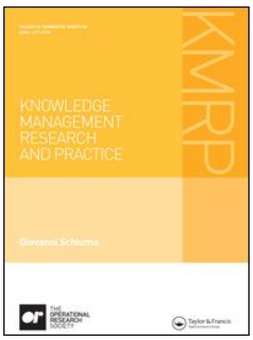

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Organisational hybridity and fluidity: deriving new strategies for dynamic knowledge management

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ABSTRACT

This article discusses the dynamics of knowledge management in the specific contexts of hybridity and organisational fluidity. The aim is to recognise areas in which knowledge management theory and practice need to be rethought and subsequently develop a new kind of strategic thinking. The article argues that dominant knowledge management approaches see and analyse the world from the perspective of an individual organisation, which hinders the development of new approaches. We consider that knowledge-based value creation takes place "betwixt and between" organisations and that we need new ways of conceptualising the phenomenon. Hence, we suggest that hybridity-oriented and individualistic knowledge strategies serve as mental models that could broaden the scope of knowledge management by offering a new type of interpretation framework for understanding and analysing how knowledge can be turned into value.

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Organisational hybridity; organisational fluidity; knowledge strategy; institutional logics

1. Introduction

Knowledge is widely considered to be the most strategically significant resource of a firm (Grant, 1996). Therefore, the manner in which knowledge resources are managed is a critical management question for both academics and practitioners (Hansen et al., 1999). A knowledge strategy defines which knowledge resources are valuable, unique, and inimitable and how they support an organisation's business strategy (Bolisani & Bratianu, 2017; Earl, 2001; Hansen et al., 1999; Laihonen et al., 2015; Zack, 1999). Although the literature strongly underscores that a knowledge strategy should be contingent on an overall business strategy and contextual determinants, there has been very little discussion about the specific need to analyse and continuously re-create organisational knowledge strategies in a rapidly changing business environment (Venkitachalam & Willmott, 2015). The changing environment continuously redefines contingencies that set requirements for a business strategy and further for a knowledge strategy. Within this evolving environment, organisations confront various institutional forces, and their responses differ. According to Greenwood et al. (2011), responses focus either on organisational strategies or organisational structures. Hence, the purpose of this study is to consider the possible implications that institutional complexity and, especially, organisational hybridity and fluidity pose for strategic knowledge management. First and foremost, our discussion is situated in organisational contexts that can be described as hybrid and/or fluid. Nevertheless, it is relevant for organisations that have only just started to recognise the hybridity and fluidity of their operations.

By hybridity, we refer specifically to the hybridity of institutional logics since this has severe implications for the dynamics of knowledge management that have not been sufficiently considered when developing knowledge management. Originally, Alford and Friedland (1985) described capitalism, state bureaucracy, and political democracy as the three institutional orders leading to different practices and beliefs (see Thornton & Ocasio, 2008 for review). Recently, many studies have elaborated on the implications of co-existing institutional logics for management accounting (e.g., Kastberg & Siverbo, 2016), performance management (e.g., Giacomelli et al., 2019), and organisational identity (e.g., Kallio et al., 2020). The contexts of these studies are typically knowledge-intensive and professional industries or organisations, such as the finance sector (Battilana & Dorado, 2010; Lounsbury, 2002), health care (D'Aunno et al., 2018; Kurunmäki & Miller, 2010), law firms (Cooper et al., 1996), higher education (Conrath-Hargreaves & Wüstemann, 2019), and various types of public–private partnerships (Johanson & Vakkuri, 2017) in which institutional complexity requires a new kind of organisational response (Greenwood et al., 2011). Despite the dominance of knowledge-intensive sectors and organisations in the literature on institutional

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logics, there are only a few studies explicitly investigating the implications of institutional logics for knowledge management (e.g., Currie & Suhomlinova, 2006; Mangen & Brivot, 2015; Oostervink et al., 2016).

Our line of thought is that coping with multiple institutional logics requires flexible organisational forms (Schreyögg & Sydow, 2010) and a careful reconsideration of knowledge management frameworks that typically build on one coherent business strategy to guide the formulation of a knowledge (management) strategy (see e.g., Bolisani & Bratianu, 2017 for a discussion on the differences between "knowledge strategy" and "knowledge management strategy"). To fulfil the research objective of this article, an extensive literature review is carried out, focusing especially on the hybridity of institutional logics and organisational fluidity. In this theoretical article, we are not concerned with implementation but aim to illustrate how these phenomena challenge organisation-driven knowledge strategies. More specifically, this article answers the following two questions:

(1) What kinds of knowledge strategies are needed when knowledge as an organisational resource is increasingly located outside the organisational boundaries?

(2) Is the organisation still a sufficient unit of analysis for knowledge-based value creation?

