Knowledge Management and Business Strategies

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ABSTRACT

KM is a newly emerging, interdisciplinary business model dealing with all aspects of knowledge within the context of the firm, including knowledge creation, codification, sharing, and how these activities promote learning and innovation. In today's information-driven economy, companies uncover the most opportunities, and ultimately derive the most value, from intellectual rather than physical assets. To get the most value from a company's intellectual assets, KM practitioners maintain that knowledge must be shared and serve as the foundation for collaboration.

The ideal organization is one where people exchange knowledge across functional areas of the business by using technology and established processes. The exchange may be for policy formulation and strategy, for training and development, or for problem solving in teams. KM is the process of capturing and making use of a company's collective expertise anywhere in the business. In contrast, intellectual capital is a company's collective brainpower, a composite of experience, knowledge, information, and intellectual property. Knowledge management is not one single discipline, but an integration of numerous methods, practices, and technologies.

The pace of change in the business world has accelerated dramatically during the past decade. Globalization and geographic dispersion changed the organization's scope while downsizing and reengineering resulted in staff attrition and knowledge drain from companies. Networking and data communications made it easier and faster to share knowledge and the increasing dominance of knowledge as a basis for improving efficiency and effectiveness triggered many companies to find the means for utilizing the knowledge they have gained from previous experience.

Keywords: Knowledge Management, Codification, Innovation, Collaboration, Actionable Information, Intellectual Capital.

INTRODUCTION

This paper is about knowledge management (KM), what it is and how to use it for competitive advantage. Industry has been collecting vast amounts data for years for the purpose of extracting information related to their operations. So, what is knowledge? Knowledge is 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. It originates in individual minds but is often embedded in organizational routines, processes, practices, systems, software, and norms.

The United States, Japan, Germany, and other major industrial powers are being transformed from industrial economies to knowledge and information-based service economies, whereas manufacturing has been moving to low-wage countries. In a knowledge and information-based economy, knowledge and information are key ingredients in creating wealth. As knowledge becomes a central productive and strategic asset, organizational success increasingly depends on the ability to gather, produce, maintain, and disseminate knowledge. "The process of systematically and actively managing and leveraging the stores of knowledge in an organization is called knowledge management" (Laudon, 2005, p.357).

KM might be a current hot topic but successful managers have always realized its value. Long before terms such as expert systems, core competencies, best practices, learning organizations, and corporate memory were in vogue, successful businesses knew that their key assets were not its buildings, its market share or its products, but lay in the heads of its people (Drucker, 1999).

UNDERSTANDING KNOWLEDGE

KM enables the creation, distribution, and exploitation of knowledge to create and retain greater value from core business competencies (Quintas, 1999). KM addresses business problems particular to your business, whether it is creating and delivering innovative products or services, or business context is to facilitate opportunistic application of fragmented knowledge through integration (Ahuja, 2000).

As an increasing number of companies now realize that knowledge is their key asset, they want to turn to managing this asset to deliver business results (Davenport, 1998). The need for knowledge management is growing rapidly. Forty percent of the U. S. economy is directly attributable to the creation of intellectual capital (Klasson, 1999). As a result, over 10 percent of the gross domestic product in the developed countries is being reinvested in knowledge development (OECD Report, 2001).

The ability of companies to exploit their intangible assets is far more decisive than their ability to exploit their physical assets (Drucker, 2001). As markets shift, uncertainty dominates, technologies proliferate, competitors multiply, and products and services become obsolete rapidly, successful companies are characterized by their ability to create new knowledge consistently, quickly disseminate it, and embody it in their new products and services (Bair, 1997).

KM is much more than just technology; its foundations require solid grounding in business strategy. "Many companies today are focusing on building new information systems in which they can redesign business processes. If the business process is redesigned before computing power is applied, organizations can potentially obtain very large payoffs from their investments" (Laudon, 2001, p. 295). Only when you vertically align your efforts in KM to your business strategies can you effectively prioritize investments that will allow you to maintain a sustained competitive advantage over your competition (MacCormack, Verganti, & Iansiti, 2001).

One method of placing a value on a company is determined by its market valuation. This represents the measure of value that investors and the market associates with a company and not just the real assets such as buildings, manufacturing facilities, and equipment. These additional values placed on some companies come from intangible assets such as vision, patents, customer loyalty, and innovative business ideas. Market valuation is largely based on intangible assets. Companies with high levels of intangible assets can be referred to as having intellectual capital. These assets can be used by a company to its advantage even though they can not be measured. In the end, the only competitive edge that sustains is knowledge.

