

# Chapter 8

## Knowledge Organization with Mashups: A Mashup Experiment in an Enterprise Environment

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### ABSTRACT

*Knowledge is based on fact and is often obtained from experience or via association. Knowledge organization is the systematic management and organization of knowledge (Hodge, 2000). With the advent of Web 2.0, mashups have become a hot new thing on the Web. A mashup is a Web site or a Web application that combines content from more than one source and delivers it in an integrated way (Fichter, 2006). This chapter will first discuss knowledge and knowledge organization and review literature on these topics. Then the authors will explore the concept and look at the components of a typical mashup. In addition, they will provide an overview of various mashups on the Internet. From these facts, the chapter proceeds to draw some connections between knowledge organization and mashups, solidifying the authors' assertions with an elaboration on their real-world, a mashup experiment in an enterprise environment. The authors will describe how they mixed the content from two sets of data and created a new source of data: a novel way of organizing and displaying HP Labs Technical Reports. The findings from this project will be included and some best practices for creating enterprise mashups will be given. Finally, they will discuss the future of enterprise mashups.*

### INTRODUCTION

Knowledge is the understanding of facts or, information or knowing how to do something from experience or via association. Knowledge organization

is the systematic management and organization of knowledge (Hodge, 2000). The new mashup technology can be used to organize, harvest, share, and leverage knowledge.

With the endless development of new technologies, more and more information—in a wide variety

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of formats—continues to become increasingly available on the Web, making it one of the most information-rich infrastructures ever built. With the advent of Web 2.0, mashups, which are combinations of content from different sources, have become a hot topic on the Web, gaining increasing popularity. According to Programmableweb.com (<http://www.programmableweb.com/>), there are currently 3.09 unique mashups being created each day, as programmers, Web developers, and hobbyists continue to blend data and services from different sources to produce entirely unique sets of content.

## **KNOWLEDGE AND KNOWLEDGE ORGANIZATION**

What is knowledge? The Random House Dictionary of the English Language defines knowledge as “acquaintance with facts, truths, or principles, as from study or investigation.” Webster’s New Collegiate Dictionary defines knowledge as “the fact or condition of knowing something with familiarity gained through experience or association.” According to Davenport and Prusak (1998), knowledge can be defined as a mix of framed experience, values, contextual information, and expert insight that provides a framework for evaluating and incorporating new experiences and information. Wilson (2002) more simply states that knowledge is what we know. Knowledge involves the mental processes of comprehension, understanding and learning that go on in the mind and only in the mind, however much they involve interaction with the world outside the mind, and interaction with others. These various definitions of knowledge can be boiled down to knowledge basically meaning knowing facts and information, and knowing how to do something. Knowledge is gained through past experience such as study or investigation.

Knowledge is often created in the mind of the individual. Knowledge would be of little value if

it remained locked in the mind of the individual without knowledge representation, without knowledge sharing, and without knowledge accessing. Instead, however knowledge often is embedded in documents or repositories and in organizational routines, processes, practices and norms. Knowledge is also about meaning in the sense that it is context-specific (Huber, Davenport and King, 1998). For knowledge to be valuable and useful, it needs to be accessed and used. How can knowledge be accessible and usable? Knowledge organization addresses this question to some extent.

What is knowledge organization? One view from a Library and Information Science and information organization standpoint, is that knowledge organization is the management and organization of knowledge in a systematic way in order to support easier access to and retrieval of knowledge (Hodge, 2000). It also encompasses creating, sharing, and leveraging knowledge. Knowledge organization enables the management of a collection of materials, information, and documents, which represent recorded knowledge. It forms a bridge between the user’s information need and the material in the collection. As the user browses, searches, and navigates, knowledge organization guides the user towards discovery. Knowledge organization also helps to answer questions about the scope of a collection (Hodge).

Knowledge organization has become a wide interdisciplinary field, with a broader focus than Library and Information Science. According to Hjerland (2003), there are also social and intellectual forms of knowledge organization. Social forms of knowledge organization are related to professional training, disciplines and social groups. The social perspective includes the social systems of genres and documents and the social system of knowledge producers, knowledge intermediaries and knowledge users. The social system of documents, genres and agents makes available a very complicated structure of potential subject access points, which may be used in information retrieval. This reflects what Huber, Davenport

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