

Towards Information Leadership

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Abstract

Purpose: The purpose of this article is to propose information leadership as a concept for describing the activity of leading information processes in organisations and in the society, and consequently, to distinguish and articulate the influence and consequences of making decisions about the use, organisation and management of information resources and information infrastructures.

Design/methodology/approach: To complement the earlier observations of the usefulness of making an analytical distinction between information and knowledge, and management and leadership within information management / knowledge management, this article posits that it is useful to distinguish information and knowledge leadership as two separate yet inherently connected processes of orchestrating respectively information infrastructures and resources, and the processes of knowing in an organisation.

Findings: This article defines information leadership as the leadership of information resources and infrastructures in contrast to the leadership of social knowledge processes, knowing and organisational learning. The distinction helps to explicate the informational premises of knowledge in organisations, articulate the difference of the infrastructural and social forms of leadership and to be more explicit about the respective consequences of information and information infrastructures and knowledge held and practised within an organisation and on its boundaries.

Practical implications: The concept of information leadership can be used both for describing the activity of leading the development and using information resources and infrastructures in organisations, and for articulating the influence and consequences of making decisions about the use, organisation and management of information resources and information infrastructures.

Originality/value: To the knowledge of the authors, this is the first time information leadership is defined comprehensively in the context of information and knowledge management and specifically in relation to knowledge leadership.

Keywords: information leadership, information management, knowledge management, leadership, infrastructures, information resources

Classification: Conceptual paper

1 Introduction

“[T]he continuing growth of information will come to change the texture of social, economic and institutional life considerably” (Kallinikos, 2006, 162). In contrast to earlier largely theoretical and philosophical works and anecdotal evidence of weak signals on the emergence and implications of the informationalisation of societies, by 2014 the reports and studies of the diverse “consequences of information” (Kallinikos, 2006) have become a daily news item. Intelligence, counter intelligence and infiltration, and the disclosure of the systematic surveillance of Internet and telecommunication traffic have become defining phenomena in the contemporary discourse. At the same time, a similarly comprehensive, but largely invisible half-forced and half-voluntary commercial surveillance has become a constituent aspect of the society and a determinant of how a large number of everyday services are developed, delivered and used. Every time we show one of our fidelity cards or search information on the web, we are disclosing information that has direct consequences as to what commodities and information will be available for us and how. As Bowker and his colleagues (Bowker et al., 2010; Bowker & Star, 2000) have highlighted, not only the information, but also the ways it is organised and turned into infrastructures of individual and organisational life have major consequences for the evolution of the ways of knowing and the ways things are. The crucial aspect of the informationalisation of the everyday life is not only the management of the availability and non-availability of information or its use in informing and the creation of knowledge, but a question of who decides how the information is structured and made available, and indirectly of who determines the “consequences of information”.

The aim of this conceptual article is to discuss the notion of *information leadership* as a concept for 1) describing the activity of leading information processes in organisations and the society, for 2) distinguishing the activity of making decisions about the use, organisation and management of information resources and information infrastructures from the activity of leading and managing organisational learning and knowing, and for 3) articulating the context and implications of this activity. The argument is based on a review of the earlier literature on information and knowledge leadership and a discussion of the implications of the earlier articulated differences of the focus of interest of information management and knowledge management.

The earlier literature has argued that information technology and information/knowledge functions and their management are intricately interwoven undertakings (e.g. Orlikowski et al., 1991; Suchman et al., 1999), but lack a simple causal correlation. Management and leadership of technology does not result in successful knowledge management (e.g. McDermott, 1999), or vice versa. What is required, is a comprehensive understanding of how technologies and social processes influence each other. This article proposes that a similar awareness of the differences of technological versus informational infrastructures, and resources versus knowing and learning that is common in social studies of information technology can provide analytical clarity and

practical benefits by helping information and knowledge leaders to understand and orchestrate infrastructural and social processes of knowing and informing in organisations.

