Walden University

COLLEGE OF MANAGEMENT AND TECHNOLOGY

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Jacob Ogunlade

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ABSTRACT

Assessing the Collaborative Knowledge Management of the Market Dominant Organization

by

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MBA., Dowling College, 2003
B.S., University of Memphis, 1991

Dissertation Submitted in Partial Fulfillment
of the Requirements for the Degree of
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Applied Management and Decision Sciences

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ABSTRACT

Dominant firms enjoy economic strengths which enable them to compete effectively in relevant markets through the use of collaborative knowledge management (CKM). While the literature is replete with general guiding principles for companies to adopt successful business strategies, there is very limited empirical research on effectively using CKM to improve company performance and market domination. The purpose of this study was to evaluate strategies for information sharing by companies to achieve better operations management and control, a wider range of customers, and stronger competitive edge in the global economy. Epistemological foundation for the study was provided by the literature on knowledge management and organizational dynamics. Data were collected by an electronically self-administered questionnaire on a convenience sample of 80 employees of three small businesses in Memphis, Tennessee. A quantitative method using Poisson regression was applied to test the hypotheses about relationships between six independent variables of value proposition, culture building, responsibilities, information technology, approaches and assessment and the dependent variable, collaborative knowledge management. Results indicate that value proposition, information technology, and building an organizational culture of responsibilities and best practices play significant roles in effective CKM. Social change implications of the study suggest that high-intensity collaborative knowledge management would produce creative leaders and workers, improved leader-worker collaboration, and more effective use of information technologies in organizational intelligence and decision making.

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DEDICATION

To my family, who make it all worthwhile and to the remnants of Metropolitan Baptist Church, Memphis, Tennessee from January 2003 to March 2009, who inspired my love of learning, and prayer warriors, who helped put my dissertation into the best position for a breakthrough.

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Covey (1995) stated the following:

> To achieve great results, you must have motivation. Motivation is a fire from within. If someone else tries to light that fire under you, chances are it will burn very briefly. Motivation is not a product of external influence; it is a natural product of your desire to achieve something and your belief that you are capable to do it. (p. 1)

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CHAPTER 1: INTRODUCTION TO THE STUDY

Introduction

Today's businesses are faced with a number of economic and technological challenges because of the global nature of our new-millennium markets. Many organizations have started using knowledge management (KM), in general, and collaborative knowledge management (CKM), in particular, to address some of these problems by tapping into the cumulative and individual knowledge of all their personnel, as well as customers, suppliers, and business partners. According to Laudon and Laudon (2002), "KM is the set of processes developed in an organization to create, gather, store, maintain, and disseminate the firm's knowledge" (p. 373). CKM is a combination of sharing knowledge roles, skills, and knowledge management workers within the organizations to gain economic advantage to growth globally. There are numerous papers and books written on the topic of KM, and the KM literature is very rich, but the same is not true for CKM. Very few guidelines exist today in CKM, and there is very limited empirical research on how organizations use CKM to improve their performance and dominate the market. The study evaluated strategies and faces of collaboration that enable efficient operation management and control, achieve a wider range of customers, and raise status in the global economy. The study aimed to add to the existing knowledge on CKM. Since CKM is a combination of collaboration and knowledge management, a section of this chapter is devoted to brief discussions on these topics, with a detailed discussion of the KM and CKM literature in chapter 2.

CKM, Knowledge, and Collaboration

Importance of Collaborative Knowledge Management

In the past, corporations could compete successfully by exploiting scale and scope economies or by taking advantage of imperfections in the world's goods, labor, and capital markets. Besanko, Dranove, and Shanley (2000) defined "economies of scales as the production of a specific good or service over a range of output when average cost (i.e., cost per unit of output) declines over that range" (p. 72). Furthermore, Besanko et al. (2000) stated that "economics of scope exist if the firm achieves savings as it increases the variety of goods and services it produces" (p. 73). However, this is no longer true because collaboration and partnership are significant business trends that are influencing information systems applications (Hansen and Nohria, 2004; Whitten, Bentley, and Dittman, 2004). Collaboration of knowledge workers involves challenges and time to achieve measurable outcomes, and it needs constant evaluation, whether such workers are making the most of collaboration (Weiss, Anderson, and Lasker, 2002). In addition, CKM is called interunit collaboration, which is formed through alliance, collaboration, and partnership (Hansen and Nohria).

