

## **Knowledge Management: Developing a Knowledge Strategy**

*Johannes D, Business Advisory, Businesssoft Consulting*

Nowadays, more organizations realize that the key resources of business are not capital, personnel, or activities, but knowledge. Knowledge management (KM) –the concept on how an organization deploys knowledge– has determined the failure and success of an organization in the competitive global economy. The knowledge-driven economy extensively forces a firm to be a knowledge-based organization (Allard, 2002). Consequently, KM has also significantly changed business culture and attitudes (Neidorf, 2002). A firm should be able to transform knowledge into corporate power. Therefore, knowledge has to be managed explicitly and cautiously to exploit its potential benefits.

Organizations clearly require information technology (IT) applications to facilitate KM. Behr (2003) even viewed such IT applications as a critical media to share the wealth emphasizing the value of knowledge within an organization. However, Zack (1999) and Earl (2001) claimed that one critical factor in successfully implementing KM has been widely ignored in practice. This factor is knowledge strategy. It is crucial since knowledge strategy determines the focus of KM that supports its objectives, strengthens the organization's competitive position and creates shareholder value. This paper is a critique about Zack's framework for understanding and evaluating an organization's knowledge strategy as a critical factor to successfully implement KM.

Zack's study provided a general idea to understand the importance of knowledge strategy role that could be used by executives as their guidelines and framework to initiate KM projects. His work also could be used to generate propositions for further study to provide a better understanding and a robust idea in the scope of KM. However, some comprehensive and more conceptual idea of knowledge strategy are addressed by Earl (2001) and Gold et al (2001).

Zack (1999) strongly argued that knowledge is the primary basis of competition. In order to compete successfully on knowledge, a firm has to align its strategy to its KM process. Such knowledge strategy is important to address any gaps, thus becoming a solid foundation to build knowledge-based economic values and competitive advantages. Zack acknowledge that by developing an appropriate strategic basis, a firm is able to generate exclusive values compared to other firms that have not had knowledge strategy.

Zack's study indicated that outcomes rest critically on the interlinked proper knowledge strategy and an organization's success in making the best effort of its KM. In his approach to define knowledge strategy, Zack (1999), like Earl (2001), focused on the resource-based view. The view suggests that organizations should position themselves strategically based on their unique, valuable and distinctive resources and capabilities. Therefore, competitive advantage based on these resources and capabilities is potentially more sustainable. Knowledge –especially context-specific and tacit knowledge set in complex organization activity and developed from practice– can be considered the most important strategic resource because its exclusivity and difficult to imitate. The ability to acquire, integrate, store, share and implement knowledge is the most important capability for developing and sustaining competitive advantages. Consequently, KM can be seen as a continual process that includes knowledge creation (acquisition), knowledge storage (organization), knowledge distribution and sharing, and knowledge application.

On the other hand, the importance of knowledge role has been significantly forces firms to capture its values through some certain way at particular level (Teece, 1998). As a result, Teece contended that a new economy and market for these valuable assets, especially

stand-alone codified knowledge that has a weak appropriability, is created. A firm could also use and deploy potential knowledge instead of create and build it through partnership and strategic alliances. Obviously, in some area where knowledge is most valued, how to secure and protect knowledge is another important concern for a firm.

Zack (1999) argued that knowledge strategy can be considered of as balancing knowledge-based resources and capabilities to build knowledge-based competitive advantages. As every strategic arrangement is related to some set of intellectual resources and capabilities, a firm has to identify not only what they must do to compete but also what they must know and know how to do. Consequently, strategic arrangements determine the knowledge, skills and core competencies needed to compete and excel in an industry. On the other hand, what a firm does know and knows how to do also become constraints for a firm to actually compete. A firm tends to become specialize as it focuses on particular approach. Consequently, it only has particular knowledge-based competitive advantages.

In addition, Zack (1999) believes that it is important to have a strategic framework for mapping knowledge, especially in order to identify which knowledge is core, advanced or innovative related to its competitive advantages. Since knowledge is dynamic, building competitive advantages requires continual learning and knowledge acquisition. Similarly, Perez (2002) claimed that KM needs continuous attention and development of knowledge identification and capture processes. Zack argued that such strategic knowledge framework help a firm to perform a gap analysis. Therefore, to give a knowledge strategy focus, KM initiatives should be directed toward closing this strategic knowledge gap. Zack identified knowledge gap as a difference between what firm must know and knows, while strategic gap as a difference between what firm must do and can do.