2 Knowledge management and knowledge leadership

The emergence of knowledge management as a field of research and practice in the nexus of management information systems, organisational learning, information science and management science has provoked lively discussions of its nature and status in all of these overlapping fields. Some authors have been inclined to label knowledge management as a buzzword, an oxymoron (Alvesson & Kärreman, 2001) or a management fashion (Scarbrough & Swan, 2001) with little awareness of the prehistory of the management of knowledge in other disciplines (Lambe, 2011). In spite of these doubts, it is obvious that knowledge management has grown into a field of its own even if it is still in an early stage of the process of becoming a paradigmatic field of research and practice (Hazlett et al., 2005).

A typical approach to classifying the various flavours of knowledge management is to make a distinction between people oriented and technology-oriented perspectives (e.g. Sveiby & Risling, 1986; Raub & Rüling, 2001; Gloet & Berrell, 2003; Gao et al., 2008). The other typically parallel distinction is made between the structural- “knowledge as a possession” (Cook & Brown, 1999) oriented perspectives (e.g. the distinction of tacit and explicit knowledge in the SECI-model of Nonaka & Takeuchi, 1995), and the processual and practice-based approaches (common in organisational learning and communities of practice research, Gherardi, 2009; Wenger, 1998) that largely coincide with broader positivistic (structural) and constructivistic (practice-based) (Grundstein, 2012) perspectives to knowledge and knowing. The dividing line between these two theoretical approaches tends to run parallel with the (typically positivistic) technology-oriented and (typically constructivistic) people-oriented paradigm even if such a distinction fails to appreciate the variety of lenses through which different researchers and practitioners conceptualise knowing and knowledge.

The epistemic shortcomings of the structural approach (e.g. Bijker et al., 1987; Weick, 1990), practical problems with technology-driven knowledge management (McDermott, 1999), increasing popularity of specific constructivistic approaches (e.g. Wenger, 1998) and the apparent practical difficulties to (literally) manage knowledge that is embedded in people and their practices has prompted proposals for alternative frames of reference within which to discuss knowledge management. The emergence of *knowledge leadership* can be broadly paralleled with these paradigmatic struggles of the field (Hazlett et al., 2005; Gloet & Berrell, 2003; Alavi & Leidner, 2001). The term has become, at least to a certain extent, an established part of knowledge management research during the past two decades, even if Cavaleri and Seivert’s (2005) remark that knowledge leadership is not a very well-known concept is still largely actual. Knowledge leadership has been even proposed as a new paradigm for the entire field of knowledge management (e.g. Newman, 1997; Skyrme &

Amidon, 1997). In most cases, however, it is rather discussed as an alternative perspective to managing and leading knowledge and knowing rather than a new fundament for the entire discipline.

In spite of the growing interest in knowledge leadership and leadership in knowledge management, the convergence of explicit leadership theories and information and knowledge management is a relatively new phenomenon (Lakshman, 2009). Often the principal common aspect of the various strands of knowledge leadership seems to be a general propensity to discuss leadership as a distinct concept from management. Leadership as such has been recognised as a critical success factor of knowledge management (Alazmi & Zairi, 2003; Ribiere & Sitar, 2003), but the explicit discussion of knowledge leadership and its theoretical premises is less common. Lakshman (2009) argues sharply that the lack of leadership theory in information and knowledge management may be seen as a contributing factor to many of the well-documented problems caused by the lack of leadership in knowledge management (e.g. Guldenberg & Konrath, 2004; Singh & Kant, 2008; Mason & Pauleen, 2003; Chua, 2009) and information technology projects (e.g. Davenport & Prusak, 1997). The lack of explicit theoretical understanding of one's own knowledge leadership is also a factor that can explain the relative prevalence of sub-optimal knowledge leadership practices, for instance, the micro-level issues of leadership styles discussed by Viitala (2004).

