

Risk and Response

Lessons from the National Digital
Information Infrastructure and
Preservation Program

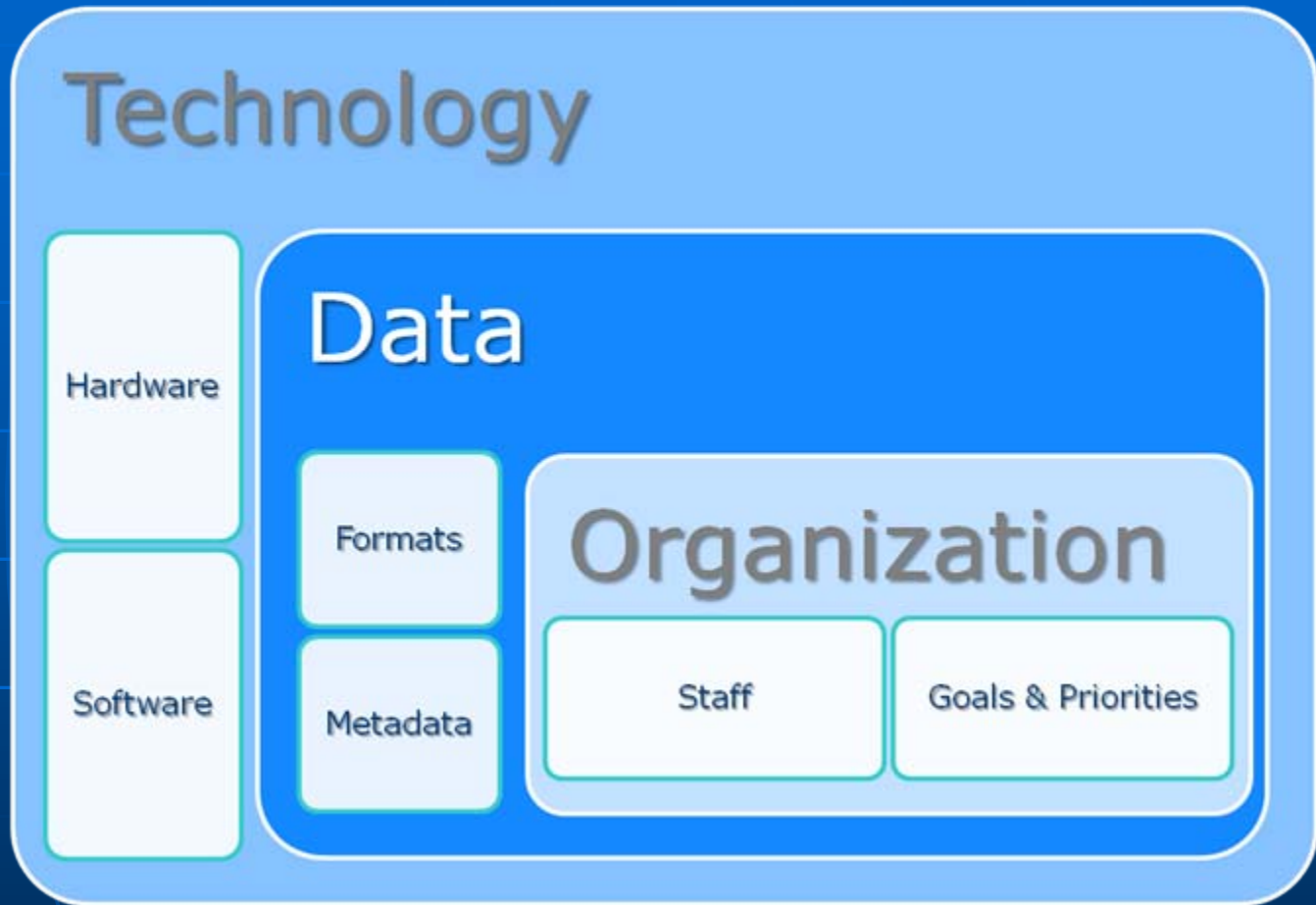
Martha Anderson, Director NDIIPP
Program Management
The Library of Congress

Everything should be made
as simple as possible, but
not one bit simpler.