Knowledge is unlike most physical assets that depreciate over time and use. Knowledge actually increases in value the more people use it. This becomes an important fact when you consider the need for company management to improving work processes. The primary goal of KM in a embrace the use of KM and encourage their employees to welcome a learning company environment.

Knowledge in the business context is actionable information. Actionable refers to the concept of being relevant, available, in the right place at the right time, to allow for considerations in decisions being made. Knowledge is not a clear issue of communications or simple codifying things into written form. It can be very intuitive and difficult to express. It lies in conversations, experience-based intuition, and people. Knowledge must be supported by both formal and informal processes to be successful in business. While data and information are essential, it's knowledge that can be applied, experience that comes into context, and skills that are used at the moment that make the difference between a good decision and a bad decision (Tiwana, 2002).

Tiwana states that knowledge can be classified in four primary dimensions: <u>Type</u>: Technological, Business, or Environmental; <u>Focus</u>: Operational or Strategic; <u>Complexity</u>: Explicit or Tacit; <u>Perishability</u>: Low or High (Tiwana, 2002). Of these dimensions, companies most struggle with the Complexity issue. Tacit knowledge is personal, context-specific knowledge that is difficult to formalize, record, or articulate. It is stored in the heads of people. It includes intuition, experience, truth, judgment, values, assumptions, beliefs, and intelligence. This component is mainly developed through a process of trial and error encountered in practice. Explicit knowledge is knowledge that can be codified and transmitted into a formal language: documents, databases, webs, emails, chart, etc. One of the greatest challenges comes from understanding the need for both tacit knowledge and explicit knowledge in various degrees within every company.

ALIGNING KNOWLEDGE MANAGEMENT AND BUSINESS STRATEGY

A clear articulated alignment of knowledge management and business strategies is a key predictor of success within a company. A common trap many companies fall into is the obsession with technology to drive their knowledge management initiatives. The critical linkage between business strategies and knowledge strategies is often ignored. Companies need to measure how their current business strategy aligns with the knowledge strategy. Many companies are driven by strategic plans and not strategic visions which require knowledge of the complex environments in which they operate along with comprehension of the complex processes of competitive conditions. Managers must think of Knowledge management as an investment in creating a climate of collaboration for new business insights, ideas, and capabilities to emerge.

Knowledge assets must be mobilized rapidly to be of maximum value to a company. The ability to integrate knowledge has been centered on two central themes that have emerged. Knowledge transfer refers to a strategy of facilitating learning and exchange such as employees teaching a colleague how to solve a specific problem. Knowledge transfer assumes certain conditions such as: the two transacting individuals possess shared knowledge, sufficient time is available for the transfer, and the knowledge being transferred will be valid by the time the transfer is completed. Knowledge transfer is part of organizational life. It is carried out whether the process is managed or not. It is conveying the knowledge of one source to another source (Awad, 2004).

Knowledge integration stresses rapid application of existing but disconnected knowledge. The organization must be careful to understand that Knowledge management initiatives can fall short is they adopt a knowledge transfer strategy when a knowledge integration approach is really needed (Tiwana, 2002).

Facing high uncertainty of markets, technologies, and customer desires, the right strategic directions can provide great gains while wrong ones can lead to systemic catastrophe. "Managers must consider the level of uncertainty their companies face to build flexibility and agility into their design" (Tiwana, 2002, p. 92).

Tiwana (2002) lists four level of uncertainty from Level 1 through Level 4. Level 1 is the lowest level of uncertainty and represents predictable outcomes and represents traditional strategic analysis approaches. Strategic commitments in KM at this level are directed to adaptation to external conditions. The traditional strengths, weaknesses, opportunities, and threats (SWOT) framework has been the mainstay of business strategy for many years. While the objective is to sustain the company's strengths, mitigate its weaknesses, avoid threats, and grab opportunities, they rarely provide foresight into rapidly emerging and disappearing opportunities that relate to how companies can compete within their industry. Level 2 represents an outcome where several possible and likely outcomes are foreseeable. At Level 3 the possibilities are expanded to a range of outcomes. At this level of uncertainty, experimentation is needed and should include pilot trials to test market reaction. Level 4 is the highest level of uncertainty and provides no basis for forecasting the future. Knowledge management at this level is geared to shaping rather than adapting the business to the market.

