The Formulaic and Embryonic Dimensions of Knowledge Management Strategy: A Social Practice Perspective

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Abstract: Knowledge Management (KM) literature is populated with a variety of perspectives, prescriptions and studies of practice, which can be complex, contradictory and confusing to practitioners who seek to make sense of, and adapt them for practice. A sub-set of this literature argues that a clear link to business strategy is critical to KM strategy's success (see Storey & Barnett, 2000; Zack, 1999, 2002), but extant research shows that this link is often weak (Leidner, 1998; Ruggles, 1998; Storey & Barnett, 2000; Zack, 1999). These debates however, adopt a mainly rational perspective which overlooks the 'emergent' and 'sensemaking' aspects of strategizing. This paper argues that an extended 'social practice' (Hendry, 2000), which brings together rational, emergent and sensemaking aspects of strategizing process, provides a useful multi-perspective framework for investigating the extent to which practitioners' approach to setting up KM strategies in their firms are influenced by their firms' business strategies. Using an extended social practice framework, I examined the managerial accounts of the processes of setting up KM strategies in 18 global firms. This study contributes to a better of understanding of the ways in which business strategy influences the KM strategizing process. The findings support extant research by suggesting that a weak link between KM and business strategy existed in these firms. However, this study demonstrates that from the social practice perspective, firms take two different approaches to their KM strategy, *formulaic* (to support their routine activities) and *embryonic* (to address their immediate strategic agenda), which signify their enduring and transient KM practices. Finally, this study concludes that further research is needed to explore the dynamic interactions between the formulaic and embryonic KM approaches.

Keywords: KM strategy, embryonic KM strategy, formulaic KM strategy, link between KM and business strategy, KM strategy as social practice

1. Background

> *The emerging knowledge-based theory of the firm is dialectical in the sense that it has a front face that is inherently designable, the elements that need to be integrated, and a back face that is inherently emergent, resolving the uncertainties experienced when trying to integrate the front-face elements in a particular context. (Spender, 2002: 160, emphasis added)*

Debates on the nature and role of knowledge in organizations regard knowledge either as 'objective' or 'subjective' (Brown & Duguid, 2001; Hislop, 2009; McAdam & McCreedy, 2000), which have distinct managerial and practical implications. Spender (2002) points to the co-existence of the 'designable' and 'emergent' features of KM strategizing. The KM approaches which assume that knowledge is (or could be) objective tend to offer generic tools and techniques to managers and practitioners. These studies, borrowing Spender's (2002) terminology, primarily address the "front face" issues. The debates that discuss the contextual and culturally embedded nature of knowledge (subjective) are more complex and draw from the existing organization theories to broadly identify and discuss three main contextual factors, business strategy, culture, and structure as critical to setting up formal KM strategies in firms. These debates mainly explore the "back face" (Spender, 2002) dynamics of KM strategizing.

This article draws on one part of a larger research project which was conducted to examine how managers of 18 global firms made sense of complex and confusing KM theory and the ways in which three main contextual factors, business strategy, culture and organizational structure, influenced the processes of setting up formal KM strategies in their firms. In this article, I examine the influence of business strategy on KM strategizing processes in those global firms. More specifically, I argue that an extended social practice (Hendry, 2000) provides a useful and multi-perspective framework for investigating the influence of business strategy on KM strategizing. The rest of the article is structured as follows. It starts with a critical review of debates which discuss the relation between business and KM strategies. Then the rationale for extending Hendry's (2000) social practice framework (SP) for the purpose of this research is discussed. The next part offers an explication of the methodology and methods and it is followed by the main findings of this study. The final section explores the theoretical and practical implications of this study and identifies some opportunities for further research.

2. The link between business and knowledge management strategy

> *Executives are in need of a framework to help them understand the knowledge-strategy link. Zack, 2002: 269)*

There are numerous definitions of knowledge management strategy (e.g., Grant, 1996; Zack, 2002). For example, Zack (2002) distinguishes between *knowledge strategy*, which "implies a notion of knowledge-based strategy, that is, competitive advantage built around a firm's intellectual resources and capabilities" and *knowledge management strategy* which "guides and defines the processes and infrastructure (organizational and technological) for managing knowledge" (p. 270). In this study, KM strategy is defined as '*an organizational-specific framework which aims to define, develop, guide, and incorporate KM activities of a firm*'.

