

## CHAPTER 12

### KNOWLEDGE MANAGEMENT AND MANAGEMENT CONSULTING

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### 12.1 Introduction

The role and handling of knowledge in management consulting firms has been a strong area of focus within research on management consulting. Ever since the early 1990s management consulting firms have provided an empirical context for what was perceived as a new and important management challenge - knowledge management (KM). On the basis of the argument that management consultancies compete primarily on their knowledge, they have been portrayed and studied as pioneers of KM. As Hansen, Nohria and Tierney (1999: 107) note, '[b]ecause knowledge is the core asset of consultancies, they were among the first businesses to pay attention to - and make heavy investments in - the management of knowledge'.

This has made management consultancies a popular object of study as exemplars of KM for other industries. Being archetypical 'knowledge businesses', lessons learned from management consultants were viewed as potentially applicable also to other sectors with a high knowledge content (Empson 2001b; Hansen et al. 1999; Løwendahl, Revang and Fosstenløkken 2001; Weeks 2004). Research on KM in management consulting firms has thus been carried out both as a way of increasing our understanding of the activity of management consulting, but also with a claim of wider relevance for organizations in the 'knowledge society' in which knowledge is increasingly becoming a key source of competitive advantage.

This chapter presents a systematic review of the literature on KM within management consulting. It will first provide a brief overview of KM in management consulting and its definition(s). The chapter will then review the extant literature, which has focused on four main -primarily empirical- issues, each of which will be addressed in turn in the remainder of the chapter. These are: (1) What is the nature of knowledge in management consulting? (2) How is knowledge shared and transferred within the consulting firm? (3) What are the effects of KM and, (4) How is new knowledge created? These four themes and the order in which they are presented reflect a crude and overlapping timeline of the overall evolution of research on KM (Rolland et al. 2005). The chapter concludes with some suggestions for the directions of future research.

### 12.2. Definitions of Knowledge Management in Consulting

The general concept of 'knowledge management' began to emerge in the literature in the early 1990s and reached its peak in popularity in the late 1990s and early 2000s (Scarbrough and Swan 2003). In general management practice, the concept has had a consistently high usage during the 2000s. In a survey among organizations all over the world conducted by Bain and Co, about 60% of organizations claimed to apply

'knowledge management' throughout the 2000s with a slight drop in 2008 (Rigby and Bilodeau 2010). The emergence and proliferation of KM as a management discourse has been driven by three main themes reflecting contemporary management challenges as well as theoretical and practical developments (Scarbrough and Swan 2003). These include an increasing focus on the 'knowledge society' identifying knowledge (rather than labor) as the key source of competitiveness. Theoretically, the emergence of the resource based view of the firm (e.g. Nahapiet and Ghoshal 1998) has been an important source in motivating the need to start 'managing knowledge' (Alvesson and Kärreman 2001). Finally, technological developments regarding information and communication technology (ICT) played an important enabling role in facilitating the processing, storage and access of knowledge across spatial and temporal boundaries (Alvesson and Kärreman 2001; Ofek and Sarvary 2001).

Underlying much of the literature on KM in management consulting is an assumption of knowledge being a strategic asset to management consulting firms and KM being the way to capitalize on this asset. Hargadon (1998) describes the brokering of knowledge between firms as an important role of management consulting firms. Through their assignments with clients, consultants gain access to both problems and solutions in different contexts. This gives them a unique position to transfer knowledge between different actors but also to combine this knowledge in new ways or move it to new places and thereby support innovation. By leveraging knowledge and experience from client projects, management consulting firms have the potential to create not only efficiency gains but a leap in the quality of their offerings (Ofek and Sarvary 2001). The management consulting firm's reliance on client projects as a main source of knowledge creates a specific kind of competitive dynamic where knowledge based economies of scale can be created through KM activities (Løwendahl et al. 2001; Sarvary 1999).

Definitions of KM in management consulting reflect a number of common themes. First, they focus on the sharing and dissemination of knowledge i.e. making sure that the individual knowledge of organizational members is made available to the entire organization. Second, they link KM to competitive advantage and business results. Third, KM is described as a business process consisting of a number of sub-activities including organizational learning/capturing knowledge, knowledge production/codification and knowledge distribution/transfer (see also Kakabadse, Kakabadse and Kouzmin 2003). Two fundamental assumptions underpin most of the KM literature - that people are willing to share their knowledge with others and that they are naturally willing to learn and seek new knowledge. These assumptions are, however, questionable (Husted, Gammelgaard and Michailova 2005; Morris 2001), and this will be discussed further later in this chapter.

Beyond these common themes, definitions of KM and associated approaches also differ in important dimensions. One such dimension is the breadth of the concept, where some definitions become rather all-encompassing, viewing KM as an integrated part of all management activities (e.g. Davenport and Prusak 2000). However, this risks making KM about everything and nothing, thus limiting its value as a specific management concept (Alvesson and Kärreman 2001; Rolland, Guilhaon and Trepo 2005). Such broad definitions of KM also make the task of this chapter - to review the research focusing on KM in management consulting - rather challenging as it would make the entire literature on organizing and managing management consulting organizations relevant. The current review thus applies a pragmatic delimitation to the systematic literature review. It focuses on the literature labeled by

its authors as dealing with 'knowledge management'. The large majority of the research identified on this basis falls within the more limited definition of KM as a set of business processes aimed at creating, storing and transferring knowledge in order to create a competitive advantage.

A second dimension in which definitions and approaches to KM differ is in relation to how knowledge is viewed. The KM literature is in general rather vague when it comes to defining what is meant by 'knowledge'. However two underlying positions can be identified. One viewing knowledge as a 'possession' that can be objectified (captured, codified and transferred) within the organization. Another (less common) position views knowledge as 'socially embedded' and thus linked to individuals and activated in relation to a specific situation (Empson 2001b; Hansen et al. 1999). Consequently, the next section will examine the related debates in the management consulting specific literature.

### 12.3 The Nature of Knowledge in Management Consulting

The nature of knowledge in organizations in general as well as in consulting specifically is a much-debated issue that has produced a wide array of typologies of different kinds of knowledge. Most of these typologies, in one form or another, build on a juxtaposition of two opposing epistemological stances. Newell (2005) labels these two positions as 'knowledge as possession' vs. 'knowledge as socially embedded' (see also Empson 2001b).