CODIFICATION OR PERSONALIZATION

Within knowledge management we find two expansive KM approaches, codification and personalization. Both elements must be present within an organization and the balance will vary from company to company. Personalization strategies focus on connecting knowledge workers through networks and are suited to companies that are more dependent on tacit knowledge and expertise than on codified knowledge. The codification strategy is focused on technology to enable storage, indexing, retrieval, and reuse. This is beneficial to companies that deal with similar problems and decisions (Tiwana, 2002).

KNOWLEDGE MAPS TO LINK KNOWLEDGE TO STRATEGY

Effective knowledge management strategies use knowledge maps to help companies build a defensible competitive knowledge position. Companies that want to execute a knowledge management initiative must first align that effort to their business strategy. Assessing your present knowledge position necessitates documenting three classifications of knowledge. Core knowledge is the base level of knowledge required to compete in the market. This level of knowledge is expected of all competitors and provides no advantage from its competitors. Advanced knowledge makes your company competitively viable within that market. This allows your company to differentiate its products from the competition. Innovative knowledge allows a company to lead the entire industry.

Knowledge is not static (Zack, 1999). What is innovative knowledge today will become the core knowledge of tomorrow. Companies must stay ahead of their competition to retain a sustainable competitive advantage. A knowledge map provides a picture of how where your company is in relationship to your competitors. This process involves rating each of your competitors as to their status of being innovators, market leaders, capable competitors, stragglers, or risky players. Then compare your company to your competitors. Use the resulting information accordingly to reposition either your knowledge or strategic business focus.

STRATEGIC GAP OR KNOWLEDGE GAP

Gaps between what your company is doing and what it should be doing represents its strategic gap. This knowledge gap represents what your company should know and what it does know to support the competitive position that has been adopted. Knowledge strategy then addresses how your company's knowledge gaps are best bridged. Knowledge gaps can be addressed through either exploration or exploitation. Exploration implies that your company will develop knowledge which will allow it to create new niches for its products and services. Exploitation implies a focus on using knowledge that already exists from inside and outside your company. Being an innovator on the knowledge map is of little help if you are not an exploiter. Your knowledge management system must support exploitation of available and accessible knowledge before it can begin supporting exploration (Tiwana, 2002).

IMPLICATIONS FOR KNOWLEDGE MANAGEMENT

Knowledge transfer, whether it is face to face, through an electronic knowledge base, or team-based, involves management support. Knowledge management should be carried out with the goals of the organization in mind Top level management support is required to ensure a reliable infrastructure that will serve the organization's long-term needs. Basic steps to follow in the creation of a knowledge management system includes: selecting a department or division within the company with interest in knowledge sharing to represent the entity, from within this group a steering committee should be formed to begin strategic thinking about how to build a knowledge management environment and launch knowledge sharing. Next, the committee would undertake evaluating existing knowledge, where it resides, how it is being used, and what part of it needs to be updated or deleted. Following this critical step, a procedure should be designed for knowledge transfer, and the types of knowledge and how they should be transferred should be determined. This requires evaluation of the company's existing technology, Intranet, e-mail technology, and security issues (Awad, 2004).

The greatest factor in knowledge management is sharing tacit knowledge. For years, organizations have captured and stored tacit knowledge. Unfortunately, because knowledge tends to become richer over time, it must be kept up to date. Also, the problem is not availability but how it is used. Another major challenge is not so much availability but willingness to share with others. Organizational control creates another level of sharing concerns. A traditional organization assigns certain authority, power, influence, and control to each managerial level. Sharing knowledge will require decentralized intelligence to empower knowledge workers to function more quickly and intelligently. Doing so requires transplanting vast volumes of decision making to lower levels. The farther down the line intelligence is transported, the more diluted it becomes. When it reaches the intended level, only content is transported and not context.

Top performers within an organization traditionally have little interest in contributing to a knowledge base. They perceive their own knowledge as something they own. Why would they want to share it? To encourage experts to contribute to the knowledge management initiative, it is important for experts to be treated as experts. This means recognition and appreciation of the contributions they make, for the way they think, and how they explain things. "There is a powerful emotion attached to being recognized as an expert." (Awad, 2004, p. 443).

It is important for leaders of organizations to understand that data is the flow of events or transactions captured by an organization's systems and, that from this data, useful information can be extracted through the use of resources to organize data into categories of understanding such as sales reports. In order to transform information into knowledge, a firm must expend additional resources to discover patterns, rules, and contexts where the knowledge works. Finally, wisdom is thought to be the collective and individual experience of applying knowledge to the solution of problems. Wisdom involves where, when, and how to apply knowledge (Awad, 2004).

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