Knowledge Management Challenges For Global Business

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ABSTRACT

Managing organizational knowledge effectively is a prerequisite for securing competitive advantages in the global marketplace. The field of knowledge management brings out important challenges for global business practices. Based on a comprehensive academic and popular literature review, this paper identifies six main knowledge management challenges faced by global business today. These are developing a working definition of knowledge, dealing with tacit knowledge and utilization of information technology (IT), adaptation to cultural complexity, attention to human resources, developing new organizational structures, and coping with increased competition. The paper offers an overall view of knowledge management challenges for global business via discussing the challenges in relation to managerial practice, therefore, provides insights on managing knowledge in global corporations.

INTRODUCTION

*K*nowledge management is currently receiving considerable attention from both academics and practitioners. The main reason is that it represents a real challenge for global business. However, most of the studies on knowledge management focus on a particular aspect of the subject in spite of the fact that knowledge management complexity requires an integrative approach. The link between the historical progress and actual challenges of knowledge management is missing. This conceptual paper seeks to contribute to the further understanding of knowledge management in global corporations via offering an integrative perspective attempting to form the link. It will review the knowledge management literature; discuss the challenges of knowledge management faced by global business organizations and the implications of the challenges for managerial practice and research. The article adds to the knowledge management literature by offering an overall view of knowledge management challenges for global business and providing insights on managing knowledge in global corporations.

KNOWLEDGE IN HISTORICAL PERSPECTIVE

The Concept Of Knowledge

The study of human knowledge has been a central subject matter of philosophy since the ancient Greeks (Pemberton, 1998; Kakabadse et al., 2003). The classical definition of knowledge is "justified true belief" (Audi, 1998). In a sense, knowledge is a meaning made by the mind (Bhatt, 2001; Lang, 2001). It is a product of human reflection and experience (Roth, 2003). Therefore, only a human can be knowledgeable in fact (Blair, 2002; Van Beveren, 2002).

The concepts of data, information and knowledge are generally confused. Data represents facts or observations out of context that are, therefore, not directly meaningful (Zack, 1999a). They are the raw material of higher order constructs (Davis and Olson, 1985; Bierly et al., 2000). Information results from replacing data within some meaningful content, often in the form of a message (Zack, 1999a). Knowledge is something more than information (Beijerse, 1999). It is closer to action (Davenport and Prusak, 1998; McInerney, 2002). It is an organized and transformed combination of information, assimilated with a set of rules, procedures and operations learnt through experience and practice. Knowledge is increased through interaction with information, typically from other people (Clarke and Rollo, 2001). A commonly held view, stated roughly, is that data is raw numbers and facts, information is

processed and organized data, and knowledge is meaningful and authenticated information (Davenport and Prusak, 1998; Alavi and Leidner, 2001).

Knowledge is categorized as explicit and tacit knowledge (Polanyi, 1966; Nonaka and Takeuchi, 1995). Explicit knowledge is easy to articulate, capture and distribute in different formats. Tacit knowledge is unspoken and hidden (McInerney, 2002). It is difficult to capture, codify, adopt and distribute tacit knowledge; because individuals cannot easily articulate this type of knowledge (Bhatt, 2000). It can be thought of as the know-how that is acquired through personal experience (Nonaka, 1994; Ipe, 2003 Perez and Pablos, 2003). And it has been evaluated as an inimitable competitive advantage (Lubit, 2001).

Knowledge As Organizational Resource

Recent work in the area of strategic management and economic theory has begun to focus on the firm's resources and capabilities. This perspective is referred to as the resource-based view of the firm (Prahalad and Hamel, 1990; Barney, 1991; Connor, 2002). The resource-based view suggests that firms should position themselves strategically based on their unique, valuable and inimitable resources and capabilities (Zack, 1999b). In this sense, knowledge is considered as the most important strategic resource of the firm (Nonaka, 1994; Kogut and Zander, 1996; Zack, 1999b). So, as Zack (1999b) noted, the ability to acquire, integrate, store, share and apply knowledge becomes the most important capability for building and sustaining competitive advantages. Knowledge-based competitive advantage is sustainable because the more a firm already knows, the more it can learn (Cohen and Levinthal, 1990). Briefly, managing knowledge has become crucial for organizations.