There are some exceptions to the lack of theorising knowledge leadership. For instance, Calaveri and Seivert (2005) lean on Koestler's leadership styles from his essay *Yogi and the Commissar* (Koestler, 1942), Lakshman has developed a grounded theory based approach (Lakshman, 2007) whereas Nonaka and Toyama (2005) and Sarabia (2007) base their notions of knowledge leadership to the SECI-model of Nonaka and Takeuchi (1995). Nonaka and Toyama (2005) define knowledge leadership as the leadership of knowing, as setting of vision and driving objectives for fostering corporate knowledge creating activities and creating and maintaining *ba* (the notion used by Nonaka to describe a shared space, which serves as a premise for knowledge creation, e.g. Nonaka & Takeuchi, 1995) whereas Sarabia (2007) focus on the role of leadership in the knowledge cycles described in the SECI-model.

A consequence of the lack of theoretical discussion is that the different varieties of knowledge leadership are not always explicit or consistent about the scope and nature of knowledge and leadership. The knowledge management oriented literature (e.g. Alazmi & Zairi, 2003; Ribiere & Sitar, 2003; Bell DeTienne et al., 2004) has a tendency to perceive knowledge as an organisational asset and leadership as a relatively generic premise of successful knowledge management. The propositions are similar, but in their focus diametrically opposite to how the term knowledge leadership is used in the general management and leadership literature to refer to leadership with the help of knowledge (e.g. Mumford et al., 2000; Sotarauta et al., 2012). The objectivist views of knowledge leadership differ from transactional and transformational leadership of knowledge processes (Bryant, 2003) and leadership of organisational learning (Viitala, 2004), and the

leadership of knowing represented, for instance, by the Yogi approach of Cavaleri and Seivert (2005). Similarly, they are different from the translational approach of Edvinsson who defines knowledge in terms of intellectual capital and knowledge leadership as the management of “tension between internal and external worlds, between words and numbers, between differences and similarities, and between the development of intellectual capital cultivation and cost rationalization” (Edvinsson, 1997, 372).

The paradox of the different approaches and scales is that even if, for instance, Lakshman (2009) argues that the micro-level and macro-level insights and approaches in knowledge leadership are two separate matters and Cavaleri and Seivert (2005) make a distinction between (external) information and (internalised) knowledge, the conclusion is that a preferred knowledge leader would need to be a master of explicit and implicit forms of information and knowledge in both individual and organisational scale (e.g. Lakshman, 2009; Sarabia, 2007). Citing Cavaleri and Seivert (2005), an ideal knowledge leader would be a combination of the intuitive (knowledge-oriented) Yogi and the bureaucratic (information-oriented) Commissar. The solution to the paradox discussed in the article is to make an explicit conceptual distinction between the two areas of information and knowledge-oriented forms of leadership.

3 Information leadership in the earlier literature

In contrast to knowledge leadership, the references to *information leadership* lack not only a clearly articulated theory, but also a common understanding of the phenomenon. The term has been used to denote a broad spectrum of different notions from technology leadership (e.g. Morin et al., 1999; Peppard et al., 2011) to information use in leadership processes (e.g. Sommers, 2009; Hay, 2001), but these definitions tend to vary considerably in their conceptualisations of information and the nature of leadership.

It is possible to distinguish two broad approaches to information leadership as a state (or position) or process/expertise. Finance literature uses information leadership in a specific sense to describe a position in which an organisation has more and/or better information than its competitors. Information leadership affects information flows and can lead to observable information spillovers, i.e. when information is transferred from the information leader to other organisations (Kim, 2005). Similar references to the term can be found in business information and management literature. Bocij et al. (2008) have defined information leadership as a state or position of using information or expertise to enhance a product or a service offered by an organisation. Kollman sees information leadership as “knowledge and information superiority over the competition” (Kollmann, 2006). Marchand et al. (2002) delve deeper into the concept by introducing industry information leadership as a concept with three dimensions: 1) *leadership in the use of competitive information* (the use of information to compete in the marketplace), 2) *leadership in the use of customer information* (the use of information about customers and

interacting with customers to provide better products and services and retain business); and 3) *leadership in the use of operational information* (the use of information for enhancing operational effectiveness).

