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Knowledge Management: The Art of Enhancing Productivity and Innovation with the Human Resources in Your Organization

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The focus has intensified and the trend is set for corporations to enhance the efficiency in which they operate in the marketplace. Years ago, organizations seemed to concentrate more on the acquisition of innovative technologies to provide the means to streamline operations, communicate with customers and more effectively compete in the new information economy. There is no doubt that these new technologies are essential components to corporate infrastructures; however, recent strategic initiatives have turned from merely acquiring these technologies to using them more intelligently in order to achieve success. A major part of this focus entails the utilization of information technologies to help organizations better identify, develop, access and apply the skills and experiences of their employees to augment business processes and drive innovation. This is called knowledge management.

Firm-level productivity or efficiency has largely been attributed to technological capital within corporations; but, in reality, productivity comes from the strategic use of a combination of an organization's entire resource base which includes capital, IT capital, labor, etc. Knowledge management addresses this concept as it involves the incorporation of management policies including strategic decision making, technological implementations and firm-level cultural issues with the intent to identify, develop, communicate and utilize the skills and talents of the employee base within the firm. Organizations are increasingly realizing that one of the most important resources, perhaps the most important, is the people that make it tick. Each employee has a set of skills and talents that needs to be appropriately allocated within a firm's operations. Additionally, with proper training, guidance and collaboration, employee skills can be enhanced to better suit the continuously evolving corporate structure. How is this achieved? Well, it's not easy because it involves the management of complex resources (people).

As is the case in any quest for increased organizational efficiency, key decision making as to resource allocation is a prime requisite. Knowledge-management initiatives are no exception. A knowledge-management initiative is a strategic plan that seeks to develop and utilize the existing assets of knowledge and experience of individuals within an organization in order to enhance a business process. It attempts to make employee knowledge and experience more accessible and available to those that require it in a timely manner. Managers at all levels and across functional departments must make accurate decisions as to which business processes to address, the type of technology to acquire, the personnel needed to support the cause and, ultimately, to determine the effectiveness of a given plan. More specifically, in relation to knowledge-management projects, decision-makers must decide the project scope to be addressed (e.g., particular business process such as enhancing sales call success rates) or a larger initiative (e.g., customer relationship management). Each of these projects leverages existing information technologies available in the organization and may require additional investment. Managers must also consider the complementary scope of employee participation relative to proposed initiatives (e.g., potential need of employee participation across functional areas), especially with regard to an enterprise project such as customer relationship management (CRM).

Decision-makers must not ignore a key fundamental requirement for achieving an effective knowledge-management project – the creation of a positive collaborative, trustworthy and supportive culture for those

involved with the initiative. A positive corporate culture plays a vital role in the success of any strategic plan. A trustworthy and collaborative environment is required for employees to more seamlessly share knowledge and experiences relative to proposed business strategies. This cultural aspect opens an entirely new strategic process, however, which is beyond the scope of this article. Regardless of the strategic and cultural complexities of a knowledge-management project, there is little doubt that knowledge-management philosophy has grown dramatically over the past decade. One of the main underpinnings to this heightened popularity has been the introduction of innovative information technologies that have increased the efficiency by which organizations can store, retrieve and communicate information, experiences and knowledge.

New Dimensions

As mentioned, the concept of knowledge management is a widely encompassing initiative. The process of identifying, developing and communicating employee skills, experiences and knowledge in order to drive innovation and corporate efficiency involves a gamut of supportive activities. Fortunately, new information technologies have simplified some of the tasks that are involved. More specifically, there are a number of IT systems that can facilitate knowledge-management initiatives. These include intranet-based knowledge maps or directories that provide locations and contact information to expert employee resources throughout an organization. In order to increase the efficiency of a business process (e.g., provide clients with vital product or process information), employees often need timely insights from company experts. Knowledge maps enable employees to locate experts more quickly and gain best practices information, enabling them to overcome obstacles they face in carrying out an activity. Document repositories accessible through portals contain value-added information and knowledge sources about products, services and general activities. These documents can involve technical specifications of new products, presentation materials, best practices literature for particular initiatives and more. A well-designed document repository with portal access helps spread the available captured knowledge and experience existing within the firm to those in need of this information. Other IT attributes such as search engines in some initiatives also augment the process of retrieving vital documentation or expert contacts. Even more simple IT systems such as e-mail and online internal chat systems facilitate informal networking channels for employees to correspond and share experiences, information and knowledge which can help reduce redundancy of errors and lead to innovative techniques for processes and product development. Finally, the spectrum of business intelligence also plays a significant role in enhancing the knowledge-management initiative.

Transforming Data into Information

Organizations continue to capture vital data corresponding to almost every activity. There is a wealth of information in this data; and with better information comes enhanced knowledge and hopefully more accurate decision making. Data repositories provide the baseline source to the knowledge-enhancement process. With the use of extraction and reporting components, data is transformed to information, which is communicated to appropriate functional areas. The knowledge-enhancement process is further augmented by the utilization of online analytical processing (OLAP) which facilitates an interactive analytic methodology where decision-makers can identify elements of failure or success corresponding to business processes (sales, CRM, supply chain, marketing or production). The business intelligence (BI) implementation is then extended by data mining which provides perhaps the most significant knowledge enhancer by enabling decision-makers to perform "what-if" simulations and identify reliable relationships among business variables. The final result is a better informed decision-maker who uses the corresponding information along with experiences in the marketplace to formulate strategies. Is BI (reporting, OLAP, data mining) the real driver to corporate efficiency? The answer is simply no. Strategic cubes, insightful reports and complex models all require effective collaboration among individuals affiliated with corresponding business processes. In order to achieve enhanced knowledge from BI, decision-makers at all levels must communicate needs, provide feedback on initiatives and direct the process that creates value-added BI systems. (For more information on the BI knowledge connection, see *Information Technology, Corporate Productivity and the New Economy* by Kudyba and Diwan, Greenwood Publishing, 2002.)

Results – Competitive Advantage

Knowledge management reflects the shift of corporate enterprises from focusing merely on investment in new forms of technologies to enhance productivity to concentrating on combining all the available resources within an organization in order to become more efficient. Firms are realizing that perhaps the most important of these resources is something in which it has already invested – the labor force. As prominent business theory has proven, one of the most reliable components of an organization's competitive advantage in the marketplace is not its technology but the chemistry that exists among the people who work with this technology to bring products and services to the market.

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