

Managing boundaries through strategy maps in pluralistic contexts

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Abstract

Purpose – Modern intra- and inter-organizational arrangements require firms to cross boundaries, but this process represents a crucial and complex challenge, especially for organizations that face pluralistic tensions. Scholars still lack sufficient knowledge of how boundaries can be crossed and what kind of boundary management is necessary within pluralistic contexts. This paper aims to enrich the understanding of these issues by exploring how strategy maps can be mobilized and used as boundary objects to elicit boundary-spanning practices that foster cross-boundary collaboration in pluralistic organizations.

Design/methodology/approach – This paper employs the case study methodology to capture the dynamics of cross-boundary management elicited by the use of a strategy map within a pluralistic social/healthcare organizational context.

Findings – This study identifies four practices of boundary spanning (i.e. identifying and crossing problem boundaries, orchestrating collective responsibilities, acknowledging a common understanding of convergent values and goals, and evolving into action) in the analysed pluralistic context and investigates the conditions under which cross-boundary interactions can mobilize a shared zone of knowing via strategy maps.

Originality/value – This paper suggests a complex (and not linear) processual model of boundary management in pluralistic contexts in which the use of the strategy map mobilizes a dynamic of centrifugal and centripetal movements which engage plural actors in a shared site of collaborative knowing. The study

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contributes to a conceptualization of boundary management in pluralistic contexts as a progressive social accomplishment.

Keywords Boundary management, Pluralistic contexts, Strategy maps, Strategizing, Social/healthcare setting
Paper type Research paper

Introduction

Pluralistic organizations, which are becoming increasingly prevalent in today's business scenario (Brès *et al.*, 2018), are those where divergent but equally legitimate goals and interests of various internal and external groups are mobilized to influence the organization's strategy execution (Jarzabkowski and Fenton, 2006). In addition to holding multiple objectives and diffuse power bases, actors within pluralistic contexts are also typically knowledge workers (Denis *et al.*, 2001) with distinctively different values and ideological assumptions (Sorsa and Vaara, 2020). These features generate tensions and exacerbate the complexity of managerial processes (Denis *et al.*, 2007; Jarzabkowski and Fenton, 2006). Accordingly, boundary management assumes a critical relevance in pluralistic settings in which pervasive boundaries must be constantly crossed to promote intra- and inter-organizational collaboration and strategic change (Denis *et al.*, 2001; de Vries *et al.*, 2021).

Scholars have widely debated how cross-boundary collaboration may be achieved, and likewise, what kind of boundary management is necessary and functional (e.g. Hsiao *et al.*, 2012; Nicolini *et al.*, 2012). Langley *et al.* (2019) define boundary management as the purposeful individual and collective effort to influence the boundaries, demarcations and distinctions affecting groups, occupations and organizations and identify three different forms, namely competitive, collaborative and configurational boundary management. Competitive boundary management refers to how people construct, defend or extend boundaries to distinguish themselves from others and to define an exclusive territory that is expected to confer an advantage. This form reflects a self-oriented nature of boundary management aimed at construing boundaries as a means to acquire resources or reinforce power positions. In contrast, collaborative boundary management is concerned with how people draw on, negotiate, blur or realign boundaries in interaction with others to collaborate, coordinate or to achieve common results. This form is, therefore, particularly relevant to the study of how individuals bridge boundaries to realize joint outcomes. Finally, configurational boundary management focuses on how the patterns of differentiation and integration among sets of people can be reconfigured to ensure that certain activities are brought together within bounded spaces while others are at least temporarily kept apart to produce particular kinds of collective action.

Overall, research on boundary management suggests that crossing boundaries requires three elements: the presence of boundary spanners (Aldrich and Herker, 1977); wise management of significant boundary objects (Ewenstein and Whyte, 2009; Star, 2010) and the ability to manage boundary-spanning practices (Hawkins and Rezazade, 2012). In fact, objects cannot usually produce effective pathways by themselves, as boundaries are also continually subject to human agency and socially constructed through practice (Langley *et al.*, 2019). However, we still lack insights into how these complex processes unfold within pluralistic settings, in which organizational actors must manage a particularly intricate set of boundary relations (de Vries *et al.*, 2021) while dealing, simultaneously, with both the multiplicities of powers and preferences that characterize these contexts (Brès *et al.*, 2018).

In this paper, we start addressing this gap. Theoretically, our perspective on boundary management in pluralistic contexts has two main foci. First, acknowledging the prominence of knowledge workers and knowledge boundaries (Carlile, 2004) in such specific settings, we conceive boundary management in pluralistic contexts as a knowing process, as suggested

by Orlikowski (2002) and further developed by Hsiao *et al.* (2012). Second, among the multiple cross-boundary interactions that unfold within pluralistic organizations, we focus on cross-boundary interactions regarding strategy execution, as the literature widely recognizes their relevance. Particular complexities and tensions also arise associated with strategizing in pluralistic organizational forms (Denis *et al.*, 2007; Jarzabkowski and Fenton, 2006; Sorsa and Vaara, 2020).

Based on these premises, this paper aims to explore how the *use of* strategy tools conceived as boundary objects (Bowman, 2016; Spee and Jarzabkowski, 2009) can create collaborative cross-boundary management in pluralistic organizations. More specifically, the paper investigates the use of a strategy map within a pluralistic social/healthcare organizational context and focuses on the following research questions: (1) Which *boundary practices* elicited by the use of strategy maps facilitate cross-boundary spanning in pluralistic contexts? and (2) Under which *conditions* does cross-boundary spanning via strategy maps facilitate collaboration in pluralistic contexts?

The paper proceeds as follows. In the next section, we delineate the theoretical framework that underpins our conceptualization of boundary management in pluralistic contexts. In the method section, we describe the empirical setting of our case study and explain our methodology to gather situated knowledge about the boundary management process. The following section illustrates our empirical findings. The discussion thereafter highlights both centripetal and centrifugal movements in the process of using the map and explores some paradoxes that illuminate the boundary object's intrinsically flexible interpretation. The paper concludes by illustrating the managerial implications of our work as well as its main limitations and directions for future research.

Conceptualizing boundary management in pluralistic contexts

Challenges of boundary management in pluralistic contexts

According to Denis *et al.* (2007), pluralistic contexts are “organizational contexts characterized by three main features: multiple objectives, diffused power, and knowledge-based work processes” (pp. 179–180). These characteristics engender multiple tensions and complex managerial challenges (Jarzabkowski and Fenton, 2006; Sorsa and Vaara, 2020) that are still poorly understood. As noted by Brès *et al.* (2018), more work is needed to clarify further how the multiple tensions underlying pluralistic contexts can be managed and contained to prevent unsurmountable conflicts and other pathological effects, such as an ingrained inability to make decisions (cfr. also Denis *et al.*, 2011).