The second broad approach of defining (or assuming) information leadership as a process/expertise is more common in the literature. In the professional and academic management literature, information leadership is defined in slightly varying terms from the perspective of the organisational management and leadership function. Harland et al. (2007) refer to (supply chain) information leadership as a specific area of supply chain leadership with a specific interest in leading information in that specific context. Jackson's (1982) information (systems) leadership and Penniman's (1990) idea of information leadership in the context of library and information services are related in that the both call for attention to a new type of leadership of information systems and services that would emphasise the commodified and measurable rather than immeasurable value of information resources. Similarly to, for instance, Morin et al. (1999), Maes and De Vries (2008) discuss information leadership as a part of the role of the chief information officers (CIO). They criticise the conventional emphases of the role of CIO as the manager of information *technology* (instead of information) and as a liaison between ICTs and business. In contrast, they suggest that CIOs should engage themselves as orchestrators and equilibrists of information and inspiration *as a part* of the business. The role of CIOs is not merely formative but also inspirational and renewing: "[t]oday's organizations have a need for information management that simultaneously provides room for 'in-spir-ation', which literally puts the spirit (back) into the organization" (Maes & DeVries, 2008, 23).

Information leadership has also been embraced by some educational institutions. City University of London has a Centre for Information Leadership offers education in information leadership that combines information and knowledge management with practical and theoretical leadership perspective (<http://www.cass.city.ac.uk/courses/executive-education/information-leadership-network-ilmn>). The School of Business and Economics at Åbo Akademi University in Finland has also an academic major in information leadership (Swedish: informationsledning, <http://www.abo.fi/informationsledning>) even if its current English translation is information and knowledge management and the course itself combines both information and knowledge leadership. The London approach of a combined informational and leadership expertise is close to the notion of information leadership discussed in a library (Everhart & Dresang, 2007) and computer and information science contexts (e.g. Lorence & Jones, 2007).

A somewhat different approach to refer to information leadership is to perceive the concept as a professional function. In an educational setting, for instance, Hay (2001; 2010), and Henri and Asselin (2005) perceive information leadership as a function of educators and school principals. In her 2011 article, Hay describes the notion as a combination of information literacy, information policy and knowledge management in terms of "managing

people and knowledge across curriculum and administration” (Hay, 2001).

Besides academic references to information leadership, the concept has been discussed to a limited degree in the professional literature. Sommers (2009) defines information leadership as “an approach to leadership that uses data to drive the mission, vision and values into the daily work” (Sommers, 2009, 42). In contrast to a conventional understanding in the academic information science, information and knowledge management, the approach perceives information specifically in terms of measurements and performance data. Everson (1995) presents another practical vision of information leadership with an emphasis on multimedia communication and life quality management.

A common aspect of the different information leadership concepts is that they share a broad idea of ‘information’ as a significant resource in an organisational context. Information leadership is also largely seen as distinct from technology leadership and with a few exceptions (e.g. Morin et al., 1999; Peppard et al., 2011), the orchestration of information resources is only seldom seen as a responsibility of technology oriented executives (cf. Stephens et al., 1992). Another common denominator of the various conceptualisations is that there tends to be very little explicit theoretical leadership thinking embedded in the formulations. Leadership is largely taken for granted and combined with domain specific ideas of what counts as information. Maes & De Vries (2008) write about information leadership, but do not make an explicit distinction between the difference of managing and leading information (and inspiration). Even if the stressing of such a distinction may sound extraneous, Alvesson & Svenningsson’s (2003) findings that leadership should not be taken for granted even in contexts where it could be reasonably expected to be thoroughly mastered, serve as a healthy reminder against making assumptions about the practical state of leadership. In their case study, leadership was not well understood in a “very large and respected knowledge company” (Alvesson & Svenningsson, 2003, 379) and it was not carried out in practice to an extent that led the authors to suggest that leadership does not necessarily exist in all contexts. In contrast to describing how they practised leadership, Alvesson and Svenningsson’s interviewees tended to fall back on discussing management and administration. Considering these findings, as Alvesson & Svenningsson (2003) suggest, it is too hasty to deny the relevance of leadership concept altogether, but in contrast we need to be reflexive about what is meant by leadership and when it is employed. This critical awareness is necessary also in the context of information leadership. The concept can be useful if (and only if) there is a qualified (i.e. useful) reason to use it instead of another term, for instance, information management, knowledge management, or knowledge leadership, to articulate a distinct process or phenomenon.