From the 'knowledge as possession' stance, knowledge is viewed as an objectively definable commodity, which can be easily moved from one place to another. Knowledge is assumed to be possible to articulate and store in databases for transfer and future use. Such a view of knowledge has been driving many KM initiatives in practice, where the focus has been on building and maintaining ICT supported 'knowledge management systems' (Ruggles 1998). Common conceptualizations of KM as consisting of capturing, codifying and distributing knowledge follow naturally from a view of 'knowledge as possession' (e.g. Deng 2008). Central challenges in this context relate to what content to provide in these knowledge repositories and how to structure it (e.g. Griggs, Wild and Li 2002) as well as how to motivate individuals in organizations to contribute and use the knowledge available within these systems.

The 'knowledge as socially embedded' stance by contrast focuses on the tacit and socially embedded nature of knowledge. From this perspective, knowledge is viewed as situation specific, embedded in practice and difficult to articulate. It is about acting knowingly in the specific situation rather than applying generic approaches or methodologies from KM systems. Visscher (2006:248), for example, in the specific context of management consulting concludes that 'instead of following phase-models, consultants appear to be improvising bricoleurs, tailoring their ways of working to specific situations, and using broad, heterogeneous and partly implicit repertoires, which are built mainly through action-learning' (see also Werr and Stjernberg 2003). From this perspective, the sharing and transfer of knowledge among consultants requires interaction in relation to a specific problem. Rather than accumulating knowledge in organizational databases, accumulation implies the continual development of shared understandings among a group of actors sharing a practice. As argued by Fincham et al. (2008) an important dimension of knowledge in this

context is the business sector or industry with which the consultants engage. Central challenges from the knowledge as socially embedded perspective include understanding the social and interactive formation and application of knowledge in practice and in a specific social context.

While these two positions and their related KM strategies with a focus on either explicit knowledge or tacit knowledge have often been presented as opposing (e.g. Hansen et al. 1999), it has also been suggested that they may be viewed as complementary, with tacit and explicit knowledge being different, but co-existing forms of knowledge (Hislop 2008; Newell 2005; Robertson and Swan 1998). One way of conceptualizing such a complementary relationship between tacit and explicit forms of knowledge is the SECI (Socialization, Externalization, Combination, Internalization) model by Nonaka and Takeuchi (1995). Although not specifically developed in a management consulting context, it deserves mention as it is frequently cited in the literature on KM in management consulting. The basic notion of this model is that knowledge creation and sharing takes place in recurring transformations between tacit and explicit knowledge. The model describes four such transformations - socialization (from tacit to tacit knowledge through, for example, collaborating and acting together), externalization (from tacit to explicit knowledge through, for example, formulating methods and tools based on experiences), combination (from explicit to explicit knowledge through e.g. combining insights from different documents) and finally internalization (from explicit to tacit knowledge through applying, for example, explicit methodologies in a specific case).

A second conceptualization of the relationship between tacit and explicit forms of knowledge developed specifically in a consulting context is provided by Werr and Stjernberg (2003) who focus on the complementarity of these knowledge forms rather than the transformations between them. They argue that consulting firms may be understood as knowledge systems composed of three different kinds of knowledge: (1) the (tacit) experiences of consultants; (2) explicit and general methodologies available in the consulting organization and; (3) explicit and specific material related to specific client cases. The tacit experiences of consultants are argued to be central to the application of the explicit knowledge stored in the company databases as they provide the basis for the adaptation of the latter knowledge to the specific situation at hand. However, the explicit knowledge in the form of methods and tools and cases is also important. The methods and tools provide a common language that enables consultants to share and apply their tacit experiences in joint action as well as access and understand other consultants' client cases on the databases. The explicit cases finally have a role in the knowledge system as examples of practice in specific situations. Unlike the methods and tools, they are not decontextualized and thus provide insights into specific practices in specific situations. Rather than focusing on either explicit knowledge and databases or tacit knowledge and interaction, this approach highlights that it is the interaction of both that makes up knowledge in management consulting (Werr and Stjernberg 2003).

Within the domain of management consulting, one can also identify a third conceptualization of knowledge, which could be labeled 'knowledge as symbol'. This view of knowledge is rooted in the epistemological position of 'knowledge as socially embedded' and elaborates on the idea that knowledge cannot be objectively defined and managed. Instead the focus is shifted to the performative aspects of knowledge and KM in management consulting. This literature claims that the knowledge of consultants is vague and ambiguous as it lacks a clearly defined body of specialist knowledge (Alvesson 1993, 2001; Clark 1995; Jones 2003). Rather than asking how

knowledge is generated and transferred in organizations these authors ask how knowledge is rhetorically constructed - both in the eyes of fellow consultants and in those of the client - and how such knowledge claims are used by managers and organizations. This stream of research highlights the importance of 'impression management' (Clark 1995) and rhetoric (Bloomfield and Best 1992; Bloomfield and Danieli 1995; Legge 2002) in creating impressions of knowledge and draws attention to political aspects of consulting knowledge (Sturdy, Clark, Fincham and Handley 2009). From this perspective KM becomes at best a management fad and resource in the construction of credible knowledge claims (Alvesson 2001; Swan and Scarbrough 2001). Based on such a view of knowledge as fluid, vague and person bound, the notion of KM has been critiqued for being oxymoronic as the notion of management, involving order and control, is in direct contrast with such characteristics of knowledge (Alvesson 2001; Styhre 2003).

The current understanding of knowledge in management consulting and consequently how it may be managed is thus multi-faceted ranging from a view of knowledge as mainly explicit and thus easily stored and transferred to more complex conceptualizations viewing knowledge as tacit and embedded in a social context which makes the task of 'managing' knowledge more complex or even futile, reducing it to mere legitimacy creating symbolic acts. While conceptualizations of knowledge underlying research on KM in management consulting have increased in complexity and level of articulation the majority of research still builds on rather unarticulated and one-dimensional conceptualizations, often with an implicit foundation in the 'knowledge as asset' approach. Few conceptualizations of knowledge go beyond a discussion of tacit vs. explicit knowledge, creating a tendency to oversimplify and overstabilize the analysis of knowledge (Robertson and Swan 1998).

Further research could thus contribute to more multidimensional conceptualizations of knowledge in management consulting. Recent efforts in this direction regarding professional knowledge more generally suggest some promising avenues in linking professional knowledge and identity (e.g. Ibarra 1999; Sandberg and Pinnington 2009).