Pluralistic tensions are typical in the public sector and particularly in healthcare, where bureaucratic cultures, practices and processes collide with specialists' cultures and autonomous ways of functioning alongside administrative pressures and constant changes in the population's needs (Cuccurullo and Lega, 2013; Denis *et al.*, 2001). Public healthcare organizations are shaped by the divergent or even conflictual values, interests and goals of different powerful stakeholders inside and outside the organizations (Jarzabkowski and Fenton, 2006). These tensions, which may occur between professional and managerial cultures and interests, between policy reforms and administrative routines, or between intra- and inter-organizational practices, can be seen as opportunities to address or cope with contradictory strategic objectives (Denis *et al.*, 2007). As a result, public healthcare organizations cannot be depicted as coherent and focused strategic entities; rather, they need to be interpreted as pluralistic contexts solicited by multiple, fragmented, shifting and contradictory demands (Jarzabkowski and Fenton, 2006). Pluralistic healthcare contexts therefore imply a particularly fragile and continuously evolving strategizing dynamic to enact a multiplicity of divergent expectations which are simultaneously set by the legitimate demands of powerful internal and external stakeholders. Strategizing refers to

“those planning, resource allocation, monitoring and control practices and processes through which strategy is enacted” (Jarzabkowski and Fenton, 2006, p. 632). Within pluralistic organizations, these practices need to recognize the multiple and possibly divergent interests, cultures and identities of the different organizational groups. Accordingly, mobilizing strategic change in pluralistic healthcare organizations is a multi-actor practice requiring, over time, a continuous social accomplishment (Sergi *et al.*, 2016).

For the strategizing dynamic to smoothly unfold, there must be cooperation across the multiple boundaries that mark pluralistic contexts. Cross-disciplinary, cross-departmental and cross-functional collaboration is highly relevant, because when individuals from different fields and belonging come together, they face the challenge of assembling diverse teams to solve problems effectively (Prahalad and Krishnan, 2008; Hawkins and Rezazade, 2012). Multi-team structures are increasingly used to coordinate complex tasks between different groups (de Vries *et al.*, 2021), and the public sector engages with boundaries, enhancing “the ability of public managers and others to use collaboration to reassemble resources and activities to continue addressing critical public problems despite disruption or adversity” (Quick and Feldman, 2014, p. 674). The development of collaboration and connections enhances resilience (Quick and Feldman, 2014) and helps embark on strategy execution (Schein, 2013). Furthermore, Willis (2016) highlights how practitioners and stakeholders require dialogue and collaboration when strategically addressing wicked problems.

Simultaneously, cross-boundary cooperation appears particularly problematic within pluralistic contexts because of the multiplicity of preferences and powers that characterize them (Brès *et al.*, 2018). The first feature (i.e. *multiplicity of preferences*) relates to the organizational mission and objectives, and it involves the need to manage individuals with divergent and possibly conflicting interests (Denis *et al.*, 2007; Hardy, 1991). Indeed, pluralistic organizations mobilize many things to many people and are faced with the difficult task of seeking legitimacy through the fulfilment of competing expectations (Jarzabkowski and Fenton, 2006). Aligning multiple preferences is always fragile and temporary (Denis *et al.*, 2001). Concerning the second feature (i.e. *multiplicity of powers*), within pluralistic organizations a centralized authority is usually replaced by coalitions of powerful actors having equal legitimacy to promote their differing perspectives (Hardy, 1991). This additionally complicates cross-boundary cooperation, as “reconciliation by fiat is not an option” (Denis *et al.*, 2001, p. 826). Further complicating cross-boundary collaboration is the notion that pluralistic organizations tend to deal with knowledge-based work processes (Denis *et al.*, 2007), which typically demand agreement on substantive and value-laden issues rather than on formal and procedural matters as in traditional bureaucracies (Brès *et al.*, 2018). By aiming to achieve broad and encompassing “grand causes” (Brès *et al.*, 2018), pluralistic organizations might practice possibilities to converge on higher-order bases of legitimacy or shared values, thus reinforcing the collaboration competences themselves, as in a virtuous circle.

In summary, we argue that boundary management within pluralistic contexts entails not only considerable challenges but also opportunities to experience new ways of mediating and nurturing the whole pluralistic system. Indeed, on the one side, the aforementioned features remarkably complicate managing boundaries within pluralistic settings. On the other side, boundary management can make it more feasible to work in pluralistic organizational contexts, as it influences the dynamics of collaboration in and around organizations (Langley *et al.*, 2019). From the above considerations, the *collaborative* form of boundary management appears particularly critical, as it constitutes simultaneously an achievement not taken for granted and a challenge to be accomplished. Hence, our intention is to address specifically the emergence of collaborative boundary management in the case study analysed.

Boundary management and spanning mechanisms

Among the many types of boundaries (physical, geographical, material, symbolical, linguistic, cultural, etc.), knowledge boundaries (Carlile, 2002, 2004) hold central importance to pluralistic organizations. They can be beneficial to certain goals, although they may hinder coordination, collaboration and problem solving (Hawkins and Rezaqade, 2012; Nicolini *et al.*, 2012). A knowledge boundary represents the limit or border of an organizational actor's knowledge base in relation to a different domain of knowledge (Hawkins and Rezaqade, 2012, p. 1802). Such boundaries are never static, as they move and adjust through organizational developments, learning processes and the constant enactment of organizational life. Nonetheless, this knowledge base perpetually influences the structures of the interpretive framework (Polanyi, 1962), the representation of problems, the use of information and the priorities of work, which means it can also trigger conflicts and difficulties.

To manage knowledge boundaries, the literature has recognized the salience of boundary spanning processes and has debated both their nature and management (Hawkins and Rezaqade, 2012; Hsiao *et al.*, 2012). Regarding the former (i.e. the *nature* of boundary spanning processes), scholars have proposed various conceptualizations of boundary spanning, i.e. spanning as trading, sharing and knowing (for a discussion, see Hsiao *et al.*, 2012). In this study, we follow the third approach and conceive cross-boundary collaboration as a form of situated collective learning (Orlikowski, 2002) that is socially accomplished by skilled actors engaging in knowledge work (Denis *et al.*, 2007).