MANAGING KNOWLEDGE

The Process Of Knowledge Management

In general, knowledge management can be defined as the achievement of the organization's goals by making the knowledge factor productive (Beijerse, 2000). It is the systematic management of knowledge related activities, practices, programs and policies within the enterprise (Wiig, 2000). Knowledge management activities aim to effectively apply an organization's knowledge to create new knowledge to achieve and maintain competitive advantage (Alavi and Leidner, 2001; Mason and Pauleen, 2003).

"Knowledge management" is an emerging discipline included in the field of management science (Shariq, 1997; Ives et al., 1998; Wiig, 2000; Armbrecht et al., 2001; Prusak, 2001). It deals with utilizing knowledge in organizations. But "knowledge management" is also an emergent process in the organization (Demarest, 1997; McAdam and Reid, 2000; Gupta and Govindarajan, 2000). This process is intrinsically linked to the social and learning processes within the organization (McAdam and Reid, 2000). There are four key dimensions of organizational knowledge management process. The first dimension is the construction of knowledge within the organization. This construction is not limited to scientific inputs; it includes the social construction of knowledge as well. This dimension encompasses knowledge acquisition and new organizational knowledge creation. Second dimension is the embodiment of the constructed knowledge. Embodiment is realized not just through explicit programs but also through a process of social interchange. The third dimension is the dissemination process. Espoused knowledge is disseminated throughout the organization and its environment. The last dimension is the use of knowledge. Knowledge is seen as being of economic use in regard to organizational outputs. It is used, and then the outcomes of the usage and efficiency of the overall knowledge management process is evaluated (Demarest, 1997; Beijerse, 1999; McAdam and McCreedy, 1999; Perez and Pablos, 2003). The process of knowledge management cannot be regarded as a simple sequential process. Rather it represents an ongoing cycle including recursive relationships and complex interactions (McAdam and Reid, 2000; Buckley and Carter, 2002).

There are two main approaches to knowledge management. One focuses on the deployment and use of appropriate technology to utilize knowledge while the other focuses on the capture and transformation of knowledge into a corporate asset (Mason and Pauleen, 2003; Guah and Currie, 2004). The first approach emphasizes information technology (IT) and focuses on it as the mechanism for managing knowledge (Alavi and Leidner, 2001; Hansen et al.,

1999). The second emphasizes people and processes. It attaches greater importance to human relations and the elicitation of tacit knowledge (Allee, 1999; Holsapple and Joshi, 2000; Gold et al., 2001). In fact, knowledge management is essentially a deeply social process which must take into account the human and social factors primarily (Mason and Pauleen, 2003). Advanced information technologies will not necessarily make knowledge management initiatives work. The most common theoretical and practical pitfall in the field of knowledge management is to perceive and/or evaluate knowledge as information and treat knowledge management as information management (McDermott, 1999; Handzic and Agahari, 2004). Advanced systems improving technical capabilities are important in fact, but they become useless and meaningless for the organizational knowledge management process unless accompanied by cultural, structural and strategic progress.

Knowledge Management In Progress

A historical perspective of today's knowledge management demonstrates that this is an old quest. Knowledge and expertise have been managed implicitly as long as work has been performed. The first hunters, soldiers, scientists and philosophers were all concerned about knowledge. People have always tried to manage knowledge in order to realize their imaginations. However, the emergence of the explicit knowledge focus and the introduction of the term "knowledge management" have been realized in the 1980s (Wiig, 1997).

Explicit and systematic management of knowledge has emerged as a result of several developments. Rapid development of advanced information technologies, progress in management science and strategic planning, enhanced understanding of human cognitive functions, globalization of business and international competition, and sophisticated market actors led to our present perspectives on knowledge management (Davenport and Prusak, 1998; Civi, 2000). Present focus on knowledge management is often explicitly oriented towards commercial effectiveness. However, the viewpoint asserting that the human resources must be considered primarily is gaining acceptance gradually (Filius et al., 2000; Carter and Scarbrough, 2001; Ribiere and Sitar, 2003).

