Chapter 108

Importance of Electronic Record Preservation in E-Business

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INTRODUCTION

The development of information and communication technology (ICT) and the rapid increase of e-business have led to a rapid growth of the number of produced and exchanged electronic documents. The documents range from simple receipts to complex legal contracts and service level agreements. More and more types of documents are required to be preserved for longer periods of time, for example, due to legal reasons or as evidence of a business activity. Although electronic records are created and managed in an electronic form through their entire lifecycle, they are usually printed at the end and preserved in paper form to be legally valid. This has led to a situation where paper archives are becoming too complex to be effectively managed, and need to be replaced with electronic record preservation systems. Properly preserved electronic records have equivalent legal value as records in the paper form and can be used as evidence material in court. Advanced organizations use document management systems (DMSs) for managing large numbers of electronic records. For example, a mobile phone operator creates user contracts in an electronic form or converts them from paper, preserves the contracts as long as required by the law, and disposes them after that. Unfortunately, DMSs frequently do not provide adequate technologies for integrity and authenticity provisions, which are critically important for long-term electronic record preservation in business organizations. More advanced electronic records preservation technologies are therefore required.

When introducing a solution for electronic records preservation in an organization it is important to choose a solution that suits the organization’s characteristics and needs in accordance with exist-
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Different standards that define technological approaches for the management of electronic records have been recently developed, for example US-DoD 5015.2, DOMEA, or NOARK4, but they mostly discuss the electronic preservation problem from a governmental perspective of specific countries. MoReq (Model requirements for the management of electronic records) is an international standard designed for any kind of organization (governmental or otherwise) and its main purpose is to unify the functional requirements for the management of electronic records for EU members. Updated and extended in 2008 MoReq2 (European Commission, 2008) is meant to become an internationally recognized standard, which would replace current national standards inside different European countries.

Over the last several years, a lot of effort has been spent on defining, improving, and evaluating electronic preservation strategies from a technical point of view. Although most of the challenges associated with electronic preservation are not technical but organizational (Asproth, 2005), this aspect has not been investigated much. Barbedo (2000) claims that existing organizational and administrative problems hinder implementation of electronic preservation. Most of the research into electronic record preservation was done by libraries, archives or museums that are facing different set of problems than business organizations. For libraries (archives, museums) preservation is their primary activity and they are more concerned with strategies for providing preservation for long periods of time, as the material they handle is mostly archival and therefore needs to be preserved permanently. Besides, libraries are focused on receiving and accessing records, copyrights, cooperation with other institutions, etc. On the other hand, preservation in business organizations mostly supports their business activity and core business processes, and helps them to meet legal requirements. For business organizations it is of great importance that records are not changed or lost or accessed by unauthorized persons.

The main purpose of this book chapter is to analyze electronic records preservation for business organizations from an organizational perspective. The main focus is not on technologies, but on organizational possibilities for an electronic record preservation solution, such as outsourcing the service, implementation on an organization’s own IT infrastructure as well as others. The importance of electronic record preservation in today’s and future e-business environment is discussed, and the advantages and disadvantages of electronic archives are presented. The main goal of the chapter is to point out what an organization needs to take into consideration when introducing an electronic record preservation solution.

BACKGROUND

Electronic record preservation, in general, refers to the preservation of electronic records which originate in electronic form or are properly digitalized from a paper form. According to the ISO (2001), records are information created, received, and maintained as evidence and information by an organization or individual, in pursuance of legal obligations or in the transaction of business activities. Electronic records are records in electronic form created by a software application or as a result of digitization. The preservation process starts at the time of record creation or reception and continues throughout the entire record lifecycle to its preservation or disposal. It is inevitably linked with the records management field (European Commission, 2008).