As its main outcome and contribution, this article conceptualises three knowledge strategies and illustrates the need to balance them when building knowledge management solutions in the context of organisational hybridity and fluidity. Thus, this article suggests that the dynamics of knowledge management can be understood only by looking beyond the knowledge management agenda to focus on the contingencies that create the institutional context for knowledge management. This new contextualisation is required for the management of the increasing dynamism, diversity, and complexity of the organisational operational environment (e.g., Järvi et al., 2018). We find that these changes in the operational environment of organisations can even challenge organisational boundaries by redefining organisational identities, power relations, and definitions of organisational efficiency while also calling for new kinds of competences (e.g., Santos & Eisenhardt, 2005). For this reason, we encourage all organisations to carefully consider their existing knowledge strategies and to pay special attention to hybridity (Johanson & Vakkuri, 2017) and organisational fluidity (Schreyögg & Sydow, 2010), which, in our view, call for open and dynamic knowledge strategies.

The rest of this article is organised as follows: The next section reviews the literature on hybridity, revealing how the hybridity of institutional logics sets new requirements for knowledge management. In section three, the theoretical understanding of organisational fluidity is deepened. The purpose of this is to recognise and better understand how increasing flexibility and dynamism challenge existing knowledge management approaches based on organisational structures. The discussion section provides an analysis of the implications of these two phenomena for strategic knowledge management. Finally, some concluding remarks and ideas for further research are presented.

2. Hybridity of institutional logics

In this article, focus is placed on institutional logics because the inter-organisational nature of knowledge-based value creation, by default, brings together entities (other organisations, individuals, or various kinds of collaborative arrangements) that are motivated and driven by different values and objectives (Laihonen & Lönnqvist, 2010; Lönnqvist & Laihonen, 2012). From the knowledge perspective, this means that entities also value different kinds of information and knowledge (Kurunmäki & Miller, 2010). This is exactly what has been discussed in the literature on institutional logics (Haveman & Gualteri, 2017) and hybrid governance (Johanson & Vakkuri, 2017) because the institutional logic defines what information is valued. Furthermore, hybrid governance also links to the discussions on organisational boundaries (e.g., Santos & Eisenhardt, 2005) when value-creation systems and their governance structures are redesigned and rebuilt.

The literature defines institutional logics as "systems of cultural elements … by which people, groups, and organisations make sense of and evaluate their everyday activities and organize those activities in time and space" (Haveman & Gualteri, 2017, p. 1). Thus, institutional logics have implications for the coordination, management, and governance of organisations (Denis et al., 2015). Hybridity refers to the presence of multiple institutional logics that may be competing or even contradicting (Thornton & Ocasio, 2008). Contradictions may take place at the individual level, such as between managerial and professional logics (e.g., Noordegraaf, 2015). Moreover, at the organisational level, contradictions may arise, such as between business and non-profit logics (e.g., Conrath-Hargreaves & Wüstemann, 2019; Skelcher & Smith, 2015) or professional service and commercial logics (Greenwood et al., 2011). Hybrids incorporate elements from different institutional logics (Battilana & Dorado, 2010), and, therefore, it is critical that knowledge management understand how institutional logics enable and constrain social action (Thornton & Ocasio, 2008) to determine how organisations should be structured, steered, and controlled (Bacharach & Mundell, 1993).

Institutional logics have recently been studied in the context of hybrid organisations, hybrid governance, and hybridity in general (cf. Ebrahim et al.,

2014; Pache & Santos, 2013; Reay & Hinings, 2009; Thynne, 2011). In institutional economics, hybridity lies between hierarchies and markets (e.g., Powell, 1990; Stark, 2009; Williamson, 1975). Here, hierarchy refers to hierarchically organised firms, and its main purpose is to differentiate between planned coordination and market relations. In public administration theory, hybridity refers to ambiguous types of social organising and manifests itself in institutional settings in which public and private organisations operate according to public interest (Johanson & Vakkuri, 2017). According to Johanson and Vakkuri (2017), hybridity covers situations of mixed ownership, goal incongruence, and competing institutional logics as well as a multiplicity of funding arrangements and both public and private forms of financial and social control.

The described hybridity of institutional logics and the overlapping and coexisting governance modes – especially their implications for managing knowledge – make hybridity interesting from the knowledge management perspective (cf. Lowndes & Skelcher, 1998). While the knowledge management literature primarily focuses on individual firms or public service entities and their business strategies (e.g., Massaro et al., 2015; Zack, 1999), the hybrid governance literature focuses on different organisational combinations and acknowledges the existence of goal incongruence, competing institutional logics, and different forms of management control (Johanson & Vakkuri, 2017). This means that while a private organisation is mainly interested in its competitive position in the markets, it can simultaneously be part of a hybrid arrangement and work together with public or third-sector actors. Then, the values and objectives of each actor guide their organisation-specific knowledge strategies, while hybrid governance and the avoidance of sub-optimisation also necessitate a wider perspective on knowledge management. However, this may be difficult to attain and agree upon due to competition and possible contradictions between institutional logics, as mentioned above.

The literature has suggested various strategies for coping with competing institutional logics, which may also be of value for knowledge management. The literature suggests decoupling (Meyer & Rowan, 1977) and compromising (Oliver, 1991) as hybridisation strategies. More recently, a logics combination has been proposed as a way in which multiple institutional models can be applied at the same time (Battilana & Dorado, 2010; Binder, 2007; Greenwood et al., 2010, 2011; Lounsbury, 2007; Reay & Hinings, 2009). Finally, Pache and Santos (2013) proposed selective coupling as a way to enact multiple institutional logics within the boundaries of organisations. Coping with competing institutional logics is also an important discussion topic for knowledge management. This is because the hybridity of institutional logics may require the decoupling, compromising, or selective coupling of knowledge strategies.