With respect to the second point (i.e. the *management* of boundary spanning processes), Hawkins and Rezaqade (2012) approach the management of knowledge boundary spanning as a multi-actor combination of various mechanisms which evolve over time, among which (1) boundary spanners, (2) boundary objects and (3) boundary practices stand out in mobilizing cross-boundary collaboration. Regarding the first mechanism, boundary spanners are organizational actors operating at the boundaries of their organizations. They are competent in translating and framing information across boundaries to close the cognitive gaps between parties, facilitate dialogue and negotiation of shared goals and meanings, and thus promote coordination amongst diverse groups (Aldrich and Herker, 1977). In addition to cognitive skills allowing them to translate knowledge, boundary spanners must have personal and political abilities (e.g. rhetorical persuasiveness) to be perceived as trustworthy across boundaries (Hawkins and Rezaqade, 2012).

Regarding the second mechanism, the boundary object is a physical, abstract or mental object that serves as a focal point in collaboration across disciplinary or professional boundaries and enables the different parties to represent, transform and share knowledge (e.g. Bechky, 2003; Carlile, 2002, 2004; Hayes and Fitzgerald, 2009). The literature has widely discussed the nature, characteristics and roles of boundary objects (e.g. Ewenstein and Whyte, 2009; Nicolini *et al.*, 2012). Since the term "boundary" evokes a periphery defining a shared space, and the term "object" represents a material entity (something people work toward), we can conceive boundary objects as "stuff of action" (Star, 2010, p. 603). Such objects are distinctive for their interpretative flexibility (Star and Griesemer, 1989; Star, 2010); they are epistemic artefacts that can have different meanings to various communities, professional groups, departments, etc. They can provide a shared language for representing knowledge across the boundary, offer a concrete means of specifying and learning about differences and dependencies across a boundary, and form a reification process around the practices and co-constructions that give rise to new meaning (Carlile, 2002; Wenger, 1998). Therefore, objects are not meaningful *per se*, but they achieve their provisional meaning through a socially interactive process (Dameron *et al.*, 2015).

Scholars have considered different object typologies in terms of their capacity to help organizations manage cross-boundary processes. Spee and Jarzabkowski (2009) designated

strategy tools as boundary objects due to their flexible interpretations that are constructed through contextual and socio-political conditions. Strategy tools help to formalize the analytical and decision-making processes, like in the use of scenario planning which defines serial steps for detecting uncertainties and new trends (Bowman, 2016).

While the extant research has clearly identified boundary spanners and boundary objects as mechanisms that facilitate coordination across boundaries, the importance of highlighting boundary practices as the third and distinct boundary-spanning mechanism has been more recently recognized (Hawkins and Rezazade, 2012). Accordingly, boundary practice has been defined as a distinct “boundary spanning mechanism that overcomes a knowledge boundary by engaging agents from different knowledge communities in collective activities” (Hawkins and Rezazade, 2012, p. 1806). In other words, boundary practices engage spanners from different knowledge domains in a shared zone of knowing which thus facilitates collaboration. Following this approach which focuses on boundary practices as distinct spanning mechanism, Hsiao *et al.* (2012) conducted a field study to investigate how knowledge workers (i.e. engineers) make use of boundary objects to learn and collaborate across multi-disciplinary boundaries to solve troubleshooting problems in interactive systems (i.e. maintaining complex wafer-fabrication machineries). This investigation allowed them to highlight three relevant practices of cross-boundary spanning leading to collaborative knowing: (1) identifying boundary problems so experts can organize an information search and gather local resources; (2) orchestrating collective responsibilities in negotiating problem ownership and (3) developing a systemic understanding through a sense-making process.

While enlightening on how *knowing* within cross-disciplinary collaboration involves an on-going accomplishment emerging from an interplay of boundary spanners, objects and practices, the existing literature on boundary management is less informative on how such complex processes can be accomplished in more fragmented contexts like pluralistic organizations. We focus on this gap to enrich the understanding of boundary management in pluralistic contexts. In particular, we dig into a case study to investigate which *boundary practices* elicited by the use of a strategy map (*boundary object*) help manage the cross-boundary interactions engaging *boundary spanners* in a shared zone of knowing regarding strategy execution. We also investigate the *conditions* under which cross-boundary spanning facilitates collaboration in pluralistic contexts.

Methods

We used a case study methodology (Eisenhardt and Graebner, 2007; Yin, 1994) to capture the dynamics of cross-boundary management in a social/healthcare organizational context. Case studies provide a meaningful methodological approach to emphasize the rich, real-world context in which the phenomena occur (Eisenhardt and Graebner, 2007). Since case-study is an appropriate research methodology to deal with questions of “how” rather than “how many” and “how much” (Yin, 1994), it is regarded as the most appropriate method in the context of this study, which explores how boundary spanning mechanisms interplay in the context being explored. This context features highly pluralistic elements that clash with an overarching pressure toward integration. Against this background, the organization undertook a formative project aimed at developing competences, relationships, and tools that were conducive to cross-boundary cooperation. Following a theoretical sampling approach (Patton, 2002), this pluralistic setting was selected as it offered a rich source of data to explore collaborative boundary management processes. We employed participant observations, documental analysis and interviews to facilitate a deep understanding of the unfolding experience. In the following, we present the empirical setting to highlight the project’s genesis and collaboration challenges. Afterward, we illustrate the data collection and analysis techniques.

Research setting

The study's empirical setting involved an inter-organizational network of social/healthcare services located in an Italian province, serving 700,000 inhabitants across a territory of 3,000 square kilometres. This network encompasses a variety of institutional contexts (i.e. the local health authority and various municipalities), organizations (i.e. the seven territorial districts within the local health authority), professions (e.g. physicians, administrative staff, nurses and social workers) and disciplines (e.g. physicians, psychiatrists or geriatricians). Its complexity is exacerbated by the territory's heterogeneous orographic characteristics (a combination of urban and rural communities) and by demographic and epidemiological trends (e.g. an aging population and an increasing number of chronic diseases), which together shift patients' needs and consequently the network's priorities. Regarding the local health authority, the whole system is entrusted to the Social and Health Director. This individual cooperates with the Strategic Management Directorate, the district directors and other department directors, especially the Primary Care Department, which handles fragile patients. Regarding municipalities, each territorial district is managed by a municipal management office. This integrated architecture aims at ensuring that patients' access to health and social care is managed in an appropriate, consistent and holistic manner throughout the territory, no matter where the patient resides. To this end, the network also adopted a unique point of access (UPA) model. Each territorial district has one UPA, which is accountable to both the local health authority and the district's municipalities. Within each UPA, patients who have both health and social problems, whether coming from hospitals or community settings, can meet nurses, social service workers and clinicians. Taking charge of patients' needs requires collaboration among the various UPAs as well as an integrated information system, homogeneous evaluation tools, and a common set of resources and services. In order to facilitate these integration and coordination processes, the Strategic Management Directorate appointed a co-ordinator to oversee all seven UPAs.