However, I believe that it is hard to specify every possible gap and actions to be taken by relevant parties for each gap. Uncertainty, complexity and multiple contingencies with their different salience make it difficult and expensive to specify every possible gap within limited time. There are also difficulties in transforming knowledge, which is intangible, tangible. Moreover, there is asymmetric knowledge where everyone has different access to knowledge and might be in the form of unseen or unconscious knowledge. Human beings also have bounded rationality (Davies and Lam, 2001). They do not have full information; language used to define knowledge can be imprecise and there are limits to how humans can process knowledge.

Zack (1999) viewed knowledge strategy as “the overall approach a firm intends to take to align its knowledge resources and capabilities to the intellectual requirements of its strategy”. Zack argued that knowledge strategy comprises two dimensions reflecting its degree of aggressiveness. The first dimension examines how a firm positions itself between a creator and a user of knowledge. The other dimension examines the primary source of knowledge, internal or external. Both dimensions identify a firm’s knowledge strategy. Firms oriented toward exploiting internal knowledge exhibit the most conservative knowledge strategy. On the other hand, firms who closely integrate knowledge exploration and exploitation exhibit the most aggressive knowledge strategy. In addition, Zack believes that in knowledge-intensive industries, firms who exhibit an aggressive knowledge strategy tend to outperform others competitors who exhibit less aggressive knowledge strategy.

However, Earl (2001) offered more comprehensive idea in defining and examining knowledge strategy. By using taxonomy of knowledge strategies, Earl explained how organizations implement KM. There are seven models –systems, cartographic, engineering, commercial, organizational, spatial and strategic– suggest that KM not only can be defined in different approaches but also there is considerable preference in both what to do and how to do it. Earl identified each model based on its characteristic of key attributes –focus, aim, unit, example, critical success factor, principal IT contribution and philosophy– instead of Zack’s

two dimensions of knowledge strategy. Therefore, this taxonomy of knowledge strategies can be used as a much better guidelines or frameworks to identify and define KM process.

Another approach is addressed by Gold et al (2001). Although their study tends to examine knowledge management capabilities and organizational effectiveness rather than knowledge strategy, they also offered comprehensive and conceptual idea to define and examine knowledge strategy. They believe that a key to understanding the success and failure of KM is the identification and assessment of preconditions needed for the effort to flourish. It is similar with what Zack (1999) and Earl (2001) refer as knowledge strategy. They focused on knowledge capability instead of knowledge resources. Moreover, they examined knowledge capability based on knowledge infrastructure and knowledge process capability. There are three sub dimensions of knowledge infrastructure capability, such as technology, structure and culture. The four sub dimensions of knowledge process capability are acquisition, conversion, application and protection.

Nevertheless, Zack's idea of knowledge strategy has some limitations. Most organizations still find it is difficult to execute KM strategies and to reap the benefits right at the point where it would have yielded stratospheric returns (Angus, 2003). One major problem is the fact that knowledge itself is multidimensional. Determining the full nature of knowledge has been difficult. For instance, as tacit knowledge is deeply rooted in experience and ideas and values, tacit knowledge is highly subjective and personal thus making it intuition-based. Furthermore, everyone has his own interpretation about knowledge in different and unique ways based on his own experience. Indeed, many CKOs and CEOs, who determine knowledge strategy and execute KM projects, even are not overly concerned about the distinction between data, information and knowledge (Earl, 2001). Consequently, it is hard to formalize and communicate knowledge (Teece, 1998). Similarly, Richardson (2001) argued that it is impossible for IT to manage knowledge since there is an infinite variety of context among users.

Moreover, Chudnow (2001) believes that one point of confusion in defining KM and knowledge strategy is that they are solidly set in the abstract and intangible world of human psychology: What do I know that I do not know and what do I know that you do not know? Why should I share if knowledge is power? Why should I change? Why should I spend my time sharing my knowledge when I do not have time to get my work done anyway? Obviously, this is a great challenge that has to be addressed in knowledge strategy framework.

On the other hand, IT applications have not yet in the limelight promise to further support and facilitate enterprise notions of KM by making it easier to collect information and to get users to use KM systems (Angus, 2003). The proliferation of IT applications is crucial to the future of KM. IT has also intensively developed, creating a relatively unexplored new type of knowledge management system (Dwayne, 2001) and leaving behind other capabilities needed to support KM. Many firms failed to mesh human resources and knowledge itself. Therefore, KM is also constrained by a lack of organizational change (DeMello, 2002).

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