Charting the Path to a Digital Local History Room

Michigan Library Association Annual Conference October 19, 2022 Richard Adler, Chelsea Denault, & Biz Gallo











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Local History Rooms

Yearbooks

Home Histories

Genealogical Records

Maps

Photographs



Photo: Michigan Room at Mackinaw Area Public Library Adler, Denault, & Gallo | Michigan Library Association Annual Conference 2022 4

Digital Local History Rooms

Digitization supports the broader work of libraries: **to ensure access to information for all.**



Why Digitize? Access!

• Virtual access



@kelseymuseum

Miss visiting the Kelsey in person? We miss you! Did you know you can still visit the Kelsey from the safety of your home? Check out our online exhibitions, like this one on Ancient Color! myumi.ch/nbNzV #museumsathome

...



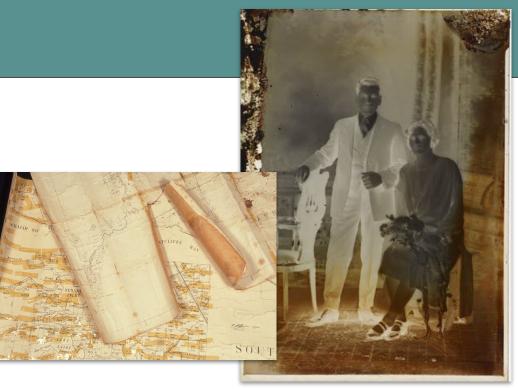
9:53 AM · Apr 23, 2020 · Twitter Web App

Why Digitize? Access!

- Virtual access
- Hidden Collections
- Research
- Collaboration
- Accessibility



• Degradation



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- Degradation
- Carrier obsolescence



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- Degradation
- Carrier obsolescence
- Theft/vandalism



- Degradation
- Carrier obsolescence
- Theft/vandalism
- Natural Disasters



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Why Digitize? Revenue!

- Sale of replicas & prints
- Publications
- Licensing (if copyright holder)

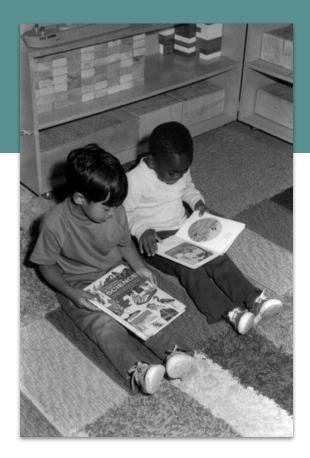


Where to Start?

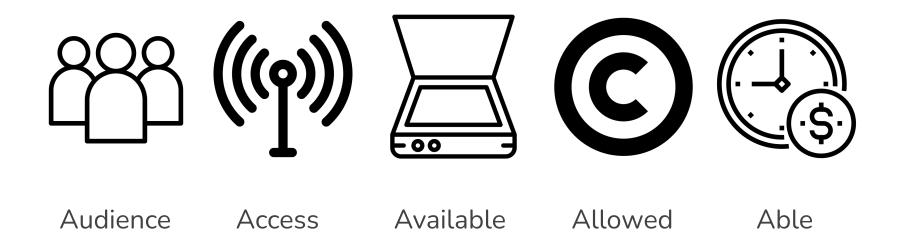


How to Start?

- Develop workflow
- Document choices
- Small wins scale
- ~10 objects



The Five A's of Selection for Digitization



Project Planning



LIBRARY OF MICHIGAN

DIGITIZATION PROJECT PLANNING GUIDE

In any successful digitization project, there is more to consider than scanning alone. Gather the project's relevant stakeholders and include them in your planning. This guide will help you consider and address each step in the digitization process, from access to rights to long-term preservation!ⁱ

PROJECT OVERVIEW

Project Name:

Goal

What are your goals for this project and how do they support your organization's mission?



Digitization - Funding

- Digitization = investment
- "Preservation reformatting"
- LM Digitization Grant *mi.gov/LSTA*
- LM Digitization page *mi.gov/LMdigitization*



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Digitization - Equipment & Services

- Digitization Kits bit.ly/LMdigkits
- Digital Content Hosting bit.ly/lmdigitalinfo



Digitize and Done?