To summarise, the key message and practical management challenge – which arise from the hybridity of institutional logics and hybrid governance in general – relate to the ambiguity and diversity of institutional logics within value-creation systems. In practice, this means that private, public, and non-profit organisations, as well as an increasing number of citizens or customers, are collaborating and creating value together. Thus, instead of one organisation-driven knowledge strategy, there are multiple institutional logics and knowledge strategies in play, and a hybrid organisation then must combine pluralistic views and expectations – not only those of one organisation and its shareholders but also of multiple organisations and their different stakeholders. At the same time, the complexity and variety of challenges a hybrid organisation aims to solve have become interdependent and multidimensional. Therefore, an organisation-driven knowledge strategy needs to be complemented with strategies and approaches that allow diversity in the value-creation process. In practice, this diversity raises questions regarding the management of knowledge assets as well as decision-making information (Laihonen et al., 2015). First, a hybrid organisation needs to identify the critical knowledge assets that each actor brings to an arrangement. Second, who has the power and legitimacy to make strategic decisions in a hybrid organisation – and on the basis of what information – must be defined. Third, and most importantly, the identity of a new hybrid organisation and how its organisational values, objectives, and organisational culture are composed when each actor may prioritise these aspects differently must be clearly outlined. We return to these questions later, in section four, when discussing knowledge strategy implications.

3. Organisational fluidity

Along with hybridity, organisational fluidity challenges the traditional ways of thinking about organisations (Schreyögg & Sydow, 2010). In comparison to other conceptions of new ways of organising, including temporary organisational forms (Bakker, 2010) and meta-organisation (Gulati et al., 2012), partial organisation (Ahrne & Brunsson, 2011), and boundaryless organisation (Ashkenas et al., 2002) forms, organisational fluidity takes a radical stance by proposing that organisations are fading away. If we take this suggestion literally, a question regarding the origins of a knowledge strategy arises. If the organisation and its business strategy are not imposing the values and objectives and determining the institutional context and logic upon which individuals base their actions, who does? This is quite a profound question for the existence and definition of an organisation, but,

in this article, we focus on its implications for knowledge strategies. First, we need to define the concept of organisational fluidity.

Organisational fluidity refers to the increasing importance of flexibility and dynamism and the decreasing importance of organisational boundaries, structures, and processes (Järvi et al., 2018; Kellogg et al., 2006; Schreyögg & Sydow, 2010). It has been suggested that organisations are becoming more fluid in order to survive and thrive in dynamic and complex environments (Kellogg et al., 2006). Schreyögg and Sydow (Schreyögg & Sydow, 2010, p. 1251) described the characteristics of fluid organisations as transforming "from hierarchies to networks, from formal programs and coordination rules to spontaneous interaction, from specialised departments and staff units to improvised processes and temporary project teams, and from vertical lines of command to lateral organisation-wide communication". Additionally, fluid organisations focus on diversity rather than similarity, seeking speed and adaptability (Schreyögg & Sydow, 2010). From the knowledge management perspective, the essence of organisational fluidity lies in its emphasis on individuals who should be able cope with contradicting requirements and ad hoc problem solving (Mintzberg, 1979; Schreyögg & Sydow, 2010). Instead of structural flexibility, the literature underscores behavioural features such as absorptive capability and competencies, which, to use Hansen et al.'s (1999) terminology, indicates an emphasis on personalisation strategy over codification strategy. Organisational fluidity also emphasises dynamic capabilities (Teece et al., 1997) and the ability to quickly create new knowledge (Eisenhardt & Martin, 2000). Indeed, knowledge processes are at the core of organisational fluidity.

Organisations that operate in a knowledge-intensive domain have two major functions – that is, they must learn about the environment surrounding them and use this knowledge to provide value to their customers and stakeholders. These two functions, exploration and exploitation, constitute organisational learning (March, 1991). In a turbulent environment, the loop between exploration and exploitation must be short in terms of both organisational distance and time. In fluid organisations, exploration and exploitation can be organised in two different ways (Schreyögg & Sydow, 2010). The first option would be to dedicate organisational units to either exploring or exploiting. Alternatively, each individual member of an organisation would be expected to both explore and exploit. This dual capability is referred to as ambidexterity (Gupta et al., 2006). While Schreyögg and Sydow (2010) concluded that ambidexterity at the individual level is the optimal way to operate in fluid organisations, Eisenhardt et al. (2010) suggested that navigating between exploration and exploitation is a combination of increasing flexibility, appreciating the multidimensionality of the organisational environment, and individual expertise. This will be a highly interesting topic for further research if we follow the assumption of the diminishing importance of organisational structures. Then, even minor changes in ownership and power over critical knowledge assets – from organisations to individuals – could have interesting effects on value-creation dynamics.