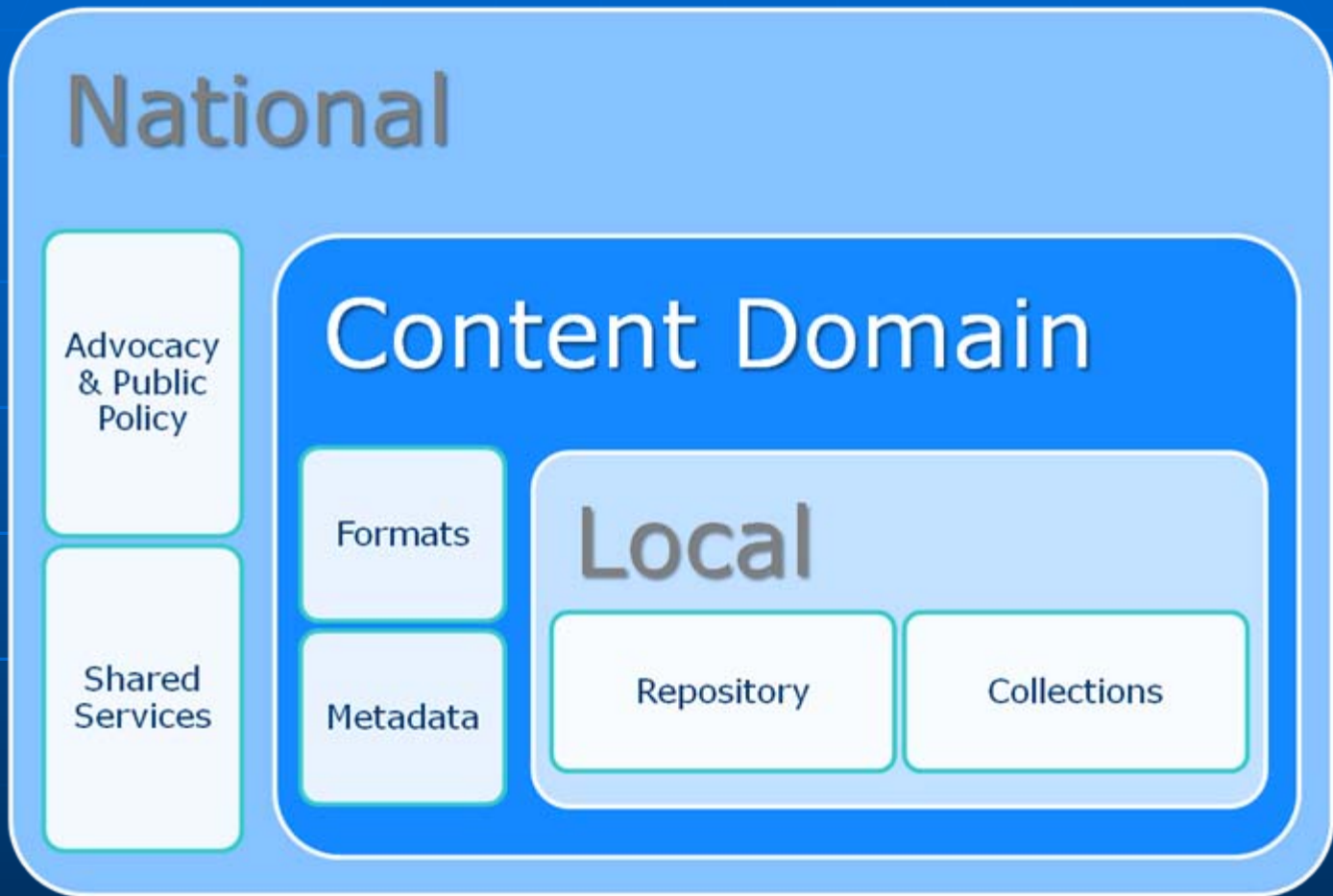
Einstein

CHANGE

TIME



Networks



Stewardship

RISKS

- Technology
- Legal
- Ownership
- Resources
- Metadata
- Value
- Organization
- Expertise

Learn by doing

Catalytic

- Take early action
- Support new ideas

Collaborative

- Engage willing partners in areas of mutual interest and expertise
- Consult key stakeholders

Iterative

- Learn from fact finding, planning and testing
- Phase investments and incorporate results back into the cycle

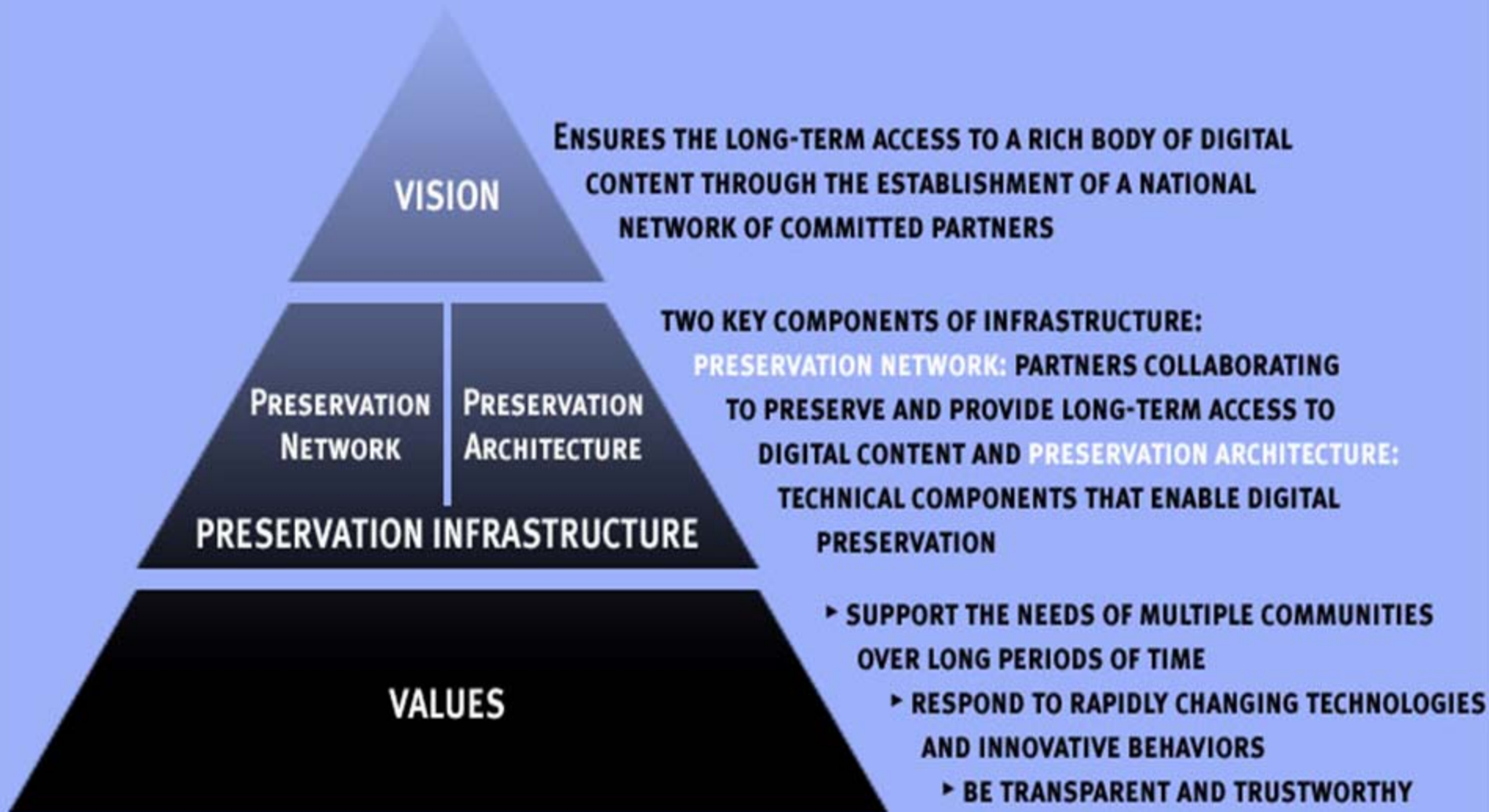
Strategic

- Address broad spectrum of issues
- Balance short term and long term actions

MISSION

To ensure access over time to a rich body of digital content through *the establishment of a national network of partners* committed to selecting, collecting and preserving at-risk digital information