4 Towards (a new) information leadership

Calaveri & Seivert (2005) emphasise the necessity of mastering both internalised and

socially constructed knowledge and externalised information and a need to balance between being a Yogi and Commissar. It seems plausible to argue, however, that the knowledge leadership of Yogi is distinct from the information leadership of Commissar to an extent that would require not only implicit but also explicit balancing and articulating of their differences in everyday work. It might not be enough to *be* a Yogi and a Commissar. These roles, or rather functions, would need to be articulated and conceptualised on different premises. They both can function on a macro or micro level and are needed in an organisation, but may not be useful or even possible to combine. The risk of trying to balance between the two opposites is that the (knowledge) leadership is lost to the management (of information) similarly to how Alvesson & Svenningsson's (2003) observation that the leadership talk remained detached from the managerialistic practices in the company they studied.

The relevance of drawing a distinction between information and knowledge leadership may be paralleled to the struggles of drawing a line between information management and knowledge management. Some, including Wilson (2005), have denied altogether the relevance of knowledge management by referring to the impossibility of managing (internalised) knowledge. Others, including Bouthillier & Shearer (2005) and Schlögl (2005), have chosen a more gentle approach and studied how the two terms have been used in the literature. Schlögl (2005) concludes that there are two content and technology oriented strands of information management respectively, whereas knowledge management is used synonymously with information management or for "management of work practices with the goal of improving the generation of new knowledge and the sharing of existing knowledge" (Schlögl, 2005). All of these different versions of IM/KM have commonalities and one possibility to find a relative consensus is to consider the (hard) management of information as one premise for a successful (soft) management of people and the socially situated and constructed knowledge. In this continuum, knowledge management can be seen, as Lakshman (2009) describes it, as the "process through which data and information are converted to knowledge and subsequently disseminated throughout the organization" in contrast to how he later defines it (following Alavi and Leidner, 2001) as an umbrella term that covers both the processing of information and knowledge. The roles of information and knowledge leadership may be seen in similar terms as complementary to each other. A distinct process of leading information is a necessary precondition for functioning knowledge leadership, similarly to how functioning (information) technology leadership is a necessary premise for developing appropriate and effective technologies for managing and orchestrating information infrastructures and resources. This distinction helps to explicate and understand the types of interventions required for different types of leadership but also the infrastructural premises and consequences of how and why people know the things they know.

Following the distinction of knowledge and information, information leadership can be defined as the *leadership of information resources and infrastructures* and knowledge

leadership (following Edvinsson, 1997; Bryant, 2003; Viitala, 2004; Nonaka & Toyama, 2005) as the leading of the social knowledge processes, knowing and organisational learning. Information leadership functions as a premise for organisational knowledge creation and knowledge leadership. Knowledge leadership builds on the availability of useful information resources and functioning information infrastructures that support organisational knowledge processes.