Despite first highlighting the social aspects of organisational fluidity in this article, this does not mean that technology and codification strategy are not important – the situation is almost the opposite. In our view, fluidity extends upon the codification strategy by bringing the business, knowledge, and technology perspectives together (cf. Venkitachalam & Ambrosini, 2017). We have already witnessed how technology and various platforms help knowledge workers organise around projects in global work markets, how chat-bots have automated customer interaction and are handling some of middle management's tasks, and how blockchain technology has removed inefficient middle-men from supply chains. Moreover, contemporary interaction platforms come with the capability to implement intelligent bots or actants that mediate the way in which teams operate (Zhou et al., 2018), and computational approaches can be used as a means of facilitating the formation of social ties in fluid organisations (Huhtamäki et al., 2020; Olsson et al., 2020). Indeed, especially in knowledge-intensive industries, technology provides a medium for knowledge management practices as well as for everyday communications and interactions. It serves as an enabler of organisational fluidity (Chatterjee et al., 2017) by enabling improvisational capability (Pavlou & El Sawy, 2010). Furthermore, the radical adoption of mobile technology enables the full-fledged distribution of work and moves the knowledge worker to a continuous liminal state of being "betwixt and between" space, time, tasks, and technology (Stein et al., 2015). Finally, digital platforms take on an increasing role in affecting and implying organisational routines (Seidel et al., 2020).

Although the focus of this particular article is not on technology as such, it is not possible to discuss the future of knowledge strategies and knowledge management without noting the fact that the adoption of information technology introduces new means of managing organisational fluidity. This is due to two major reasons. First, data on actors and their interactions are continuously accumulated in information systems. Second, these systems mediate the interactions between actors and managerial activities. Schreyögg and Sydow (2010) suggested that fluid organisations are managed through continuously evolving monitoring that enables management to balance countervailing processes by observing organisational operations and acting when issues are

observed. The monitoring capability inherent in our digital infrastructure also draws attention to the power and control issues that come with this capability (Gal et al., 2020). The panopticon metaphor for monitoring suggests that organisational actors co-construct the mechanisms of "free control" through the perceived visibility of their work actions on information systems (Leclercq-Vandelannoitte et al., 2014). That is, the actors become aware that their actions are tracked and can be potentially monitored and change their behaviour accordingly. It is evident that the role of information systems – and, more recently, of platform ecosystems – in organising has been increasing (De Reuver et al., 2018). D'Adderio (2011) noted that information systems take on an active role in the way organisational routines are formed and also affect organising. Seidel et al. (2020) pointed to platform ecosystems as a significant category of modern information systems, suggesting that organisations will mirror the evident changes taking place on platform ecosystems.

To summarise, organisational fluidity questions the importance of organisational structures and processes, arguing that enhanced collaboration within and between organisations provides a general recipe for improving productivity and innovation capability (Hsiehchen et al., 2015; Wuchty et al., 2007). Furthermore, the role of individual actors in accumulating and making use of knowledge is highlighted in the literature. Thus, organisational fluidity raises similar management questions as the hybridity of institutional logics, with more focus placed within an organisation and on individual knowledge workers. However, in our view, organisational fluidity extends upon the knowledge management questions raised earlier in this article on hybridity. First, a fluid organisation cannot place trust in existing structures when defining responsibilities and accountabilities, which also raises severe concerns regarding knowledge ownership and power relations within the organisation. Second, balancing the needs and expectations of individual knowledge workers and organisational goals becomes a critical management question that may necessitate a profound reconsideration of organisational values. Third, the legitimacy of decision-making, management control, and organisational efficiency needs to be redefined, which could lead to very different ways of organising than those currently used.

4. Deriving new strategies for dynamic knowledge management

In this section, we analyse the implications of organisational hybridity and fluidity for strategic knowledge management. As stated previously, we consider hybridity as more of a characteristic of the organisational environment; however, hybrid organisations can also be considered an institutional response to environmental hybridity. Organisational fluidity, in our view, is primarily an internal characteristic, but, again, in business ecosystems, for example, organisational fluidity may also refer to a cross-organisational capability. The phenomena of hybridity and fluidity can manifest themselves either simultaneously or separately. In the next two subsections, we will consider the implications of these phenomena for strategic knowledge management.

4.1. Theoretical implications of organisational hybridity and fluidity for knowledge strategy

From a theoretical perspective, the main argument of this article is that the hybridity of institutional logics and organisational fluidity challenge the foundations of organisation-centric knowledge strategies. The resource- and knowledge-based views of the firm (Barney, 1991; Grant, 1996; Spender, 1996) place emphasis on an organisational entity (firm), an approach which may not be sufficient in a context where actors operate in inter-organisational arrangements with different institutional logics and where perceptions of value may differ significantly. For this reason, our argument is that knowledge-based value creation in contemporary business environments decreases the importance of organisational boundaries, structures, and processes, as suggested by several authors (e.g., Järvi et al., 2018; Kellogg et al., 2006; Schreyögg & Sydow, 2010). On some occasions, the decreasing importance of organisational structures may even require a very profound reconsideration of organisational boundaries (e.g., Santos & Eisenhardt, 2005). For a knowledge strategy, this sets very different requirements than the prevailing organisation-centric approaches suggest.