## 12.4 Knowledge Sharing and Transfer

The second focal issue in research on KM in management consulting is the transfer and sharing of knowledge, which represents the bulk of the publications in this area. Research on this topic is typically based on qualitative case studies of a single consultancy and rooted in a 'knowledge as asset' epistemological position. From early on this research acknowledged the limits to the codification of knowledge, which consequently called for combinations of initiatives focusing on the formulation and transfer of explicit knowledge through e.g. databases and the creation of opportunities for the exchange of tacit knowledge through social interaction.

Two approaches to the sharing and transfer of knowledge are generally identified, which relate to the two epistemological positions noted previously. In Hansen et al.'s (1999) much cited version these two approaches are labeled 'codification' and 'personalization' respectively. The codification approach focuses on making knowledge explicit and transferring it by means of databases, thus reflecting a 'knowledge as asset' epistemology. The personalization strategy on the other hand focuses on transferring tacit knowledge between individuals and thus emphasizes

mechanisms for creating connections and facilitating interaction between individuals, which reflects more of a ‘knowledge as socially embedded’ epistemology. These two approaches are viewed as mutually exclusive and the suitability of each approach is portrayed as contingent upon the level of standardization and maturity of the service offered as well as the nature of the knowledge base that underlies the service (Hansen et al. 1999; Morris and Empson 1998).

While Hansen et al. (1999) present codification and personalization as two alternative strategies, other authors often find a mix of different forms of both tacit and explicit knowledge and associated KM mechanisms. In line with this, research also points to a combination of structural and technical factors and cultural and social factors as central enablers of the sharing and transfer of knowledge. In the following the central organizational enablers of KM in management consulting as identified in the literature are reviewed. These enablers have been identified both from a ‘knowledge as asset’ perspective, focusing on explicit knowledge and a knowledge as socially embedded perspective, focusing on tacit knowledge. However, the way in which the enablers support knowledge sharing and transfer differs depending on the underlying conceptualization of knowledge (for a summary see Table 15.1).

<b>Enabler</b>	<b>Knowledge as asset approach (focus on explicit knowledge)</b>	<b>Knowledge as socially embedded approach (focus on tacit knowledge)</b>
<b>IT systems</b>	Repository of knowledge; enabler of knowledge storage and dissemination	Enabler of networking (Identifying the right people) and communication
<b>Reward structures/ incentive systems</b>	Affects willingness to engage in updating and consulting databases	Affects willingness to support colleagues on projects, respond to questions, and the preferred media of communication
<b>Business processes</b>	Encourages interaction with knowledge systems as a natural part of the process	Initiates and legitimates interaction and knowledge exchange through organizational and process structures
<b>Roles and structures</b>	Formal KM roles ensure and enforce quality and use of knowledge repositories	Communities of practice create spaces for interaction and knowledge sharing and creation
<b>Organizational culture</b>	Provides as basis for trust which influences the willingness to share and reuse knowledge from repositories	Provides a basis for trust, which encourages the sharing of failures and creates commitment and openness among consultants
<b>Common language</b>	Provides a structure for knowledge that enables access and reuse across cultural and other boundaries	Facilitates collaboration and learning as well as face-to-face sharing of knowledge
<b>Power and politics</b>	Fear to lose status and power may reduce willingness to codify knowledge	Fear to lose out in internal career competition limits individual knowledge sharing and seeking
<b>Management support</b>	Successful integration of KM systems requires that they are part of the strategic agenda and that top management demonstrates desirable behavior	Social mechanisms for knowledge sharing are difficult to control. Research focuses on the consultants and their work rather than managerial initiatives

Table 1: Organizational Enablers of knowledge transfer and sharing

**IT Systems:** While IT systems and their design have been a focus of the KM literature more generally (Scarborough and Swan 2003), this has not been a strong focus in the literature on KM in management consulting. Still, some kind of IT support is generally involved in KM initiatives (Apostolou and Mentzas 1999b; Chait 1999), most often based on different kinds of internet technology applications, including e-mail (Kim and Trimi 2007). IT systems may serve both as a vehicle for storing and transferring explicit knowledge and as a way of enhancing networking, communication and interaction in order to share tacit knowledge. The design of the IT-based KM systems used is seldom discussed beyond examples of specific cases (e.g. Baladi 1999; Griggs et al. 2002). Olivera (2000) discusses the perceived effectiveness of different memory systems where IT-based knowledge repositories are one example. He highlights five factors contributing to effectiveness: (1) relevance and specificity of system's content; (2) effectiveness of system's indexing; (3) extent to which content has been filtered by experts; (4) extent to which system's content is updated and; (5) ease of accessing the system. The most common reference to the role of IT in KM in the extant literature, however, is the advice not to overemphasize IT. The implementation of IT-based KM systems needs to be accompanied by other changes in the organization. Without such changes, the implementation of IT-based KM systems may fail or even become counter-productive (Deng 2008; Robertson, Sorensen and Swan 2001). This downplaying of the role of IT is related to observed challenges in relation to ensuring both the input to the systems as well as their use to find information.

**Reward structures / incentive system:** A common finding in studies on knowledge sharing is that sharing and reusing knowledge (regardless of its form as tacit or explicit) does not come naturally. Barriers such as time pressure (Henriksen 2005), fear of losing a key asset (Morris 2001; Morris and Empson 1998), concerns that knowledge that is shared is misused (Ejenäs and Werr 2005), etc. create barriers towards sharing knowledge. Similarly (although not as well studied), reusing knowledge is met by resistance originating from e.g. difficulties of finding relevant knowledge or professional pride (Dunford 2000; Robertson et al. 2001). To overcome these barriers the incentive system, including both rewards and career, is identified as critical (e.g. Apostolou and Mentzas 1999b; Deng 2008; Henriksen 2005; Kaplan and Thomson-Reed 2007; Lahti and Beyerlein 2000; Morris and Empson 1998; Weeks 2004). As argued by Robertson et al. (2001), the way in which (formal and informal) rewards are distributed affects not only to what extent knowledge is shared but also in what ways in which it is shared. Furthermore, the common focus on billable hours as a central basis for evaluation in management consulting firms is seen as a barrier to sharing both explicit and tacit knowledge, since it discourages spending time on non-client related tasks such as synthesizing experiences, answering questions from colleagues or acquiring and testing new knowledge (Bang 2005; Chao 2005). Studies thus point out that the incentive system needs to be aligned to the KM system. Few studies, however, explicitly discuss how incentive systems encouraging different kinds of knowledge sharing could be designed. In this context, cultural variation in multinational settings also needs to be taken into account (Paik and Choi 2005).