Today's knowledge management has a multi-faceted structure. The scope of problems it has to deal with has become broader than ever. The difficulties globalization has brought out have well added to existing problems. Complexity of knowledge management is more significant in global corporations. Based on an academic and popular literature review, this study has identified six main knowledge management challenges for global business. Developing a working definition of knowledge, dealing with tacit knowledge and utilization of IT, adaptation to cultural complexity, attention to human resources, developing new organizational structures and coping with increased competition are the main knowledge management challenges faced by global business today (Herbane et al., 1997; Fahey and Prusak, 1998; Staber and Sydow, 2002; Hall and Andriani, 2003; Desouza and Evaristo, 2003; Narracott, 2003; Corso et al., 2005; Davis et al., 2005). Comprehending these challenges will help managers wisely respond to the needs knowledge management process brings forth.

KNOWLEDGE MANAGEMENT CHALLENGES FOR GLOBAL BUSINESS

Developing A Working Definition Of Knowledge

Organizations have to develop a working definition of knowledge. It is a necessity to distinguish between data and information on the one hand and knowledge on the other. This is essential for the knowledge construction stage especially. Otherwise, the organization will treat data, information, and knowledge by the same way. Knowledge will become undervalued. Therefore, utilization of knowledge resources will become impossible. The organization will waste time and money by substituting distinct efforts such as data warehousing architecture plans and information technology advancement programs for knowledge management initiatives. Not developing a working definition of knowledge is a critical error contributing directly to many errors and failures in the knowledge management process (Fahey and Prusak, 1998).

Defining knowledge differs among various types of organizations and even among different branches or departments of the same organization. In general, the challenge is to define what constitutes knowledge in the organization at the beginning of the knowledge management initiative so as to be able to develop further initiatives of

knowledge management based on an operational knowledge definition. For this reason, management should encourage social interaction and dialogue in the organization. This will enable sharing insights, -though indirectly and often in an unintended and informal manner- generate inputs for defining, and so will enrich the defining process.

Dealing With Tacit Knowledge And Utilization Of IT

Almost all knowledge is either tacit or rooted in tacit knowledge. It is very difficult to articulate tacit knowledge because it is highly situated in the context and to abstract it from its context of application would mean to lose much of its intrinsic meaning and value (Kakabadse et al., 2001). However, it is tacitness that makes knowledge difficult to imitate and therefore an important organizational resource for sustaining competitive advantage (Grant, 1996). Organizations, in spite of the recent emphasis upon tacit knowledge, seem reluctant to deal with it. Therefore a more explicit emphasis must be exhibited. Programs enabling and encouraging tacit knowledge sharing must be supported by management. Managerial incentives might also be helpful for effectively sharing and dealing with tacit knowledge especially in case of critical knowledge projects.

Focus on tacit knowledge should not deemphasize the importance of IT implementations. An effective balance between focusing on tacit knowledge and utilizing IT should be achieved. Global business must not rely on IT, but it must make IT work as an integral component of the knowledge management process. Accessibility of explicit knowledge resources for employees must be provided by the help of IT. An organization having a poor IT implementation will be disadvantaged in the global marketplace. Besides processing data and information, IT implementation and advancement must have a knowledge oriented focus. Knowledge creation must be targeted finally. System design and working principles of IT professionals must reflect this focus. To provide this is among the responsibilities of the management

Adaptation To Cultural Complexity

As a component of social complexity, cultural complexity global corporations experience implies some managerial and organizational interventions to organizational culture. Because organizational culture is a key element of managing organizational change and renewal, inappropriate culture is generally regarded as the key inhibitor of effective knowledge sharing (McDermott and O'Dell, 2001). Thus, organizations have to move towards a knowledge-oriented culture by every means possible. A knowledge-oriented culture challenges people to share knowledge throughout the organization. At the same time, it is a culture of confidence and trust. Confidence and trust are required to encourage knowledge management practices in the organization. Developing an organizational culture geared towards knowledge management and innovation should be one of the main concerns of top management.

Knowledge communities are formed in the firm while implementing knowledge management projects. It is important to ensure that these communities do not become knowledge hoarding gate keepers. The organization must value and encourage knowledge creation and sharing. Besides this, there is a problem of balancing the culture of openness and knowledge-sharing with the need to appropriate knowledge as intellectual property. Similarly, the knowledge-oriented culture must also be balanced with the necessity to prevent information overload which can be harmful for the knowledge management process and the organization as a larger system.

