ABSTRACT

As new information technologies are available to the design and implementation of organizational memory and as organizations continue to automate their business processes and collect explosive amounts of data, researchers in knowledge management need to confront new opportunities and new challenges. Some of the core issues of organizational memory management include organizational context, retention structure, knowledge taxonomy, ontology, organizational learning, and so forth. In this article, we review the literature of organizational memory management. We further present a basic framework of the technological components and their applications in organizational memory systems and discuss a number of important research issues.

Keywords: knowledge management; organizational memory

INTRODUCTION

Organizational knowledge, also known as institutional memory, plays a critical role in the overall performance and competitiveness of a business venture (March & Simon, 1958; Mort, 2001; Watson, 1998). In order to realize a benefit or strategic advantage, however, this knowledge must be managed properly. Consequently, many organizations are using formal knowledge management practices to improve performance. Knowledge management is best described as a process in which information is transformed into actionable knowledge and made available to the user (Allee, 1997). Effective knowledge management enables businesses to avoid repeating past mistakes, to ensure the continued use of best practices, and to draw on the collective wisdom of its employees, past and present. Organizational memory is the collection of historical corporate knowledge that is employed for current use through appropriate methods of gathering, organiz-
ing, refining, and disseminating the stored information and knowledge (Ackerman & Halverson, 2000; Nevo & Wand, 2005).

The objectives of this article are to survey the organizational memory literature and to present a basic framework of organizational memory systems and applications while focusing our attention on IT-based organizational memory. Research in organizational memory management deals with the creation, integration, maintenance, dissemination, and use of all kinds of knowledge within an organization (Alavi & Leidner, 1999; Cross & Baird, 2000). It is also confronted with new challenges, because recent developments in information processing technologies have enhanced our ability to build the next generation of organizational memory management systems. Through our research studies, we found that much of the organizational memory is ignored or lost in the corporate collaborative processes in spite of the fact that several enterprise collaboration management tools are available and used in the marketplace. The consequence is that employees spend too much time recreating common elements from online and off-line meetings, calendars, and various project-related activities.

In the next section, we review the literature of organizational memory management. In Section 3, we present a basic framework of technological components and their applications. Section 4 discusses some important research issues and future trends. Section 5 concludes the article and discusses directions for future research.

ORGANIZATIONAL MEMORY

Organizational memory has been described as corporate knowledge that represents prior experiences and is saved and shared by users. It includes both stored records (e.g., corporate manuals, databases, filing systems, etc.) and tacit knowledge (e.g., experience, intuition, beliefs) (Nonaka et al., 1995) and encompasses technical, functional, and social aspects of the work, the worker, and the workplace (Argote et al., 2003; Choy et al., 1999; Lee et al., 1999). Organizational memory may be used to support decision making in multiple tasks and multiple user environments. Walsh and Ungson (1991) refer to organizational memory as stored information from an organization’s history that can be brought to bear on present decisions. By their definition, organizational memory provides information that reduces transaction costs, contributes to effective and efficient decision making, and is a basis for power within organizations. Researchers and practitioners recognize organizational memory as an important factor in the success of an organization’s operations and its responsiveness to the changes and challenges of its environment (Bright et al., 1992; Huber, 1991; Huber et al., 1998).

Information technologies (IT) contribute to enable automated organizational knowledge management systems in two ways: either by making recorded knowledge retrievable or by providing vehicles for knowledgeable workers to share information (Chen et al., 1994; Olivera, 2000; Zhao, 1998). An organization’s knowledge, explicitly dispersed through a variety of retention facilities (e.g., network servers, distributed databases, intranets, etc.) can make the knowledge more accessible to its members. Stein and Zwass (1995) suggest that IT strategies can be used to maintain an extensive record of processes (through what sequence of events?), rationale (why?), context (under what circum-