As discussed earlier in this article, the actors in hybrids are dependent on one another's resources – much like the actors in networks (cf. Powell, 1990). This pooling and integration of resources in general, and knowledge assets in particular, constitutes the essence of hybrid governance, for which a major challenge is posed by the lack of direct managerial coordination mechanisms placed over different organisations. The complementary nature of knowledge assets in networks is a critical question for developing a knowledge strategy in hybrids. This is the case in any network-based model, but what makes hybrids different are the distinct institutional logics of their individual actors. Different institutional logics set different values, strategies, and processes for operations. In practice, this means that individual actors may not have power over those knowledge resources critical for their own success. A conflict of interest created by the hybridity of institutional logics could pose a significant threat to the competitiveness of any particular actor. Indeed, if contradicting institutional logics hinder

knowledge flow, this may not only harm the hybrid but also individual actors, thus preventing them from attaining their objectives. Therefore, it is important to carefully consider the relevant objectives, structures, evaluation practices, and control mechanisms when engaging in hybrid arrangements. Also, from the decision-making perspective, each institutional logic values a different type of decision-making information. Some organisations may primarily be driven by financial information, whereas ecological sustainability may represent a decisive piece of information for others. Indeed, in hybrids, who defines – and through what processes – the basis on which decisions are made becomes a very important question.

When the accumulation and development of knowledge assets and decision-making information are observed from the perspective of an individual organisation and its dominant institutional logic, it is difficult to recognise the presence and influence of other institutional logics at play in hybrids. Then, what seems a logical and legitimate action from the viewpoint of one organisation may induce sub-optimisation when considered from the perspective of the hybrid. The literature notes that the typical reasons for failure in collaborative networks include a lack of commitment (Zineldin & Bredenlöw, 2003), a failure to identify common targets (H. Parker, 2000), or a failure to fulfil the objectives and needs of partners (Zineldin & Bredenlöw, 2003). It can be argued that the underlying reason for many of these problems could be traced back to conflicting institutional logics. Despite partners' strategic will to collaborate, major challenges could exist in defining objectives to which all participants can commit (cf. Agostino & Arnaboldi, 2017). This leads to a situation in which decision-making information and knowledge management practices remain organisation-specific and detached from the strategy of a hybrid. Thus, each organisation is still *only* led by its own business objectives, and the hybrid systematically sub-optimises. Furthermore, sharing resources remains a challenge if a hybrid is unable to clearly demonstrate the benefits and added value of collaboration for each participant.

A typical solution for collaborative performance management (e.g., Busi & Bititci, 2006; Verdecho et al., 2009) and networked knowledge management (e.g., Laihonen & Pekkola, 2016; Peltokorpi & Tsuyuki, 2007; Valkokari et al., 2012) is to follow an open-book principle, in which certain predefined information is gathered into a shared information base accessible to all actors. This shared information provides a starting point for joint actions; however, one challenge lies in the fact that new information sources need to be continuously recognised and integrated into the management system when the network evolves and the operating environment changes. This requires the building of a collaborative network capacity (Mischen, 2015) and the creation of technical interfaces that enable the aggregation of data as well as reporting practices that support system-level analysis and decision-making. It has also been noted that hybrid governance, as with network governance in general, builds on trust, mutuality, and shared identity (cf. R. Parker, 2007). These are prerequisites for building the needed decision-making and accountability structures enabling collaboration. This does not, however, provide solutions for tackling problems related to the transfer of knowledge assets. The fact that knowledge workers are still employed by a specific organisation maintains many of the problems related to traditional organisation-centric approaches. However, shared information and an understanding of network performance (e.g., the values and objectives of different actors) could help in overcoming challenges related to sub-optimisation since actors would have access to the same information and, thus, to a performance dialogue (Laihonen & Mäntylä, 2017), enabling joint sense-making and sense giving based on figures and numbers (Giuliani, 2016).

Organisational fluidity raises further concerns about the validity of organisation-centric knowledge management. A fluid organisation that operates on digital technology and information systems both disrupts management practices and introduces new management capabilities (Seidel et al., 2020). The disruptive aspects revolve around the increasing autonomy of individual actors. The management practices that scholars (e.g., Schreyögg & Sydow, 2010) propose for fluid organisations are based on monitoring and variations in enacted sense-making (cf. Bendoly, 2016; Weick et al., 2005). That is, individuals are permitted to operate autonomously, and management can act when identifying a behavioural pattern insists on their intervention. From a critical viewpoint, ubiquitous monitoring can be perceived as a panopticon-like control mechanism, which invites further research on balanced management activities (Leclercq-Vandelannoitte, 2017; Leclercq-Vandelannoitte et al., 2014). From a knowledge management perspective, we observe fluid organisations as social structures (Borgatti & Foster, 2003; Lee & Hassard, 1999) of interconnected, ambidextrous, and autonomous individuals. Moreover, we subscribe to the views of Ashcraft et al. (2009) in that organisations are fundamentally constituted by communication (cf. Putnam et al., 2009).

