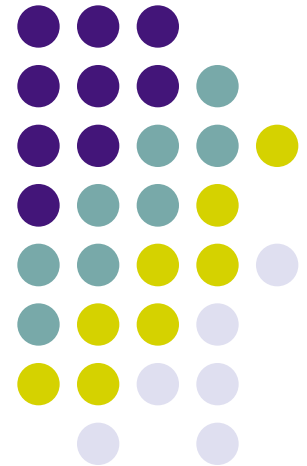


# The Digital Library Agenda for the 21<sup>st</sup> Century Research Library

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## Envisioning a Strategic and Collaborative Digital Research Library



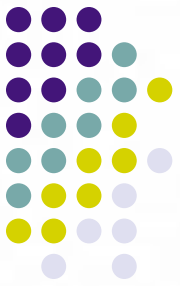
Plato L. Smith II  
Florida State University Libraries Presentation  
May 13, 2005

# Table of Contents

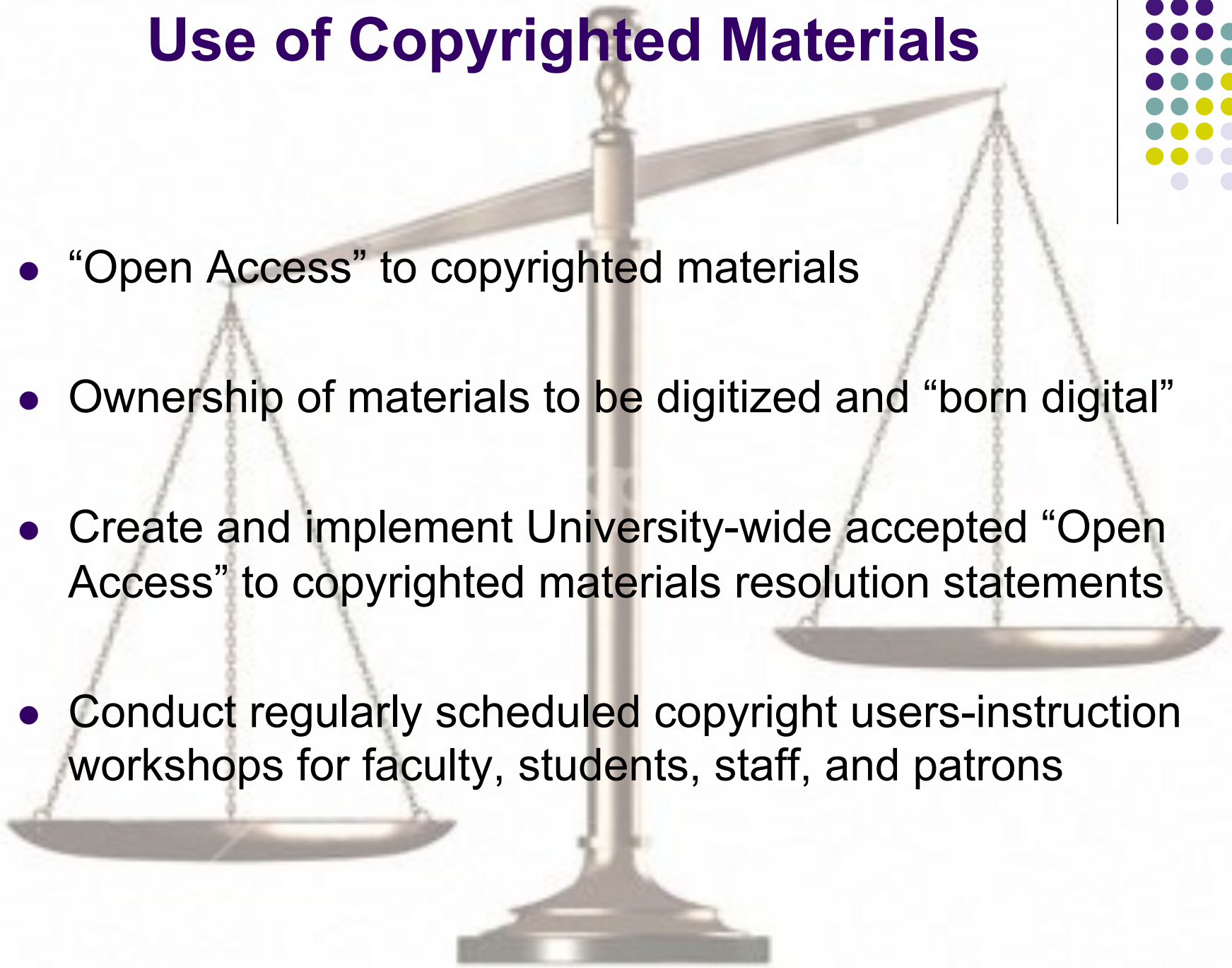


- Use of Copyrighted Materials
- 21<sup>st</sup> Century Digital Library Agenda
- An Illustrative Research Library Business Model
- Areas of Interests
- Future
- References
- Acknowledgements

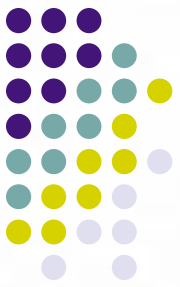
# Use of Copyrighted Materials



- “Open Access” to copyrighted materials
- Ownership of materials to be digitized and “born digital”
- Create and implement University-wide accepted “Open Access” to copyrighted materials resolution statements
- Conduct regularly scheduled copyright users-instruction workshops for faculty, students, staff, and patrons



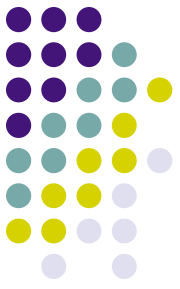
# Use of Copyrighted Materials – A Creative Commons Approach



- Creative Commons gives new meaning to the term creative license
- Creative Commons allows copyright owners the flexibility and manageability to control the use of their copyrighted works by allowing a mix of licensing options from which to choose and share their creative works.
- Digital Library Initiatives must incorporate Creative Commons approaches into project implementations and thereby educate faculty, student, staff, and patrons in the process (lead by example)



# 21<sup>st</sup> Century Digital Library Agenda



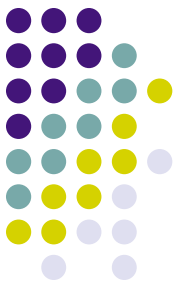