However, the network has previously attempted – and failed – to foster coordination and integration among its different organizational structures, largely due to heterogeneous organizational models, assigned resources and cultures. Given this scenario, the co-ordinator of the seven UPAs proposed to undertake a formative project aimed at constructing and applying a strategy map that could produce a common way of managing patients' access to the service network.

Data collection and analysis

Two of the authors were allowed to follow the project as it unfolded. The project required about 20 months in order to develop participants' knowledge and learning processes, as well as undertake initiatives that could increase the level of collaboration within this pluralistic system. The project involved a representative number of managers and professionals who belonged to the various institutional, organizational, professional and disciplinary fields contained in the service network. [Table 1](#) clarifies the type of data collected at each phase of the project.

Specifically, the first phase involved an in-depth analysis of the most critical aspects involved in managing patients' access to the service network, based upon documentation, participant observation and phone interviews (see [Table 1](#) for details). This analytic phase resulted in the decision to design and implement a strategy map ([Kaplan and Norton, 2004](#)) as a way to describe and execute a new strategy to manage access to the service network.

The second phase involved a participative approach with 35 managers from different contexts (see [Table 1](#)). These actors participated in various workshops during which they discussed and progressively agreed on the service access strategy and its representation within a common strategy map. Participants were also divided into four work groups, each

Phases	Date	Data collection techniques	Approximate total duration (hours)	Participants
1. Preliminary analysis of access management's critical issues	April 2014	Documentation (e.g. internal documents describing the service network and UPAs' functioning) Unstructured and not recorded phone interviews ($n = 5$)	– 1.5	– Social and health director UPAs' coordinator Primary care department director
	May–June 2014	Meeting observation ($n = 1$)	4	Social and health director UPAs' coordinator Primary care department director One district's director One municipal management office's manager
2. Map design	Sept 2014–March 2015	Workshop observation ($n = 6$)	28	35 managers (i.e. social and health director, UPAs' coordinator, Primary care department director, district directors, municipal management offices' managers, hospital managers)
		Documentation Unstructured and not recorded phone interviews ($n = 12$)	– 6	– 4 team leaders
3. Map implementation	April–Dec 2015	Workshop observation ($n = 4$)	16	35 managers (<i>ibidem</i>) 30 professionals (e.g. nurses, social service workers, clinicians, administrative staff)
		Unstructured and not recorded phone interviews ($n = 6$)	3	2 team leaders
4. Follow up	June 2016	Documentation Face-to-face, semi-structured and recorded interviews ($n = 11$)	– 11	– 11 managers

Table 1.
Data display

led by a purposefully selected team leader, assigned the twofold task of: (1) verifying the significance of the map with respect to various territorial characteristics and (2) clarifying and formalizing in written documents (cards) the meaning and rationale of all key performance areas in the map. The two aforementioned authors participated in all workshops and supervised the working groups through an analysis of the documents produced as well as through phone interviews with the team leaders.

Figure 1 displays the final map’s evaluation perspectives and related key performance areas. In brief, this map visualizes the findings of a social accomplishment process enacted by the managers involved in the project to shape the priorities to be addressed by professionals in the socio-care network to take charge of patients with complex health and social needs. The map highlights the key performance areas shaping the intended outcomes for both citizens (i.e. safety, sustainability and continuing life relationships) and their community (wellness, accessibility and response to need). Furthermore, the map represents the key performance areas which are expected to lead the previous outcomes. Regarding the process perspective, the map visualizes both the key steps of the overall process throughout which patients may be evaluated and access the socio-care network (e.g. receiving information and orientation and so on) and the key features inspiring the way of implementing these steps (e.g. accessibility and so on). Finally, the map identifies the leading factors which can enable innovation in the socio-care network (e.g. competences).

In the third phase, the strategy map was applied to support the implementation of two strategic initiatives aimed at revising (1) the evaluation scales used to assess the needs of elderly individuals before hospital discharge and (2) the regulations for granting access to residential care services. This phase involved all managers from the previous phase, but also 30 professionals appropriately selected to represent all the roles working across the service network. This phase likewise entailed both workshops and workgroups. Indeed, participants were divided into two groups, each led by a team leader, and then worked to implement an assigned initiative. Once again, the same two researchers participated in the workshops, analysed documents, and interviewed the team leaders throughout the process.

In the last phase, we evaluated the overall process and its achievements through 11 in-depth interviews with managers who had participated in the design phase (some of whom also assisted with the map implementation). To ensure that the various perspectives were represented, we purposefully selected interviewees from across the different institutional, organizational, professional and disciplinary fields. Interviews lasted an average of 60 min, were recorded, and followed a semi-structured format aimed at helping interviewees elaborate on the whole process and evaluate the map’s relevance for creating and implementing cross-boundary collaboration.

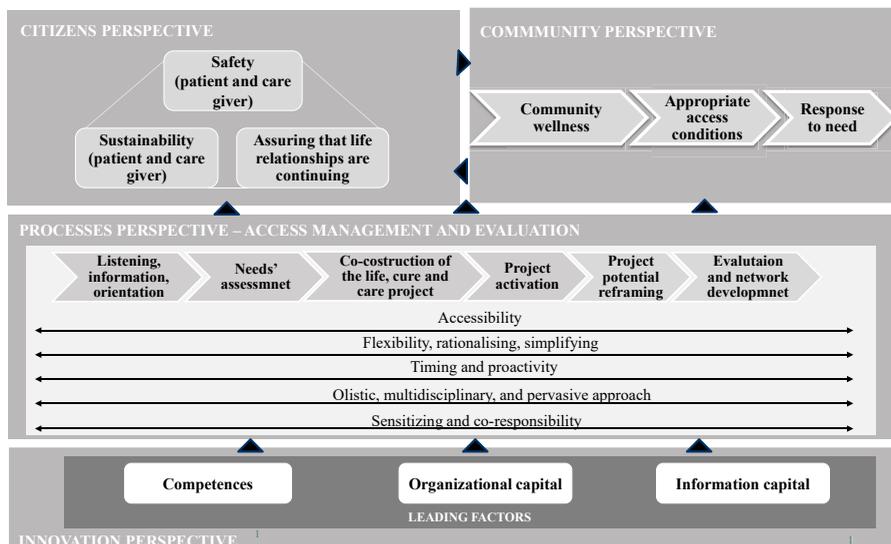


Figure 1. Strategy map

After transcribing the 11 interviews verbatim, we used the software ATLAS.ti [1] to form initial categories from open coding both the transcripts and the researcher notes taken during workshop observations. We sought feedback from participants regarding the initial results. Through an iterative process within and across the data, we modified the initial categories to reveal key emergent themes and relations (Miles and Huberman, 1994). Participant observations and interviews were continuously integrated to facilitate a broad understanding of the phenomenon under investigation. The authors conducted this analytical process in parallel and discussed the results until agreement was reached.

