internal resources to monitor the project on a daily basis. We needed external consultants, fully dedicated to the project [Finance manager/ Division 2]		
CHANGE DEMANDS VS BUSINESS-AS-USUAL: When your senior manager tells you: "For now, you stop dealing with the usual business," but in the meantime your team continues to come and ask you when they have a problem, it's complicated to manage. Although we worked for hours, we didn't manage. [Finance manager/ Division 3]	I work very long days. I 'm currently working 12 hours a day: 8 hours for the project and then 4 hours to catch up on the other business. [Finance manager/ Division 3]	Undulating	Temporal splitting
SHORT-TERM DEMANDS VS LONG-TERM DEMANDS: That's what gives me the most headaches right now. In other words, I feel like a firefighter right now. When there's a fire, we start running. For someone who's always worked in a planned way, it's difficult. [Logistics manager/Division 1].	In fact whether it is planned or unplanned events, I'm still working on a priority basis. Everything always depends on the priority [Logistics manager/ Division 1].	Oscillating	
CHANGE DEMANDS VS BUSINESS-AS-USUAL: Between the change project and my daily work, it is always a race against time. The problem is always the availability of time I unfortunately do not have [Finance manager/ Division 3]	The most difficult is to no longer have time to do anything you want. I must make choices because it is no longer possible to do everything at the same time [Finance manager/Division 3]	Deciding	Selecting

Secondly, *temporal splitting* comprise our original undulation and oscillation responses. In this regard, the case hypothesized that the rate at which individuals move from one pole to another can vary considerably, ranging from slow undulation to fast-moving oscillation. Indeed, the data highlighted two ways that the business-as-usual is temporarily separated from the change project. In this scenario, some managers planned ahead how they would allocate



their time between the two activities. For example, one manager planned to spend two days a week on the project, while another dedicated eight hours a day.

The project is the easiest task to postpone. So you have to force yourself to get involved in it. I chose two days and I try to stick to it. It's not easy but it's the only way I've found to devote myself to the project [Maintenance manager/Division 5]

On the other hand, some managers said oscillating between both poles depends on the urgency of requests coming from each pole. The speed of the movement therefore allows them to respond almost simultaneously to both constraints.

Every day we must reprioritize. When you find yourself faced with something urgent, you have no choice but to switch from the everyday business to the project or vice versa [Sales manager/Division 4]

To highlight the differences in the rate at which managers move from one pole to the other, undulation has been defined as "a wavelike motion to alternating sides" whereas oscillation concerns "a fast-moving rocking movement."

Finally, middle managers stated that they cope with paradoxical tensions deciding on which pole they uppermost put emphasis. In line with the *selecting* coping strategy, middle managers may give priority to one pole and allow it to dominate or overrule the other element of the paradox.

"Whether you like it or not, it will be first the business and then the project" [Sales manager/ Division 1]

Beyond identifying specific new ways the three existing defensive strategies are played out at intermediate level, data analysis also highlighted the non-exclusive aspect of these coping responses. In particular, verbatim analysis helped to demonstrate the interrelatedness between spatial splitting and temporal splitting. As a case in point, one respondent implicitly referred to this spatio-temporal splitting strategy when he reported seeking to strengthen her temporal splitting by being absent from her office on the days she was working on the change project.

I don't go into the plant on a daily basis anymore. Physically, I'm in my office only during accounts closure periods, the rest of the time I'm gone. The physical absence is symbolic: you don't see me so that proves that I'm doing something else ... [Finance manager/ Division 3]

In the same way, another middle manager explained that having a laptop allowed him to respond to operational emergencies while sitting in on a project meeting. In this case, managers split both time and space: when the topic of the meeting did not concern them, they took the opportunity to work on their own business via their computer.

I got a laptop for the project which means I can respond quickly in case of operational problems. To be 100% involved in the project, you need to distance yourself from your usual business, but on the other hand, the normal operations continue. Management has given us the means to be able to follow the business in case of trouble. It has the downside that you're sometimes interrupted. [Logistics manager: Division 1]



Active responses

In cases where middle managers accepted the paradoxical situation, the findings involved four active coping strategies to work through the paradox (Table 4).

The first of these consisted of *translating*, as managers must translate information depending on the person they are speaking with. As stated earlier, these intermediate actors must constantly confront operational demands as well as strategic requirements coming from the top management. As it is not always possible to satisfy both sides, middle managers have to explain the decisions made according to the constraints of both parties. If the final decision does not take operational demands into account, managers must explain to the staff the reasons for a decision in such a way as they will still support it. In line with Rouleau (2005: 1425) who advanced that "middle managers translate messages by telling people the stories they want to hear", the confrontation response was relabelled translating as it did not fit existing definitions of confrontation that deal with paradox via open communication to socially construct a more accommodating understanding (e.g. Lewis, 2000; Lüscher & Lewis, 2008). Translating occasioned a different dynamic than confronting as middle managers do not search to discuss openly the contradictory elements but they aim at translating the information by selecting the relevant elements of the paradoxical situation to communicate to their employees.

