

The Basics of: Digitization

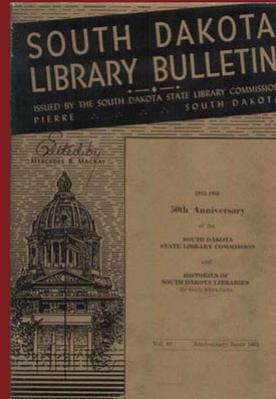
A RACE Webinar
South Dakota State Library

What is Digitization?

- Converting analog information to digital information.
- To put into digital form.

What Can Be Digitized?

- Text
- Still Images
- Sound
- Video



What Can Digitization Do For Me?

Digitization Can....

- Increase access to materials
- Adds value of collections
- Assist in the preservation of materials

Sounds Great!

But won't I need to buy a lot of expensive equipment?

The Tools of Digitization

- Computer
- Flatbed Scanner
- Digital Camera
- Microphone
- Audio Recorder
- Video Recorder
- Editing Software
- Website
- Storage

The Language of Digitization

Some Basic Terms Defined

- Pixel- the smallest discrete unit of information in a digital image's structure
- DPI- Dots per Inch
- PPI- Pixels per Inch
- Megapixel- 1 Million Pixels, often abbreviated MP

Some Basic Terms Defined

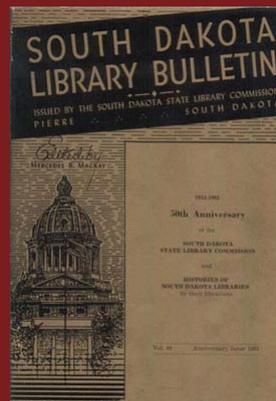
- Black and White- an image consisting of 2 colors, black and white.
- Grayscale- an image consisting of shades of gray, from white to black.
- Resolution- the spatial detail that can be resolved in an image

Some Basic Terms Defined

- Born Digital- content that originated as a digital product
- Archival Master Copy- file that represents the best copy produced by a digitizing organization
- Derivative File- also called the access, delivery, or viewing file. Provides end user access.

Some Basic Terms Defined

- OCR- Optical Character Recognition, used to convert images of handwritten, typed, or printed text to a machine editable format



Some Basic Terms Defined

- Digital Object Management System- software used to organize digital objects and deliver them on the internet. Can also be called digital asset management software, digital library software, or digital collection management software.

Some Basic Terms Defined

- Compression- The process of encoding data in a manner that reduces the amount of information required than required for the uncompressed data. Compression techniques can be categorized into two major categories: lossless and lossy.

Basic Terms: Compression



Lossless

- **300x300 ppi**
- **88.1 kb**



Lossy

- **300x300 ppi**
- **7.25 kb**

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Some Basic Terms Defined

- **Lossless Compression-** Data compressed using a lossless compression technique will allow the decompressed data to be exactly the same as the original data before compression, bit for bit.
- **Lossy Compression-** Data compressed using a lossy compression technique results in the loss of information. The decompressed data will not be identical to the original uncompressed data.

Some Basic Terms Defined

- Metadata- information about an object, a component of the object, or a collection of objects. Metadata, like cataloguing makes it possible to find something, put it in context, and relate it to other objects or collections.

Building Good Digital Collections

Collection Development

- How does the collection support your library's mission?
- Who is your target audience?
- How will the collection be used?

Describe and Discover

- Scope
- Format
- Restrictions to Access
- Ownership
- Authenticity
- Helps the user to discover the existence of the collection
- Helps the user put the collection in context

Collection Management

- The digital objects should be corrected and enhanced when appropriate
- Metadata should be created, corrected, and enhanced
- Links should be added or deleted when appropriate

Availability

- Accessible on demand
- Uses technology readily available to the target audience
- Accessible to those with limited bandwidth
- Accessible through a variety of browsers
- Accessible to those with disabilities

Intellectual Property Rights



- What rights do the owners of the original source material retain?
- What rights do the collection developers have in making the collection available digitally?
- What rights do the users have for subsequent use of the collection?

Circulation Statistics

- Who is using what, how, and why?
- Observation
- Focus Groups
- Interviews
- Log In Analysis

Interoperable

- Collection developers should be aware of related collections
- Follows widely accepted practices in data creation and metadata creation

Technical Standards for the South Dakota State Library

Digital Practices: Scanning

Materials	DPI	Notes
5x7 Photo (larger)	300	File size restraint pending
3x5 Photo (smaller)	600	File size restraint pending
Text	600	Can include handwritten documents
Slides/Negatives	2400	May need attachment for scanner
Digital Photo (printed)	Original	Obtain original file (jpeg)
B/W Photo		Grayscale
Monochrome Photo (sepia)		Color

Workflow Integration

- Digital collection building is built into the staff workflow
- Collection development takes the user's information searching behavior into account
- Workflows are reviewed periodically and changes made as needed

Sustainability

- Archived for permanent access
- Ensuring applications remain usable
- Upgrading hardware and software as needed
- Maintaining server security
- Providing end user support

Resources

- CONTENTdm- OCLC has made CONTENTdm Quickstart available to South Dakota's libraries through our First Search Database Subscription.
- Dublin Core Metadata Initiative- an organization engaged in developing metadata standards for a variety of purposes
<http://www.dublincore.org>

Examples

- Digital Library of South Dakota- a collaboration between the six Board of Regents colleges and universities in South Dakota.

<http://dlsd.sdln.net/>

- South Dakota e.library- provides access to South Dakota State Agency publications not found elsewhere online

<http://e.library.sd.gov>

Examples

- Denver Public Library Podcasts, Stories for Kids!- please note that the Denver Public Library gained permission from the publisher's before creating and releasing these podcasts

<http://podcast.denverlibrary.org/>

Examples

- Hennepin County Library, World War II Poster Collection
<http://www.hclib.org/pub/search/WWIIPosters/>
- Wilmette Public Library, Local History Collection
<http://www.wilmette.lib.il.us/localhistory/localhistoryhome.php>

Questions?

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Thank you for participating!