The increased autonomy of individuals, combined with the diminishing importance of the organisational envelope, implies that the mechanisms that drive the formation of social networks come into play. Two such core mechanisms are homophily and triadic closure. The homophily bias implies that forming a new connection between individuals is more likely the more similar the individuals are – "birds of a feather flock together" (McPherson et al., 2001). Triadic

closure means that new connections are more likely to form among actors who share a *strong tie* – that is, among friends of friends (Granovetter, 1973). Over time, the combination of triadic closure and homophily is likely to result in a non-optimal social network configuration composed of densely interconnected social groups with homogenous knowledge (Kossinets & Watts, 2009), often referred to as echo chambers or silos. *Weak ties* connect actors over the boundaries of individual social groups and also have the potential to connect actors to novel information (Aral, 2016; Granovetter, 1973). Both strong and weak ties play a role in facilitating the flow of information within and between organisations (Aral & Van Alstyne, 2011).

From a knowledge strategy perspective, it is important to strike a balance between strong ties that primarily serve exploitation and weak ties associated with exploration. Professional social matching is a new academic endeavour that seeks to take advantage of the accumulation of digital data and the growing importance of information technology in facilitating the formation of a social structure in the context of organisational fluidity (Huhtamäki et al., 2020; Olsson et al., 2020). We look forward to future social matching research and development that seeks to make use of codification to enable personalisation and continuously balance exploration (e.g., the diversity of weak ties) and exploitation (e.g., the bandwidth of strong ties; cf., Aral & Van Alstyne, 2011). Indeed, these approaches and methods provide many new possibilities for strategic knowledge management if appropriately exploited.

Table 1 summarises our framework for deriving new strategies for dynamic knowledge management and brings together the theoretical constructs of organisational hybridity and fluidity. Based on the above discussion, the table also depicts the key aspects of a knowledge strategy when hybridity and fluidity are present either separately or simultaneously.

We will discuss organisation-centric, hybridity-oriented, and individualistic knowledge strategies in more detail in the next section. However, here we want to make a note regarding the lower-right quarter of the framework, where both hybridity and fluidity are present. This situation depicts the case where attempts to construct internal capabilities (ambidexterity and fluidity) meet the external need to achieve social endorsement and legitimacy (hybridity of institutional logics; Greenwood et al., 2011). For a knowledge strategy, the latter case is naturally the most challenging and requires extreme openness and dynamism.

4.2. Three complementary strategies for dynamic knowledge management

From the above, there are several theoretical implications that can be drawn for strategic knowledge management. First, the hybridity of institutional logics and organisational fluidity necessitates a very different strategic approach to knowledge management than the traditional organisation-centric approach. This has clear implications for knowledge management processes and changes the role and position of an individual knowledge worker within the knowledge ecosystem. Knowledge strategy needs to be open and dynamic; it cannot only be built on only organisational structures and organisational objectives but needs to also consider the interfaces that enable and support collaboration between organisations operating with different logics and business models. Furthermore, it needs to pay special attention to open data and open interfaces that can dynamically adjust to changing structures and processes. Second, as the locus of business-critical information may no longer lie within an organisation's boundaries, new knowledge processes for accumulating, transferring, and securing this information must be developed. There is also a need for more dynamic processes since knowledge needs may change quickly, and there is no time for long-term planning. Major changes may also be needed due to a lack of organisational structures on which to build responsibilities. This could provide new ways to organise, analyse, and utilise data; but, alternatively, it could also obscure these processes if the relevant

Table 1. Framework for deriving new strategies for dynamic knowledge management.

	Fluidity	
Hybridity	Low	High
Non-hybrid	Organisation-centric value creation Theoretical basis: Grant (1996), Hansen et al. (1999), Zack (1999) Knowledge strategy: Organisation's business strategy, knowledge gap, knowledge management initiatives.	Diminishing role of structures and boundaries Theoretical basis: Schreyögg and Sydow (2010), Santos and Eisenhardt (2005) Knowledge strategy: Ambidexterity, dynamic capabilities, organisational learning, technology as an enabler, monitoring.
Hybrid	Hybrid governance with organisational structures Theoretical basis: Battilana and Dorado (2010), Laihonen and Kokko (2020) Knowledge strategy: Shared objectives, shared information, performance dialogue, coping with multiple institutional logics.	Hybrid governance without organisational structures Theoretical basis: Greenwood et al. (2011) Knowledge strategy: Balancing internal (ambidexterity and fluidity) and external complexity (hybridity of institutional logics).

ownership, responsibilities, and accountabilities are not clearly defined. Third, such a change could also induce challenges at the individual level. There is a risk that competing institutional logics, as well as evanescent organisational structures, leave an individual without a clear course or guidance. Therefore, a central question is: How can it be ascertained that individuals are doing the right things in an efficient manner? There is also an increasing need to develop and provide transparent information about knowledge work performance and retain a connection to those objectives that are attained at the system level – whether for an organisation or ecosystem.

From the above discussion, the following three different types of knowledge strategies can be derived: (1) organisation-centric, (2) hybridity-oriented, and (3) individualistic (Figure 1). The managerial challenge is to balance these knowledge strategies, bringing an important dimension to the discussion on the dynamics of knowledge management. These three strategies can co-exist and complement each other. The framework should be used to break free from an organisation-centric view of knowledge management in order to prepare for a future in which knowledge is increasingly located outside organisations. It is also worth noting that while a certain individual may operate based on the individualistic strategy, he or she can still work for an organisation, which acts as part of a hybrid. In our view, a key to understanding the dynamism of knowledge management lies in contextual sensitivity and in acknowledging that institutional complexity can create different organisational responses – the agreed objectives can be pursued with different institutional logics, organisational forms, and knowledge strategies.