CKM is necessary for a company to remain competitive, adapt to a rapidly changing environment, be able to innovate, respond to the demand of e-business, fully capitalize and develop its people, and support effective relationships with suppliers, partners, and customers (Hansen and Nohria, 2004, p. 23; Smith, 2001, p. 4). According to Tollinger, McCurdy, Vera, and Tollinger (2004), at NASA, "CKM allows groups of scientists and engineers to view space in shoulder-to-shoulder collaboration to do free

form drawing and do strategic planning" (p. 30). In addition, CKM is used in the health care industry, as Guptill (2005) found:

> It is long-term, sustainable commitment to changing the culture of health care to become more collaborative, more transparent, and more proactive. Knowledge management, implemented well, will transform the health care delivery system over the next few decades, into a more cost-effective, error-averse, and accountable public resource. (p. 10)

Moreover, Guptill added that "knowledge management is more than the centralized repository of data, documents, and other information, but it encompasses the social context of other experiences and the lessons learned in the process" (p. 11). She continued, "Knowledge management should result in changed behavior as a result of knowledge sharing" (p. 12). As Logan and Stokes (2004, p. 1) phrased it, "Organizations and individuals must be competitive to collaborate, and at the same time they must collaborate to compete."

Knowledge: an Instrument for Evaluating Organization

Knowledge is the psychological result of learning, reasoning, and perception of agreement or disagreement of at least two ideas (Locke, 1894). According to Santosus and Surmacz (2002), "Knowledge management is the process through which organizations generate value from their intellectual- and knowledge-based assets" (p. 1). Collaboration is the combination of people's creativity, resources, passion, culture, innovation, and intellectual abilities to raise the standard and to gain global economical advantage.

Tiwana (2002) defined knowledge as "a fluid mix of framed experience, values, contextual information, expert insight, and intuition that provides an environment and framework for evaluating and incorporating new experiences and information" (p. 4). According to Nonaka (1998) "knowledge is the source of the highest-quality power and the key to the powershift that lies ahead. Knowledge Is Power. Knowledge is the new competitive resources and what makes the new society unique" (p. 7). Organizations that embrace knowledge, skills, attitudes, culture, and support systems create a collaborative knowledge organization. It is able to function as an intelligent system because information and knowledge are shared more quickly and effectively (Davenport & Prusak, 2000; Haag, Cummings, & McCubbery, 2004; Nonaka and Takeuchi, 1998; Tiwana, 2003). Nonaka and Takeuchi (1998) developed the spiral of knowledge of knowledge creation, which is the organizational knowledge creation, and is a continuous and dynamic interaction between tacit and explicit knowledge.

According to Nonaka and Takeuchi, this interaction is shaped by shifts between different modes of knowledge conversion, which are, in turn induced by such triggers as socialization, externalization, internalization and a combination of both. First, the organization gets involved with the community (socialization). Through socialization the members share experiences and mental models. Second, through the externalization mode, the organization is engaged in dialogue. Third, the combination mode results in networking. Finally, "learning by doing" results in internalization (Nonaka & Takeuchi, p. 70). The spiral of knowledge creation helps a manager's intuitive sense of market trends to become the catalyst for an important new product concept. The spiral of

knowledge creation helps the manager to understand the internal logic of intellectual activity in the following ways: (a) sharing tacit knowledge; (b) creating concepts; (c) justifying concepts by providing access to sources of knowledge rather than by transfer, (d) building an archetype by providing links among sources of knowledge to create a wider breadth and depth of knowledge flows; and (e) cross-leveling of knowledge through enhancement of intellectual capital by supporting the development of individual and organizational competencies. In addition, Bali (2005) stated, "The structured spiral of knowledge creation offered by Nonaka and Takeuchi has been adopted a positive perspective" (p. 108). It helps companies to be more competitive by hiring, developing, and retaining excellent managers who accumulate knowledge assets (Kazuo & Nonaka, 2007, p. 121). Knowledge assessment is an instrument for analyzing trends as well as a tool that can be used to analyze company capabilities for participation in the knowledge revolution (Malhotra, 2003, p. 1). It measures a nation's trend competencies and capabilities that are deemed essential for economic growth, competitive advantage, human development, and quality of life.

Knowledge Revolution

Tiwana (2002), Nonaka (1995), Davenport and Prusak (2000), Davenport (2005), Malhotra (2003), and other researchers have engaged in exploratory knowledge revolution. Knowledge revolution is a process that results from rapid growth information and communication technologies (ICT). Nonaka (1995) stated, "Knowledge has become the resource, rather than a resource, and is what makes the new society unique" (p. 6).

The knowledge revolution is the acceleration of technical change and the intensification of globalization. The knowledge revolution requires knowledge workers, investment in education, information infrastructure, research, and development (R&D), and intensive and constant innovation. Moreover, knowledge workers use their skills to achieve superior performance and competitive advantage, and they stay current with technology to reduce the uncertainty (Heinrichs & Jeen-Su, 2005).