- Define the goals and characteristics of the digital preservation repositories
- Establish administrative and technical models for digital preservation repositories
- Convey how preservation repositories metadata will be encoded, stored, and managed
- Provide user-centered access to digital repositories

# Goals and Characteristics of Developing a Digital Repository – U. Minn. Libraries Case File



- **Organization:** U. Minn. Libraries
- **Location:** Minnesota
- **Goals:** Digital Collections Unit needed to digitize, describe, and provide access via searchable database to over 6,000 oversized World War posters
- **Issues considered:** Physical conditions, copyright, duplicates
- **Equipment Used:** Power Phase FX Digital Camera System
- **Image File Format:** High-resolution 24-bit, uncompressed TIFF, min. res. 300 pixels per inch; derivatives thumbnail and screen-size images saved as JPEG at 120 pixels per inch
- **Storage:** Wrote each image to durable optical storage media
- **Time spent digitizing:** 4,000 hours (100 weeks)
- **What's next:** Enhanced database search features

# Digital Preservation Repository Metadata Elements



- Unique Digital Identifier
- Other Identifier(s)
- Title
- Series
- Caption
- Creator
- Publisher
- Other contributors
- Year of creation
- Owning repository
- Object location
- Ownership History
- Medium
- Media
- Original Dimensions
- Descriptions
- Subject Terms
- Use/Rights
- Notes
- File Format
- Bit Depth
- Resolution



# Digital Preservation Repository – Search GUI (May 2005)



## Search The War Posters Collection

Search for:  Keywords  Search [Search Help](#) [About Us](#)