Next, adjusting responses comprise our original behavioural fitting and structural fitting which were relabelled in line with the study of Jarzabkowski et al. (2013: 9). Adjusting involves responses to paradoxes recognizing that both poles are important and interdependent and thus that both had to be achieved (Jarzabkowski, et al., 2013). Specifically, findings highlighted two types of adjustment. First, data indicated that middle managers adjust their behavior according to the person to whom they interact (behavioural adjustment). If we apply this coping strategy to the empowerment/ control duality, middle managers are much more directive with a new employee while they give lot of autonomy to someone who is in the business for several years.

I have some basic rules that all employees must follow but after it is as I had 20 children. They should each be treated differently [Sales manager/ Division 1]

Secondly, middle managers explained that they manage paradoxical situations by adjusting the organizational structure of resources (structural adjusting). Examples of structural adjustment include reorganizing existing resources or adding more resources. This type of



adjustment is necessary when existing resources are not adequate or are not used optimally to meet the increased number of demands, as it is the case in a change context.

We set up some versatility in the team. In this way, when someone is overloaded, another employee can take over one part of his work. This versatility allows to always have in the office some help and avoid accumulating delays. [Finance manager/ Division 3]

Last, transcending comprises our original reframing response and was relabelled in accordance with others' use of the word (e.g. Lewis, 2000; Poole & Van de Ven, 1989). Transcending served as an active coping strategy wherein managers reframe the situation so that any paradoxical elements are understood as interdependent rather than competing. One manager illustrated this coping response by considering its relationship with clients as a tandem relationship rather than a one-way relationship. While this coping strategy offers long-term relief from tension, only a few middle managers were able to handle the paradox through a creative problem-solving perspective.

Table 4: Active strategies used by middle managers to deal with tension

First-order data			Aggregate dimensions
Examples of paradoxical tensions	Examples of responses	•	
TOP MANAGEMENT VS EMPLOYEES: The needs expressed by my team and the decisions of top management are not necessarily in sync, but it's my job to ensure alignment. The individual situation of a person or a small group must enter into the broader framework [Maintenance manager/Division 2]	We must shoulder our responsibility and use as much flexibility as we have to meet the needs of the team while remaining faithful to the guidelines decided by the top management. If the levers that we have aren't sufficient to alter strategic decisions, we must be transparent and explain the reasons for that decision. It's never easy but it's the job. [Maintenance manager/Division 2]	Explaining	Translating
EMPOWERMENT VS CONTROL: when I had to check, I tended to check in detail. That's something I'm trying to change, limiting myself to just 1 or 2 points. The risk is that someone reproaches me for not having seen a mistake [Maintenance manager/ Division 2]	A person who is new to the job will require a lot of checking while a person with experience will require more sporadic checks [Maintenance manager/Division 2]	Behavioural Fitting	Behavioural Adjusting
PRODUCTION CONSTRAINTS VS COMMERCIAL DEMANDS: When production is extremely tight, the slightest delay impacts directly on customers. If we listen only to sales demands, everything is a priority, but it's not feasible. [Production manager/ Division 5]. CHANGE DEMANDS VS BUSINESS-AS-USUAL: For two years my colleagues and me felt in- between. On the one hand, there was the change project and on the other, there was the business- as-usual. Even by working a lot we couldn't manage everything [Sales Manager/ Division 4].	First, the resources had to be used more optimally: all machines began to turn 24h/24 to increase capacity. Second, resources had to be increased: 25 employees were hired for a temporary period [Production manager/Division 5]. We changed a bit the organization so that everyone supports a portion of the excess workload [Sales Manager/ Division 4].	Structural Fitting	Structural Adjusting
PRODUCTION CONSTRAINTS VS COMMERCIAL DEMANDS: Interviewer: "If I understand well, you don't feel torn between the demands of your team and those of the external stakeholders." Sales manager/ Division 1: "Yes, exactly"	I used to say that we work with our clients in tandem. I don't like the word partnership because it's a bit hackneyed today. Tandem means that the client needs us and we need him. In this perspective, requests from both sides are managed in harmony. [Sales manager/ Division 1]	Reframing	Transcending



DISCUSSION

The aim of this paper was twofold; firstly, to identify the opposing poles underlying the complexity of middle managers' work and, secondly, to establish the active and defensive strategies used by middle managers to cope with those paradoxical tensions. We now draw our findings together by developing a synthetic model. Figure 1 captures the paradoxical nature of middle managers' work in a change context.