In an *organisation-centric knowledge strategy*, the focus is placed on organisational objectives, as previously discussed. Data is gathered to enable follow-up on an organisation's business strategy, as highlighted by the knowledge management literature (Bolisani & Bratianu, 2017; Earl, 2001; Hansen et al., 1999; Laihonen et al., 2015; Zack, 1999). In addition, knowledge resources (including knowledge workers) work in terms of the interest of the organisation, and the organisation's governance structure defines the strategy for managing knowledge. In a *hybridity-oriented knowledge strategy*, organisation-specific databases are complemented with a shared database consisting of network-level information that organisations have agreed to share (cf. Agostino & Arnaboldi, 2017; Laihonen & Pekkola, 2016; Valkokari et al., 2012). A shared database aims to overcome the challenge of competing institutional logics, enabling the horizontal and at least somewhat objective evaluation of network performance. Nevertheless, knowledge resources are still connected to different organisations, and the main challenge lies in coordinating the objectives and activities that arise from different institutional logics. As previously discussed, there are various strategies for coping with this challenge of competing institutional logics. Decoupling (Meyer & Rowan, 1977), compromising (Oliver, 1991), logics combination, and selective coupling (Pache & Santos, 2013) can also be used to solve knowledge management questions when different

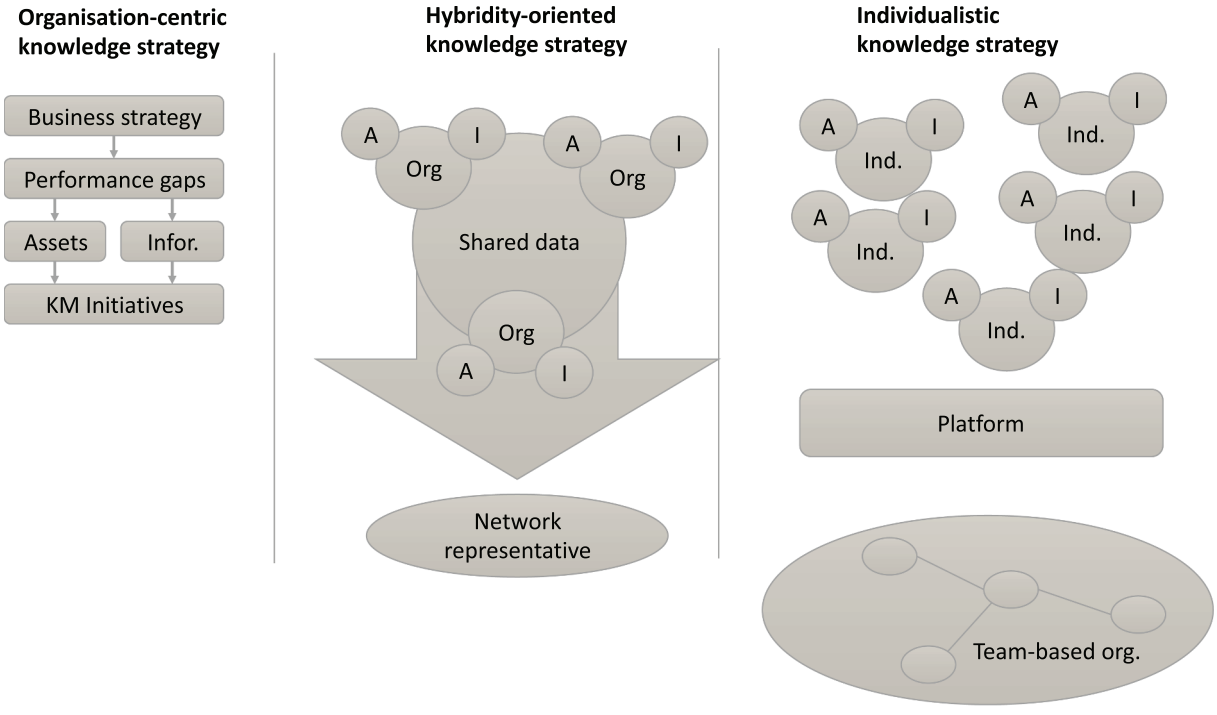

Figure 1. Knowledge strategies for organisational hybridity and fluidity (A=Knowledge assets, I=Decision-making information).

institutional logics are at play. Moreover, in practice, there seems to be a tendency for network governance challenges to be solved by creating a new entity (e.g., organisation) that takes on the role of a network representative and is responsible for network governance as well as gathering and sharing information with the rest of the network (Provan & Kenis, 2007). This means that if a hybrid is unable to cope with the hybridity of institutional logics (cf. Skelcher & Smith, 2015), then the solution is to return to the traditional way of organising, in which organisational identity, power relations, efficiency, and necessary competencies are easier to manage.