### Select Period:

- All
- World War I
- Interwar Period (1918-1939)
- World War II

### Select Series to Search:

- All
- Charitable organization
- Civil defense
- Civilian participation

### Limit Search by Specific Subjects:

- Allied Powers (1919-)
- Alsace-Lorraine question
- American Committee for Armenian and Syrian Relief
- American Express Company
- American Field Service
- American Humane Association
- American National Association
- American Red Cross
- American Social Health Association
- Animals



Contact [msref@umn.edu](mailto:msref@umn.edu) with questions.  
[Return to War Posters Project Home Page](#)

UNIVERSITY LIBRARIES  
[Appropriate Use of Electronic Resources](#)  
©1999-2002 University of Minnesota Libraries. All rights reserved.

URL: <http://digital.lib.umn.edu/warposters/warposterssearch.html>



# Digital Preservation Repository – Search Result (May 2005)



Your search for found 22 results.  
Currently displaying results 1 through 15.

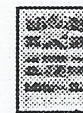
[New Search](#) | [View Basket](#) | [Next >](#)



Give : American Library Associat...



Leave books here : Victory Book ...



American Library Association : L...



Library war service of the Ameri...



Jewish Welfare Board : U.S. Army...



We want books : Victory Book Cam...



Give more books : 1943 Victory B...



Knowledge wins : public library ...



American Library Association : 1...

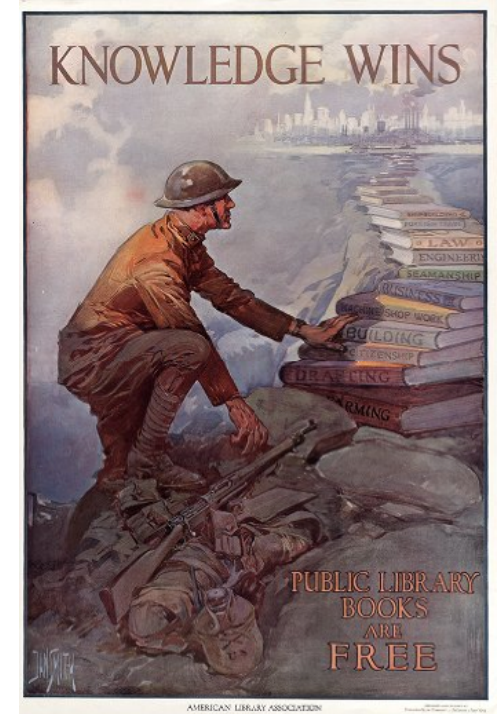
Knowledge Wins



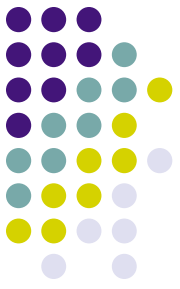
# Digital Preservation Repository – World War Poster Digital Image Example with Metadata



