

Chapter 3

Moving Wikis Behind the Firewall: Intrapedias and Work–Wikis

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ABSTRACT

The use of wikis behind the firewall in corporations presents significant opportunities as well as challenges for improving knowledge capture and work processes. This chapter identifies fundamental characteristics of wikis and how these change between public and corporate wikis, and between wikis intended for knowledge capture (intrapedias) and those supporting work processes. A case study describing two organizational wikis illustrates the power of the individual in instigating knowledge capture and the ability of wiki technology to rapidly and easily support individuals in their work efforts. The case study also exposes how adopting wikis can challenge deeply engrained cultural beliefs. As wikis become more prevalent behind the firewall, organizations may need to shift to new ways of thinking about knowledge sharing, the role of the individual versus the collective, and governance. Conversely, characteristics of wikis may need to be adjusted to deal with the realities of knowledge use within organizations.

INTRODUCTION

Corporations have started using wikis, defined as “sets of dynamically created web pages with content contributed directly by users in a web browser” (Yates, Wagner & Majchrzak, 2010), to support both internal and customer-centric business processes (Wagner & Majchrzak, 2006ab).

Behind the firewalls (BTF) that protect corporate intranets, wikis are used in purposeful environments, in a significantly different manner than that faced by public systems such as Wikipedia. While there is a large body of research examining the Wikipedia phenomenon, wiki research BTF is in an early stage (c.f., Holtblatt, Damianos & Weiss, 2009; Wagner & Majchrzak, 2006ab).

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As corporations continue to invest in wikis – both in the technology platforms and in content development, there are open questions as to what factors contribute to successful use and how what is known about public wikis informs BTF use. Early research indicates that organizations are seeing many advantages, but also that defining features of public wikis (e.g., community authorship, open access) change in response to corporate needs (Wagner & Majchrzak, 2006b).

The goal of this chapter is to examine in-depth specific corporate wikis: to understand the characteristics that define them, the processes that shape them, and how adoption of wikis may in turn affect changes in the organization. The chapter starts with a review of relevant literature on wikis. It then presents a case study of the implementation and use of BTF wikis developed in a U.S. national research laboratory. By contrasting these wikis with each other and with public wikis, we identify key characteristics and how they differ based on public versus private access and intended use. This is followed by a discussion of cultural and governance implications in the transition to wiki-based systems and ends with a presentation of research and practical implications for BTF wiki use.

Background

Wikis are now routinely used to capture and share knowledge in the general public, as exemplified by Wikipedia. Wikipedia has been studied extensively as a volunteer, community-based resource for knowledge sharing. Research has shown that contributors are motivated by a sense of community, the desire to build reputation, and a need to correct errors (Anthony, et al., 2007). Wikipedia content is “crowd sourced” (Kittur, et al., 2007) so the quality and accuracy of content depends on the quality of the crowd, i.e., the active involvement of a community of users willing to contribute original material, identify and correct errors, expunge embedded advertising

or self-promotion, and cross-reference related material (Denning, et al., 2005). Content derived from different sources, ideologies, contexts, and experiences can find a home within the wiki, regardless of the credentials or capability of the contributor. The process of integrating these materials adds value by reconciling or highlighting inconsistencies and creating a richer, deeper, and broader representation. Through community scrutiny and peer review, errors can be identified and fixed, gaps can be filled, connections to related concepts established, and deviations from topic pruned. This iterative collective action enables convergence on a representation that satisfies the intellectual needs of the community relative to the specific topic.

The wiki exists and evolves via the efforts of its collective membership drawn from the community of interest. Both the collective members and the overall community of interest are continuously evolving, with members moving in and out of both the collective and the community from which it is drawn (Ciffolilli, 2003; Yates, Wagner & Majchrzak, 2010). The “wiki way” (Leuf & Cunningham, 2001) assumes that the vast majority of participants will abide by rules and norms, that content-based conflicts can be resolved collectively, and that malicious or deviant behavior will be a rare exception. Wikis therefore rely on community governance. Article quality can therefore vary significantly depending on the community size, knowledge, and willingness to contribute.

Because responsibility for the quality of the content is distributed across an amorphous community of contributors, users of Wikipedia must exercise caution when applying the knowledge (Young, 2006). There is no guarantee of accuracy, timeliness, or completeness (Kramer et al., 2008). Still, Wikipedia is widely used as a source of knowledge throughout the world, contains millions of articles (Ortega & Gonzalez-Barahona, 2007) and continues to grow.

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