The point of making this distinction is not to separate these two functions as organisational activities, but rather to underline the different premises of the two practices. It is apparent that the framing of a concept does not solve the knowledge and information leadership paradox of how knowledge turns to information turns to knowledge (Storey & Salaman, 2009), but the conceptual distinction can be helpful in trying to work around the rift and making a case of the difference of leading knowledge practices and their premises. As Day & Lord (1988) suggested already in the late 1980s, large-scale and micro-scale leadership require different approaches and measures to succeed. Similar to the macro and micro level leadership, the infrastructural information leadership requires a different approach and methodology than leading knowing and organisational learning in an organisation. In contrast to the distinction of infrastructural and human aspects of knowing and informing, both information and knowledge leadership share the same rationale of making a distinction between leadership and management. Similarly to knowledge leadership, information leadership can also benefit from the existing corpus of leadership theories (in contrast and complementary to the management literature) and the aspect highlighted by Skyrme (1999, p. 208) that leadership focuses on the aspects of continual development and innovation of skills, networks, communities and resources in contrast to the emphasis of control and custodianship in the notion of management.

The introduction of information leadership as a specific concept has potential implications for information and knowledge work practices in organisations. Building on the three dimensions of information leadership of Marchand and colleagues (2002) as a state of competitive advantage, the focus of information leadership activities can be framed to encompass the leadership of necessary resources and infrastructures of *competitive information* (information seeking and analysis, competitive intelligence and the acquisition and use of information available in and about the marketplace, society and stakeholders for competitive advantage), of *customer information* (the use of information about customers and interacting with customers oriented to the purpose of the organisation), and of *operational information* (information about and for increasing and maintaining operational effectiveness). It is apparent that in order to be effective, the information and knowledge functions and their leadership need to converge in the everyday life of the organisation. Information resources and infrastructures support knowing and organisational learning, which are at the same time necessary ingredients for developing these resources and frameworks. Information leadership requires both tactical and strategic understanding of information seeking and use, information technology, market research and customer

relations, qualitative and quantitative data collection and analytical methods, organisation and management, organisation of information and information architecture, whereas knowledge leadership needs a similar awareness of human resource management, management of knowledge work, education and training and psychological and sociological understanding of individuals, groups and their behaviour.

From a theoretical point of view, the distinction can help to comprehend and articulate the complexity of effective leadership (e.g. Denison et al., 1995; Weick, 2009) and its implications for successful information and knowledge work. In terms of the leadership models of Uhl-Bien et al. (2007), knowledge leadership could be characterised as a form of *adaptive leadership* (a generative dynamic, a premise of emergent change activity) and information leadership as a form of *enabling leadership*, a form of leadership that structures and enables premises for creative problem solving, adaptability and learning (Uhl-Bien et al., 2007). The enabling and infrastructural nature may be suggested as going beyond the forceful-enabling dichotomy discussed by Kaplan (Kaplan, 1996; Kaplan & Kaiser, 2003) by emphasising the constitutive nature of the enabling quality of the leadership of and by information. Comparably, from a cultural perspective, knowledge leadership can be aligned with the part of organisational culture that relates to knowledge sharing and support (Ribiere & Sitar, 2003) whereas information leadership may be seen to operate in the context of *information culture* (for a review of the literature on the concept, see Choo et al., 2008), an organisational culture where information forms the basis of organisational decision making, and that is conducive to information management and to the value and utility of information for achieving operational and strategic success (Curry & Moore, 2003). Further, plausibly, in contrast to knowledge culture, the information culture may be defined as having a specific affinity with technical and non-technical infrastructures (e.g. information technology in Curry & Moore, 2003) and resources as Ginman noted in her seminal definition of information culture as culture in which “the transformation of intellectual resources is maintained alongside the transformation of material resources” (Ginman, 1988, p. 93; discussed further e.g. by Widén-Wulff, 2000).