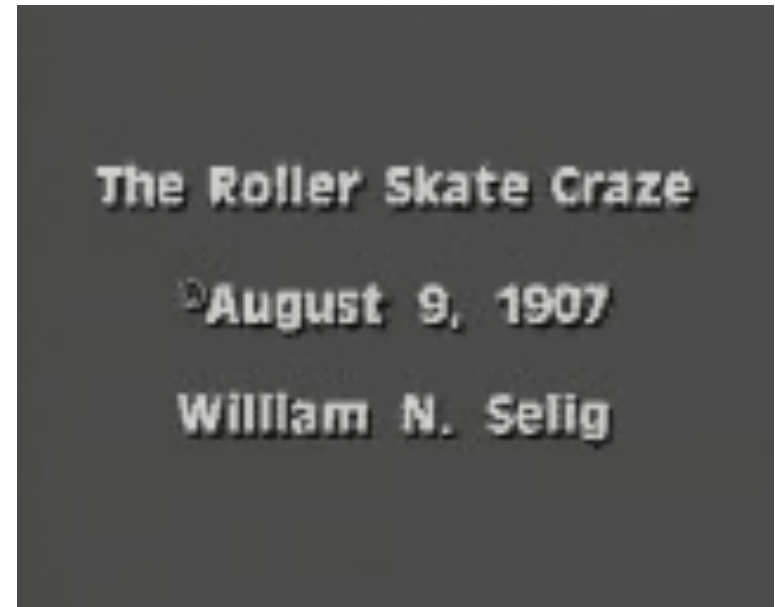
- Knowledge Wins: public library books are free...
- **Title:** Knowledge wins: public library books are free
- **Creator:** Smith, Dan. 1865-1934
- **Contributor:** American Library Association
- **Period:** World War I
- Description: Soldier moving from trenches to city over bridge of books
- **Subject Terms:** World War, 1914-1918. United States. Posters. Libraries. American Library Association.
- **Series:** War Posters [Patriotism]
- **Related Sites:** (Relationship="IsPartOf")  
<http://digital.lib.umn.edu/warposters/>
- **Medium:** Poster; **Dimensions:** 71 \* 48 cm
- **Holding:** University of Minnesota Libraries
- **Provenance:** Digital image created with IMLS support.
- **Published:** U.S.; ALA; Designed and Printed by Thomsen-Ellis Co.
- **Language:** eng
- **Record Number:** msp01047
- **Other Identifier:** OCLC10586556
- **Copyright:** Subject to US and International copyright laws.



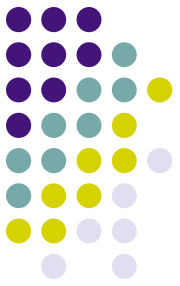
# Digital Preservation Repository – LOC Digital Movie Digitization Example



- **CREATED/PUBLISHED:** United States: Selig, 1907.
- **SUMMARY:** During this short film the cameraman photographed many different people in varied walks of life, all of whom are wearing roller skates.
- **NOTES:** Copyright: Selig; 09Aug07, H97845.
- **Duration:** 0:18 at 16 fps.
- **Source:** used Niver, Kemp R., Early motion pictures, 1985.
- **Received:** 2/2000 from LC lab; ref prints and dupe neg; preservation; Paper Print Collection.
- **SUBJECTS:** Roller-skating. Actuality-Shorts.
- **RELATED NAMES:** Selig. Paper Print Collection (Library of Congress)
- **Medium:** 1 reel of 1 (18 ft): si., b&w; 16 mm. Ref print. 1 reel of 1: si., b&w; 35 mm. Ref print. 1 reel of 1 (18 ft): si., b&w; 16 mm. dupe neg.
- **CALL NUMBER:** FLA 4410 (ref print); FEC 1863 (ref print); FRA 1535 (dupe neg)
- **REPOSITORY:** Library of Congress Motion Picture, Broadcasting and Recorded Sound Division, Washington, D.C. 20540USA
- **DIGITAL ID:** awal 1396 urn.hdtloc.mbrsmi/awal.1396  
<http://hdl.loc.gov/loc.mbrsmi/awal.1396>



# Digital Preservation Repository – Technical Information



- **Digital Preservation Process**

- State-of-the Art Digital Cameras
- Scanning
- Wrap digital reproduction and digitized content with self-identifying metadata