Two rather distinct streams could be identified in the literature debating the role of business strategy in the processes of setting up KM strategy (KM strategizing). Studies in the first stream, which regard knowledge as a strategic resource and critical to competitive advantage (e.g., Clarke, 2001; Drew, 1999; Whitehill, 1997, tend to adopt a *'tool-based approach'*. In this approach, KM strategy is an organizational function like finance or marketing and its role is to support business strategy. Most of these debates do not go further than creating *odd couplings*: imposing a dynamic dimension (knowledge or knowing) on some static tools and frameworks in strategic management literature (see for example, Drew, 1999). Thus, at best they offer managers and practitioners *simplistic* and *generic* insights on 'how to' set up KM strategies. This 'designable' aspect, as Spender (2002) puts it, tends to ignore the influence of contextual factors and as a result oversimplifies the complexity of KM strategizing.

The second stream, which mainly emerged in response to the simplistic tool-based approach, contains more sophisticated studies, mainly single or comparative case studies, offering an array of '*knowledge strategy models'* (see, Hansen et al, 1999, von Krogh et al, 2001; Zack, 1999, 2002). These debates regard knowledge as contextual and culturally-embedded, hence they offer context-specific and more complex insights (local and muddled) (e.g., Chakravarthy et al, 2005; Clarke, 2001; Hansen et al, 1999; Lang, 2001; March, 1991; von Krogh et al, 2001; Zack, 1999, 2002). Similar to the tool-based stream, these studies also assume that a 'temporal distinction' exists between a firm's business and KM strategies and argue that KM strategy should be linked to a firm's business strategy. Put simply, they assume that business strategy is (or must be) well-defined and planned prior to setting up KM strategy. Thus, they tend to overlook the retrospective (sensemaking) and the emergent aspects of the strategizing process.

Studies in this camp share some assumptions. For example, with the exception of March (1991), they draw on the knowledge conversion perspective (Nonaka & Takeuchi, 1995) and assume that knowledge has two dimensions: tacit and explicit. They address a number of different issues such as *knowledge appropriation* (March, 1991), *knowledge-based issues/problems* (von Krogh et al, 2001), and the *locus and purpose of knowledge* (Chakravarthy et al, 2005; Zack, 1999). Their diversity could be an indicator of the potential breadth of KM strategy and practice in the corporate world. A detailed critical review of these debates is beyond the scope of this paper but it suffices to say that while these debates tend to rely on the 'designable' aspect of KM strategizing (Spender, 2002), their claims and assumptions mostly fit the subjective approach (i.e. knowledge is contextual).

So far, I argued that theories of knowledge and strategy tend to be either, *'rational and oversimplified'* (e.g., Drew, 1999; Whitehill, 1997), or *'muddled and local'* (e.g., Hansen et al, 1999; von Krogh et al, 2001; Zack, 1999), similar to strategic management literature in general. Moreover, extant research demonstrates that a weak link exists between business and KM strategies (Davenport & Prusak, 1998; Leidner, 1998; Ruggles, 1998). While establishing a link between KM and business strategy is logical within a rational approach, it becomes problematic when sensemaking and emergent aspects of strategizing process are taken into account. Thus, this article argues that an extended social practice (Hendry, 2000) provides a useful multi-perspective framework which allows for exploring the complexity of KM strategizing and how it is influenced by the business strategy of firms. The next section presents a brief review of the social practice framework (Hendry, 2000) and the rationale for extending it for the purpose of my research.

3. The social practice framework

Studies of strategic decision making and strategizing broadly come under three main perspectives: rational (planning), adaptive (action), and interpretive (sensemaking) (Johnson, 1987; Rajagopalan & Spreitzer, 1997). Each perspective is based on different assumptions and offers useful but "partial and disconnected perspectives on the process as a whole" (Hendry, 2000: 956). The social practice (Hendry, 2000) is an integrated framework within *the social constructionist* paradigm, which uses *discourse* to bind together these perspectives for a better conceptualization of decision making and strategizing processes. Hendry offers a general definition of discourse as "any body of language-based communication, however organized, whether or not these are concretized as texts" (p. 964).