First, in line with Smith and Lewis' (2011: 384) who argument that 'paradoxical tensions may be nested, cascading across levels, as the experience at one level creates new challenge at another', our case study analysed how organizational paradoxes –performing, belonging, and organizing- are perceived by middle managers. Specifically, we found seven opposing yet interrelated dualities embedded in the process of organizing and brought into juxtaposition by the changing environmental context. These findings confirm that 'rather than being the sole responsibility of a few, managing paradox requires local actors learn to cope with their tensions' (Lewis, 2000: 764).

The second point in the model concerns active and defensive responses. According to Smith and Lewis (2011), responses drive reinforcing cycles that can be negative or positive. When middle managers experience anxiety in the face of contradictions, data highlighted that they may react by choosing defensive mechanisms such as spatial splitting, temporal splitting or selecting. In this regard, the paper makes three contributions. First, it revisited the notion of temporal splitting, making the distinction between undulation and oscillation depending on the rate at which individuals move from one opposing pole to another. Second, the spatial splitting was declined in two sub-categories based on the location – inside or outside – of the areas in which the poles were splitted. Finally, is has been observed that middle managers may opt for the selecting strategy by giving priority to one pole but have generally no choice than considering both poles. Such defensive mechanisms (temporal splitting, spatial splitting, and prioritizing) lead to vicious cycles as they stem from static cognitive and behavioural forces (Smith & Lewis, 2011). In contrast, when middle managers view tension as an invitation for creativity and opportunity (Beech et al., 2004), it leads to a virtuous cycle. In this regard, Smith and Berg (1987, p. 215) note that "by immersing oneself in the opposing forces, it becomes possible to discover the link between them, the framework that gives meaning to the apparent contradictions in the experience." Therein, findings put forward that the acceptance process of middle managers can take four forms. Specifically, our research

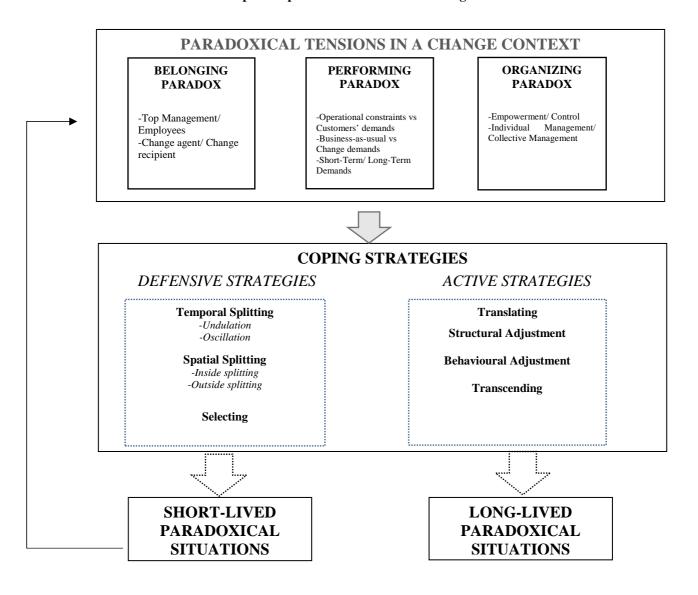


first allowed replacing the confrontation response by the translating coping strategy as the latter occasioned a different dynamic. The translating strategy aims at explaining in the most appropriate manner to employees how opposite poles are integrated into strategic decisions whereas the confrontation strategy searches to discuss openly how to combine the contradictory elements. Then, our paper added to the research by Jarzabkowski et al. (2013) by putting the adjusting response into two categories depending on the object the adjustment is based on (behavioral or structural). As far as the transcendance response is concerned, only a few cases were reported. This is not surprising as this response requires the capacity to think paradoxically to construct a more accommodating perception of opposites. "Such reframing marks a dramatic change in the meaning attributed to a situation as paradoxical tensions become viewed as complementary and interwoven" (Lewis, 2000, p. 764). To escape from paralyzing cycles, middle managers must immerse themselves in the tensions (Smith & Berg, 1987; Lewis, 2000) in order to open up a framework that gives meaning to the apparent contradictions (Vince & Broussine, 1996).

In conclusion, findings allowed to demonstrate that dualities encountered are not always coped with in the same way by all organizational actors. In particular, it has been shown that middle managers may respond differently to the same duality. For example, each active and defensive coping strategies was used by different middle managers to cope with the "change/stability" duality (appendix 4). This example illustrates the plurality of coping strategies that may be deployed within an organization to deal with the same duality. In this line, future research could focus on identifying factors that favour the use of active responses, as the latters are beneficial for the organization on the long run.