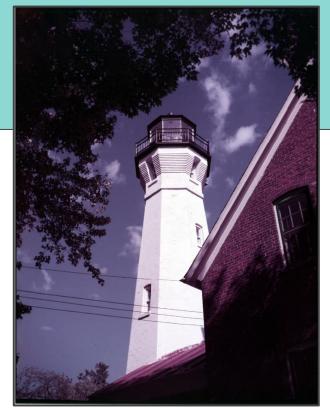


- A public service
- An ongoing outreach program
- A publicity campaign
- An exercise in discovery



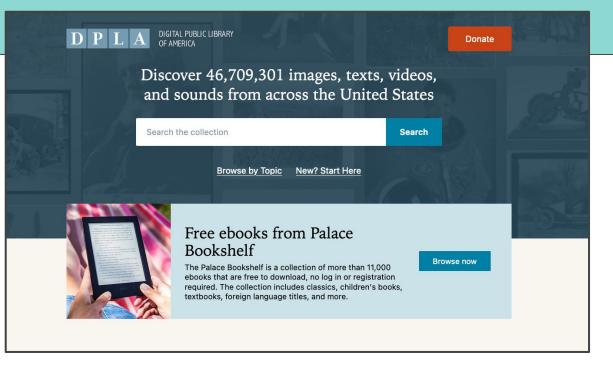
Consider the Lighthouse

- A prompt for discussing commerce and navigation on the Great Lakes
- But also a prompt for a discussion about navigation before there were lighthouses and how indigenous people might have navigated and interacted with the Great Lakes in very different ways.
- Online access, by opening your collections to a wider community, can further encourage these connections.



Port Sanalac Lighthouse, Sanalac County, Michigan. Retrieved from https://digital.library.wayne.edu/item/wayne:vmc5729 on Oct 5, 2021.

Access: DPLA (<u>https://dp.la/</u>)



Access: Michigan Memories (<u>https://michmemories.org/</u>)





Why Access Through Michigan Memories and the DPLA?

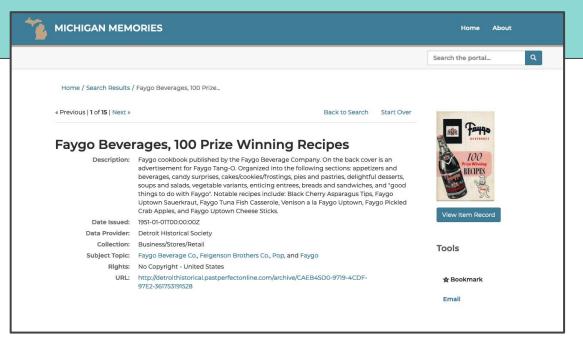
No added costs or paywalls.

The contributing institution determines how its collections are described.

Only metadata are shared, not the digital objects themselves.



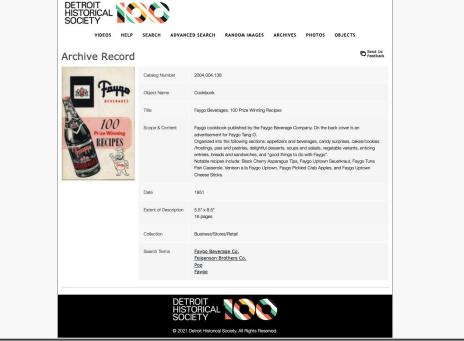
Access: Describing Collections



https://michmemories.org/exhibits/default/catalog/67726d3e92f9159145dc3ede8765589a



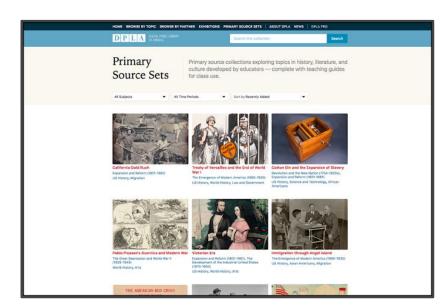
Access: Describing Collections



https://detroithistorical.pastperfectonline.com/archive/CAEB45D0-9719-4CDF-97E2-361753191528



Access: In the Classroom



MICHIGAN MEMORIES







Arab Americans and the Automobile: Voices from the Factory Detroit Housewives League

LGBT Detroit: Civil Rights in Michigan

This portal was funded by a Library Services and Technology Act (LSTA) Collaborative Library Services Grant, administered by the Library of Michigan

Access: Classroom Resources

(https://sites.google.com/view/michmemoriesclassroomresources/home)



In honor of <u>Black History Month</u>, <u>Michigan Memories</u> is highlighting some of the photographs from the rich collections of our state's cultural institutions. For updates please visit our Facebook page and our Twitter account.

Black History Month



Western Union bicycle messengers

Three young African American women in uniforms, holding "Western Union Telegrams", 2 with bicycles. Left to Right Earlene Robey, Marjorie Sams, Doris Leak. Grand Rapids Herald article, 11-7-1942, pg. 3

Possible research questions:

- What was Western Union?
- When did Western Union first hire African American men as workers?
- When did Western Union first hire African American women?