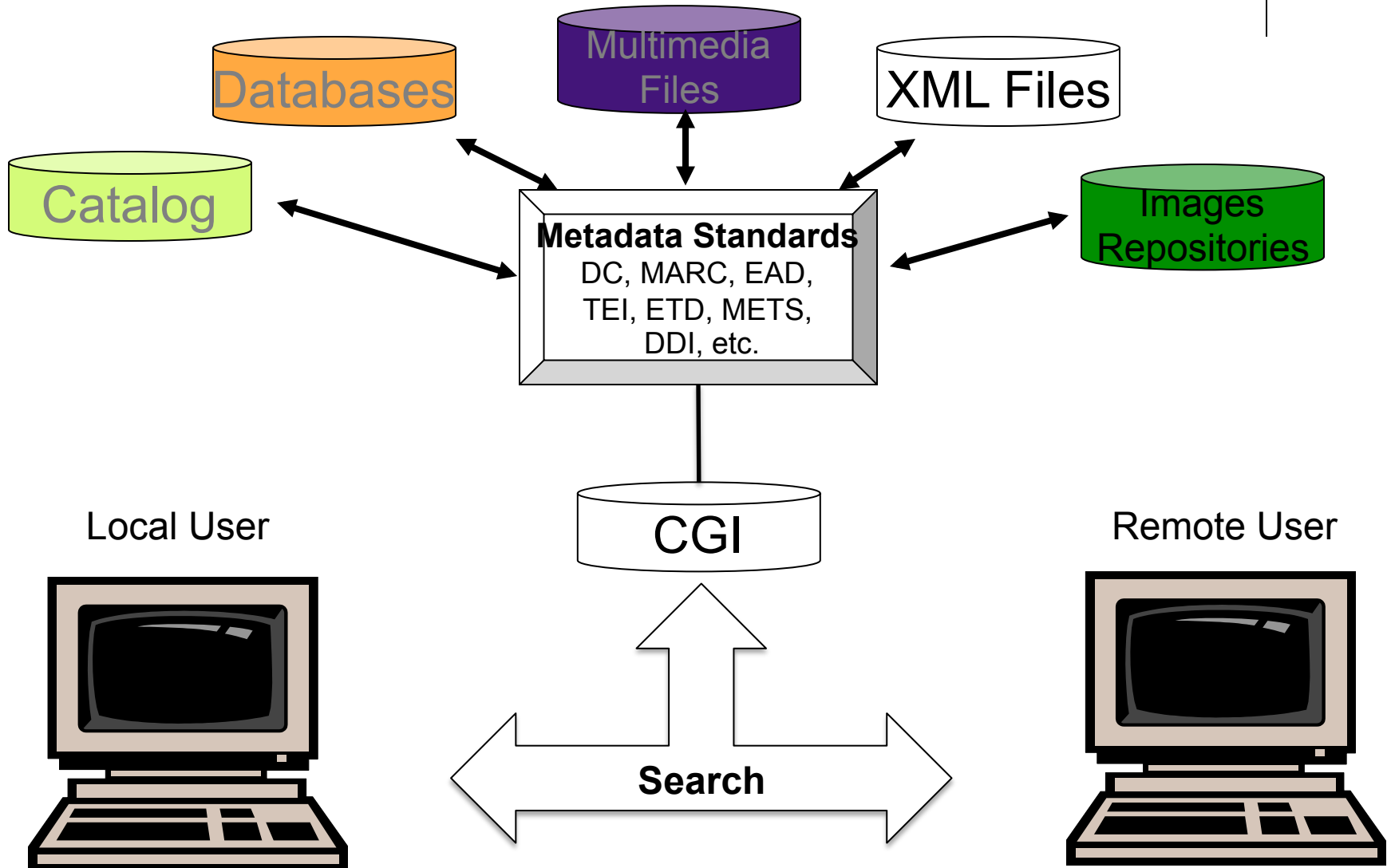
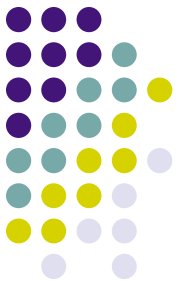
- **Technology Standards Used**

- Z39.50 protocol standard
- XML, SGML, TEI, ETD METS, DC, DDI, MARC, MARCXML, DocBook, RDF, MODS, and other metadata standards

- **File Formats & Special Viewers**

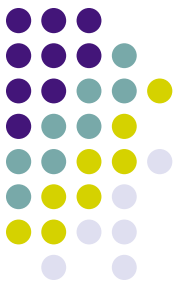
- Sound Recordings
  - .ra, .ram, .mp3, .wav
- Text and Page Images
  - .tif, .tiff, .pcx, .pdf, .sid, .sgm
- Maps
  - .sid, .jp2
- Prints and Photographs
  - .tif, .tiff
- Video
  - .mpg, .mpeg, .mov, .rm, .ram