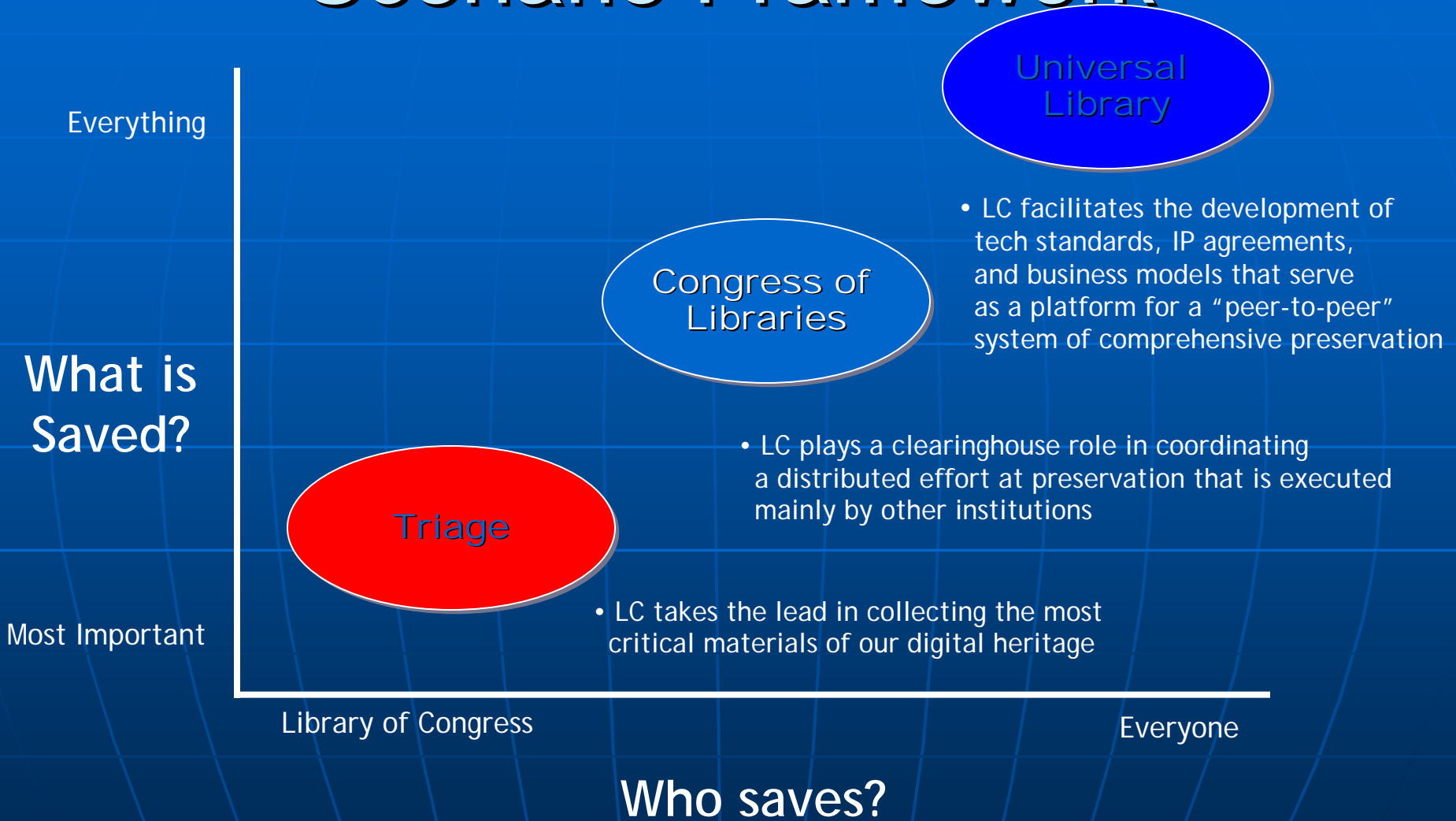
A Network of People An Architecture for Preservation



LESSONS

Take time to plan.