Managing boundaries through a strategy map in a pluralistic inter-organizational network

We present our findings in two sections. First, we illustrate which boundary practices elicited by the use of a strategy map helped to cross boundaries in our case study; second, we describe the conditions under which cross-boundary spanning via strategy map generated collaboration in our plural setting.

Boundary practices elicited by the use of a strategy map

Our analysis of the empirical material, built on the literature on boundary spanning mechanisms (e.g. Hsiao *et al.*, 2012; Spee and Jarzabkowski, 2009; Hawkins and Rezazade, 2012; Star, 2010), led us to identify four boundary practices associated with the use of the strategy map to facilitate cross-boundary work in our pluralistic setting. The first two practices are in line with the research findings suggested by Hsiao *et al.* (2012). In particular: (1) the first practice of *identifying and crossing problem boundaries* explains how the use of the strategy map as a boundary object engages a shared zone of knowing, which reveals implicit clues, evokes memories, enables diagnostic logic and reframes issues, thus offering plural actors knowing opportunities to activate cross-boundary interactions; (2) the second practice, *orchestrating collective responsibilities*, refers to how plural actors use the strategy map as a boundary object to explore joint problem ownership and promote collective responsibilities across relational boundaries. The remaining two practices emerging from our case offer an enrichment of the third practice suggested by Hsiao *et al.* (2012), i.e. developing a systemic understanding. Our findings highlight the relevance to engage two distinct, although interconnected, zones of systemic understanding as cross-boundary knowing: (3) *acknowledging a common understanding of convergent values and goals*, which involves crossing boundaries for values and goals and relates to the sense-making process through which actors reach shared beliefs and interests when interacting with the strategy map as a boundary object; (d) *evolving into action*, which refers to how plural actors' understanding of the common priorities highlighted by the strategy map facilitate activation of concrete actions aimed to execute those priorities, thus crossing technical boundaries and achieving common changes. The fourth practice enables the actionability of the overall boundary management process in pluralistic contexts, since it engages plural actors toward the development of common actions, thus offering crucial opportunities to activate concrete cross-boundary initiatives. The four practices are not intended to be strictly sequential; rather, they emerged as part of an iterative circle wherein each practice built upon and was reinforced by the others.

- (1) *Identifying and crossing problem boundaries*. Cross-boundary collaboration requires acknowledging problem boundaries in the first place. Indeed, people identify problems differently based on their position. Within the service network we studied, the position, which influences the perspective and the representation of what might

be considered a “problem”, depends on whether a person belonged to an institution (local health authority or municipality), an organization (a specific territorial district within the local health authority), a profession (e.g. a physician, nurse, or social worker), a discipline (e.g. a psychiatrist or a geriatrician) or a group of users (e.g. a patient or caregiver). In our pluralistic setting, identifying problems is therefore particularly challenging because it requires crossing multiple boundaries (i.e. institutional, organizational, professional, disciplinary and user boundaries) simultaneously. Against this backdrop, the strategy map project galvanized participants to reflect on and make explicit the different perspectives and interpretations of a problem in order to identify a common strategy for dealing with it. The initial differences represent a centrifugal force (pushing the perspectives apart), while the reciprocal sharing creates a centripetal movement (pulling the perspectives into alignment):

There are plenty of actors involved in the service network – such as the hospital, general practitioners, social cooperatives, and so on – and everyone has his own viewpoint. It is therefore necessary to make all these different viewpoints converge [. . .] And the map helped us to make little logical steps after we had confronted each other (Interviewee 11).

Moreover, disciplinary boundaries can alter the speed of mapping problems. Social service professionals tend to provide slow responses, as they respond to complex existential needs that cross many aspects of family and social life, whereas hospital doctors must react quickly in order to hasten discharge as soon as acute care problems are solved:

Today’s healthcare is used to much more quick and immediate responses, while social services have different time horizons, also due to more complicated tools to activate. Imagine for example the case in which a person does not have a house, or his house is not suited to domiciliary assistance [. . .] This difference in speed is always present in everyday work, and this creates sometimes a bit of friction. For example, regarding hospital discharges, the hospital is always very afraid that social services intervene and slow down, since the hospital’s goal is to send people home as quick as possible (Interviewee 8).

The practice of identifying problem boundaries therefore shows divergent interpretations and action speeds that at some point become convergent. The movement is thus described as either centrifugal or centripetal. Through this process, produced knowledge becomes linked to different kinds of boundaries, all of which must be taken into consideration in pluralistic settings.

(2) *Orchestrating collective responsibility.* Identifying and crossing problem boundaries are not sufficient for cross-boundary collaboration. Actors also need to have solid inter-personal relationships that allow them to recognize and share collective responsibilities. In this context, patients’ final outcomes depend on the ability (and willingness) of the network’s actors to work together toward a common goal. Thus, groups need to cooperate across relational boundaries in order to determine the depth of the problem and identify possible solutions:

Integration processes are complicated, and in the face of shrinking resources integration, they become even more complex. The risk is that professionals react by segregating responsibilities, by saying: “this is under my responsibility, this is instead under your responsibility”. Now we have a tool, the map, that should remind operators of their collective responsibility towards the service users (Interviewee 8).

However, sometimes individuals or groups need to work separately to build ultimate consensus, make decisions and translate ideas into concrete actions. The *orchestrating*

collective responsibility practice, similar to the previous one, implies a need to manage the processes of opening and circulation as well as closure and convergence. Thus, initiating change might require imbuing close groups with certain responsibilities (a centripetal movement):

Integration is also given by how much time you spend together, how many things you do together. And integration is difficult precisely because the different professionals rarely work together. But within the UPA, for example, nurses and social workers are integrated, they work together in the same place, and often a divide emerges instead between the UPA's nurses and social workers, on the one side, and other nurses and social workers working in different settings, for example in home care services (Interviewee 3).

