Supporting the Mentoring Process

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INTRODUCTION

While the concept of knowledge management (KM) is not new, the focus on knowledge management as a strategy has heightened in recent times as organizations realize the importance of knowledge as an intangible asset contributing to the enhancement of competitive advantage (Bolloju & Khalifa, 2000). In the 21st century, it is believed that successful companies are those that effectively acquire, create, retain, deploy, and leverage knowledge (Cecez-Kecmanovic, 2000). Knowledge work is the ability to create an understanding of nature, organizations, and processes, and to apply this understanding as a means of generating wealth in the organization. Evidently, the focus on knowledge management as a strategy has become central to organizations (Davenport & Prusak, 1998). Ichijo, Von Krogh, and Nonaka (1998) view knowledge as a resource that is unique and imperfectly imitable, allowing firms to sustain a competitive advantage. Additionally, many approaches to managing knowledge are marred by obstacles of sustainability (Kulkarni, Ravindran, & Freeze, 2006). As a direct result organizations fail to realize the expected returns on investment from knowledge management implementations or strategies (Zyngier, 2007). However, if knowledge management as a formalized organizational strategy is supported, it can be sustained. Therefore in an economic environment where organizations have been forced to take a step back and reevaluate their core competencies and ability to innovate, organizational knowledge has come to the forefront as a valuable strategic asset (Haghirian, 2003). It is the objective of this article to provide an example of knowledge workers and experts collaborating to implement successful training and learning programs to support knowledge management activities in their organization. The authors hope that the case discussed will inform researchers of an appropriate model in designing an interactive learning environment which enables a positive knowledge sharing environment and in turn contributes to the growth of an organization's memory.

BACKGROUND

The intensity of competition in the business market, advances in technology, and a strong shift towards a knowledge-based economy have each contributed to the demand for Web-based mentoring systems. "There is no knowledge that is not power," according to Emerson (1843), and the organization (public or private) that can utilize its knowledge resources more effectively than its competitor will persevere. An effective mentoring system between knowledge workers and experts can provide an organization with a strategic advantage in the market. Mentoring environments can help create and maintain skills, and therefore the corporate knowledge base. They both alleviate the strain on corporate resources and facilitate employees' changing training needs through knowledge sharing. Therefore the majority of organizations face the enormous challenge of supporting their employees' thirst for expanding their skill base and effectively their corporate assets, as "knowledge implies a knower; *the rest is just information.*" Some companies exploit the capabilities of Web technology to facilitate knowledge sharing at workgroup and company levels (Davenport, 1996). Recent evidence points to the deployment of organizational systems with the primary objectives of improving customer services, increasing revenue, containing costs, and improving internal processes—in other words, creating competitive advantage. In the case under consideration, the organization implemented a successful mentoring system in order to develop employee skills and knowledge in both IT and managerial issues such as knowledge management. This article is focused on the development of a Web-based mentoring system (WBMS) to mentor (Neville, Adam, & McCormack, 2002) workers and enhance learning. The case study indicates a strong requirement for the utilization of such an environment to both increase support for and collaboration between the knowledge workers.

MAIN FOCUS OF THE ARTICLE

Mentoring is a traditional method of teaching that strengthens the concept and objectives of learning/training (Neville et

al., 2002; Heavin & Neville, 2006). The Oxford dictionary defines the word mentor as a "wise counselor, who tutors the learner in intellectual subjects." When this model is applied to a learning network, the student is called a teleapprentice who studies using appropriate methods. The teleapprentice reads messages, answers questions, participates in discussions, and conducts research online to master his or her subject. Mentorship is a method of teaching that has been used for hundreds of years; this design is incorporated into learning/knowledge networks to develop more effective learning and collaborating practices, and provide additional support and mediation to the learners/workers. 'Access to experts' is one of the many advantages provided through learning networks (Harasim, Hiltz, Teles, & Turoff, 1995; Hansen, Nohria, & Tierney, 1999). Networks are, in fact, modeled on this method (Harasim et al., 1995). Therefore, Web-based mentoring systems allow students/workers to communicate with experts in a field and collaborate with their peers. WBMSs can be described as learning delivery environments in which the WWW is its medium of delivery (Neville et al., 2002). The possibilities of WBMSs are limited only by constraints imposed by the university or organization in question, such as technological or managerial support (Neville, 2000). Innovative companies and universities are using this implementation for a number of reasons, specifically to keep employees or students abreast of emerging technologies in their fields, and to provide effective training to both staff and customers on new products and skills. Designing a WBMS requires a thorough investigation into the use of the Web as a medium for delivery (McCormack & Jones, 1997). The designer must be aware of the attributes of the WWW and the principles of instructional design to create a meaningful support environment (Gagne, Briggs, & Wagner, 1988). The Web-based training room is viewed as an innovative approach to teaching (Relan & Gillani, 1997). The virtual training room, like the traditional method, requires careful planning to be both effective and beneficial (Dick & Reiser, 1989). As stated by McCormack and Jones (1997), a Web-based classroom must do more than just distribute information; it should include resources such as discussion forums to support collaboration between learners and ultimately it should also support the needs of both the novice and advanced learner. A WBMS is composed of a number of components that are integral to the effective operation of the environment, for example the development of content, and the use of multimedia, Internet tools, hardware, and software (Reeves, 1993a). A developer must understand the capabilities of these components (search engines, feedback pages, and movie clips), as their use will determine the success or the failure of the learning environment. In this article we provide an example of a WBMS to help illustrate the main elements, issues, components, and problems encountered through the implementation of learning systems to enhance knowledge management in organizations.

The WBMS (see Figure 1) was constructed to support and develop knowledge sharing for personnel who seek to acquire and develop their knowledge management skills. Training material is available online, but in addition, a discussion forum enables both learners and experts to exchange ideas and add to the environment. This allows learners to provide feedback (anonymously, if desired) to the experts. It also enables them to pose queries, which other participants or the experts can answer. All participants are able to see the initial queries and the discussion stream of answers from

Figure 1. The Web-based mentoring system (WBMS)
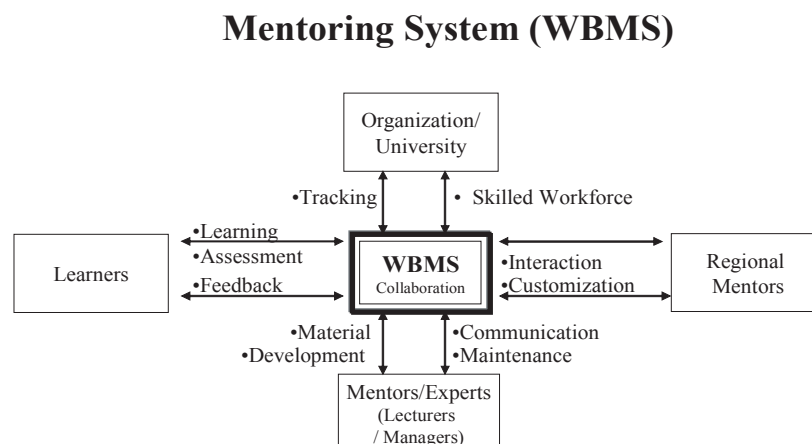
Mentoring System (WBMS)

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