

Digitizing Records

What is digitization?

Digitizing (also known as digital imaging or scanning) is defined as the process of converting any hard-copy, or non-digital record into digital format. This includes digitizing text, photographs, maps, microfilm; converting analogue voice recordings to digital media; etc.

Considerations when planning for digitization

1. Recordkeeping requirements:

Under [The Archives and Recordkeeping Act](#), government bodies are responsible for creating full and accurate records of their activities and for ensuring that they are managed according to standards and processes established by the Archives of Manitoba. A department/agency planning a digitization project must ensure that:

- updated records schedules are in place for the records planned for digitization that reflect the change in business process and properly authorize retention and disposal
- original source records are not disposed of without authorization
- the authenticity and integrity of the digitized records can be demonstrated
- the images are accessible for as long as required

In some cases, where the records have been identified to be transferred to the Archives of Manitoba for permanent preservation, the official recordkeeping copy must be maintained in a form that can be preserved by the Archives of Manitoba.

2. Business needs analysis:

The decision to digitize should be based on an analysis of business needs balanced against risks and costs. Business needs include not only support of current work processes, but integrity and accessibility of the information as long as it is needed. Opting to maintain digital images in electronic form for medium to long periods (e.g. over 10 years), means a long-term commitment of resources. Storage and migration costs are often neglected in the analysis.

Digital records management capability must be considered up-front when planning for digitization. When government records will be maintained in electronic form only, additional capability that meets standards for electronic records management may be needed to support management of the records throughout their life cycle.

2.1 Some factors to consider when analyzing business needs and requirements:

- Why do you want to digitize?
- What problems/challenges are you trying to solve?
- What is the desired end product? Document management capability? A searchable online collection?
- What are the technical specifications? Do they meet all business requirements?
- How long do you need to keep the digital records?
- What do you need to do with the originals? Are there any legal or archival requirements that may require your program area to keep the hard-copy version, even after the records have been digitized?
- Once the records are in digital form, where will they be stored and how will they be managed?
- What are the quality control procedures to ensure that the digitized record is a true and accurate copy? Are they documented?
- What is the relationship to records in other formats? How will related records be linked to the digitized records and to the business context?
- Will there be integration with other systems (file tracking systems, line-of-business applications)?
- How will digitization facilitate work process and information flow? What are the implications? (e.g., when will draft and final records be captured, how will information be added to records or files, how will records be routed, how will closure and retention/disposal mechanisms be applied?)
- What are the indexing and metadata requirements? These should be determined by analyzing how users will access the records and how the records will be managed.
- Will user access and security be controlled? Program areas should define rules and determine system capability needed to control access and protect information.
- What staffing is required to support imaging, indexing and quality control procedures?
- What is the condition of original records? This will affect handling during imaging and quality of image.
- Is any of the work being outsourced? Outsourced digitization agreements/contracts should be reviewed in consultation with the Legal Services Branch, Manitoba Finance, Insurance and Risk Management Branch and the Archives of Manitoba to ensure that the records are securely handled and protected and that no information is reproduced or stored in a way that risks breach or alienation from the Crown.

2.2 Summary of Benefits and Risks:

Potential **benefits**:

- Increased storage capacity and reduced dependence on paper records (space saving).
- Improved tracking and control of active files and content when supported by necessary functionality.
- Improved access when combined with effective indexing. Most beneficial where:
 - frequent access to high volumes of records is required
 - there are multiple users accessing the same records
 - the original format made it difficult to access the records (e.g. large maps or microfilm).
- Access rights can be used to control who can view the record.
- May facilitate work process and information flow when implemented in combination with workflow capability.
- May increase productivity.
- Ease of making copies and disseminating the information.
- Reduction of hybrid systems (paper and electronic).

Potential **risks**:

- Hardware and software obsolescence. The life-expectancy of the supporting systems may be much shorter than the required retention period of the records, necessitating active management and migration of the records over time.
- Initial costs of digitization and storage may be relatively low but long-term storage and migration may be overlooked in planning and budgeting. The costs associated with the medium to long-term maintenance and accessibility of digital records may be more than required to physically store the original source records.
- Digitization itself is not a records management solution. If good records and information management practices are not already in place, issues could be compounded when the records are in digital form.
- Problems with implementing disposition. Additional capability is required to meet minimum standards for electronic recordkeeping.

2.3 Cost Factors:

- Initial system costs (hardware and software).
- The digitizing process (document preparation, digital quality control, image capture, metadata capture and management).
- Indexing requirements.
- Integration with other systems.
- Data storage and migration costs, including costs for records that need to be maintained medium to long-term (over 10 years).

For more detailed specifications and considerations, consult the Government Records Office and the following related standards and technical reports:

CAN/CGSB-72.34-2017 National Standard of Canada. *Electronic Records as Documentary Evidence*. This standard is available at no cost from the Canadian General Standards Board:

<http://www.publications.gc.ca/pub?id=9.839939&sl=0>

ISO 13008:2012 *Information and documentation - Digital records conversion and migration process*.

<https://www.iso.org/standard/52326.html>

ISO/TR 13028:2010 *Information and documentation - Implementation guidelines for digitization of records*. <https://www.iso.org/standard/52391.html>

ISO 15489:2017 *Information and documentation – Records management – part 1: Concepts and principles*. <https://www.iso.org/standard/62542.html>

Also see: [Electronic Recordkeeping FAQs](#) and [Fact Sheet on Recordkeeping Standards](#).

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