Scenario Framework



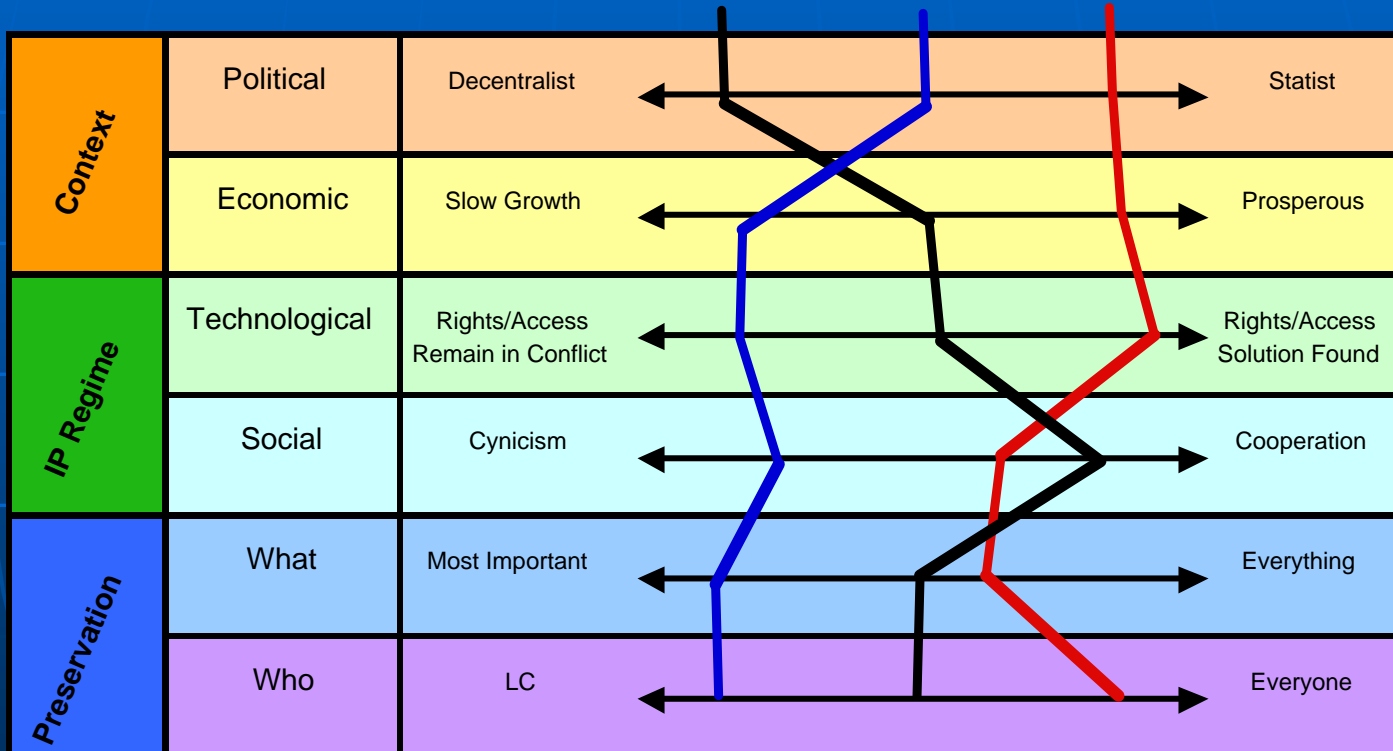
Scenario Implications

Three
Regions of
Uncertainty

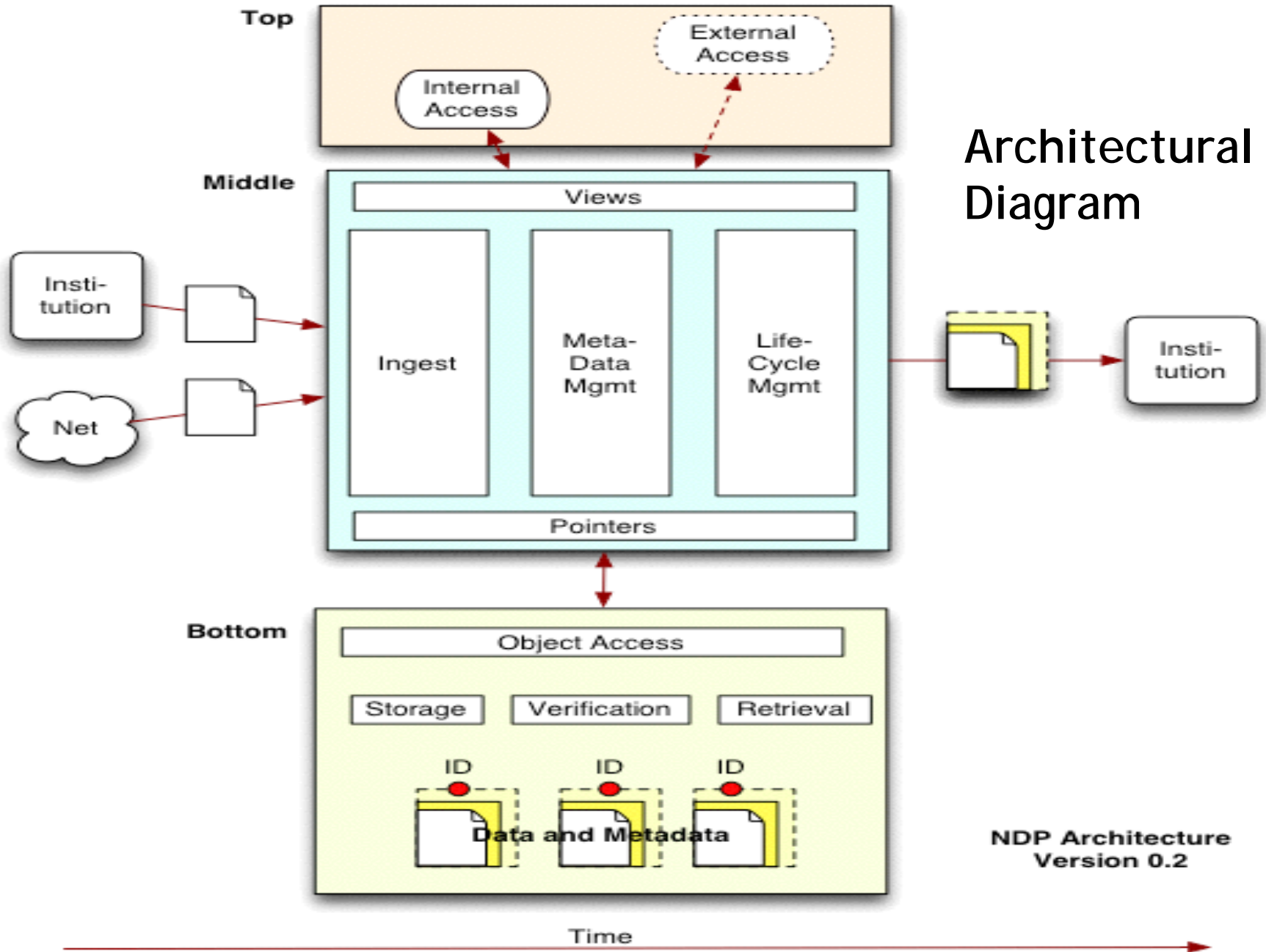
Congress of
Libraries

Triage

Universal
Library



Architectural Diagram



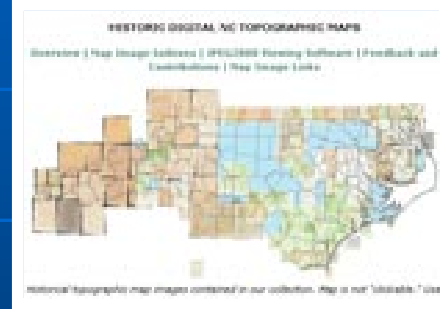
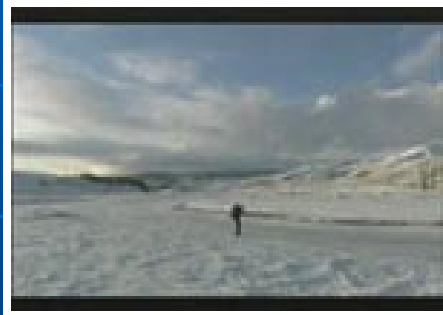
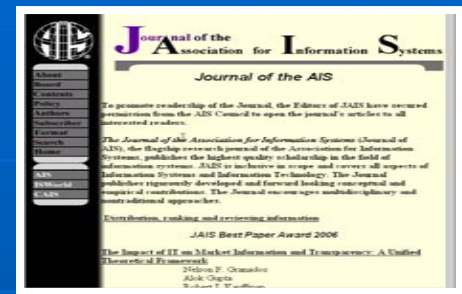
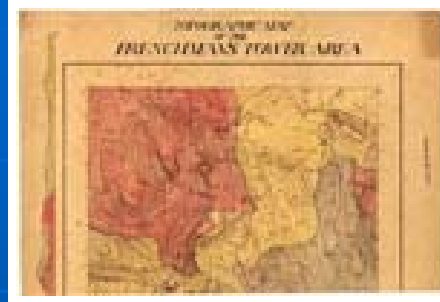
NDP Architecture
Version 0.2

LESSONS

Shared focus is a critical success factor for partner networks.

IBM informal network study,
2007

CONTENT TYPES



Images and Text

Audio Visual

Geospatial

Web Sites

Public Television...

Film footage of the early Beatles, from the archives of
PBS



Southern Culture...

Vocational students in 1926, from the collections of
Auburn University



Foreign News Broadcasts...

Al-Jazeera, from SCOLA partnership. Used by Congress and other policymakers.



History of American Politics...

Web 2002 Archives

Wellstone!