Figure 1: Active and defensive responses used by middle managers to cope with paradoxical tensions in a change context



Managerial implications

As paradox is an increasingly prevalent phenomenon in organizations (Jarzabkowski, et al., 2013; Lewis, 2000; Smith & Lewis, 2011), our paper suggests to reconsider the role of middle managers. Having to constantly deal with incompatible demands, middle managers should not only be considered as linking pins but as paradox agents. As a result, their mediation, negotiation and interpretation activities will not only be useful to connect the organization's strategic and operational levels, they will more broadly serve them coping with paradoxical situations. Rather than being anxious and defensive about making hard choices, middle



managers need to act on ambiguity to adopt an approach that combines and optimizes rather than splits apart. From this perspective, we suggest that the role of ambiguity can be helpful in paradoxical situations as managers may rely on their agency to adapt their actions to the way in which they interpret the duality encountered. While the lack of description regarding their function has generally been considered as a source of uncertainty and anxiety for middle managers, it also offers them the opportunity to adjust their actions so as to meet competing demands simultaneously. Based on their interpersonal capability and their situational creativity, they are more likely to find local solutions to organizational paradoxes.

As the process of experiencing the paradoxical tension requires that middle managers recognize the simultaneous presence of opposite poles, we believe it is up to senior managers to help them overcome limitations of either/or thinking (Poole & Van de Ven, 1989) and move toward a both/and approach (Lewis, 2000; Smith & Lewis, 2011). By promoting reflexivity, senior managers can make "middle managers aware of the taken-for-granted nature of their espoused logic, while allowing them to consider alternate logics" (Sharma & Good, 2013: 111). In the same line, Tracy (2004: 141) argued that, 'organizational leaders can acknowledge and explain the tensions that mark their institutions in an effort to encourage employees to frame tensions as complementary dialectics rather than as contradictions or paradoxes. In doing so, employees would know they are not alone in experiencing contradictions and would be able to share coping strategies.'

Avenues for future research

While the present article is based on a case study, this theoretical model provides a basis for generalizability (Eisenhardt & Graebner, 2007). As organizations are increasingly facing paradoxical tensions (Jarzabkowski et al., 2013; Smith & Lewis, 2011), our findings are relevant to other organizations that face similar paradoxical tensions intensified by technological transformation. Hence, we would expect our findings to be relevant to other cases of change context for instance. Further research may be envisioned to examine the active and defensive strategies used by middle managers to deal with dualities compared with those of other organizational contexts. With coping strategies considered as strategic practices for long-term performance, it could also be interesting to look at the impact of these strategies on the success rate of change. In the case of Incabas, managers had difficulty managing the extra workload arising from the implementation of the new information system. As senior



managers ignored the tensions experienced by the middle managers, the latter became more resistant to the change project, which led to the launch of the new system being delayed on three separate occasions.

CONCLUSION

In summary, this analysis indicates 1) that organizational paradoxes cascade at middle manager level through seven dualities; and 2) that middle managers may react to paradoxical tensions through three defensive and four active responses. In this regard, the contribution of our paper is five-fold. First, we identified specific new ways temporal and spatial splitting are played out at the intermediate level making the distinction between undulation/oscillation and inside/outside respectively. Secondly, the selecting strategy has been confirmed for middle managers as the latter may select the pole on which they will focus. Thirdly, we retained our original label of translating because none of the existing responses in the paradox literature accurately fit our empirical observations. Then, we complemented Jarzabkowski et al. (2013) research by declining the adjusting strategy in two sub-categories depending on the object the adjustment is based on (behavioural and structural). Finally, even if only a few middle managers reframed the paradoxical situation they encountered, their actions aligned with the transcendence strategy established in the literature. Based on these findings and prior research, a theoretical model was put forward that summarises the coping strategies used by middle managers to deal with paradoxes in a change context. The findings and theoretical model offered confirm that it is not the existence of contradictions per se that is productive or destructive, but the way they are perceived and managed.