In an *individualistic knowledge strategy*, the role of the traditional organisation weakens, and individuals become key actors in the value-creation process. Moreover, platforms play an essential role in gathering and storing operational data. However, the most significant difference, in comparison to the previous knowledge strategies discussed, is that knowledge resources (especially knowledge workers) become detached from organisations and choose to create value for themselves and society by selecting the most interesting tasks that are aligned with their individual values. Subsequently, platforms provide boundary resources (Ghazawneh & Henfridsson, 2013; De Reuver et al., 2018) that enable individuals to benefit from their knowledge (e.g., skills and capabilities) by sharing or otherwise providing access to valuable data. Then, to follow and widen the terminology used by Stein et al. (2015), the locus of valuable information and knowledge actually lies "betwixt and between" traditional organisations, the platform used, and individuals. In this situation, it is difficult to see how an organisation can govern knowledge resources other than by providing the best data and most attractive business vision in order to attain the most capable knowledge workers. This makes knowledge-based value creation strongly mission-driven and strengthens the competition for the best resources. Table 2 summarises the main differences between the three knowledge strategies discussed.

Table 2 shows that, in the future, knowledge strategies are going to be increasingly built on communication and dialogue. Whether about the hybridity of institutional logics or organisational fluidity, a continuous and open dialogue between participating actors is imperative. In one form or another, this calls for open and transparent information that creates a boundary object enabling different interpretations as well as the emergence of a common identity required for joint actions.

5. Conclusions

This article discusses the future and dynamics of knowledge management in the specific contexts of hybridity and organisational fluidity. Its aim is to recognise the areas in which knowledge management theory and practice need to be rethought. The main argument highlights that we first need to understand how these phenomena change our perceptions of organisational life and then develop knowledge strategies and practices that would benefit all actors. We find that the development of new knowledge management approaches is hindered by prevailing approaches that perceive and analyse the world mainly from the perspective of an individual organisation (Earl, 2001; Grant, 1996; Hansen et al., 1999; Laihonen et al., 2015; Zack, 1999). We consider that knowledge-based value creation takes place "betwixt and between" organisations and that, therefore, we need new ways of conceptualising the phenomenon.

We make two fundamental contributions in the article. First, we bring together the concepts of organisational hybridity (Battilana & Dorado, 2010) and fluidity (Schreyögg & Sydow, 2010) to create a theoretical framework for dynamic knowledge management. Second, we derive and introduce the following three complementary knowledge strategies: (1) organisation-centric, (2) hybridity-oriented, and (3)

Table 2. Defining the three knowledge strategies through organisational characteristics.

	Organisation-centric knowledge strategy	Hybridity-oriented knowledge strategy	Individualistic knowledge strategy
Identity	Organisational knowledge processes create coherence between the identity of the organisation and its activities.	The participating organisations use a shared information base for collaborative sense-making and decision-making.	Individuals operateaccording to their own objectives and compose their individual knowledge strategies.
Power	Organisational shared data and knowledge reduce uncertainty and exercise power in order to improve performance. Organisational processes and structure provide a governance model.	A continuous power play exists between organisations and information needs unless the network is able to balance the different institutional logics and to compose and communicate shared objectives.	Platforms serve as intermediaries between organisations and individuals. Individuals have the power in the projects and assignments that they choose to commit to.
Competence	Organisational objectives and the customer-base define the needed competences that are owned by the organisation.	Knowledge resources are located around the network and are owned and governed by independent and separate organisations. Knowledge strategy must acknowledge the strengths of each actor.	Individuals use their knowledge resources on those projects and assignments that they consider valuable.
Efficiency	An organisation's efficiency is measured against its objectives. Boundaries are set at the point that minimises the cost of governing activities.	Each organisation continues to measure its efficiency. Moreover, efficiency is measured at the network level.	Efficiency is defined and measured by individuals. They can choose the efficiency level they want but it is continuously evaluated by the platform and other actors operating on the same platform.

individualistic. We suggest that hybridity-oriented and individualistic knowledge strategies provide mental models that broaden the scope of knowledge management by offering a new a kind of interpretation framework for understanding and analysing how knowledge is turned into value. As we see that organisational hybridity and fluidity are going to increase in the future, we invite others to join the discussion on the changes in how knowledge management is perceived in organisational research and practice.

Theoretically, this shift towards dynamic knowledge management in the context of organisational hybridity and fluidity opens exciting avenues for further research. In the context of organisational renewal and learning (March, 1991), we need to untangle situations where attempts to construct internal capabilities (ambidexterity and fluidity) meet the external need to achieve social endorsement and legitimacy (hybridity of institutional logics; Greenwood et al., 2011). In addition, it would be interesting to study whether and how ongoing transformation has been redefining organisational boundaries – that is, organisational identities, power relations, competences, and the ways in which we define efficiency. Furthermore, it would be of interest to investigate how legitimate access to data and system-level objectives are defined in hybrid and fluid organisations. In our view, it seems that the changes described in this article would increase the role and importance of continuous performance dialogue and collaborative management practices. This would further lead to a well-justified argument that future organisations are increasingly defined through communicative processes. In addition to these theoretical considerations, we also believe that organisational hybridity and fluidity would require new methods in knowledge management practices as well, especially in collecting, storing, integrating, and analysing data.

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