Chapter 3.18

Wikis for Collaboration and Knowledge Management: Current Practices and Future Directions

Clif Kussmaul
Muhlenberg College, USA & Elegance Technologies, Inc., USA

ABSTRACT

This chapter examines how collaboration and knowledge management (KM) can be supported using wikis and related tools. A wiki is a web site that makes it easy for users to create, edit, and link pages without specialized tools. The chapter seeks to help readers understand what KM and wikis are, and when and why wikis can support collaboration and KM. The chapter identifies associated challenges and best practices. Organizations should assess cultural factors, recognize the differences between top-down and bottom-up approaches, and leverage the KM “market”. Projects should be iterative, focus on either mapping or capture, start with pilot projects and simple structures, and focus on key users and roles. Systems should be off-the-shelf, avoid “either-or” conflicts, and provide structures to facilitate common tasks. The chapter also discusses future directions and implications in these rapidly changing areas.

INTRODUCTION

This chapter examines how collaboration and knowledge management (KM) can be supported using wikis and related tools. A wiki is a web site that makes it easy for users to create, edit, and link pages without specialized tools. Knowledge management (KM) is “the leveraging of collective wisdom to increase responsiveness and innovation” (Frappaolo, 2006, p. 8). The chapter seeks to help readers understand what KM and wikis are, and when and why wikis can support collaboration and KM. It identifies associated challenges and best practices, and reviews complementary tools and techniques. It emphasizes the flexibility
of wikis, including the ease with which they can be used to prototype and refine user interfaces for KM tasks and activities. It also discusses future directions and implications in these rapidly changing areas.

The chapter provides a multidisciplinary perspective, since effective collaboration involves a variety of disciplines, including business, software development, psychology, and sociology. Throughout this chapter, “platform” refers to the underlying tool, which could be used in many settings, and “system” refers to a actual instance, with content that is specific to an organization.

The chapter draws on the author’s experiences using and contributing to several wiki platforms, teaching with wikis, and consulting for business, educational, and governmental organizations seeking to use wikis for KM, as well as experiences working in global organizations and managing global virtual teams. In particular, many of the examples are based on consulting projects. In the first, referred to below as SalesCom, the author worked with sales and marketing staff in an international company to develop a wiki KM system for product information and marketing materials, so that SalesCom staff could make better use of existing materials based on product line, customer, or geographic region. In the second, referred to below as EnginCom, a group of engineers created a wiki for their own use that gradually spread across the engineering department, and the author reviewed the resulting KM system and recommended next steps. In the third example, referred to as ResourceOrg, a group of faculty (including the author) started a public web site to share teaching materials.

The remainder of this chapter is organized as follows. The Background section provides relevant background on KM, wikis characteristics in general, and uses of wikis for collaboration and KM. The Challenges section presents some of the key challenges in using wikis for collaboration and KM, grouped into several categories. The Best Practices section identifies and discusses best practices for initiating and sustaining wiki-based systems for collaboration and KM, organized into several groups. The Future Directions section describes future directions in wikis and their use in collaboration and knowledge management, as well as some implications. The Conclusions section is followed by lists of references and additional reading.

BACKGROUND

This section provides relevant background on knowledge management (KM), wikis characteristics in general, and uses of wikis for collaboration and KM.

Knowledge Management

Making better and more efficient use of the knowledge of people in an organization can have enormous benefits (e.g. O’Dell & Grayson, 1998, p. 8-9), particularly for knowledge-intensive work, where professionals often spend 20-25% of their time trying to find needed information (Koenig, 2001). Our main focus is on collaboration for knowledge management and information sharing, either within an organization or in a (usually virtual) community. However, there are other forms of collaboration, such as collaboration within a team with a specific objective (usually project-based).

O’Dell and Grayson (1998) describe how KM can provide business value in three main areas: customer relationships, best practices to improve internal operations, and new product development. At SalesCom, customer relationships were a major goal, while EnginCom’s KM system supported engineering operations and new product development. The author worked with a third organization to develop a wiki to manage and review proposals for internal development projects in order to allocate resources more effectively.

Views of KM have changed and evolved over time (e.g. Snowden, 2002; Figallo & Rhine,
Related Content

**Lessons Learned: Theory and Practice**
Irene Kitimbo (2015). *Utilizing Evidence-Based Lessons Learned for Enhanced Organizational Innovation and Change* (pp. 1-23).
[www.igi-global.com/chapter/lessons-learned/117322?camid=4v1a](www.igi-global.com/chapter/lessons-learned/117322?camid=4v1a)

**Quality Improvement in Real Sense or Just a Quick Fix?**
Merlin Mythili Shanmugam and Sapna Popli (2018). *Teaching Cases Collection* (pp. 252-272).
[www.igi-global.com/chapter/quality-improvement-in-real-sense-or-just-a-quick-fix/209863?camid=4v1a](www.igi-global.com/chapter/quality-improvement-in-real-sense-or-just-a-quick-fix/209863?camid=4v1a)

**Elaborating the Project Management System: Influence on Project Managers**
[www.igi-global.com/chapter/elaborating-the-project-management-system/200198?camid=4v1a](www.igi-global.com/chapter/elaborating-the-project-management-system/200198?camid=4v1a)

**Implementation Difficulty**
[www.igi-global.com/chapter/implementation-difficulty/22179?camid=4v1a](www.igi-global.com/chapter/implementation-difficulty/22179?camid=4v1a)