Exploring the Enterprise Value of Wikis through Media Choice Theories

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ABSTRACT

Wikis are quickly emerging as a new corporate medium for communication and collaboration. They allow dispersed groups of collaborators to asynchronously engage in persistent conversations, the result of which is stored on a common server as a single, shared truth. To gauge the enterprise value of wikis, the authors draw on Media Choice Theories (MCTs) as an evaluation framework. MCTs reveal core capabilities of communication media and their fit with the communication task. Based on the evaluation, the authors argue that wikis are equivalent or superior to existing asynchronous communication media in key characteristics. Additionally argued is the notion that wiki technology challenges some of the held beliefs of existing media choice theories, as wikis introduce media characteristics not previously envisioned. The authors thus predict a promising future for wiki use in enterprises.

Keywords: Common Ground, Media Choice Theories, Media Richness, Media Synchronicity, Wiki

1. INTRODUCTION

A report by Gartner Group forecasted that by 2009, half of Fortune 500 firms would have adopted wiki technology (Atlassian, 2008). This prediction suggests a strong belief in the impact and desirability of the technology. Several proponents of wiki technology expect that wikis will become the internal communication media of choice for organizations and

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effectively replace email. Corporate examples such as Google's "Goowiki" intranet demonstrate the conviction held by some companies to replace traditional technologies with a wiki's open communication platform (Goowiki, 2008). Yet, what justifies these strong beliefs in wiki technology as a tool for communication and collaboration? This article attempts to answer this question by applying the lens of media choice theories.

Based on the empirical evidence provided by 43 published case studies and the defining

characteristics of three media choice theories, the results show that wikis meet and even exceed capabilities of several other communication media. Our finding not only proves that Wiki technology is a highly credible replacement for email as the most popular business communication technology in use, but also assist us in broadening existing media choice theories.

2. WIKIS IN THE ENTERPRISE

Wiki technology and the principles of wikibased collaboration have gained popularity through online encyclopedias such as Wikipedia (Wagner, 2006). However, in its original conceptualization wiki technology was not developed for the purpose of a public internetbased encyclopedia but as an internal collaboration platform. Ward Cunningham originally developed the c2 wiki, also known as "Ward's Wiki" (Wiki, 2009) to support the effort of his project team to maintain version control in a software development project. The underlying principle was to create "the simplest database that might just work" (Leuf & Cunningham, 2001 p. 15). The c2 wiki quickly developed into an open knowledge sharing and collaboration environment. The use of wiki as an encyclopedia (Wikipedia, 2009) arose only several years later in 2000, when Nupedia creators Larry Sanger and Jimmy Wales were looking for a collaboration technology to overcome their stalling initiative to create a free, online encyclopedia (Timothy, 2005). As of 2009, Wikipedia is the world's largest encyclopedia, with over 2.9 Million entries in the English version alone. Wikipedia is also the 8th most popular Internet site, according to Alexa.com.

The design of wiki technology is based on eleven principles (Wagner, 2004). Among the most distinctive of these principles is openness which specifies that "any reader can edit [content] as he/she sees fit" (Wagner, 2004, p. 270). Based on this design principle wiki users can refactor (Fowler, 1999) content which has previously been posted and hereby modify, extend or adjust its meaning. The refactoring capability of wikis allows for a new form of collaboration. Instead of passively reading content which has previously been posted on the wiki, users actively edit content. The 'wiki way' of collaboration (Leuf and Cunningham, 2001) is characterized by users jointly editing content and thereby integrating their particular knowledge or perspectives. An example of wiki based collaboration is provided by Foremski (2005) who describes an effort at IBM corporation to promote corporate blogging through the creation of clear guidelines. Instead of developing the guidelines by corporate lawyers or other small expert groups, IBM asked its employees to participate in the guideline development for a period of 14 days, using a shared wiki. In the collaborative editing process users built up on each others' work which continuously improved the quality of the content. The resulting content represented a consensus of the individuals involved in the creation process, which is now used by IBM.

Wikis and the wiki way of working have been implemented in a range of organizational functions as shown in a recent survey by Majchrzak et al. (2006). Consistent with its initial development objective, wikis are often used in areas of software development where they are used for technical communication, issue tracking and internal workflow. However, further organizational functions have also been found to use wikis for ad-hoc collaboration, exchanging ideas and brainstorming. Other areas of application include general information and knowledge management, such as vacation schedules, personal blogs as well as repository for policies and guidelines. These functions highlight the inherent flexibility and adaptability of wikis.

Although numerous case studies attest to the enterprise value of wikis, there have been few formal evaluations, and to the authors' best knowledge none that considers the technology's capabilities and corresponding task fit. Enterprise wikis differ from open wikis such as Wikipedia or Wikitravel, based on their usually smaller user numbers, access restrictions, non-anonymity, and higher participation rates (Majchrzak et al., 2006). Hence, evaluating

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