REFERENCES

- Andriopoulos, C., & Lewis, M.W., (2009), Exploitation-Exploration Tensions and Organizational Ambidexterity: Managing Paradoxes of Innovation, *Organization Science*, 20(4), 696-717
- Argyris, C., (1983), Action Science and Intervention, Journal of Applied Behavioral Science, 19 (2), 115-135
- Argyris, C., (1988), Crafting a theory of practice: The case of organizational paradoxes. In Quinn, R., & Cameron, K., Paradox and Transformation: Toward a theory of change in organization and management, 255-278, Cambridge, MA: Ballinger
- Armstrong-Stassen, M., (2005), Coping with downsizing: A comparison of executive-level and middle managers. International Journal of Stress Management, 12, 117-141.
- Balogun, J., (2003), From blaming the middle to harnessing its potential: creating change intermediairies. *British Journal of Management*, 14, 69-83.
- Balogun, J., & Johnson, G., (2004), Organizational Restructuring and Middle Manager Sensemaking. *The Academy of Management Journal*, 47(4), 523-549.
- Beech, N., Burns, H., de Caestecker, L., MacIntosh, R., & MacLean, D., (2004), Paradox as invitation to act in problematic change situations, *Human Relations*, 57, 1313-1332
- Bryant, M., & Stensaker, I., (2011), The challenges of middle management change agents: How interactionism can provide a way forward, *Journal of Change Management*, 11 (3), 353-373
- Cameron, K. S., & Quinn, R. E., (1988), Organizational paradox and transformation. In R. E. Quinn, & K. S. Cameron (Eds.), *Paradox and Transformation: Toward a Theory of Change in Organization and Management*: 1-18. Cambridge, MA: Ballinger Publishing.
- Donaldson, T., & Preston, L.E., (1995), The stakeholder theory of the corporation: Concepts, evidence and implications, *Academy of Management Review*, 20, 65-91
- Eisenhardt, K. M. & Graebner, M. E., (2007), Theory Building from Case Studies: Opportunities and Challenges, *Academy of Management Journal* 50(1), 25–32
- European Agency for Safety and Health at work, (2014), Calculating the cost of work-related stress and psychosocial risks, European Risk Observatory.
- Farjoun, M., (2010), Beyong dualisme: Stability and change as a duality. *The Academy of Management Review*, 35(2), 202-225.
- Fredberg, T., (2014), If I say It's complex, it bloddy well will be: CEO strategies for managing paradox, Journal of Applied Behavioral Science, 50 (2), 171-188
- Gibbs, J., (2009), Dialectics in a global software team: Negotiating tensions across time, space and culture, Human Relations, 62 (6), 905-935
- Gibson, C.B., & Birkinshaw, J., (2004), The antecedents, consequences, and mediating role of organizational ambidexterity, Academy of Management Journal, 47 (2), 209-226
- Gioia, D.A., Corley, K.G., & Hamilton, A.L., (2012), Seeking qualitative rigor in inductive research: Notes on the Gioia methodology, *Organizational Research Methods*, 16 (1), 15-31
- Gotsi, M., Andropoulos, C., Lewis, M. W., & Ingram, A. E., (2010), Managing creatives: Paradoxical approaches to identity regulation. *Human Relations*, 63 (6), 781-805
- Gupta, A.K., Smith, K.G., & Shalley, C.E., (2006), The interplay between exploration and exploitation, *Academy of Management Journal*, 49, 693-706
- Groleau, C., Demers, C., Lalancette, M., & Barros, M., (2011), From Hand Drawings to Computer Visuals: Confronting Situated and Institutionalized Practices in an Architecture Firm. *Organization Science*, 22(3).
- Hoel, H., Sparks, K., & Cooper, C.L., (2001), The cost of violence/stress at work and the benefits of a violence/stress-free working environment, *International Labour Organization* (ILO), Geneva
- Hatch, M. J., & Ehrlich, S. B., (1993), Spontaneous humour as an indicator of paradox and ambiguity in organizations. *Organization Studies*, 14: 505-526
- Huy, Q., (2001), In praise of middle managers, Harvard Business Review, September, 72-79
- Huy, Q., (2002), Emotional balancing of organizational continuity and radical change: The contributions of middle managers, Administrative Science Quarterly, 37, 634-665
- Jarzabkowski, P., Lê, J., & Van De Ven, A., (2013), Responding to competing strategic demands: How organizing, belonging, and performing paradoxes coevolve. *Strategic Organization*, 0(0), 1-36.
- Johnson, G., Scholes, K., Whittington, R., & Frery, F., (2011), *Stratégique*, 9ème Ed, Pearson.
- Josserand, E. & Perret, V., (2003), Le paradoxe: Penser et gérer autrement, Editions Ellipse, Paris
- Katz, D., & Kahn, R.L., (1966), The social psychology of organizations, New York: John Wiley.
- Kreiner, G.E., Hollensbe, E.C., & Sheep, M.L., (2006), Where is the "me" among the "we"? Identity work and the search for optimal balance, *Academy of Management Journal*, 49, 1031-1057
- Lazarus, R. S., & Launier, R., (1978). Stress-related transactions between person and environment. In L A Pervin and M Lewis (Eds), (1978). *Perspectives in Interactional Psychology*, 287–322, New York,: Plenum.
- Leonardi, P.M., (2009), Why Do People Reject New Technologies and Stymie Organizational Changes of Which They Are in Favor? Exploring Misalignments Between Social Interactions and Materiality. *Human Communication Research*, 35(3), 407-441.
- Lewis, M. W., (2000), Exploring paradox: Toward a more comprehensive guide. *The Academy of Management Review*, 25(4), 760-776.