Attention To Human Resources

The success of any knowledge management initiative is likely to be critically dependent on having competent and suitably motivated people taking an active role in the process (Robertson and O'Malley Hammersley, 2000; Hislop, 2002). Hence, effective human resources management policies must be implemented. Attracting and keeping people with abilities, behaviors and competencies that add value to the firm's knowledge stock must be targeted. This requires effective recruitment, selection, training, development and compensation policies. Building trusting and meaningful relationships within the organization also supports human resources policies enabling improved organizational knowledge management. An effective flow of dialogue must be achieved, and especially informal knowledge sharing practices must be encouraged by management.

Human resources departments are crucial for knowledge management initiatives. Human resources management can encourage the culture enabling the flow and sharing of the employees' knowledge (Soliman and Spooner, 2000). It also can be useful for integrating knowledge to organizational decision making processes. Commitment to knowledge management is specifically important for human resources professionals. They are expected to contribute strategically to the process of determining the organization's knowledge gap. Top management has to encourage the human resources professionals to be active in the knowledge management process and coordinate the relationships between the functions of human resources management and knowledge management.

Developing New Organizational Structures

Hierarchical-bureaucratic structures, though they generate useful outcomes in some organizational settings and under specific circumstances, are considered to prevent knowledge sharing and utilization. They impose limits to learning, generation of new knowledge, knowledge dissemination and, therefore, innovation. Thus, several leading firms in various sectors and from different countries try to adopt innovative organizational structures. These structures are based, to a large extent, on the work of multidisciplinary groups with a high degree of autonomy and acting in environments characterized by fluctuation, creative chaos, requisite variety and redundancy (Nonaka and Takeuchi, 1995). Besides, multiplexity and loose coupling in the organizational setting facilitate information dissemination and resource exchange, therefore, support knowledge management activities in general (Staber and Sydow, 2002).

Developing new organizational structures is a complicated issue offering a wide variety of solutions for differing organizations. The necessity of developing a new organizational structure must be balanced with the crucial need for business continuity. New structures may be developed to be valid for some parts of the organization or to be limited with a specific time constraint the knowledge management initiative imposes. They may be temporary as well as permanent. Balancing the encountering needs and interests of knowledge management and business continuity is an emerging challenge for and a responsibility of top management.

Coping With Increased Competition

Coping with increased competition is one of the most significant challenges of knowledge management faced by global business today. Intense worldwide competition forces the firms to take new actions responding to environmental demands, pressures, and challenges almost day to day. Fast response strategies have become prevalent because of the intensity of the competition. Nevertheless, knowledge management represents a long term oriented cycle of initiatives. Therefore, a tension between the nature of knowledge management and accelerating pace of change occurs. No practical and worldwide applicable solution can be proposed in response to this problem. In general, specific knowledge management programs should be designed as flexible as possible. But the framework and main principles of knowledge management initiative must be structured as a steady construction in order to internalize knowledge management as an essential process in the organization.

Coping with increased competition calls for various knowledge management initiatives requiring a serious investment. However, management should balance the necessity of technological advancements and other initiatives related to knowledge management with the need to cut costs. The diffusion of investments must be planned carefully at the same time. Resources must be devoted appropriately to the different aspects of knowledge management which require investment. This implies the careful determination of needs. For this reason, global business management needs essential internal and external environment scanning enriched by various formal and informal channels and tools.

Overview Of Challenges

To overcome the difficulties knowledge management challenges impose, organizations have to adopt the necessary approaches and activities mentioned above. Appropriate, timely and careful responses are important for successful knowledge management initiatives. For global business organizations; appropriate, timely and careful responses to challenges summarized in Figure 1 will enhance the effectiveness of the knowledge management process and, therefore, help to secure competitive advantages in the global marketplace. Furthermore, effective knowledge

management requires a holistic approach (Tirpak, 2005). Therefore, global business managers should consider and deal with the knowledge management challenges in a holistic manner taking into account all internal and external factors influencing the knowledge management process.