Hendry's (2000) framework is generic and it has influenced a number of studies which examine how managers 'perform' and 'practise' strategizing in their everyday activities at micro level (e.g., Jarzabkowski, 2003, 2004; Johnson et al, 2003; Whittington, 2002, 2003). These studies are branded as *strategizing activities and practice* (SAP, formerly known as strategy-as practice). Most reviews of the SAP literature (e.g., Carter et al, 2008) acknowledge Hendry's (2000) contribution but do not critique it in isolation. Rather than examining the micro activities of KM strategists, this study examines an aspect of *unique strategic episode* (Seidl, 1999), the influence of business strategy on setting up formal KM strategies in multiple contexts.

Bearing in mind that Hendry's SP framework is generic, for the purpose of this study, I extended it by incorporating some more recent and relevant insights. Setting up formal KM practices in firms is linked to the diffusion of KM discourse in the corporate world (Scarbrough & Swan, 2001). Thus, it was important to know how management theories influence practice in general. What theories do practitioners generally find useful and relevant? More specifically, which KM perspectives have been influential in practice? In doing so, I drew on insights from more recent debates on *strategic decision-making* (Hickson et al, 2003; Wilson et al, 2005), *management fashion* (Abrahamson, 1991, 1996; Clark & Salaman, 1996), *adoption of innovation*, and *complexity sciences* (for elaborating the notion of 'emergence') (Allen, 1998; Boulton & Allen, 2007). The adoption of innovation research demonstrates that practitioners are more likely to adopt research findings if they are perceived to lead to improvement, if the findings are presented positively and persuasively, and if they reflect the views of their communities' leaders (Rogers, 2003; Van de Van, 2007). Hence, it is reasonable to suggest that these insights could explain how the diffusion of knowledge management in practice (through different media such as social networks, business gurus, consultancy firms, business schools, academics, business and academic journals) influenced practitioners to set up formal KM strategies in their firms. Finally, KM literature contains a number of different perspectives, but three have become influential in academe and practice. They are *knowledge conversion* (Nonaka & Takeuchi, 1995; Nonaka et al, 2000), *knowledge integration* (Grant, 1996, 2002), and the *communities of practice* (Brown & Duguid, 2001; Wenger et al, 2002). The influence of these perspectives on KM practice is beyond the scope of this paper but they were explored in the main research. With these adaptations, the social practice offered a practical and useful framework in this study. The next section offers an explication of the methodology and methods used in this study.

4. Methodology

This qualitative study is conducted within the social constructionist paradigm congruent with the SP framework. I identified a number of global firms (operating in different industries) with established KM strategies. Subsequently, I interviewed 18 top KM managers and collected some secondary data on each firm. I also wrote and analyzed 'post-interview reflective notes' (Nadin & Cassell, 2004). The industries in which these firms operated included oil and energy, construction, law, manufacturing, business consultancy, environmental management, insurance, IT, and many more. The interviewees had varied backgrounds like geology, marketing, engineering, law, accountancy, business consultancy, and IT. I followed some recommendations for 'elite interviewing' (e.g., Gaskell, 2000; Grant, 2003; King, 2004a). The interviews lasted from one to two and half hours and were recorded and fully transcribed. To preserve the context-specificity of data at every level of analysis, I used two main techniques consecutively. First, *template analysis* (King, 2004b) was used to organize the data. These coded and categorized data required further analysis in order to be interpreted appropriately. This was done through a *cross-site analysis* (Miles & Huberman, 1994). A small number of firms requested anonymity so I applied it to all, and for the sake of clarity in presentation of analyzed data, I assigned a random letter to each firm (and its KM manager).