Lewis, M.W., & Smith, W.K., (2014), Paradox as a Metatheoretical Perspective: Sharpening the Focus and Widening the Scope, Journal of Applied Behavioral Science, 1-23

Lindblom, C. E., (1965), The Intelligence of Democracy. New York: Free Press

Lüscher, L., & Lewis, M., (2008), Organizational change and managerial sensemaking: Working through paradox. *The Academy of Management Journal* 51(2), 221-240.

Mangham, I.L., & Pye, A., (1991), The Doing of Managing, Oxford: Blackwell

Maslach, C., Schaufeli, W.B., & Leiter, M.P., (2001), Job Burnout, Annual Review of Psychology, 52, 397-422

Michaud, V., (2013), Business as a pretext? Managing social-economic tensions on a social enterprise's website, M@n@gement, 16 (3), 294-331

Mollering, G., (2005), The Trust/Control Duality: An Integrative Perspective on Positive Expectations of Others. International Sociology, 20(3), 283-305.

O'Reilly, C., & Tushman, M. L., (2008), Ambidexterity as a dynamic capability: Resolving the innovator's dilemma. Research in Organizational Behavior, 36, 165-186.

Papachroni, A., Heracleous, L., & Paroutis, S., (2014), Organizational Ambidexterity through the lens of Paradox theory: Building a Novel Research Agenda, Journal of Applied Behavioral Science, 1-23

Poole, M. S., & Van de Ven, A.H., (1989), Using Paradox to build management and organization theories, *Academy of Management Review*, 14 (4), 562-578

Quinn, R.E., (1988), Mastering the paradoxes and competing demands of high performance, San Francisco: Jossey-Bass

Romanelli, E., & Tushman, M.L., (1994), Organizational transformation as punctuated equilibrium: an empirical test, *Academy of Management Journal*, 37 (5), 1141-1166

Rouleau, L., (2005), Micro-Practices of strategic sensemaking and sensegiving: How moddle managers interpret and sell change everyday, Journal of Management Studies, 42 (7), 1413-1441

Rouleau, L., & Balogun, J., (2011), Middle managers, Strategic Sensemaking, and Discursive Competence, *Journal of Management Studies*, 48 (5), 953-983

Sharma, G., & Good, D., (2013), The Work of Middle Managers: Sensemaking and Sensegiving for creating Positive Social Change. *Journal of Applied Behavioral Science*, 49(1), 95-122.

Seo, M-G., Putnam, L., & Bartunek, J.M., (2004), Dualities and tensions of planned organizational change, in Poole, S. & Van de Ven, A., (Eds), *Handbook of organizational change*, 73-107, Oxford: Oxford University Press.

Sharma, G., & Good, D., (2013), The Work of Middle Managers: SEnsemaking and Sensegiving for Creating Positive Social Change, Journal of Applied Behavioral Science, 49 (1), 95-122

Smith, K.K., & Berg, D.N., (1987), Paradoxes of Group Life, San Francisco- Josey-Bass

Smith, W.K., Binns, A., & Tushman, M.L., (2010), Complex Business Models: Managing Strategic Paradoxes Simultaneously, *Long Range Planning*, 43 (2), 448-461

Smith, W. K. & Lewis M. W., (2011), Toward a theory of paradox: A dynamic equilibrium model of organizing. *The Academy of Management Review*, 36(2), 381-403.

Smith, W.K., & Tushman M.L., (2005), Managing strategic contradictions: A top Management Model for managing Innovation Streams. *Organization Science*, 16(5), 522-536.

Snow, D. A., Morrill, C., & Anderson, L., (2003), Elaborating Analytic Ethnography: Linking Fieldwork and theory, *Ethnography*, 4 (2), 181-200

Stoltzfus, K.., Stohl, C., & Seibold, D.R. (2011). Managing organizational Change: Paradoxical problems, solutions and consequences. *Journal of Organizational Change Management*, 24(5), 640-661.

Sundaramurthy, C., & Lewis, M., (2003), Control and Collaboration: Paradoxes of Governance. *The Academy of Management Review*, 28(3), 397-415

Tracy, S.J., (2004), Dialectics, Contradiction, or Double Bind? Analyzing and Theorizing Employee reactions to organizational tension, Journal of Applied Communication Research, 32 (2), 119-146

Truchot, D., (2004), Épuisement professionnel et burnout: Concepts, modèles, interventions. Paris: Dunod.