Year: 1942

Source: The Robinson Studio Collection (Coll. 125), Grand Rapids History Center, at the Grand Rapids Public Library: https://digital.grpl.org/Detail/objects/121745



Required Fields

Title

Rights

Data Provider

URL (IsShownAt)

Preview (Thumbnail)



Highly Recommended

Collection Language Type Date Place Subject

Recommended

Creator Format Publisher

PRESERVATION

What is Digital Preservation?

"Digital preservation is the series of *managed activities* necessary to ensure *continued access* to digital materials for *as long as necessary*."

"Managed Activities" - digital preservation requires a variety of proactive and systematic actions to care for content. Also, digital preservation is an ongoing process and not a one-off.

"Continued Access" - the ultimate aim of digital preservation is maintaining access and use.

"As Long as Necessary" – A reminder that we should be aiming to preserve the digital content for 'as long as necessary," depending on your organizational context and needs.

Understanding Digital Files

Digital files are made of binary code - a series of 1s and 0s.

One <u>byte</u> is made up of 8 <u>bits</u>, such as 01101100

Digital preservation's goal is to keep every bit - every 1 and 0 in every individual byte - in the same place, for as long as that file is needed.



Understanding Digital Files



0 bits flipped



2 bits flipped

3 bits flipped

https://en.wikipedia.org/wiki/Data_degradation

What Does Preservation Do?

The "series of managed activities" of a digital preservation program maintains a file's:

Integrity





Identity

Authenticity

Why is Preservation Important for my Local History Collection?

Collections stewardship

Legal mandates

Natural, technical, and manmade risks

Costs - tangible & intangible

Assure long-term access and use of content



Preservation Challenges for Public Libraries

COST





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The Michigan Digital Preservation Network

The MDPN is a membership-based collaborative initiative that provides access to affordable and easy-to-use digital preservation services.

> The MDPN is... Collaborative Smart Collective Community-based Equitable



MDPN Technology

LOCKSS (Lots of Copies Keeps Stuff Safe)

- Open-source, free software program from Stanford University
- Works like a web crawler to harvest content from a secure, MDPN-only server
- Stores content at multiple locations on servers called "nodes"
- Nodes "poll" each other periodically to make sure digital content is the same across all nodes
- Nodes that don't agree with the poll replace damaged or corrupted files with copies from the other nodes
- Adopted by a robust and supportive community of international users

MDPN Membership Costs

Member Level	Annual Operating Budget	Membership Cost
Individual	n/a	\$35
Erie	\$10,000 and under	\$100
Ontario	\$10,001 - \$100,000	\$300
Huron	\$100,001 - \$500,000	\$550
Michigan	\$500,001 - \$999,999	\$1,500
Superior	\$1 million - \$9.99 million	\$2,500
Bridge	\$10 million +	\$3,500

40

MDPN IMLS Grant: Demonstrating and Documenting a Statewide LOCKSS 2.0 Preservation Network for Cultural Memory Institutions

Phase 1: Technical Development & Documentation

Phase 2: Community Outreach & Education

Phase 3: Sharing Resources & Results



Feeling Overwhelmed? Here are 5 (+1) easy steps to start with...

- Know what you have
- Learn about free, open-source tools
- Find a community (or two or three) and learn what others are doing
- Build a team of stakeholder advocates in your library
- Start an internal digital preservation assessment

Reach out to me anytime!

Digital Preservation Tools

Functional Area	Lovel							
Functional Area	Level 1 (Know your content)	Level 2 (Protect your content)	Level 3 (Monitor your content)	Level 4 (Sustain your content)				
Storage	Have two complete copies in separate locations Document all storage media where content is stored Put content into stable storage	Have three complete copies with at least one copy in a separate geographic location Document storage and storage media indicating the resources and dependencies they require to function	Have at least one copy in a geographic location with a different disaster threat than the other copies Have at least one copy on a different storage media type Track the obsolescence of storage and media	Have at least three copies in geographic locations, each with a different disaster threat Maximize storage diversification to avoid single points of failure Have a plan and execute actions to address obsolescence of storage hardware, software, and media				
Integrity	Verify integrity information if it has been provided with the content Generate integrity information if not provided with the content Virus check all content; isolate content for quarantine as needed	Verify integrity information when moving or copying content Use write-blockers when working with original media Back up integrity information and store copy in a separate location from the content	Verify information of content at fixed intervals Document integrity information verification processes and outcomes Perform audit of integrity information on demand	Verify integrity information in response to specific events or activities Replace or repair corrupted content as necessary				
Control	Determine the human and software agents that should be authorized to read, write, move, and delete content	Document the human and software agents authorized to read, write, move, and delete content and apply these	Maintain logs and identify the human and software agents that performed actions on content	Perform periodic review of actions/access logs				
Metadata	Create inventory of content, also documenting current storage locations Backup inventory and store at least one copy separately from content	Store enough metadata to know what the content is (this might include some combination of administrative, technical, descriptive, preservation, and structural)	Determine what metadata standards to apply Find and fill gaps in your metadata to meet those standards	Record preservation actions associated with content and when those actions occur Implement metadata standards chosen				
Content	Document file formats and other essential content characteristics including how and when these were identified	Verify file formats and other essential content characteristics Build relationships with content creators to encourage sustainable file choices	Monitor for obsolescence, and changes in technologies on which content is dependent	Perform migrations, normalizations, emulation, and similar activities that ensure content can be accessed				