**Business processes:** In order to overcome some of the barriers to knowledge sharing discussed above, several studies point out that specific KM activities need to be incorporated in the natural workflow in order to become 'part of the way people do business' (Kaplan and Thomson-Reed 2007: 221). Activities related to capture, transfer and reuse of practices (primarily explicit knowledge) need to be simple

enough to become an integrated part of the way of working in order not to be perceived as just an extra administrative burden (Ambos and Schlegelmilch 2009; Kaplan and Thomson-Reed 2007: 221; Weeks 2004). Also, some slack and room for reflection built into the business processes are identified as enablers of knowledge sharing (Apostolou and Mentzas 1999a). Furthermore the design of the business processes in service delivery is pointed out to be important as this enables participation and collaboration and thereby social mechanisms for (tacit) knowledge sharing. Chao (2005) for example shows how peripheral participation of young consultants in project work enables them to acquire central competencies, including a professional identity (see also Morris et al. in this volume). The detailed connections between the design and organization of consulting work and the sharing of knowledge between consultants however remain to be explored in detail.

***KM roles and structures:*** Knowledge sharing and transfer activities are further argued to require a clear structure of roles related to especially the maintenance and use of IT-based KM systems (Baladi 1999; Henriksen 2005; Weeks 2004). These roles could be specialized, with dedicated incumbents, or temporary so that active consultants could rotate in and out of the roles. Depending on the kind of service delivered, firms were found to have different strategies as to what extent KM was handled by specialists as opposed to regular consultants (Apostolou and Mentzas 1999b). Another structural intervention related to KM (although from a 'knowledge as socially embedded' position) is the creation of communities of practice, groupings of people that share a specific practice and thus knowledge domain (Kohlbacher and Mukai 2007). Communities of practice in consulting firms may either emerge naturally from informal networks or be formed top down, developed as a part of the business strategy. A study by Pastoors (2007) found that consultants preferred the naturally formed communities as they were closer to their members' interests and thus were perceived as being more valuable.

***Organizational culture:*** The attitudes and values making up the culture of the consulting organization are recurrently mentioned as enablers of sharing and transferring both tacit and explicit knowledge (e.g. Apostolou and Mentzas 1999b; Baladi 1999; Chait 1999; Deng 2008; Henriksen 2005; Morris and Empson 1998). Exactly what constitutes a 'knowledge sharing culture' - beyond that it makes it legitimate to share and reuse knowledge - is however unclear. Trust is one aspect, which is mentioned repeatedly. Thus, sharing knowledge on an individual basis but even through IT-based systems involves showing openness and vulnerability and individuals need to trust their co-workers to do so (Ejenäs and Werr 2005; Henriksen 2005). Trust is also argued to bind people and their companies together, which discourages self-serving behaviour and encourages knowledge sharing (Deng 2008; Morris and Empson 1998). An additional aspect of a culture supporting knowledge sharing is a tolerance for making mistakes (Henriksen 2005). In forming knowledge sharing cultures, structural means such as organizational structures, business process related interventions and the incentive system are pointed out as key tools (Apostolou and Mentzas 1999b). Robertson et al. (2003) also argue that in cases where the consulting service is based on a strong profession, professional norms of knowledge sharing and seeking may be mobilized for corporate ends.

***Common language:*** It has further been argued that the sharing of knowledge among consultants can be facilitated by the existence of common frameworks and vocabularies (Apostolou and Mentzas 1999a; Ejenäs and Werr 2005; Kaplan and Thomson-Reed 2007; Lahti and Beyerlein 2000; Werr and Stjernberg 2003). In order to share knowledge over geographical, cultural and educational boundaries, as is



often the case in large management consultancies, a common language that can be used for the exchange of both tacit and explicit knowledge is needed. As suggested by Werr and Stjernberg (2003), this common language may be provided by structured methodologies, which supply both conceptual frameworks and detailed concepts of how to approach certain tasks. These frameworks and concepts facilitate both communication and collaboration between consultants.

***Power and politics:*** Knowledge, as a key asset in the management consulting firm, is closely linked to power on both an individual and group level (Morris 2001; Robertson and Swan 1998). A key issue discussed by Morris (2001) is the tension between the individual's expert knowledge as a prerequisite for reward and promotion within the firm and the firm's desire to appropriate that knowledge by codifying it and transmitting it throughout the firm. The risk of losing expert-based power is frequently referred to as an impediment for consultants to share knowledge. Morris (2001) however shows that this risk in codification projects is often exaggerated due to limitations of what knowledge it is actually possible to articulate (see also Werr and Stjernberg 2003; Visscher 2006). Studies have also shown that concerns with status and identity on a group level may influence the sharing of knowledge. Sharing as well as reusing knowledge from groups with perceived status differences has been found to be difficult. This has been highlighted specifically in merger contexts where Empson (2001a) found that individuals resist knowledge transfer if they perceive fundamental differences in the forms of the knowledge bases and the images of the combining firms. Similar inter-group power dynamics were found between regional offices in multinational consulting firms (Donnelly 2008; Paik and Choi 2005). Taken together, however, there are surprisingly few studies that focus on power and politics in relation to knowledge transfer.

***Management behavior / support:*** In their search for success factors for KM initiatives especially the literature viewing 'knowledge as an asset' repeatedly comes back to the behaviour and support of management. Key roles for top management are to make the KM strategy part of the overall strategy (Kaplan and Thomson-Reed 2007), to show commitment and support (Deng 2008), and to 'walk the talk' (Baladi 1999). This advice reflects an underlying assumption in much of the literature that KM initiatives represent large scale change programs that need to be managed from the top (c.f. Kaplan and Thomson-Reed 2007). The literature taking a 'knowledge as socially embedded' position is more interested in the local social interactions through which knowledge is shared and enacted and thus has less faith in the actions of top management.

In addition to the enablers of KM discussed above, which mainly relate to the organizational level, a limited number of studies have focused on the drivers of individual behaviour when it comes to knowledge sharing and reuse. Focusing on the demand side, Sussman and Siegal (2003), have investigated factors such as the usefulness of advice, the perceived quality of the argument, the credibility of the source and the expertise and involvement of the recipient in the topic. On the supply side, Hansen and Haas (2001) have examined the strategies of suppliers of electronic documents to gain the attention of users. They found that suppliers with a selective and concentrated strategy gained most attention as they developed a reputation for quality and focus (Hansen and Haas 2001).