Vince, R., & Broussine, M., (1996), Paradox, Defense and Attachment: Accessing and working with emotions and relations underlying organizational change, *Organization Studies*, 17 (1), 1-21

Weick, K.E., (1995), Sensemaking in Organizations, London: Sage

Wooldridge, B., Schmidt, T., & Floyd, S.W., (2008), The middle management perspective on strategy process: contributions, synthesis, and future research, *Journal of Management*, 34, 1190-1221



APPENDIX 1

References	Type of study	Empirical setting	Findings
Poole & Van de Ven (1989)	Conceptual	- 1	Four modes of working with paradoxes are distinguished: 1) accept the paradox and use it constructively; 2) clarify the levels of analysis; 3) temporally separate the two levels; and 4) introduce new terms to resolve the paradox. These four modes of paradox resolution are illustrated by application to the action/structure paradox in organization theory.
Vince & Broussine (1996)	Empirical Qualitative (drawings)	49 senior managers and 37 middle managers from six public service organizations	The paper analyses how managers work with paradoxical emotions as part of the change management process
Lewis (2000)	Conceptual	-	The paper develops a framework that clarifies the nature of paradoxical tensions, reinforcing cycles and their management.
Josserand & Perret (2003)	Conceptual	-	The paper presents 6 organizational practices to manage paradox
Tracy (2004)	Empirical Qualitative (participant observations, in-depth interviews and organizational documents)	19 officers and 3 organizational administrators from two correctional facilities	The paper advances a theoretical model positing that organizational tensions may be framed as complementary dialectics, simple contradictions or pragmatic paradoxes. The analysis suggests that through meta-communication about organizational tensions, employees are better able to understand the paradoxes that mark their working life, and make sense of them in emotionally healthy ways.
Beech, Burns, de Caestecker,	Empirical	UK's National Health Service	The purpose of this article is to explore the potential for managerial action where
MacIntosh & MacLean (2004)	Action research		the paradox is held open through the use of theory on "serious playfulness."
Gibson & Birkinshaw (2004)	Empirical Qualitative (interviews and survey)	4195 individuals from 41 business units in ten multinational firms	The paper investigates contextual organizational ambidexterity and argues that a context characterized by a combination of stretch, discipline, support, and trust facilitates contextual ambidexterity.
Seo, Putnam & Bartunek (2004)	Conceptual	-	The paper examines both theories and practices linked to planned change to uncover underlying dualities and tensions and their implications
Smith & Tushman (2005)	Conceptual	-	Using the literature on paradox, contradictions and conflict, the authors develop a model of managing strategic contradictions that is associated with paradoxical cognition.
Lüsher & Lewis (2008)	Empirical Action research	45 managers from the Lego Company	The results transform paradox from a label to a lens, contributing a process for working through paradox and explicating three organizational change aspects-paradoxes of performing, belonging, and organizing.
Andriopoulos & Lewis (2009)	Empirical Qualitative (interviews, archival data and observations)	86 managers (senior executives, directors, designers and engineers) from 5 firms in the product design industry	The paper presents nested paradoxes of innovation and theorizes how integration and differentiation tactics help manage these interwoven paradoxes and fuel virtuous cycles of ambidexterity.
Gibbs (2009)	Empirical	Global software team in a	This study examines dialectic tensions (autonomy-connectedness, inclusion-