Overall, the strategy map project allowed participants to cross relational boundaries by creating or strengthening personal ties and reducing eventual conflicts:

This project resulted in greater cohesion and reduced conflict levels among group members. Individuals that regularly participated to the workshops incurred fewer occasions for conflict later on at the operational level than the individuals that were not involved (Interviewee 7).

- (3) *Acknowledging a common understanding of convergent values and goals.* Pluralistic contexts are characterized by divergent goals, interests and values, all of which need to be reconciled with a shared vision before cross-boundary cooperation can be achieved:

Cooperation is not a matter of tools, nor of technical reasoning. Cooperation is a matter of values, of importance that is attached to certain choices rather than others (Interviewee 1).

Constructing a strategy map was a way to cross value and goal boundaries and ultimately create and share knowledge across diverse perspectives. For example, managers grappled with the definition of the outcome itself. For social workers, the outcome meant taking care of existential needs; for nurses, the outcome was related to satisfying care needs; and for physicians, the outcome was about curing clinical needs. The map allowed individuals to unpack conceptual differences and move toward convergent ideas about care provision:

I remember one morning when we lost, or better, invested a lot of time in this kind of work where someone from the hospital said, "For me this word means a certain thing . . .", whereas social workers said, "No, to us this word means another thing . . ." and the healthcare professional said a different thing [. . .] This is what has been done: a discussion on the meaning of "integration" rather than "dismissal" rather than another word or value, that needed to be unpacked before we could really agree on a common understanding and sharing (Interviewee 10).

This process of progressive convergence toward common values and goals, as visualized within the strategy map, also implied both centrifugal and centripetal movements, similar to that observed when illustrating the first two practices. On the one hand, managers were forced to make their differing values and interests explicit, thus widening the cross-boundary discourse and letting heterogeneity emerge:

These different perspectives emerged that were broader than the usual perspective of your own service. Indeed, reasoning from the viewpoint of the user, or the family, or the politician . . . it was an interesting exercise that gave you all the different perspectives (Interviewee 2).

On the other hand, such an exhaustive debate on the underlying values and interpretive paradigms "broadened the horizons", allowing for the emergence of provisional agreements that were crystallized within a common vocabulary:

Being forced to confront each other in the creation of the strategy map, among us managers, led us to make explicit our visions and reference paradigms, also in value terms. This was extremely important because it allowed us to align, or at least to make coherent, such different visions, that were also affected by the different territorial locations, experiences, histories. And the other result produced by this job was that of being forced to share a language, which was the hardest thing, because the vocabulary was also different, even when the underlying values were maybe similar. So, this was an important chance of confrontation and exchange in order to reach a satisfying meeting point (Interviewee 7).

In doing so, the map sustained the process of producing knowledge at a complex and plural level, thereby producing a systemic understanding.

- (4) *Evolving into action.* To transform systemic understanding into concrete changes, the map had to become operationalized. One example of this effort was the production of a homogeneous evaluation scale that would be used across the entire province – specifically by the multi-disciplinary teams in charge of assessing the needs of fragile individuals before hospital discharge. Prior to the strategy map project, each district had its own evaluation scale, which resulted in possible inequities due to the same need being evaluated differently across the territory. Therefore, as a final step of the project, the network formed an operating group that translated the various technical tools in use into a unified scale that matched the map's strategic priorities. The challenges of this effort were numerous, such as the need to agree on a common set of clinical, care and social needs to evaluate, as well as share the practices (in terms of, e.g. tools, professionals involved and approach used) for evaluating and communicating the information and results. As a visual tool for representing, storing and retrieving knowledge, the map rendered the work done by the strategic group's participants visible and legible to the members of the operating group. Interestingly, engagement with the object itself was enough to facilitate cross-boundary cooperation, even among those individuals who were not directly involved in its construction. The map acted as cognitive frame that oriented the group's practical efforts:

I believe the strategy map helped the operating group. Every time we lost direction, the map acted as a lighthouse for where to focus. It served as a cognitive and emotional point of reference in bringing knowledge to the surface (Interviewee 6).

The practical efforts galvanized by the map were effective at crossing technical boundaries, producing a new evaluation scale that was uniformly adopted across the entire service network:

Before the map, we had already made thousands of attempts to foster integration, thousands of meetings. They did not lead to anywhere. Because, if you want to really change the technical side, you first have to reach an agreement on something deeper than the technical level. In those failed attempts, we missed all of this part (Interviewee 1).

Conditions of collaboration through boundary spanning via strategy map

In addition to the four aforementioned boundary practices, our analysis of the case study data also revealed a variety of processual, design and contextual conditions through which boundary spanning via strategy map generated cross-boundary collaboration.

As emphasized in the previous section, a first recurring condition in the *process* of using the strategy map in this context was the continuous, dynamic *interplay between centrifugal and centripetal movements*. By engaging with the map, actors were capable of reconciling tensions that amplified heterogeneity (by invoking different positions, interpretations, values and interests) while aligning with a common, shared framework.

This map's dual nature, as an object producing both divergence and converge, appeared related to two *design* conditions: *simplicity* and *zone of indeterminacy*. Regarding the former, the strategy map visually materialized the cause-and-effect relationships that were believed to connect the various performance areas needed to manage access to the service network. This process increased the complexity of the system by showing that every context is heterogeneous and divergent from another and simultaneously reduced the complexity by allowing actors to focus on a few multi-dimensional aspects that were logically interconnected:

The map was very effective and exhaustive as a communication tool, simple but at the same time holistic and impactful. It put things in a very strong logical connection. It offered a simple but very interconnected view of the various aspects, and this isn't easy in such a complex system as our service network. I don't know how to explain: it is not easy to interconnect so many elements in a mental, as well as physical, space (Interviewee 11).

Regarding the zone of indeterminacy, we refer to something that is left implicit, flexible, and therefore "open" to possibly divergent interpretations. In our pluralistic context, strategy mapping was not a linear and straightforward procedure for achieving goals; rather, it entailed unforeseen events and results that required new understanding and coping. In this process, the map nurtured a zone of indeterminacy that compelled a search for agreements and provisional decisions:

While all working on the same people, everyone's point of view was so partial that it was difficult to give space to everyone's thoughts and then synthesize them in a single way. Well, perhaps some small piece of specificity has been sacrificed to common understanding (Interviewee 8).