5. The findings

The managers in this study did not find it hard to describe the link between KM and business strategy, although some could not state their firm's mission statement. The findings revealed that seven managers (B, F, H, K, P, O, Q) claimed that an explicit link existed between their firms' KM and business strategy, while three managers said KM strategy had an implicit supporting role (C, G, R). In the third category, KM strategy was perceived as more linked to the business unit (SBU) rather than the firm's overall strategy (A, J, M, N), which indicates a decentralised and local approach. One manager (I) reported conflict and "often a mismatch" between his firm's business and KM strategy. In another firm (L), KM was described as tactical and local, and yet in two firms (D, E) a link was not reported, although in the latter (E) a major re-thinking of business at strategic level was underway. The KM manager of another firm (D), which had gone through a lengthy period of restructuring, said:

> *I think most line managers are very clear about what the strategy is. The way we look at learning for instance, is very aligned to that….what we really need to be able to do is create a context for that strategy which makes it fit into place very easily for the business.*

When I probed further, he said: "the reality is that most people in the business, I don't think, need to understand the business strategy at all…. but what we need to be able to communicate to them is the context in which they are working". In one firm (B), KM strategy was one of their mission statement's four objectives. This firm had made a number of acquisitions in the previous 5-6 years so the management felt that through KM they could consolidate the disparate parts of the firm. Another manager (K) also highlighted the importance of KM's link to business strategy and said: "we can't have a KM sitting in ivory tower, which is unrelated to the business strategy", while one manager (D) plainly said: "we are here for the business, not for any other reason". These statements demonstrate that the link between KM and business strategy were (or could be) taken for granted, even if it was not clear at times how these statements could be substantiated. Others reported frequent mismatch, as one manager (I) noted:

> *The executive group say here are the strategic issues for this company, and then the senior middle managers translating all of that down the line to people so they have a very clear idea of what the company is trying to do. And I see a mismatch very often with that in terms of, specifically in KM.*

A different account was presented by a manager (L) which implied that KM was being regarded as functional; he said:

> *I don't think we necessarily see that we need to have that kind of approach to 'here is the business strategy and we must align this right alongside this'. I guess we see it [KM] more as a tactical tool in a way. We see the KM process, we see the enabling conditions, and our kind of simplistic view of KM is, when we look at this kind of, create, capture, organise, share and then use it. And we say, okay, how good are we in each of these areas?*

These findings demonstrate the range of approaches from 'textbook' to chaotic or local instrumental. The findings also suggest that firms had some generic KM practices to support their routine activities such as capturing and repeating the best practices (e.g., consultancy firms, energy firms), post project-lessons (construction firm) and case law libraries and setting up documentation templates (law firms) and e-learning. Moreover, the evidence demonstrated that firms' KM strategies were influenced by their immediate strategic agenda too. For example, if a firm had set up its KM strategy after a period of rapid growth (e.g., mergers and acquisitions) its KM focus would be *integrative* (cultural or structural) and/or *supportive* (KM used to support restructuring or culture change programmes). In conclusion, the findings revealed the varied nature of the managerial accounts of the link between business strategy and KM. The evidence also revealed that firms' *immediate strategic issues and agenda* influenced an important aspect of their KM strategy. In the next section, I explore the implications of these findings.

6. Discussion and conclusion

This study makes a number of contributions to the literature on KM strategizing process. While some debates stress the importance of a clear link between KM and business strategy (Drew, 1999; Storey & Barnett, 2000; Whitehill, 1997; Zack, 1999, 2002), the extant empirical research suggest that this link is often weak (e.g., Davenport et al, 1998; Leidner, 1998; Ruggles, 1998, Zack, 1999). The findings support these studies but do not regard KM's weak (or no) link to business strategy as a managerial oversight, as some studies implicitly do (e.g., Storey & Barnett, 2000; Zack, 1999). Rather,

while establishing a clear link seems only logical from a '*rational perspective*', from a '*social practice perspective*', it is problematic, given the emergent and sensemaking aspects of strategizing process.

The *knowledge strategy models* (e.g., Chakravarthy et al, 2005; Hansen et al 1999; von Krogh et al, 2001; Zack, 1999, 2002) offer a range of approaches based on the types and the locus of knowledge and so forth. This study demonstrates that from a social practice perspective, KM strategy of firms could be described as a dynamic combination of the more *enduring* KM practices set up around a firm's 'routine activities' (formulaic), and the *transient* KM practices set up to address its 'immediate strategic agenda' (embryonic). Thus, this paper concludes that conceptualizing KM strategizing process as a social practice better explains its complexity and the factors that could shape or affect its *enduring* and *transient* elements.