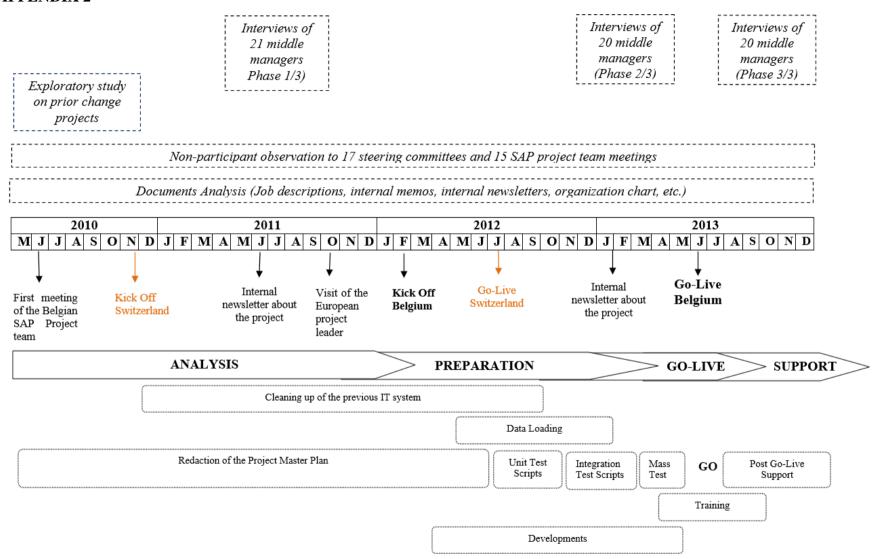


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	(ethnography)	digital imaging corporation	exclusion, empowerment-disempowerment) in global virtual teams, and the ways in which tensions are negotiated through the communicative practices of team
Gotsi, Andriopoulos, Lewis & Ingram (2010)	Empirical Qualitative (interviews, archival data and observations)	86 managers (senior executives, directors, designers and engineers) from 5 firms in the product design industry	members. Leveraging the paradox literature, the paper analyses how differentiation and integration strategies may accommodate creative workers' needs to cope with multiple identities, as well as their aversion to sanctioned subjectivities.
Smith, Binns & Tushman (2010)	Conceptual	-	The paper identifies several types of complex business model that seek value by supporting paradoxical strategies, and notes the critical role of senior leaders in implementing these complex business models successfully.
Smith & Lewis (2011)	Conceptual	-	After reviewing the paradox literature, categorizing types and highlighting fundamental debates, the paper presents a dynamic equilibrium model of organizing, which depicts how cyclical responses to paradoxical tensions enable sustainability.
Stoltzfuz, Stohl & Seibold (2011)	Empirical Qualitative (interviews)	15 executives and leaders from justice agencies in a large county government	The purpose of this paper is to examine how institutional contradictions become simultaneously embedded in the process and outcomes of organizational change.
Jarzabkowski, Lê & Van de Ven (2013)	Empirical Qualitative (interviews, observations and documents)	Key senior, middle, and operational managers in a telecommunications company	This article develops an empirically grounded process model that 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.
Lewis & Smith (2014)	Conceptual	-	Identifying core elements viewed from a paradox perspective (underlying assumptions, central concepts, nature of interrelationships and boundary conditions, the paper illustrates the meta-theoretical nature of paradox.
Fredberg (2014)	Empirical Qualitative (interviews of CEO)	CEOs of 20 global organizations selected for their ability to create both economic and social value	The article contributes to the literature by showing how CEOs relate to paradoxes and strategies for resolving the paradoxes.
Papachroni, Heracleous & Paroutis (2014)	Conceptual	-	Viewing exploration and exploitation as dynamically interrelated or even complementary activities enables the authors to conceive prescriptions that move beyond structural or temporal separation toward synthesis or transcendence, as well as toward longitudinal explorations of how paradoxical poles dynamically interrelate over time.



APPENDIX 2





APPENDIX 3

Respondent	Gender	Function	Year of entry	Division	Number of people within the division
1	F	Sales	1983	1	80
2	M	Logistics	2000	1	80
3	M	Sales	1991	1	80
4	M	Maintenance & Methods	2008	2	200
5	M	Maintenance & Methods	1983	2	200
6	M	Production	1979	2	200
7	M	Production (replaced)	1989	2	200
8	M	Finance	2000	2	200
(21)	M	Marketing (retired)	2007	2	200
9	M	Finance	1978	3	270
10	F	Finance	1993	3	270
11	M	Purchase & Planning	1993	3	270
12	M	Maintenance & Methods	1997	3	270
13	M	Finance	1978	3	270
14 M Production		2010	3	270	
15	F	Finance	1995	4	45
16	F	Sales	2010	4	45
17	M	Production	1978	5	130
18	M	Production	2005	5	130
19	M	Maintenance & Methods	1980	5	130
20	M	Production	2000	5	130

APPENDIX 4

	Examples of responses to cope with the "change/stability" duality	Coping strategy
•	It's obvious that it was not easy to manage both activities. A choice had to be made: my staff worked on the "old system" to ensure the everyday work and I was involved in the change project. [Finance manager/ Division 2]	Spatial splitting
	The project is the easiest task to postpone. So you have to force yourself to get involved in it. I chose two days and I try to stick to it. It's not easy but it's the only way I've found to devote myself to the project [Maintenance manager/ Division 5]	Temporal splitting
	I said, "whether you like it or not, it will be first the business and then the project." [Sales manager/Division 1]	Selecting
	I explained to the team that it was a little difficult at times but that we were all in the same boat and had to get out together. I'm not saying that there was no tension between us but generally employees responded quite wellThe people were stressed, tired but there has always been solidarity [Finance manager/Division 3]	Explaining
	We changed a bit the organization so that everyone supports a portion of the excess workload [Sales Manager/ Division 4].	Structural adjusting
•	I always ask myself this question: what will be the result of what I do now? Is the result will be that tomorrow it will work better, I'm ready to get involved in the project. If this is something that structurally change something for the better, yes I am ready to invest myself and ask my team to invest there too [Sales Manager/Division 4]	Transcending