PAUL WELLSTONE FOR U.S. SENATE 2002



Paul Wellstone: You Can Count on Him to Fight for You

DFL Get-Out-The-Vote Rally - [Click for Details](#)



Wellstone Visits with Voters in Elk River
October 24, Elk River, MN
Today, Paul Wellstone brought his Green Bus to Daddy-O's Cafe in Elk River for a good old-fashioned campaign stop with supporters. Wellstone talked with folks there about the importance of fighting for education, jobs, and affordable healthcare.

What's New on Wellstone.org

- Listen to Our Newest Radio Ads
- Wellstone.org Adds New College Section
- Another Positive Wellstone Ad: "Economy"

Other Recent Top News

- Wellstone Debates the Issues in Joint Round
- Minnesota Firefighters Endorse Wellstone for U.S. Senate
- Wellstone Works to Restore Consumer Confidence

Sign up to take Election Day off of work to help us Get-Out-The-Vote!

Take Election Day Off

You Decide Whom You can Trust to Protect Social Security

Get the Facts and Read the Complete Record about Norm Coleman's Long-Standing Support for the Partial Privatization of Social Security.
[Click for Details...](#)

Kids Come First - Sen. Wellstone's Education Plan

Federal Education Funding Before Additional Tax Breaks for the Wealthy. Paul is fighting to put \$2 billion over ten

What People are Saying About Sen. Wellstone

State can't afford to lose Sen. Wellstone
The Fargo Forum, October 23, 2002



Minnesota voters - be aware that Sen.

PHONE
NEWS
EVENTS
ON THE ISSUES
ACCOMPLISHMENTS
VOLUNTEER CENTER
MULTIMEDIA CENTER
ON THE BUS
GET LOCAL
PRESS ROOM
ABOUT PAUL
DONATE
CONTACT
REGISTER TO VOTE
ESPAÑOL

GET CAMPAIGN E-NEWS
your e-mail here

Join

GREEN BUS



YOU CAN HELP WELLSTONE WIN! DONATE NOW VOLUNTEER NOW

Over 11,854 Donors in 2002
[View the List](#)

Markets, Lemmas, Finance, Politics, Taxes, In
Interviewed by

Geospatial Information...

Useful for studying demographics, populations



Business Records...

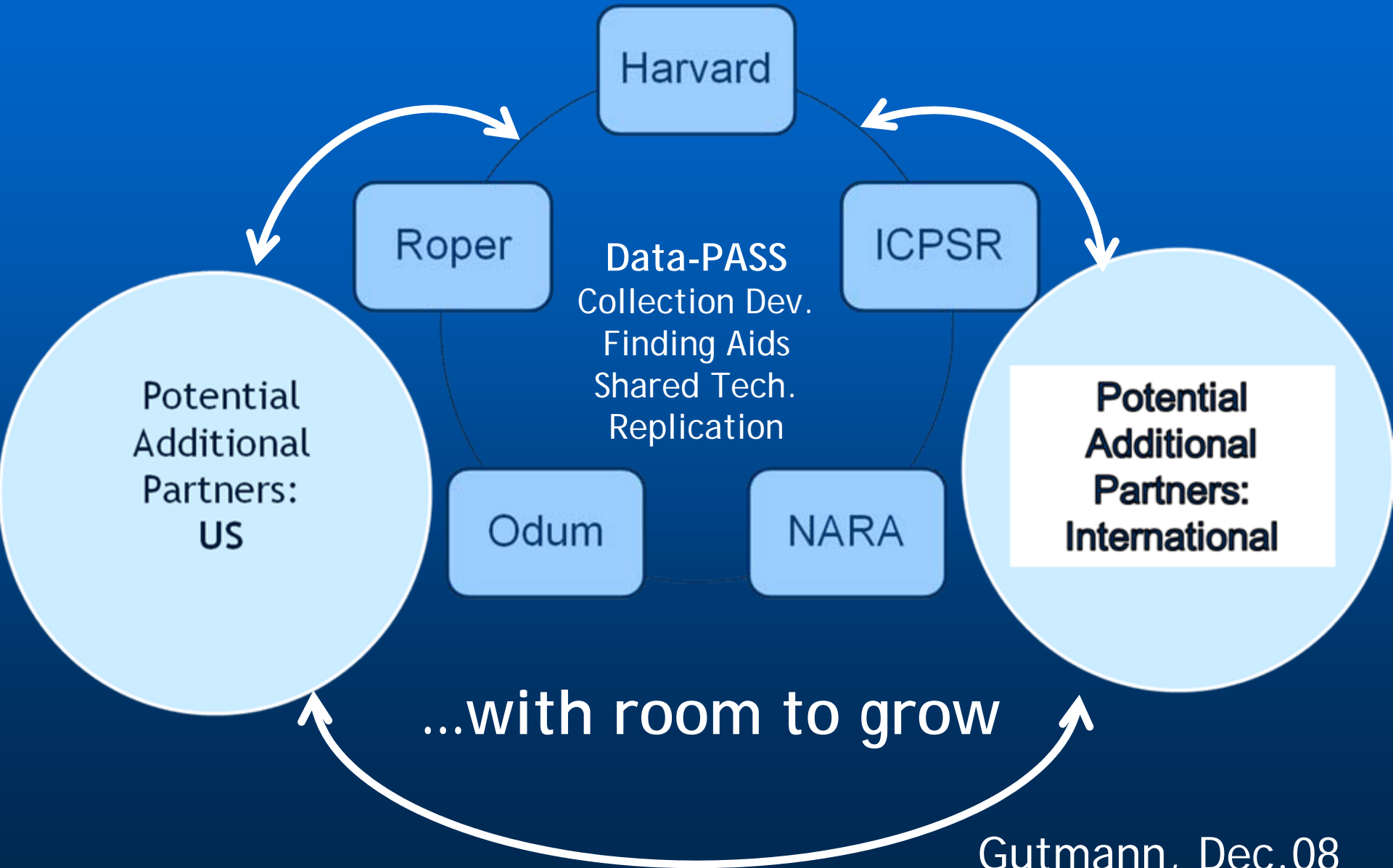
History of the Dot-Com Era of the 1990s

Brobeck, Phleger & Harrison



- Prestigious San Francisco Law Firm
 - Represented ~2,000 tech clients in 1990s
- Filed for Bankruptcy, 2003
 - Paper records span 77 years, extend to 200,000 boxes
 - Digital records span 9 years, extend to 2.5-4.0 Tb (~20-40M pages of text)
- Preservation via Closed Archive
 - Established by Court Order, August 2006
 - www.brobeckclosedarchive.org

