Document Management, Organizational Memory, and Mobile Environment

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INTRODUCTION

Wireless networks and new tools utilizing mobile information and communication technologies (ICTs) challenge the theories and practices of document management, in general, and records management, in particular. The impact of these new tools on document management as a part of organizational memory is as yet unexplored because the wireless and mobile working environment is a new concept. Recent studies of mobile environment have focused on mobile work itself or technologies used, and the aspect of document management, especially records management, has been ignored.

BACKGROUND

Records form one important part of the memory of an organization. From the organizational perspective, one method of managing intellectual resources is to augment the organization’s memory. A standard connotation of organizational memory is a written record, although this is only one form of memory. Organizational memory has explicit and implicit forms and can be retained in several places like databases and filing systems, but also in organizational culture, processes, and structures (Ackerman, 1996; Walsh & Ungson, 1991). Megill (1997) specifies organizational memory to include all the active and historical information in an organization that is worth sharing, managing, and preserving for use. It is an important asset encompassing all types of documented and undocumented information that an organization requires to function effectively.

Digital documents and records can be found in every area of administration and business activities. Official records are produced in carrying out business or administrative processes, decision-making processes or procedures. These records are vital and must be preserved for later use, as documentation and evidence and for cultural and historical reasons. Records are not preserved only for the use of the organization; they must be made accessible to individuals and customers (Young & Kampffmeyer, 2002). With a growing number of people using mobile tools, new kinds of problems are emerging. These problems arise because documents are created, processed, stored, managed, and shared through various mobile ICT tools and technologies. In a mobile working environment, it is essential that every piece of an organization’s explicit memory is accessible, searchable, and preservable. This is vital, especially in the case of official and business records.

The literature on document management focuses mainly on the technologies used or the functionality of the document management systems created by practicing consultants. Academic research is rare (Bellotti & Bly, 1996; Eldridge et al., 2000; Luff, Heath & Greatbatch, 1992). Mobile working environment has been examined from the social-scientific and social interaction perspectives (Brown, Green & Harper, 2001; Katz & Aakhus, 2002). The mobile working environment in relation to the aspects of document management is an uninvestigated area and a new research topic.

ORGANIZATIONAL MEMORY

The concept of organizational memory is not new. Its roots go back to the organizational science and information-processing theories of the 1950s (Walsh & Ungson, 1991). Research on organizational memory increased especially in the 1990s in the field of information systems research. Understanding of the concept is limited, and the term is vague but commonly used. Mostly organizational memory is seen from the perspective of the organizational member.
It refers to the stored information on the organization’s history that can be brought to bear on present decisions (Walsh & Ungson, 1991).

The perspectives of information systems scientists on organizational memory are pragmatic, more often concentrating on the development of databases and information systems supporting organizational memory, since examining the contents of the concept is the focus of organizational scientists. Walsh and Ungson’s (1991) classic study, in turn, is completely conceptual. Bannon and Kuutti (1996) claim that the concept of organizational memory does not belong exclusively to any particular research area or discipline and that a variety of definitions is available in such different fields as administrative science, organizational theory, change management, psychology, sociology, design studies, concurrent engineering, and software engineering. The viewpoint taken in archival science (see, e.g., Hedstrom, 2002; Yates, 1990, 1993) is on the historical mission of organizational memory. The purpose of archives is to retain and store the historical memory of an organization. Organizational memory research has been criticized for perceiving organizational memory as only a problem of information technology. The problem of how databases serve users is not the most essential (Koistinen & Aaltonen-Marjosola, 2001).

On the basis of a through concept analysis, the definition of organizational memory is the organized knowledge of an organization, a process which is individual and distributed and past preserving, which has an effect on organizational learning, competitiveness and decision-making, and which can be supported by information technology. (Mäkinen & Huotari, 2004).

The preservation and use of organizational memory refer strictly to working life and information used in work-related settings. The empirical case studies on organizational memory pertain particularly to carrying out a task (Mäkinen & Huotari, 2004).

Schwartz, Divitini, and Brasethvik (2000) note that organizational memory has become a close partner of knowledge management (KM), denoting the actual content that a knowledge management system purports to manage. They perceive knowledge as the key asset of the knowledge organization. They also argue that organizational memory amplifies this asset by capturing, organizing, disseminating, and reusing the knowledge. Generally, the purpose of KM is seen to make these resources available for use. This approach refers to knowledge as an object (Sveiby, 1996), and thus, brings KM close to the traditional role of information management.

Wilson (2002) argues that the information systems orientation dominates the approaches and implicit conceptions presented in the research papers, consulting practices and university curricula of KM. According to him, the theoretical foundation of this orientation is similar to that of information management research; that is, the term knowledge is in fact used to refer to information. Wilson argues that we cannot manage individual knowledge because it resides in human minds. Research on organizational memory information systems also supports this view by serving the needs of information retrieval and information seeking in the case of an explicit preserved form of organizational memory (Mäkinen & Huotari, 2004).

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The issues of records management are not taken into account utilizing mobile tools for document management. The current need is to combine the perspectives of both document management and records management. For example, it has been suggested that about 12% of organizational knowledge is in its structured knowledge base and the majority (46%) lies scattered about organizations in the form of paper and electronic documents (Kikawada & Holtshouse, 2001). We can assume that the mobile working environment does not improve this situation.

Mobile devices can be defined in many ways. A mobile device can be described as an application of mobile technology—a technical device utilizing mobile technology and is designed to be mobile. Mobile devices, for example, include laptop computers, personal digital assistants (PDAs), mobile phones, and other handheld devices for data transfer and communication (Allen & Shoard, 2004; Weilenmann, 2003). Mobile technology is also about personal communication technologies (PCTs), which is a broader category and includes video cassette re-