While the question of how knowledge within management consulting organizations can be shared and transferred has attracted significant attention, this review still points to the need for further research on some aspects. First, there is a

need for comparative studies that can shed more light on the contingencies behind the choices and effects of different ways of approaching sharing and transfer of knowledge in consulting firms. Several studies show that the sharing and transfer of knowledge is dealt with differently in different firms. Understanding these differences beyond simple dichotomies, as well as the antecedents and effects of these differences, merit further research. Second, some of the enablers identified in the literature are in need of further elaboration. This is especially true for the concept of 'culture'. Current studies say little about the nature of a 'knowledge sharing culture' and what the key elements of such a culture may be. Also the incentive system and work processes merit further research to establish how their design influences knowledge sharing and transfer in different contexts.

Third, the review has identified power and related status and identity issues as central barriers to knowledge sharing and transfer. These issues have, however, received a rather limited attention in the KM literature. Further investigations into the power context of different kinds of consultancies may thus create important insights. Fourth, KM has been presented as a strategic enabler of the large, global consulting firm (Sarvary 1999). However, the multinational context and the challenges this may create in terms of language, status, culture etc. barriers is little studied. The few studies that take this outlook (e.g. Crucini 2002; Donnelly 2008; Paik and Choi 2005) find a need for substantial adaptations of KM practices across cultural contexts. Finally, the role and effects of social networks as a vehicle for knowledge sharing and transfer remain unexplored. While the importance of personal relations is pointed out occasionally (e.g. Henriksen 2005) the detailed constitution of social networks and their effects on the sharing and transfer of knowledge has not been studied to any larger extent. Studies of social networks in consulting firms may further our understanding of the nature and enablers of knowledge sharing.

## 12.5 The Effects of Knowledge Management

In research focusing on the sharing and transfer of knowledge, the (positive) effects of KM are generally taken for granted. The basic premise for most of the literature reviewed in the previous section is 'the more knowledge sharing and exchange, the better'. A third theme in the literature on KM in management consulting focuses on the relation between KM and performance, and this research gives reason to moderate this assumption. Research within this third theme is dominated by quantitative methodologies.

While the investments of large management consulting firms into KM initiatives have been considerable, few efforts have been made to actually follow up the return on such investments. In an effort to do so in the multinational consulting firm Accenture, Aaron (2009) conducted a survey in which consultants were asked to estimate time savings related to the use of the IT based KM system. The results showed a considerable increase in productivity related to the KM system and a return on investment of about 1:18. However, looking at time savings only captures one aspect of the potential benefits of KM. Ofek and Sarvary (2001) argue for, and model, two potential effects of KM - increasing efficiency (time savings) and increasing quality (offering more robust and innovative services). In a competitive setting, with sufficient potential for economies of scale, they argue, consulting firms will focus on building KM systems aimed at delivering higher quality services to customers rather than increasing efficiency. Haas and Hansen (2005; 2007) elaborate on this idea and

investigate the effects of different KM initiatives on the efficiency and quality of consulting services. Their findings suggest that different kinds of knowledge and knowledge sharing have different effects in different settings and that using more knowledge does not always benefit performance.

With the increasing possibilities for networking provided by ICT, consultants also have the possibility to go beyond their co-workers to obtain knowledge. In a study of consultants in an IT and management consulting firm, Teigland and Wasko (2003) found a positive relationship between boundary spanning communication and creativity and general performance, and a negative relationship between a reliance on co-located co-workers and creativity. Taken together, the small number of studies which have examined the effects of KM activities show a differentiated picture where more KM is not always better and where different kinds of knowledge and knowledge sources have different effects in different situations. These findings call for more research that shows awareness of both the context in which KM is performed and the effects KM activities generate in the specific context.

## 12.6 The Creation of New Knowledge

Finally, a fourth theme in the literature on KM in management consulting is concerned with the creation of new knowledge (see also Heusinkveld and Benders in this volume). In the research focusing on knowledge sharing and transfer, the creation of knowledge is regarded as unproblematic. It is continuously created in client projects and the challenge is to share and transfer these constant improvements in practice (Werr and Stjernberg 2003). Research in this fourth theme instead focuses on the creation of more radically new knowledge and how it emerges and becomes accepted as new concepts and practices. Research within this theme is dominated by qualitative methodologies.

Innovative activities within consultancies are often carried out under the label of 'thought leadership' (Davenport and Prusak 2005) and linked to experiences with clients, although the closeness of different thought leadership activities to ongoing projects and client relations may vary (Anand, Gardner and Morris 2007; Morris and Empson 1998). As argued by Hargadon (1998), the innovation potential in management consulting derives from consultancies' potential role as knowledge brokers. Consultants' diverse experiences create a potential for innovative solutions based on existing knowledge, which is connected through analogical reasoning. This is enabled through intensive face-to-face communication around client problems. Robertson et al. (2003) further discuss how the process of knowledge creation is shaped by the institutional context and professional norms. In a comparison of science consultants and law consultants, differences in the relative work autonomy of professional groups, the nature of the knowledge base, and social identity formation of professional practitioners were found to create observable differences in the way in which knowledge was created and legitimated. These differences were reflected in different emphasis on experimentation vs. interpretation, different forms of personal networking and differences in the importance of codifying knowledge. This indicates a need to link the analysis of different kinds of knowledge creation processes to the institutional context and professional norms in specific (Robertson et al. 2003).

Based on the claim that knowledge development in consulting is driven by client engagements (Løwendahl et al. 2001), the characteristics of client engagements that

support knowledge development have also attracted some attention, highlighting factors such as novel tasks that require the development of customized knowledge, working in multi-disciplinary assignment teams, time pressure in the assignment, the size of the assignment, the knowledge ability of the client, and opportunities for face-to-face interaction with client representatives (Fosstenlökken, Löwendahl and Revang 2003; Löwendahl et al. 2001; Skjölsvik, Löwendahl, Kvålshaugen and Fosstenlökken 2007). The accumulated and ongoing experiences with clients within a management consultancy firm is thus seen as a key source of new knowledge creation. The translation of these experiences into new concepts and practices is, however, a challenging process that may take different ways and involve a multitude of challenges. However, they will not be reviewed further here as they are dealt with in detail in other chapters of this handbook, particularly that by Heusinkveld and Benders.