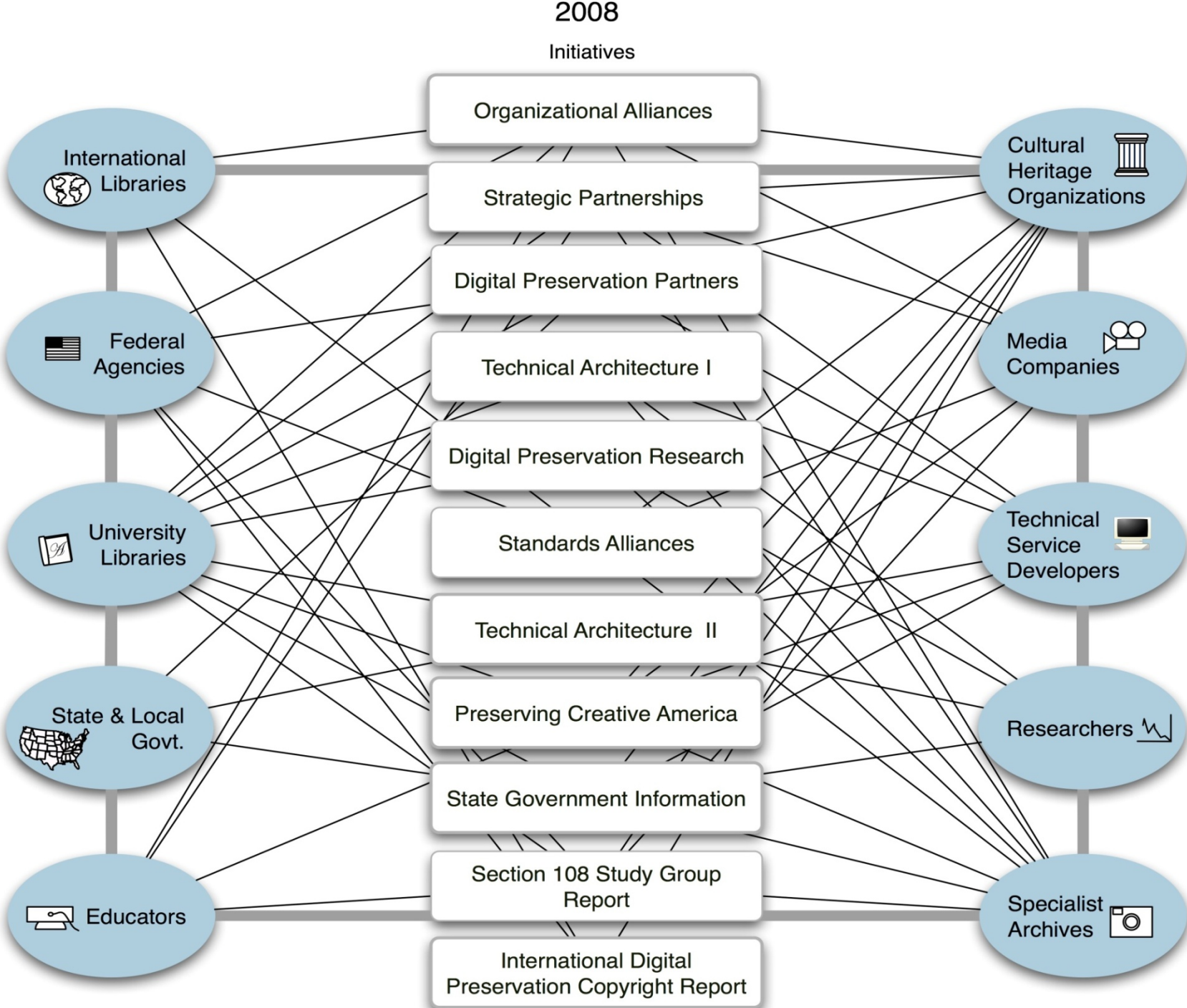
The Data-PASS Network is Simple...