# Providing Access – Z39.50 compliant Common Gateway Interface (CGI)



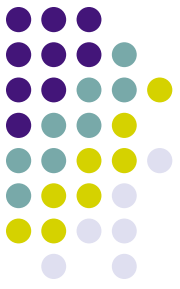


# An Illustrative Research Library Business Model



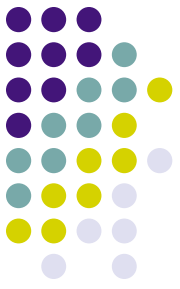
	Objectives	Measurements	Targets	Initiatives
Stakeholder		Scholarly value  Budget revenue  Digital project costs	30% CAGR*  20% CAGR  5% CAGR	
User		<u>LibQual+</u> rating  User ranking ( <u>user survey</u> )	No. 1  No. 1	Quality Management Usability testing program
Internal Processes		Development time  Timely deployment	Within projection	Applications testing program
Learning & Growth		% <u>staff stakeholders</u>  % <u>staff trained</u>	Yr. 1: 70%  Yr. 3: 90%  Yr. 5: 100%	ESOP & Benefits  Staff training
*CAGR = compound annual growth rate Reference: South West Airlines' Balanced Scorecard (2005)				

# Areas of Interests – Research Libraries



- Are you educating your users on copyright issues along with your open access and digitization projects?
- How will your current data storage infrastructure handle current and future digitization projects?
- Are you and your partners' digitized assets and digitization projects protected against disaster?

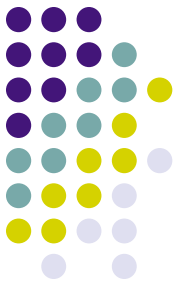
# Areas of Interests – Research Libraries



- Google Library Project
  - Current library digitization project
- Google Scholar
  - Scholarly publication search
- Google Print
  - Allows content owners to publish content
- Google Video
  - Multi-video database search
- Yahoo! Search Creative Commons

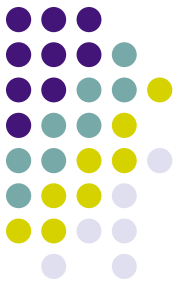
Reference: Technology Review, The Infinite Library (May 2005).

<http://www.technologyreview.com/featuredstory/404002/the-infinite-library/>



# Future

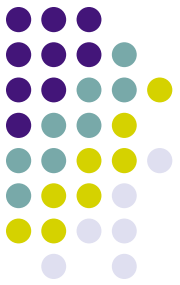
- Can you envision combined semantic interoperability and data visualization of enhanced data, image, and multimedia search?



# References

- National Diet Library
- Creative Commons
- Science Commons
- Library of Congress  
American Memory
- U. Minn. Univ. Libraries
- Los Alamos National  
Library
- Council on Library and  
Information Resources
- Technology Review
- FSU D-Scholarship  
Repository
- AHDS Case Studies
- MetaArchive
- LOCKSS
- THINKMAP
- JISC i-skills project
- eWeek, ComputerWorld,  
Communications in ACM,  
Triangle Tech Journal
- Forrester

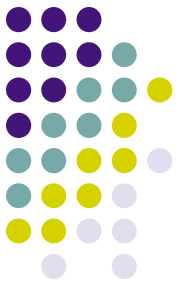




# Acknowledgements

- Florida State University Libraries
  - Director and Associate Director
  - Connie Stoutamire
  - Digital Initiatives Selection Committee
  - FSU Libraries Staff
- David Ferriero
- Bao-Chang
- Eric Lease Morgan
- The Google Team

# Thank you



- Please send comments, suggestions, and provide feedback to [psmith@moc.edu](mailto:psmith@moc.edu)