## 12.7 Emerging Directions and Future Research

The bulk of the studies identified as a basis for this review dealt with the issue of knowledge sharing and transfer in management consulting and most often did so from a 'knowledge as asset' perspective. However, based on the discussions in the literature on the nature of knowledge in consulting, this perspective has its limits and may miss out important aspects that would follow from alternative epistemological positions such as viewing 'knowledge as socially embedded' (Hicks, Nair and Wilderom 2009; Hislop 2008). There is however a relative lack of studies that address issues of KM from this perspective, pointing to a need for elaboration in future research. Mechanisms such as communities of practice and social networks have gained considerable interest outside the empirical context of management consulting. Applying such concepts in the context of management consulting holds the potential of developing interesting new insights both when it comes to management consulting and KM more generally.

Questions that should be asked include: How are networks in consulting firms built and maintained? How do different network structures shape knowledge application? What is their role in sharing and transferring knowledge? Can such networks be managed? What are the forces forming and enabling the creation of networks and communities of practice? In this context, emerging new technologies in the area of social networking (Facebook etc.) in combination with a new generation of consultants and clients accustomed to new interaction patterns may provide entirely new ways of setting up KM systems in globalized organizations that may extend even across firm boundaries to clients. Studying these possibilities as well as their consequences provides an interesting avenue for future research.

Also within the 'knowledge as asset' perspective there is a potential for further research in opening up and elaborating some of the continuing black boxes. We have shown that research here has come some way in identifying the important factors (such as culture, work processes, KM structure, etc.). However, some of these factors still have the character of 'black boxes'. We know that culture is important, but less about the detailed characteristics of this culture. Lingering questions include: What is the character and the mechanisms behind a 'knowledge sharing culture'? What is the nature of a work process that encourages and supports knowledge sharing? In order to answer these questions in a way that can guide action in practice, more attention also needs to be given to contextual factors, as different conditions most likely lead to

different answers to these questions. This calls for studies that enable the comparison of different contexts and their effects on KM structures and processes.

Furthermore, the interplay between the different aspects enabling KM deserves additional attention. As this review has indicated, KM is intertwined with the ongoing work in client projects, the strategy process, organizational structure, HR practices, and so forth. This implies that KM systems need to be understood in relation to the activities which they to support and the context within which these activities are carried out. The kinds of services offered, the expectations of clients, the motivational set-up of the employed consultants, their networks, etc. are all potentially important contextual factors. Which factors are important in which context and how they may impact the setup of KM systems and procedures are fruitful areas for further research.

The few existing studies on the effects of KM activities also indicate a potential for further studies in this area. KM has often been treated as a 'universal good'. Closer investigations into the consequences of knowledge sharing are needed to modify this picture and show under what conditions sharing and creating new knowledge is beneficial to different stakeholders, including the firm, individual consultants or the client. Little is known about the potential risks or downsides of KM activities. However, they most probably exist. The formalization and dissemination of knowledge may increase the risk that important knowledge may get into the hands of competitors. KM activities aimed at formalizing and articulating consultants' knowledge may also create a deskilling of consulting work reducing the motivation of individual consultants but also creating a commodification of the consulting service that may lead to a downward pressure on consulting fees. There is thus room for further critical examinations of KM initiatives. Such investigations should also pay more attention to the power and politics involved in KM looking closer at the winners and losers of knowledge sharing and creation and how they are created.

Additional areas for future research may also be derived from the empirical limitations of previous research, including its focus on large firms, which are treated as homogeneous systems. However, the bulk of consulting work is carried out in small and medium sized firms (Doucet and Barefield 1999). Further research is thus needed to show how these firms may leverage and develop their consultants' collective experience, as the mechanisms applied in large firms are not necessarily feasible or suitable in small or mid-sized consulting organizations. This may also include the study of personal and organizational networks across firm boundaries as vehicles for knowledge sharing and development. In the context of multinational consultancies, studies also point out a need for more attention to local variations and adaptations. Questions to address include: What is the role of cultural and other kinds of boundaries for knowledge sharing and creation?

Finally, recent developments in the consulting industry and the context of management consulting open up new avenues for research. The knowledge environment of management consulting is changing. Knowledge development is increasing in speed and is increasingly global, clients are getting more demanding and expect their consultants to possess both state-of-the-art problem solving skills as well as functional and industry expertise. Additionally, cost pressures will increase (Poulfelt, Greiner and Bhambri 2005). Taken together this will increase the pressure on management consulting organizations to leverage their collective competencies through different KM activities (Davenport and Prusak 2005). While KM activities are more important than ever for management consulting organizations, they are also

increasingly put under economic pressure to run operations more efficiently. This has created a trend to offshore, or even outsource, parts of KM activities. The consequences of these initiatives and the challenges they create for consultancies are however largely unstudied. Questions to address include: What kinds of KM activities may be off-shored or outsourced and what activities need to be carried out closer to the core operations merit further research?

## References

- Aaron, B. (2009). 'Determining the Business Impact of Knowledge Management'. *Performance Improvement*, 48/4: 35-45.
- Alvesson, M. (1993). 'Organizations as Rhetoric: Knowledge-Intensive Firms and the Struggle with Ambiguity'. *Journal of Management Studies*, 30/6: 997-1015.
- Alvesson, M. (2001). 'Knowledge Work: Ambiguity, Image and Identity'. *Human Relations*, 54/7: 863-86.
- Alvesson, M. and Kärreman, D. (2001). 'Odd Couple: Making Sense of the Curious Concept of Knowledge Management'. *Journal of Management Studies*, 38/7: 995-1017.
- Ambos, T., C. and Schlegelmilch, B. (2009). 'Managing Knowledge in International Consulting Firms'. *Journal of Knowledge Management*, 13/6: 491-508.
- Anand, N., Gardner, H. K. and Morris, T. (2007). 'Knowledge-Based Innovation: Emergence and Embedding of New Practice Areas in Management Consulting Firms'. *Academy of Management Journal*, 50/2: 406-28.
- Apostolou, D. and Mentzas, G. (1999a). 'Managing Corporate Knowledge: A Comparative Analysis of Experiences in Consulting Firms. Part 1'. *Knowledge and Process Management*, 6/3: 129-38.
- Apostolou, D. and Mentzas, G. (1999b). 'Managing Corporate Knowledge: A Comparative Analysis of Experiences in Consulting Firms. Part 2'. *Knowledge and Process Management*, 6/4: 238-254.
- Baladi, P. (1999). 'Knowledge and Competence Management: Ericsson Business Consulting'. *Business Strategy Review*, 10/4: 20-28.
- Bang, A. (2005). 'Knowledge Management in Practice - Examining Knowledge as Modes of Production'. In: A. Buono and F. Poulfelt (eds.), *Challenges and Issues in Knowledge Management*. Greenwich: Information Age Publishing, 23-50.
- Bloomfield, B. P. and Best, A. (1992). 'Management Consultants: Systems Development, Power and the Translation of Problems'. *The Sociological Review*, 40/3: 533-60.
- Bloomfield, B. P. and Danieli, A. (1995). 'The Role of Management Consultants in the Development of Information Technology: The Indissoluble Nature of Socio-Political and Technical Skills'. *Journal of Management Studies*, 32/1: 23-46.
- Chait, L., P. (1999). 'Creating a Successful Knowledge Management System'. *The Journal of Business Strategy*, 20/2: 23-26.
- Chao, C. (2005). 'Toward Full Participation in Management Consulting Practice: Experiences of Recent College Graduates'. *Education and Training*, 47/1: 18-30.

