

Digital Archiving Projects with PDF/A

If one wants to eliminate mountains of paper records and the associated retention costs, then the implementation of a legally binding digital archiving system cannot be avoided. But are corporations and their project leaders sufficiently prepared for this?



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A large part of a company's "value" lies in documents. They also form the basis for demonstrating proof during legal disputes. The increasing digitization of paper documents and the flood of documents created by digital sources (fax, emails, e-invoicing, MS-Office, web, etc.) are requiring archivists to deal with the special demands of retaining documents in digital format.

The Roll of the Archiving System and File Formats

Archiving systems save files (objects), links between them (relationships) and description of the files (metadata). Several also offer the administration of dossiers. In contrast to general DMS systems they should support retention periods and in particular the deletion of files after the retention period has expired. They should also guarantee protection against unauthorized access and manipulation. And more: the system should provide surveillance by means of an access log and ensure the security of the files. Most suppliers suggest that it does not matter which file format is used for archiving. They claim that they can archive and recall everything, and that auditing requirements are therefore fulfilled when their system is used. This is not so. The archiving format plays a much greater role than the archive suppliers would like to admit. The life cycle of a document is generally substantially longer than that of an

archiving system. Documents must be irreproachably reproducible and legible after ten, twenty or more years. For this reason the role of the document and that of the archiving system have to be clearly separated. The file format PDF/A was developed for the long-term retention of digital documents. It is the preferred format for most archives in Switzerland and several other European countries. The archiving system should ensure that only documents which fulfill the above mentioned criterion are accepted. This is ensured by means of a "Gatekeeper" (validator software).

The Roll of the Electronic Signature

Electronic signatures basically fulfill four main purposes: the replacement of hand-written signatures, integrity protection (the "sealing" of digital documents and traceability of changes or manipulation), authenticity (identification of natural or legal persons) as well as authorization (rights and entitlements). Neither the electronic signature nor a specific document format can prevent a digital document from being manipulated via technical means. However, the digital signature can ensure that the change is recognizable and traceable at all times.

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