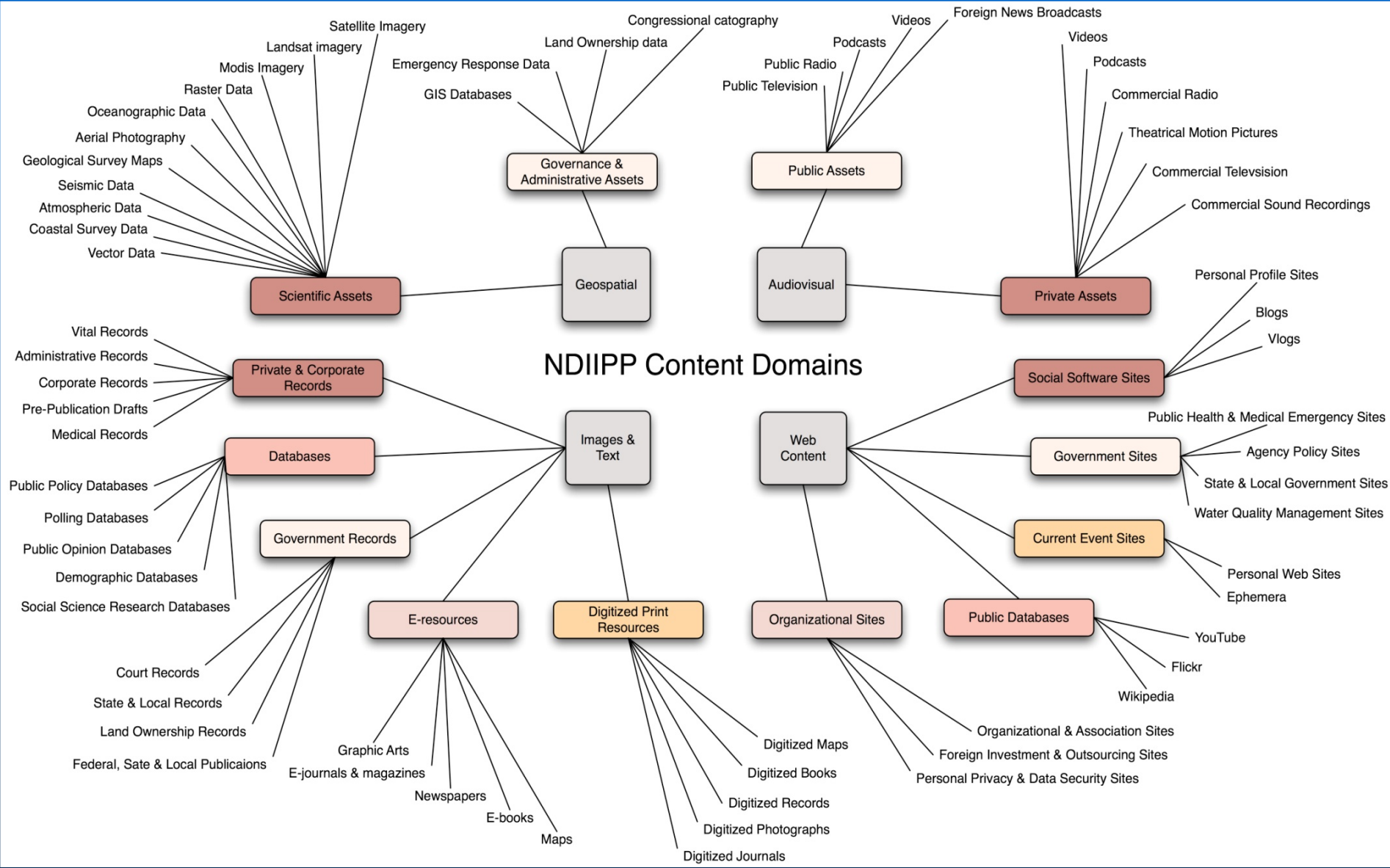
LESSONS

Diversity works
for, *and against*,
you.

COMMUNITIES



CONTENT: Bridging Diverse Domains

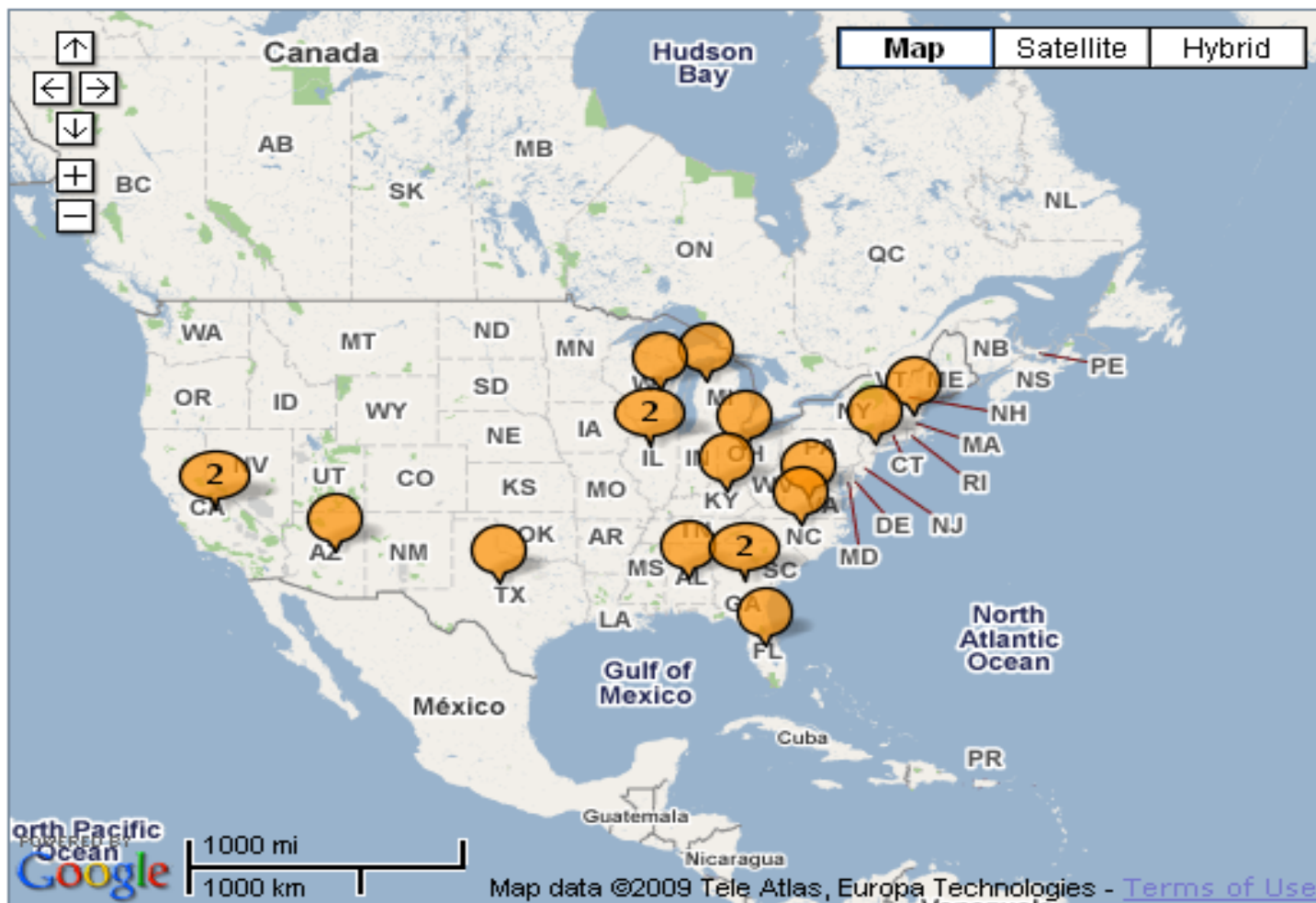


[Web Archives](#)
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[Government](#)
[Information](#)
[Privacy & Confidentiality](#)
[Standards & Best Practices](#)
[Sustainability](#)
[Text & Image](#)
[Web Archives](#)

WHO • WHEN • **WHERE**

19 Projects filtered from 184 originally ([Reset All Filters](#))

[1 result](#) out of 19 cannot be plotted.



7 Items

sorted by: [title](#); [then by...](#) • grouped as sorted



California Wildfire Web Archive

This collection contains an archived list of date captured web sites covering the 2007 California wildfires. The following example provides a new way of viewing the data leveraging the Recollection platform.

2009-03-02

Tags

1930's 2004 2007 Aerial
Photographics
California Candidates
Elections International
Kentucky Mountain Life
NDIIPP Partners Opinion Polls
Photography Television Web
Sites Wildfires

Collection Type

- 1 Aerial Photographs
- 1 Image Archive
- 1 NDIIPP Partners
- 1 Opinion Polls
- 1 Video Archive
- 2 **Web Archive**

Organization

- 1 California Digital Library
- 1 Library of Congress
- 1 National Digital

1.



Library of Congress Web Archive: 2006 California Elections

The Election Web Archives are selective collections of content archived during the 2006 elections. The following example provides a new way of viewing the data leveraging the Recollection platform.