Behaviorists (Skinner, 2002; Watson, 1998) termed knowledge as a "repertoire of behavior," which can be further stated as stored sequence lines of a computer program that runs later. Learning is regarded as a sign of intelligence, in contrast to the functioning of internal organs or to instinctive performances, which are classified as sub-intelligent (Skinner). Learning is a permanent change in a person's capability to execute motor skills because of practice or experience (Coker, 2004).

Collaboration and cooperation are equivalent. Collaboration refers to the humanistic process of organizations, families, cities, and nations. Collaboration shares the same mode processes with the knowledge spiral mode processes which are socialization, externalization, internationalization, and a combination of the mode processes (Nonaka & Takeuchi, 1995, p. 70).

Barriers to Collaboration

Collaborative organizations are flexible and better able to adapt to changing business conditions. Their members are able to develop greater sets of skills and competencies. Similarly, they can be used wherever within the organization skill are needed (Allen & Jarman, 1999; Logan & Stokes, 2004).

The barriers to collaboration include a reluctance to share with other unknowns others, a fear that may have already solved the problem, and a belief that collaboration may result in others having power over them. Logan and Stokes (2004) stated that "effective collaborators must possess the cognitive skills, the technical skills and the ability to communicate to be able to contribute to the collaboration process" (p. 132). Logan and Stokes (2004) found the following:

> The ideal collaborative behavior that is desired is one in which tasks and objectives are achieved not by sacrificing relationships but rather by building productive relationships that will serve one's long-term interests. Individuals act collaboratively not just for the sake of building relationships; but rather because they can better achieve their objectives with the cooperation of their colleagues who find themselves in a similar position. (p. 130)

Additional barriers to collaboration may include (a) skills that undermine action, (b) personnel and information systems that make it difficult to act, (c) bosses that discourage actions, and (d) formal structures that make it difficult to act (Olson & Singer, 2004).

According to Leslie (2006), "When it comes to joint ventures and wider collaborations crucial to the success of industry, too many conflicting views, hidden agendas and egos lead to failure" (p. 40). For example, Leslie added for the Aerospace, Defense, and Energy sectors, the most significant barriers to collaboration are:

1. Concerns over intellectual property rights;
2. Protection of competitive advantage;
3. The problem of benefits being seen to be intangible;
4. The risk of becoming involved with untested collaborative ventures; and
5. Mindsets. (p. 41)

The people who have these characteristics are reluctant to share their knowledge because knowledge is perceived as power. In addition, barriers to collaboration involve the avoidance of previously performed research or knowledge that was not originally developed within the group/institution. For example, technological barriers to online collaboration include security and proprietary software. Social barriers to online collaboration exist because people work differently.

Effective Collaboration

Since ancient times, people, and organizations have expanded their businesses in a collaborative manner as far as technology allowed. According to Logan and Stokes (2004), "computers and other forms of IT have transformed the nature of manufacturing and commerce" (p. 3). To be successful in business today, "organizations must undergo a transformation; operate effectively within a dynamic, fast-pasted, and changing economic environment" (Haag et al., 2004, p. 5). Collaborative transformation aligns values and objectives of employees and management, respects and produces a climate of mutual trust, diversifies skills, and decentralizes decision making (Logan & Stokes). In order to achieve collaboration organization activities must be visible and control by business and technology processes that focus on enforcing process discipline within the organization itself.

CKM improves the performance of teams by supporting the sharing and flow of information. In addition, it increases R&D, efficiency of mechanisms, and net profit.

Leslie (2006) found the following:

> Effective collaboration must have good coordination where people share objectives (inclusive and not exclusive), trust, and understanding of the need to advance an organization. To achieve coordination among the groups, a problem-resolution mechanism must be applied. Effective collaboration must develop good cooperation, appreciate other people, and understand the benefits that come with collaboration processes. To achieve cooperation, frequent consultation and knowledge sharing must take place between participants, there must be a clear role of definition, and the participant must use correct problem-solving methods. Effective collaboration can be achieved with the right mix of people, collaboration skills, and practice in collaborating. Collaboration is a complex people issue which means dealing head-on with people's different preconceptions, personalities, and approaches to joint working (p. 41).

Competitive Strategy

The two relationship domains between an organization's competitive strategy and its knowledge strategy are external domains (opportunities/threats) and internal domains (capabilities/arrangements). The external domain involves three dimensions: scope (what the firm must know), competencies (what the critical characteristics of the required knowledge are), and governance (how to obtain the required competencies). The scope dimensions deal with the specific domains of collaborative knowledge that are critical to the firm's survival and advancement strategies. Survival strategies aim at securing profitability, while advancement strategies aim for future profitability (Von Krogh et al., 2000). The competencies dimension focuses on the utilization characteristics of knowledge that contribute positively to the creation of new business. These characteristics include:

1. Accessibility, the extent to which organizational collaboration knowledge