- Clark, T. (1995). *Managing Consultants*. Buckingham: Open University Press.
- Crucini, C. (2002). 'Knowledge Management at the Country Level: A Large Consulting Firm in Italy'. In: M. Kipping and L. Engwall (eds.), *Management Consulting: Emergence and Dynamics of a Knowledge Industry*. Oxford: Oxford University Press, 109-28.
- Davenport, T. H. and Prusak, L. (2000). *Working Knowledge*. Boston: Harvard Business School Press.
- Davenport, T. H. and Prusak, L. (2005). 'Knowledge Management in Consulting'. In: L. Greiner and F. Poulfelt (eds.), *The Contemporary Consultant*. Mason, OH: Thomson South-Western, 305-326.
- Deng, P.-S. (2008). 'Applying a Market-Based Approach to the Development of a Sharing-Enabled Km Model for Knowledge-Intensive Small Firms'. *Information Systems Management*, 25/2: 174-87.
- Donnelly, R. (2008). 'The Management of Consultancy Knowledge: An Internationally Comparative Analysis'. *Journal of Knowledge Management*, 12/3: 71-83.
- Doucet, T. A. and Barefield, R. M. (1999). 'Client Base Valuation: The Case of a Professional Service Firm'. *Journal of Business Research*, 44: 127-33.
- Dunford, R. (2000). 'Key Challenges in the Search for the Effective Management of Knowledge in Management Consulting Firms'. *Journal of Knowledge Management*, 4/4: 295-302.
- Ejenäs, M. and Werr, A. (2005). 'Merging Knowledge: A Study of Knowledge Management in a Consulting-Firm Merger'. In: A. Buono and F. Poulfelt (eds.), *Challenges and Issues in Knowledge Management (Research in Management Consulting, Volume 5)*. Greenwich, CT: Information Age Publishing, 179-207.
- Empson, L. (2001a). 'Fear of Exploitation and Fear of Contamination: Impediments to Knowledge Transfer in Mergers between Professional Service Firms'. *Human Relations*, 54/7: 839-62.
- Empson, L. (2001b). 'Introduction: Knowledge Management in Professional Service Firms'. *Human Relations*, 54/7: 811-17.
- Fincham, R., Clark, T., Handley, K. and Sturdy, A. (2008). 'Configuring Expert Knowledge: The Consultant as Sector Specialist'. *Journal of Organizational Behavior*, 29/8: 1145-1160.
- Fosstenlökken, S. M., Löwendahl, B. R. and Revang, Ö. (2003). 'Knowledge Development through Client Interaction: A Comparative Study'. *Organization Studies*, 24/6: 859-79.
- Griggs, K. A., Wild, R. H. and Li, E. Y. (2002). 'A Web-Based Knowledge Management Environment for Consulting and Research Organizations'. *Journal of Computer Information Systems*, 42/5: 110-18.
- Haas, M. R. and Hansen, M. T. (2005). 'When Using Knowledge Can Hurt Performance: The Value of Organizational Capabilities in a Management Consulting Company'. *Strategic Management Journal*, 26/1: 1-24.
- Haas, M. R. and Hansen, M. T. (2007). 'Different Knowledge, Different Benefits: Toward a Productivity Perspective on Knowledge Sharing in Organizations'. *Strategic Management Journal*, 28/11: 1133-53.



- Hansen, M. T. and Haas, M. R. (2001). 'Competing for Attention in Knowledge Markets: Electronic Document Dissemination in a Management Consulting Company'. *Administrative Science Quarterly*, 46: 1-28.
- Hansen, M. T., Nohria, N. and Tierney, T. (1999). 'What's Your Strategy for Managing Knowledge?' *Harvard Business Review*, March-April: 106-16.
- Hargadon, A. B. (1998). 'Firms as Knowledge Brokers: Lessons in Pursuing Continuous Innovation'. *California Management Review*, 40/3: 209-27.
- Henriksen, L. (2005). 'In Search of Knowledge Sharing in Practice'. In: A. Buono and F. Poulfelt (eds.), *Challenges and Issues in Knowledge Management*. Greenwich, CT: Information Age Publishing, 155-78.
- Hicks, J., Nair, P. and Wilderom, C. (2009). 'What If We Shifted the Basis of Consulting from Knowledge to Knowing?' *Management Learning*, 40/3: 289-310.
- Hislop, D. (2008). 'Conceptualizing Knowledge Work Utilizing Skill and Knowledge-Based Concepts - the Case of Some Consultants and Service Engineers'. *Management Learning*, 39/5: 579-96.
- Husted, K., Gammelgaard, J. and Michailova, S. (2005). 'Knowledge-Sharing Behaviour and Post-Acquisition Integration Failure'. In: A. Buono and F. Poulfelt (eds.), *Challenges and Issues in Knowledge Management (Research in Management Consulting, Volume 5)*. Greenwich, CT: Information Age Publishing, 209-26.
- Ibarra, H. (1999). 'Provisional Selves: Experimenting with Image and Identity in Professional Adaptation'. *Administrative Science Quarterly*, 44: 764-91.
- Jones, M. (2003). 'The Expert System: Constructing Expertise in an It/Management Consultancy'. *Information and Organization*, 13: 257-84.
- Kakabadse, N. K., Kakabadse, A. and Kouzmin, A. (2003). 'Reviewing the Knowledge Management Literature: Towards a Taxonomy'. *Journal of Knowledge Management*, 7/4: 75-91.
- Kaplan, W. S. and Thomson-Reed, A. F. (2007). 'KM: From Concept to Theory to Practice'. *VINE*, 37/2: 219-232.
- Kim, S. and Trimi, S. (2007). 'IT for KM in the Management Consulting Industry'. *Journal of Knowledge Management*, 11/3: 145-55.
- Kohlbacher, F. and Mukai, K. (2007). 'Japan's Learning Communities in Hewlett-Packard Consulting and Integration - Challenging One-Size Fits All Solutions'. *The Learning Organization*, 14/1: 8-20.
- Lahti, R. K. and Beyerlein, M. M. (2000). 'Knowledge Transfer and Management Consulting: A Look At "The Firm"'. *Business Horizons*, 43/1: 65-75.
- Legge, K. (2002). 'On Knowledge, Business Consultants and the Selling of Total Quality Management'. In: T. Clark and R. Fincham (eds.), *Critical Consulting: New Perspectives on the Management Advice Industry*. Oxford: Blackwell, 74-90.
- Løwendahl, B. R., Revang, Ö. and Fosstenløkken, S. M. (2001). 'Knowledge and Value Creation in Professional Service Firms: A Framework for Analysis'. *Human Relations*, 54/7: 911-31.
- Morris, T. (2001). 'Asserting Property Rights: Knowledge Codification in the Professional Service Firm'. *Human Relations*, 54/7: 819-38.