National Digital Stewardship Alliance Levels of Preservation

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Home Insert Draw Page Lay	out Formulas I	Data Review View	🗘 Tell me				년 Share
				General ~ \$ ~ % 9 % -%	Conditional Format Ce Formatting as Table Styl	v insert De	iete Format Σ × Δ∇ × Δ Sort & Firmat
f_x J. Metadat	ta Management: Proce	esses to create and maintain :	sufficient metadata to su	port preservation, discovery a			v Pillon Su
A .				c		D	٤
Digital Preservation Coalition Rapid As Assessment Worksheet	sessment Model (DPC	RAM)					
Organization							1
Number of employees							
		Education & Research / Library / Mu	iseum or Gallery / Other (Delete	as appropriate)			
Scope of assessment							
Type of content being assessed Number of TB of digital content being assessed	8	tised document collections / Digitis	ed AV collections / Email / Eboo	is / Etheses / Research data / Websites ,	(Other (Delete as appropriate)		
Time frame used for target levels (e.g. 1/3/2 years	5						
Assessment completed by							
Assessment complete on	2						
ORGANIZATIONAL CAPABILITIES							1
s	Current Level	Why did you select this level?			Ta	rget Level (optional)	What needs to be in place to get there?
 A. Organizational viability: Governance, organizational structure, staffing and resourcing of digital preservation activities. 							
B. Policy and strategy: Policies, strategies, and procedures which govern the operation and management of the digital archive.							
C. Legal basis: Management of legal rights and responsibilities, compliance with relevant regulation and adherence to ethical codes related to acquiring, preserving and providing access to digital content.	ł						
D. IT capability: Information Technology capabilities for supporting digital preservation							
D. IT capability: Information Technology capabilities for supporting digital preservation							
D. IT capability: Information Technology capabilities for supporting digital preservation activities. E. Continuous Improvement: Processes for the assessment of current digital preservation capabilities, the definition of goals and the							
D. IT capability information Technology capabilities for supporting digital preservation extention. E. Continuous improvement: Processes for the assessment of current digital preservation capabilities, the definition of goals and the monitoring of progress F. Community: Gruggement with and contribution to the wider digital preservation	Visualise your results	Lists - do not edit	+				

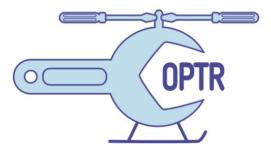
Digital Preservation Coalition RAM

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Digital Preservation Tools

			ecycle S	tages				
	C.e.	Ingen Receive C	Press	Press Press	Acces Action	Store dia and As.	Disp.	Cross.
3D	1	3		5	3	2		3
Audio	5	15	3	17	3	2	1	14
Binary Data	1	3	1	4	1	2		6
Container	1	1		5		1		
Database	1	5		16	2	1		1
Disk Image	12	6		4	1	3		8
Document	4	29	1	24	8	1	1	22
EBook		2		2				1
Email	5	5	2	5	6	3		7
Geospatial		1						
Image	9	31	1	31	6	1		18
Metadata	5	21	1	8	6	3		5
Project Management Data	1			1	1			
Research Data	10	5	9		2	16		6
Software	1	2		3		1		2
Spreadsheet	1	5		4				2
Video	4	14	3	19	2	2	1	11
Web	34	8	3	9	5	4		8
Not content-type specific	28	42	101	14	92	84	29	75

Community-Owned Preservation Tools Registry



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Built from the 568 tools recorded in COPTR.

"It's long past time to start taking actions."

- Trevor Owens, Head of Digital Content Management at LOC



Digitization Access

Digital Preservation

Key Takeaways

What actions can you take now??

Inventory your collection! Assess the "who, what, where, when, why, and how" of your content

Use your inventory to create a prioritization roadmap for digitization Ask what is most unique, most used, and most at risk

Need help? Don't know where to start? **Reach out** and start a conversation with us! (we're nice!)



Thank You!



Contact us:

bit.ly/MLA-resources

Digitization & Project Planning: Biz Gallo, gallob@michigan.gov

Access & Michigan Memories: Richard Adler, rcadler@umich.edu

Digital Preservation & MDPN: Chelsea Denault, denaultc@mcls.org