

Wiki Technology as a Knowledge Management System

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OVERVIEW

This article presents the use of Wiki technology to support knowledge management efforts in an organizational setting. We begin by providing some background information about knowledge management and knowledge management systems therein. The article then proceeds by examining what Wiki technology means, its benefits as a knowledge management system, and the issues involved for organizations that might consider using this technology to support knowledge management initiatives.

KNOWLEDGE MANAGEMENT

Knowledge management in an organization enables the users in the organization to deal with the current situations and effectively envision and create their future (Alavi & Leidner, 2001; Brown & Duguid, 1991; Tiwana, 2000). Knowledge management treats knowledge as a form of information, which is impregnated with context based on experience. The main role of knowledge management in an organization is to ensure that the right information is delivered to the right people just in time, in order to make the most appropriate decision. Knowledge management is not only to manage knowledge per se, but to encourage the creation, sharing, distribution, and accessibility of knowledge within an organization. An organization that has a system that assists in the proper management of knowledge will achieve good results via improvements in productivity, innovation, competitiveness, and better relationships among people in the organization (Davenport & Prusak, 1998).

Successful knowledge management initiatives can enhance an organization's competitiveness (Hackbarth,

1998; Tiwana, 2000). To win the race in the market, modern organizations must seek for innovation through application of new knowledge. Organizations should work efficiently by making use of the available resources. Today, the majority of employees are very mobile, their life span in an organization is very short, and therefore capturing their knowledge is important. The enormous amount of new information and the knowledge that it generates is another reason to be aware of the importance to do something with knowledge. These developments have led to knowledge management (Alavi & Leidner, 2001).

Companies with a focus on knowledge management pay close attention to issues of collaboration, organizational learning, best practices, workflow, intellectual property management, document management, customer focus, and using data effectively (Davenport & Prusak, 1998). Many companies have realized the importance of knowledge management and have taken steps to initiate the implementation of knowledge management systems in their organizations.

Knowledge management complements and enhances other organizational initiatives such as total quality management (TQM) and business process re-engineering (BPR) (Tiwana, 2000). Knowledge management will assist organizations in serving their customers well, reducing their delivery cycle time, operating with minimum fixed assets and overhead, shortening product development time, empowering employees, supporting innovation, and delivering high quality products (Davenport & Prusak, 1998; Nonaka, 1994; Tiwana, 2000).

The importance of knowledge management has resulted in numerous technologies being developed, from simple, single-user tools such as mind mapping software to highly expensive enterprise systems for content management or data mining (Gupta & Sharma,

2004). The next section provides a summary of different knowledge management systems that are commonly found in organizations.

KNOWLEDGE MANAGEMENT SYSTEM

Alavi and Leidner (2001) define a knowledge management system (KMS, henceforth) as any IT system that supports the process of knowledge creation, storage, sharing, and dissemination in an organization. Among all available technologies, those that enable the knowledge management of online communities have proven to be highly popular and effective (Wagner & Bolloju, 2004). KMSs involve the application of IT systems and other organizational resources to manage knowledge strategically in a more effective and systematic way. Many technologies are used in KMSs in light of knowledge management efforts. Table 1 highlights some of the popular technologies for KMSs based on the work of Gupta and Sharma (2004) and Wagner (2004, 2006).

Among the above mentioned KMSs, the best technology fit depends on the community type and the specific knowledge management requirements within organizations (Wagner, 2004). The next section discusses the use of Wiki technology to support knowledge management efforts within organizations.

WIKI TECHNOLOGY

Wiki is a Web-based collaboration tool that is rapidly growing in popularity. Wiki, which means fast in Hawaiian, was created in 1994 and installed on the Web in 1995 by Ward Cunningham. A wiki which was initially called "Quickweb" is an editable **Web site** that does not require users to know HTML. It has a system to record changes so that at any time, a page can be reverted to any of its previous states. A wiki system may also include various tools, designed to provide users with an easy way to monitor the constantly changing state of the wiki and a place to discuss and resolve the many inevitable issues, namely the inherent disagreement over wiki content.

Table 1. KMS technology (Adapted from Gupta and Sharma, 2004; Wagner, 2004)

| System | Function |
|-----------------------------|---|
| Groupware | <ul style="list-style-type: none"> Allows teams to discuss ideas across the traditional boundaries of space and time Allows groups to track ideas and build communities of practice |
| Contact Management Software | <ul style="list-style-type: none"> Allows organizations and individuals to document relationships, commitments, and interactions with customers and suppliers |
| Intranets/ Databases | <ul style="list-style-type: none"> Allows organizations to store key documents, record lessons learned and best practices Can provide an employee directory that includes contact information, special skills and current/previous projects |
| Data warehouse | <ul style="list-style-type: none"> Allows data mining to research market and customer trends |
| Document Management | <ul style="list-style-type: none"> Systems that allows organizations to electronically store documents for future reference and share documents across multiple geographic locations |
| Wiki | <ul style="list-style-type: none"> Is a set of linked Web pages, created incrementally by a group of collaborating users Wiki content pages resemble regular Web pages |
| Discussion Forum | <ul style="list-style-type: none"> Allows knowledge creation and knowledge sharing |
| Weblog | <ul style="list-style-type: none"> It is a log on the Web (Wagner, 2004) Blogs use special "blogging" software to simplify Web publication for end-users |

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