- Morris, T. and Empson, L. (1998). 'Organization and Expertise: An Exploration of Knowledge Bases and the Management of Accounting and Consulting Firms'. *Accounting, Organizations and Society*, 23/5-6: 609-24.
- Nahapiet, J. and Ghoshal, S. (1998). 'Social Capital, Intellectual Capital, and the Organizational Advantage'. *Academy of Management Review*, 23/2: 242-66.
- Newell, S. (2005). 'The Fallacy of Simplistic Notions of the Transfer Of "Best Practice"'. In: A. Buono and F. Poulfelt (eds.), *Challenges and Issues in Knowledge Management*. Greenwich, CT: Information Age Publishing, 51-68.
- Nonaka, I. and Takeuchi, H. (1995). *The Knowledge Creating Company*. New York: Oxford University Press.
- Ofek, E. and Sarvary, M. (2001). 'Leveraging the Customer Base: Creating Competitive Advantage through Knowledge Management'. *Management Science*, 47: 1441-57.
- Olivera, F. (2000). 'Memory Systems in Organizations: An Empirical Investigation of Mechanisms for Knowledge Collection, Storage and Access'. *Journal of Management Studies*, 37/6: 811-32.
- Paik, Y. and Choi, D. Y. (2005). 'The Shortcomings of a Standardized Global Knowledge Management System: The Case Study of Accenture'. *Academy of Management Executive*, 19/2: 81-84.
- Pastors, K. (2007). 'Consultants: Love-Hate Relationships with Communities of Practice'. *The Learning Organization*, 14/1: 21-33.
- Poulfelt, F., Greiner, L. and Bhambri, A. (2005). 'The Changing Global Consulting Industry'. In: L. Greiner and F. Poulfelt (eds.), *The Contemporary Consultant*. Mason, OH: Thomson South-Western, 3-22.
- Rigby, D. and Bilodeau, B. (2010). *Management Tools and Trends 2009*. Boston: Bain and Company
- Robertson, M., Scarbrough, H. and Swan, J. (2003). 'Knowledge Creation in Professional Service Firms: Institutional Effects'. *Organization Studies*, 24/6: 831-57.
- Robertson, M., Sorensen, C. and Swan, J. (2001). 'Survival of the Leanest: Intensive Knowledge Work and Groupware Adaptation'. *Information Technology and People*, 14/4: 334-53.
- Robertson, M. and Swan, J. (1998). 'Modes of Organizing in an Expert Consultancy: A Case Study of Knowledge, Power and Egos'. *Organization*, 5/4: 543-64.
- Rolland, N., Guilhon, A. and Trepo, G. (2005). 'Ten Years of Knowledge Management - Ramifications for Consultants'. In: A. Buono and F. Poulfelt (eds.), *Challenges and Issues in Knowledge Management (Research in Management Consulting, Volume 5)*. Greenwich, CT: Information Age Publishing, 317-36.
- Ruggles, R. (1998). 'The State of the Notion: Knowledge Management in Practice'. *California Management Review*, 40/3: 80-89.
- Sandberg, J. and Pinnington, A. H. (2009). 'Professional Competence as Ways of Being: An Existential Ontological Perspective'. *Journal of Management Studies*, 46/7: 1138-70.
- Sarvary, M. (1999). 'Knowledge Management and Competition in the Consulting Industry'. *California Management Review*, 41/2: 95-107.

- Scarbrough, H. and Swan, J. (2003). 'Discourses of Knowledge Management and the Learning Organization: Their Production and Consumption'. In: M. Easterby-Smith and M. A. Lyles (eds.), *The Blackwell Handbook of Organizational Learning and Knowledge Management*. Oxford: Blackwell, 495-512.
- Skjölsvik, T., Löwendahl, B. R., Kvålshaugen, R. and Fosstenlökken, S. M. (2007). 'Choosing to Learn and Learning to Choose: Strategies for Client Co-Production and Knowledge Development'. *California Management Review*, 49/3: 110-27.
- Sturdy, A., Clark, T., Fincham, R. and Handley, K. (2009). 'Between Innovation and Legitimation - Boundaries and Knowledge Flow in Management Consultancy'. *Organization*, 16/5: 627-53.
- Styhre, A. (2003). *Understanding Knowledge Management - Critical and Postmodern Perspectives*. Malmö: Liber.
- Sussman, S. W. and Siegal, W. S. (2003). 'Informational Influence in Organizations: An Integrated Approach to Knowledge Adoption'. *Information Systems Research*, 14/1: 47-65.
- Swan, J. and Scarbrough, H. (2001). 'Editorial. Knowledge Management: Concepts and Controversies'. *Journal of Management Studies*, 38/7: 913-21.
- Teigland, R. and Wasko, M. M. (2003). 'Integrating Knowledge through Information Trading: Examining the Relationship between Boundary Spanning Communication and Individual Performance'. *Decision Sciences*, 34/2: 261-87.
- Weeks, M. (2004). 'Knowledge Management in the Wild'. *Business Horizons*, 47/6: 15-24.
- Werr, A. and Stjernberg, T. (2003). 'Exploring Management Consulting Firms as Knowledge Systems'. *Organization Studies*, 24/6: 881-908.
- Visscher, K. (2006). 'Capturing the Competence of Management Consulting Work'. *Journal of Workplace Learning*, 18/4: 248-60.