Figure 1: Overview Of Knowledge Management Challenges For Global Business
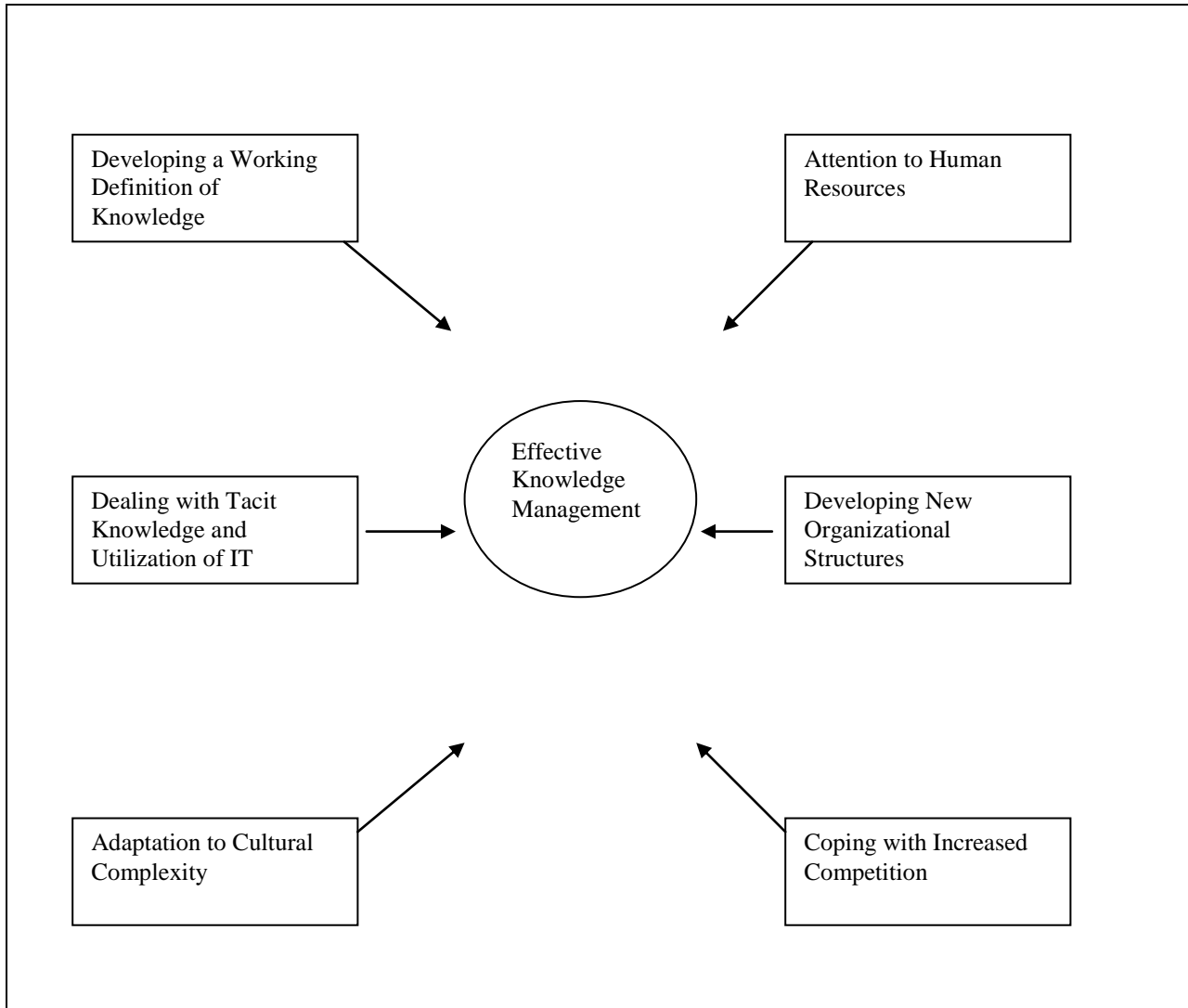
Studies forming the knowledge management literature vary in the extent to which they address global business leaders and managers. It should be noted that this paper referred to the mainstream literature on knowledge management chiefly while identifying and discussing the challenges, because its interest is limited to formulating the main challenges for global business and it addresses global business leaders and managers. In the literature, there are also critical and alternative evaluations of knowledge management enclosing information that is useful for research, however, mostly irrelevant to our discussion.

CONCLUSION

Literature on knowledge management is composed of studies that are partially useful for different aspects of managerial practice, including the ones related to global business management. However, there is a lack of comprehensive studies offering the whole picture of knowledge management challenges for global business. This paper evaluated the critical findings of the literature within the historical progress of knowledge management and clarified the main knowledge management challenges faced by global business organizations today. Further research must concentrate on the specific aspects of knowledge management challenges for global business and their implications for different aspects of organizational life. This study has made a modest beginning in this important, but understudied field. Future researchers will find this area of global knowledge management challenges to be extensive and fruitful.

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