Spender (2002) says the designable *front face* are "the elements that need to be integrated", while the *back face* relates to "resolving the uncertainties experienced when trying to integrate the front-face elements in a particular context" (p. 160). Spender assumes that practitioners generally understand *what* needs to be integrated (e.g., a firm' resources and activities), thus it could be designable, but *how* they integrate these elements, is context-dependent, experimental and inevitably emergent. This study revealed that firms have different assumptions about not only *what* needs to be integrated (routine activities or novel problems/issues) but *how* it could be done.

The *formulaic* approach contains mainly *enduring practices* because the focus is on firms' routine activities and embodies the 'backbone' of KM strategizing. The assumption is that a firm has an abundant pool of untapped and/or underused knowledge that could be better shared and utilized. This approach is mainly influenced by contemporary KM perspectives for practice including the *knowledge strategy models* (e.g., Chakravarthy et al, 2005; Hansen et al, 1999; March, 1991; von Krogh et al, 2001; Zack, 1999, 2002). Innovative solutions and creativity in this approach mainly relate to 'how' KM theory and other firms' KM (best) practices are contextualized by practitioners for their own firms.

The *embryonic* approach is a series of experiments usually dealing with novel problems/issues. Thus, the existing academic debates may be inadequate. The embryonic approach is flexible so it can respond to the dynamic challenges that require new ideas and solutions (creativity). Hence, it mostly contains *transient practices,* where firms' most unique and creative KM practices could be found.

By extending the social practice framework (Hendry, 2000), this study also creates an intersection between the knowledge perspective on strategy and 'strategizing activities and practice' (SAP) strands of strategic management literature. In addition, it contributes to SAP where the influence of management theory on practicing strategy is relatively unexplored (Jarzabkowski & Giulietti [2007] examine the use of strategy tools by MBA alumni managers).

The results of this study are worthy of practitioners' attention too. First, practitioners, who have adapted complex KM theory for practice, would find conceptualizing KM strategizing as social practice useful because it resonates with their experiences because it captures both their decisions and actions and the contextual factors which influence them. It also informs practitioners that strategic aims and objectives of a firm could at best offer pointers to KM strategy. This is different from attempts to link KM to the business strategy of a firm (as advocated by academic KM debates). Finally, it offers insights that creativity in KM mostly emerges in the process of dealing with the most important and immediate aspect of a firm's strategic agenda.

The results of this study should be considered in light of its limitations. The contexts were global firms with formal KM strategies in place, some chosen from publications, or list of firms attending academic and practitioner-focused KM conferences and forums. This means that by interviewing KM managers who were, perhaps uncommonly, familiar with academic KM debates and other firms' KM practices, I may have got skewed data (perspectives), as noted by similar studies (e.g., Mohrman et al, 2001). Thus, these firms' approaches to KM strategy should be seen in this light. In addition, the findings are based on one account per firm. While confident that I accurately presented the managers' views, this study cannot claim that those views were shared by others in the firms. Exploring different views in each firm would have added other dimensions to the study.

Paradoxically, this study was both restricted and fortified by its retrospective nature, similar to other studies (e.g., Mohrman et al, 2001). On the down side, the data relied on the interviewees' memories;

they might have forgotten details, or used retrospective rationalization (Weick, 1995). On the positive side, because of the time gap, the managers were able to reflect on their actions to identify and articulate the outcomes of their KM strategy and practice. Since these are central to sensemaking, this allowed me to explore the subjective-retrospective accounts of key actors and identify their perspectives in their practices.

This study offers a number of options for further research. For example, a case study could examine a wider range of views and experiences of KM strategizing within one context (e.g., a global firm). Alternatively, a longitudinal study could map the dynamic relationship between KM strategizing and business strategy and explore the characteristics and interactions between the formulaic and embryonic KM approaches over time. Finally, the firms in this study operated in different industries. Thus, a question which warrants attention would be to examine the effect of industry on KM strategizing. This empirical study represents a step forward in understanding the influence of business strategy on the situated, dynamic and complex KM strategizing process and in that regard has set a foundation for further research on this area.

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