Chapter 3

Knowledge Mapping: An Essential Part of Knowledge Management

Jay Liebowitz

University of Maryland-Baltimore County, Maryland

Knowledge management is one of the fastest emerging fields in industry today. Unfortunately, however, most of the knowledge management endeavors do not seem to have rigorous and comprehensive knowledge management methodologies, tools, and techniques. One technique that can greatly aid the knowledge management field can be borrowed from the concept mapping community, namely the use of knowledge maps. This chapter will discuss the role of knowledge mapping for improving knowledge management projects, and the specific use of a tool called WisdomBuilder to aid in the creation of the knowledge maps.

INTRODUCTION

Knowledge management is one of the emerging trends that is striving to give organizations a sustainable competitive edge. Knowledge management is the process of creating value from an organization's intangible assets. Specifically, it deals with how best to capture, secure, distribute, coordinate, retrieve, store, and manage knowledge assets so that the organization can best leverage its knowledge (and associated intellectual capital assets) internally and externally (Liebowitz, 1999, 2000; Liebowitz and Beckman, 1998).

Many organizations are applying knowledge management methods and practices. General Electric Company has GENet, a corporate intranet at GE, which

provides the best and worst practices throughout GE. Hewlett Packard captures and leverages HP product knowledge for the Computer Products Organization dealer channel. The system became known as HP Network News (Lotus Notes-based). Reuters established an international case base which serves as a knowledge repository for their offices worldwide. The Reuter Global Case Base Project is one of the first projects to focus on building a knowledge base from expertise existing in many areas around the world. Knowledge is then distributed to multiple Reuter sites worldwide that need and want this knowledge. Skandia feels its knowledge management (KM) efforts reduced the startup time for opening a corporate office in Mexico from 7 years to 6 months. Steelcase cites an upswing in patent applications and a threefold increase in productivity due to their KM efforts. Canadian Imperial Bank of Commerce (CIBC) established a Leadership Centre to provide the organization with systematic practices for the generation and renewal of tacit knowledge and intellectual capital. CIBC is measuring the flow of knowledge from people (new ideas generated and implemented) to structures (new products introduced) to customers (% of income from new revenue streams). The list continues of how organizations are now trying to practice knowledge management and be competitive in the marketplace.

An important element of knowledge management is knowledge reuse and the development of corporate memories. Knowledge reuse provides for the capture and reapplication of knowledge artifacts (episodes in memory, stories, relationships, experiences, rules of thumb, and other forms of knowledge acquired by individuals or groups). It relies as much on the use of negative experiences, flawed reasoning, or wrong answers as on correct results. Much of the knowledge reuse is predicated on the construction of knowledge repositories or corporate memories. Some guidelines that have been suggested are: It should be easy for individual workers to access the knowledge in the corporate memory to facilitate individual learning from a combination of sources; it should be easy for workers to determine which co-workers could have the knowledge needed for a particular activity; it should be easy for workers to decide which of the co-workers would be interested in a lesson learned; it should be easy (and rewarding) for a worker to submit a lesson learned to the corporate memory; there should be well-defined criteria for deciding if something is a lesson learned, how it should be formulated, and where it should be stored; there should be mechanisms for keeping the corporate memory consistent; the corporate memory should have a facility to distribute a newly asserted piece of knowledge to workers who need that knowledge.

In order to help create these knowledge repositories and corporate memories, a "knowledge mapping" should be conducted. According to Wiig (1993), knowledge mapping:

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