Another example in this direction was the decision to focus on those areas that were perceived as "high comfort zones". More specifically, cross-boundary work centred on evaluation scales for elder people services, as regional and governmental programs had asked for evaluation practices in the past. In contrast, low-comfort areas in which work practices were less structured (such as children or mental disability scales) were intentionally ignored in order to avoid excessive uncertainty and inescapable conflict that would have likely blocked cooperation:

We have ignored the theme of children, of young generations. Okay, the elderly are super protected, but access paths are not just for the elderly. Yet, the professionals working on these issues can only see the elderly, and it is hard even to take them out of the elderly shell, because it is what is most familiar to them (Interviewee 9).

Finally, our analysis revealed a variety of *contextual* conditions that were important facilitators of cross-boundary cooperation. First, the deep engagement of all involved individuals was key to the success of the strategy map project:

I have seen for sure a great desire to participate, to get involved by the operators who participated in the operating group (Interviewee 10).

Such motivation seemed to be related to a bundle of factors: a strong institutional mandate to realize the project, a clear perception of the project's utility, a deep sharing of its aims among the managers and professionals involved, and a formative approach that encouraged individuals to participate with a positive and open-minded attitude:

The group working on evaluation scales was immediately clear about what was the goal it had to achieve. And such a goal was – for operators working on that field – not only embraceable, but also absolutely useful and with a fairly rapid impact on everyday work practices. In short, it was a stimulating goal because it touched, for the first time, an issue that necessitated reordering (Interviewee 7).

Another contextual condition was the strong and competent leadership by a few actors (i.e. the moderator who steered the plenary sessions and the various team leaders) who assumed the role of boundary spanners, translating and framing information across the multiple boundaries characterizing our pluralistic context and thereby promoting coordination:

The strength of the process was the way in which it was managed, and the facilitator played an essential role in raising questions and in putting together all of the different bits that were constantly shared. She was also good at counterbalancing our temptation to run, to move forward too quickly, while actually we needed time for analysing and sharing the political view, the families' view, and the perspective of the professionals. All this promoted clarity and the possibility to act (Interviewee 11).

Therefore, our analysis suggests that boundary crossing is best characterized as a complex *social accomplishment*, whose smooth unfolding depends on not only the performative capacity of the material objects, but also a variety of factors beyond the objects themselves.

Discussion

In this section, we reflect on the potential of boundary spanning via strategy map to arouse profound meanings and facilitate provisional agreements around the perimeter of cross-boundary representations. Thus, we draw on our empirical findings to develop a conceptual model of boundary management through strategy maps in pluralistic contexts, as depicted in Figure 2. It is important to acknowledge that this process of social accomplishment engage plural actors in a shared zone of knowing which is in constant flux.

First, the use of strategy map in the integration project allowed placing problems at the centre. Managers and practitioners were asked to cross problem and relational boundaries in order to cope with them across the context's multi-site positions. In Figure 2, this process is illustrated as the most external. The second movement involved a deepening of the specific aims, values and technical boundaries. This was a progressive advancement, as illustrated in the inner circle. The figure represents the virtuous circles that using a map can trigger. As shown in the external circle, identifying and crossing problem boundaries helps with crossing relational boundaries by orchestrating collective responsibilities; in turn, working on relational boundaries allows people to better define problems and position them across boundaries. The internal circle represents the mutually reinforcing relationship between the

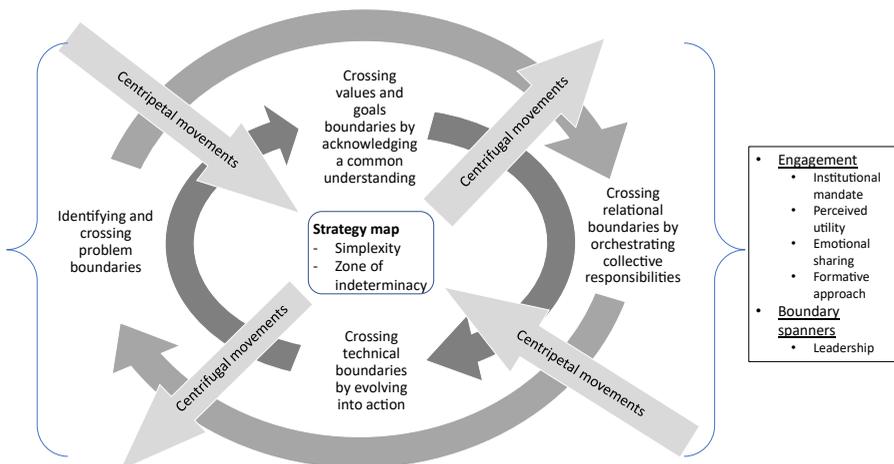


Figure 2. The process of boundary management through strategy maps in pluralistic contexts

practice of acknowledging a common understanding of convergent values and goals and that of evolving into action. In fact, crossing value and goal boundaries provides the interpretative framework to develop new technical tools and actions. In turn, crossing technical boundaries fosters the convergence toward common values and goals. In this respect, it is interesting to notice that the theme of values and goals boundaries emerged as a distinctive feature of our pluralistic context, but it is not considered in the boundary-spanning framework by [Hsiao et al. \(2012\)](#). In fact, [Hsiao et al.'s \(2012\)](#) study involved engineers from different disciplines who collaborated in maintaining wafer-fabrication machines. Collaboration in that context required working across disciplinary boundaries, yet the underlying interests, cultures and identities of collaborating actors appeared remarkably more homogeneous than in our pluralistic inter-organizational network of social and healthcare services. Thus, our specific focus on pluralistic contexts allows us to refine and enrich the threefold conceptualization of boundary practices by [Hsiao et al. \(2012\)](#). In our model, the third practice, as identified by Hsiao and colleagues (i.e. developing a systemic understanding), assumes a subtler nature that we explicitly acknowledge by splitting it into two practices, (1) acknowledging a common understanding of convergent values and goals and (2) evolving into action. In fact, pluralistic contexts are characterized by divergent goals, cultures and values that need to be crossed before collaboration can emerge and produce practical accomplishments. Accordingly, our empirical findings suggest that pluralistic organizations become more prepared to enter a zone of shared knowing by discussing and converging around grand causes and key values underlying strategic priorities ([Brès et al., 2018](#)). Crossing such knowing has the potential to sustain the achievement of concrete change initiatives through which claimed goals become actions.