From an analytical point of view, the distinction of information and knowledge leadership can also provide further clarity as to how the two strands of leadership can draw from different parts of information and knowledge management literature. While the existing knowledge leadership literature leans largely to the people oriented line of knowledge management research, and to a lesser extent to the objectivist paradigm, information leadership can explicitly build on information management and information science literature that is relevant for leading information and information work including the large bodies of work on information behaviour and practices (Case, 2012), information sharing (Wilson, 2010), information architecture (Dillon & Turnbull, 2009) and knowledge organisation (Gnoli, 2008), information literacy (Limberg et al., 2012) and, for instance, information retrieval (Chowdhury, 2010). From the information leadership perspective, some significant findings of information science research include the understanding of

information practices (Cox, 2013; Savolainen, 2008) and information work (Huvila, 2013a, 2008) as work-and-practices relevant to everyone and every context, and similarly how the notion of complexity leadership (Uhl-Bien et al., 2007) underlines the difference between leaders (actors) and leadership (function).

The final, rather indirect, aspect of information leadership is that in contrast to the nature of knowledge leadership and the management of knowing and learning as internal to an organisation, an infrastructural and resource-oriented perspective is necessarily at least partly external to the organisation. Both perspectives engage with internal and external actors and influences, but knowledge leadership (as leadership of knowing) is by definition an activity that focuses on the organisation itself whereas the orchestration of information infrastructures and resources functions to a greater extent at the interface between an organisation and its context. The nature of information leadership as a boundary process also makes it a potential instrument of critical reflection. Just as Schultze & Leidner (2002) remind us of the necessity of considering both the positive and negative, intended and unintended consequences of knowledge and its management, it is similarly necessary to be aware of and reflexive of the upsides and downsides of information and knowledge leadership. In this respect, information leadership converges with infrastructure studies (Bowker et al., 2010), a branch of research that focuses on investigating how various types of technical and non-technical informational infrastructures influence individuals, communities and organisations. As such, information leadership should not be a merely normative and formative enterprise, but also a pursuit that involves considerations of the “consequences of information” (Kallinikos, 2006) in a particular organisation, for its stakeholders and the society at large. Information leadership is about developing and exploiting information resources and infrastructures, but in order to be effective and individually, organisationally, contextually and societally acceptable it should also demonstrate a sophisticated understanding of its building blocks and their consequences.

5 Conclusions

This article has discussed the notion of information leadership as a complementary concept for articulating the infrastructural and information resources related premises and consequences of the (broadly understood) management and leadership of knowledge and information in organisations. For the sake of conceptual clarity and even more so, because of foreseeable analytical and practical advantages, the present article proposes that the infrastructural and resource related aspects of information and knowledge leadership could be framed as information leadership whereas community building, organisational learning and the orchestration of knowing in an organisation could be distinguished as knowledge leadership. Information leadership is defined as the *leadership of information resources and infrastructures* with three broad focal areas of interest in marketplace-related competitive information, organisational-operative information and purpose-oriented customer

information. A possible theoretical framing of information leadership is to see it as a form of enabling leadership in the context of information culture(s). This article posits that the distinction of the two forms of leadership helps to explicate the informational premises of knowledge in organisations, articulate the difference of the infrastructural and social forms of leadership and to be more explicit about the respective consequences of information and information infrastructures and knowledge held and practised within an organisation and on its boundaries.

The proposal is largely in line with the definitions and descriptions of the two concepts discussed in the earlier literature (definitions of information and knowledge leadership discussed earlier in this article) and, as argued in this text, bring both conceptual and practical clarity to the different aspects of the responsibilities of information and knowledge professionals and from a research perspective, provide means to ground the two different functions in partly distinct bodies of literature. It is apparent that such a conceptual proposal *per se* does not solve the well-known knowledge and information leadership paradox of how knowledge turns to information turns to knowledge (Storey & Salaman, 2009) discussed elsewhere in the literature (for examples of classical and newer proposals, see e.g. Nonaka & Takeuchi, 1995; Dervin, 1998; Valentine et al., 2012; Huvila, 2013b), but would undoubtedly clarify the aims and purposes of leadership in organisations: whether a particular set of activities is about the infrastructural premises of information or the organisational culture of knowing and letting others know.

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