Effective Knowledge Management Using Wikis

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ABSTRACT

This paper presents a discussion and in-depth exploration of using Wikis for providing support to, and for the effective maintenance of, knowledge management systems. Specific issues, considerations, and relevant areas for which Wikis can be most effective are addressed. This includes identifying both strengths and weaknesses of Wikis as they apply to the various types of knowledge management requirements, including information capture, retention, dissemination, updating, and security concerns. A conceptual and research framework of the major impacts, challenges, and issues is also presented, as well as areas for future research.

KEYWORDS

Enterprise 2.0, Knowledge Management, Knowledge Maturation, Organizational, Resistance, System Acceptance, Tacit Knowledge, Web 2.0, Wikis

INTRODUCTION

Knowledge Management (KM) is an extremely important endeavor for organizations, both due to the type of information and the audience for which it is needed and addressed. This includes the need to capture, manage, retain, and store valuable firm specific information, while making it accessible to those who have a need for both receiving, understanding, and updating the information. Employing tools to help support these functions in an important component of a successful KM system. One of the most promising of these new tools is the Wiki, whose construction and sharing capabilities have made it one of the more promising and effective tools for knowledge management provided by the Web 2.0 environment. After a discussion of the background behind knowledge management and the new Web 2.0 environment, specific issues, considerations, and relevant factors involved using Wikis for knowledge management are presented and explored in depth in this paper.

This paper is organized as follows: the next section presents a brief review of knowledge management systems and the key elements that have been used to define both the discipline and concepts underlying a knowledge management system. This is followed by a brief review of Web 2.0 tools with emphasis on what a Wiki is, and the ease with which Wikis can be developed and maintained for knowledge management purposes. The remaining sections and the central part of this paper detail the applicability of Wikis as they relate to knowledge management systems, including key considerations relating to the system and technology, organization-related issues, and considerations
related to the task, application, and individual user differences. The paper is concluded by a model/framework focusing on issues related to successful Wiki implementation and acceptance, as it relates to knowledge management applications. Lastly, areas for additional research in this relatively new and emerging area are presented.

**KNOWLEDGE MANAGEMENT**

Knowledge Management is a broad discipline comprising numerous sub-areas and topics; as such, it is useful to first define, and then to examine, some of the major areas that comprise a KM system.

A useful definition of knowledge management is as a process, using a multi-disciplinary approach, for the capture, development, sharing, and effective use of organizational knowledge for achieving organizational objectives (Davenport, 1994; Dalkir & Liebowitz, 2013).

In practice, this means capturing the knowledge and information found in an organization, storing it in retrievable form for use and update, ultimately to benefit the organization. It could include, for example, capturing and retaining specific knowledge about a company’s operations and functions, plans that must be shared, commented, and updated by one or more groups within the organization, trade secrets and company proprietary development, or expertise relating to a specific area within the firm (Dalkir & Liebowitz, 2013). Although there exists a wide range of views on the exact elements encompassing the theory and practice of KM (Bray, 2007, Langston & Robbins, 2006), there is broad agreement that the central elements of KM must include an organization’s culture and people, processes and structure, and technology, as listed in Table 1.

As shown in Table 1, there is a much broader realm beyond the main task of capturing, storing, and retrieving information. The people who hold, manage, and use this knowledge are one key component. In addition, the organizational structure within which the knowledge is managed is another key factor. It is precisely this complexity, in terms of these interrelated elements, that make the Wiki a suitable tool for the management of knowledge within business organizations.

Viewing knowledge management from these varying perspectives, it is also important to view Wikis, as they are applied to knowledge management, by consideration of the various knowledge types that will be captured. Within an organizational context, the term knowledge has been categorized as including explicit and tacit elements (Polayni, 2009; Ikujiro, 2007).

Explicit knowledge is factual knowledge, which can be expressed, documented, and communicated; as such it is more easily handled in terms of capturing and storing in a knowledge management system or repository (Dalkir & Liebowitz, 2013). Tacit knowledge is in the “mind of the knower,” that was gained through study, experience, and learning, and is frequently described as “know how” or “expertise” in a certain skill or task (Polayni, 2009).

The ease with which Wikis can be constructed, updated, and shared make them especially suited to the needs required in capturing, managing, storing, disseminating, and sharing both explicit and tacit knowledge, within and for a community of practitioners.

<table>
<thead>
<tr>
<th><strong>Table 1. Central elements of a knowledge management system</strong></th>
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<tbody>
<tr>
<td><strong>Component</strong></td>
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<tr>
<td>People</td>
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<tr>
<td>Organizational</td>
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<td>Technological</td>
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Adapted from Alavi and Leidner (1999).
Managing Knowledge: The Critical Role of Culture and Ownership as a Mediator of Systems
www.igi-global.com/article/managing-knowledge/83610?camid=4v1a

Strategies for Managing Project Generated Knowledge: A New Zealand Case Study
www.igi-global.com/chapter/strategies-managing-project-generated-knowledge/24999?camid=4v1a