The figure also highlights two types of movement that arose from analysing the paradoxes and tensions in the debated issues: centrifugal and divergent, and centripetal and convergent. The circle implies a constant movement from centrifugal to centripetal and vice versa, which drives the different processes that create knowledge and promote cross-boundary cooperation and the activation of strategic change initiatives. These movements are in turn guaranteed by the interpretive flexibility of the boundary object. However, in our pluralistic context, the general idea of interpretive flexibility as widely discussed within the boundary object literature (see, e.g. [Star, 2010](#)) assumes peculiar nuances, since it appears related to two specific design characteristics. First is the concept of “simplicity”, which combines “complexity of thought with simplicity of action” ([Bowman, 2016, p. 78](#)). In this respect, the strategy map’s visual power, capable of materializing the cause-and-effect links connecting the various multi-dimensional performance areas that compose a pluralistic system, increases the complexity of actors’ conceptualizations of the system. The map shows that every context is heterogeneous but also makes this complexity manageable by allowing actors to see the logical interconnections between the system’s elements and how they can be used to achieve some desired goals. While [Spee and Jarzabkowski \(2009\)](#) emphasize simplicity as a critical design feature for strategy tools meant as boundary objects in more conventional settings, we argue that, in the face of pluralistic tensions, simplicity will hardly suffice and simplicity will be needed in order to better cope with the challenges of strategizing in pluralistic organizations.

The second critical design feature emerging from our analysis is what we label the zone of indeterminacy, a term borrowed from [Lainer-Vos \(2013\)](#). We hereby refer to the boundary object’s ability of nurturing a zone of vagueness, where meanings and representations are left somewhat implicit, flexible and thus open to possibly divergent and productive interpretations. This avoids the emergence of unsurmountable conflicts between the possibly conflicting identities, culture, interests and meanings that characterize pluralistic domains, yet at the same time also compels a search for agreements and provisional decisions. Therefore, we can conclude that boundary objects need to offer a zone of indeterminacy to facilitate collaboration among heterogeneous groups and achieve common usage.

This integration is not a given; however, it depends on specific conditions and negotiations between involved parties. By conceiving boundaries as continually subject to human agency and socially constructed through practice (Langley *et al.*, 2019), our findings show a complex and not linear cross-boundary spanning process in which the use of the strategy map elicited boundary practices which then mobilized a multi-actor social accomplishment (Sergi *et al.*, 2016), leading to collaboration.

Conclusions

Cross-boundary cooperation is increasingly necessary in today's intra- and inter-organizational arrangements (Bowman, 2016; Nicolini *et al.*, 2012), but it also represents a crucial and complex challenge, especially for organizations that face pluralistic tensions (Jarzabkowski and Fenton, 2006; Sorsa and Vaara, 2020). To address this issue, our study mobilized a conceptualization of collaborative boundary management as a strategic and socially constructed practice. More specifically, we explored the multiple practices associated with boundary spanning through strategy maps in a pluralistic social/healthcare context as well as the conditions by which such processes can generate connectivity and cross-boundary collaboration.

Our study contributes to a conceptualization of boundary management in pluralistic contexts as a progressive *social accomplishment*. Specifically, our contributions are threefold: First, our process model of cross-boundary collaboration in pluralistic domains (cfr. Figure 2) highlights a *paradoxical* trait, characterized by both centripetal and centrifugal motions that are intertwined in a continuously evolving dynamic across the four practices of boundary spanning. Such tensions and paradoxes are not necessarily dysfunctional, however. On the contrary, they fruitfully activate practices that could encourage provisional cross-boundary agreement and action. Second, and relatedly, the smooth unfolding of this dynamic seems to fundamentally depend on a boundary object's interpretative flexibility. More specifically, we argue that the strategy map's (our boundary object) simplicity and ability to nurture a zone of indeterminacy are two critical design conditions for accommodating and reconciling pluralistic viewpoints and goals. Third, we underline that transforming pluralistic tensions into a unifying framework that can activate cross-boundary cooperation additionally requires a variety of contextual conditions. We can therefore conclude that cross-boundary collaboration does not depend on boundary objects by themselves (there may not even be a boundary object *per se*), but on a complex and salient interaction of objects, spanners and practices that generate social accomplishment.

Our results also offer useful suggestions for business leaders and managers who increasingly face the problem of leading complex and pluralistic organizational settings. Our model suggests that achieving successful collaboration across boundaries and initiating strategic change initiatives requires a long-term process characterized by seemingly schizophrenic (divergent and convergent) movements as well as provisional and continually evolving agreements. While these paradoxical and progressive dynamics might seem to contradict the conventional understanding of strategy practice, they are not only inescapable, but possibly fruitful in pluralistic contexts. Our model also indicates a variety of design and contextual conditions that practitioners should consider when planning cross-boundary collaboration. Our study, which argues how the use of a strategy map facilitates cross-boundary collaboration, offers insightful implications in terms of managerial practices to cope with a multiplicity of divergent, shifting and contradictory tensions in pluralistic organizations.

This study represents only a first, and inevitably limited, attempt at addressing the complexities of managing boundaries in pluralistic contexts. Future research could corroborate our findings by investigating the use of different strategy tools (other than the strategy map) to understand whether the boundary practices and conditions we identified also apply to other

tools or differences emerge. Furthermore, other pluralistic contexts (such as universities, private-public partnerships and professional service organizations) could be analysed to validate or refine our proposed model. Further studies could also enrich the understanding of boundary spanning in pluralistic organizations by exploring other conceptual issues which have not been included in our model. For example, following the conceptualization of boundary discourses as “the content stemming from the dynamic process of engaging in identifying and articulating ideas, building up a party’s knowledge to overcome the knowledge boundary” (Hawkins and Rezazade, 2012, p. 1801), scholars could investigate whether and how they may act as additional and distinct boundary mechanisms elicited by the use of strategy tools in pluralistic organizations. Finally, out of the three forms of boundary management suggested by Langley *et al.* (2019), this work considers the collaborative form only. While this focus appears reasonable as a first attempt to start investigating boundary management in pluralistic contexts due to the peculiar relevance and challenges of cross-boundary collaboration in such settings, the configurational form might be pertinent as well. Indeed, the paradoxical dynamic among centripetal and centrifugal movements highlighted in our model reconnects somehow with the configurational logic according to which competition and collaboration coexist to some extent and interplay when managing boundaries (Langley *et al.*, 2019; de Vries *et al.*, 2021). Future studies could investigate such initial thoughts in greater depth.

Note

1. ATLAS.ti is software for computer-aided qualitative data analysis that provides a variety of coding, search, retrieval, and visualizing tools.

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