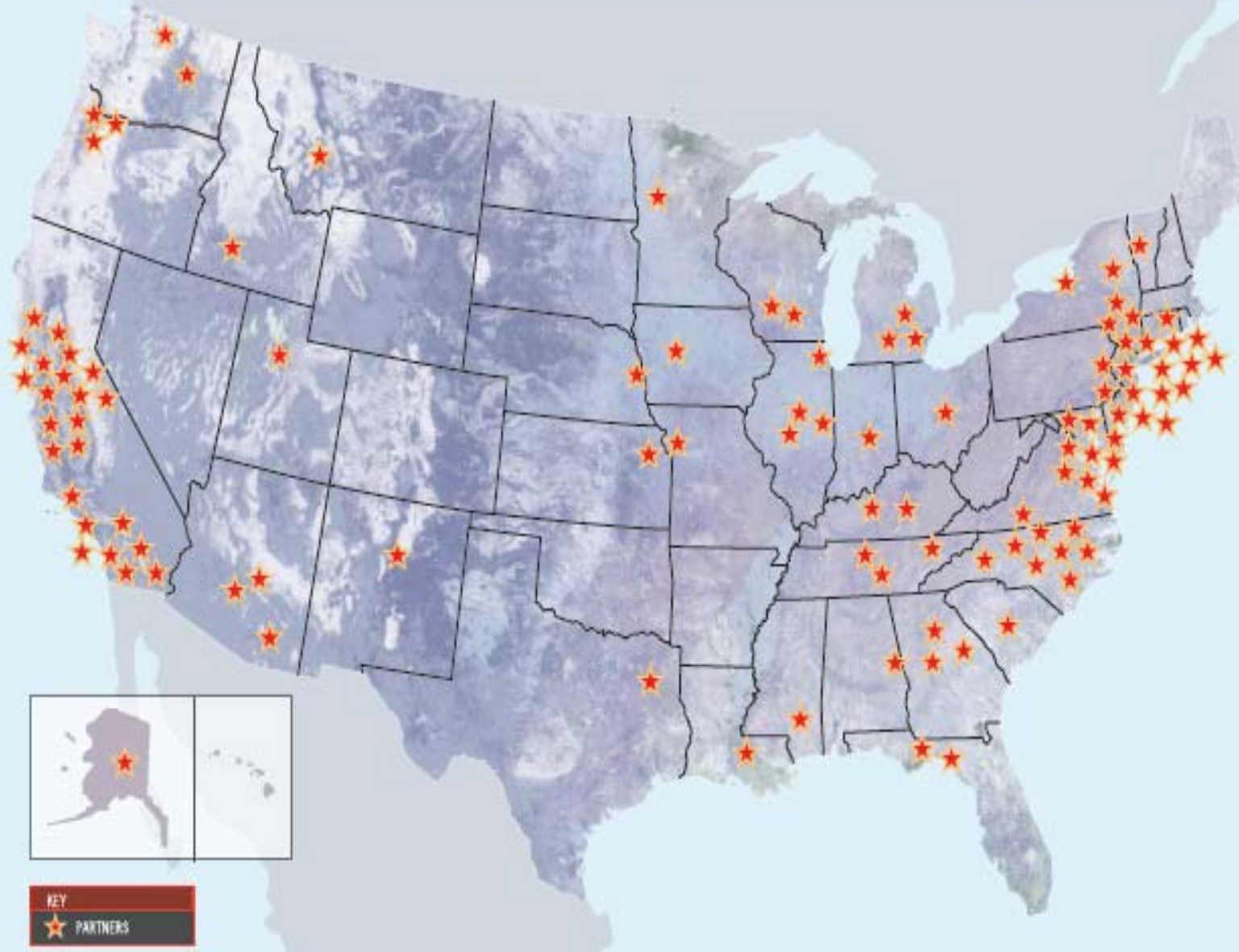
2009-03-02

2.



National Digital Information Infrastructure

GEOGRAPHY

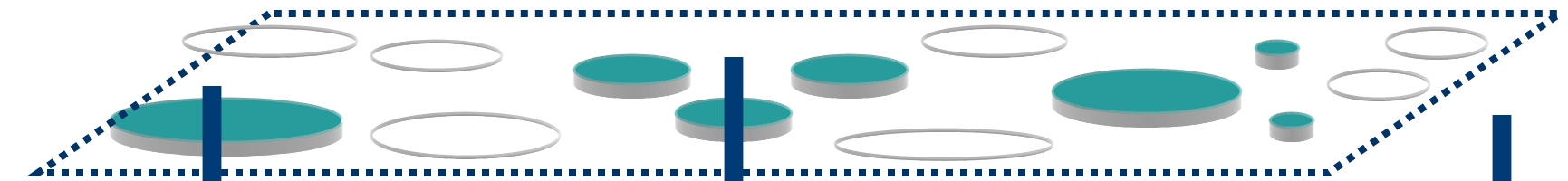


LESSONS

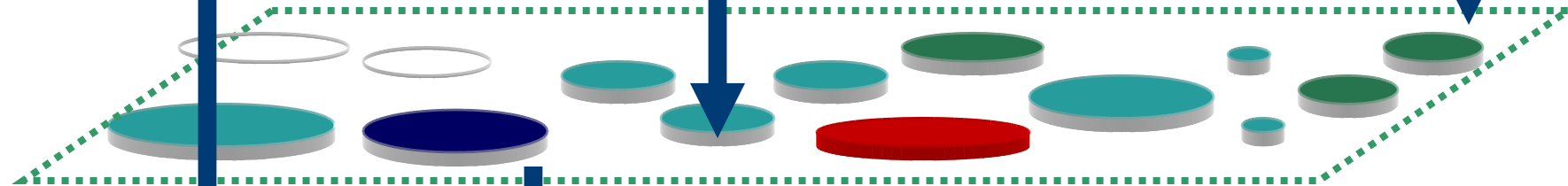
Within a
preservation
network, an
organization may
take on one or
more roles.

Roles in the Stewardship Network

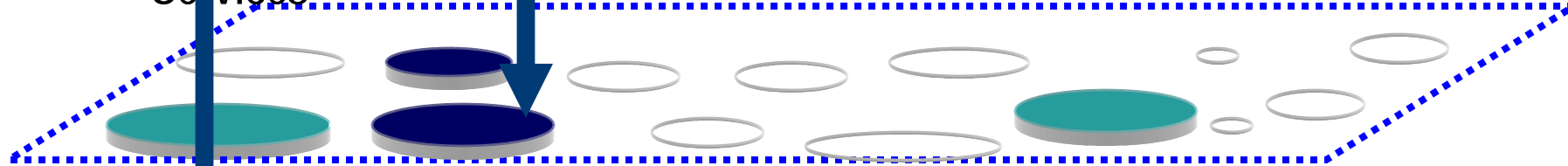
Committed Content Custodians



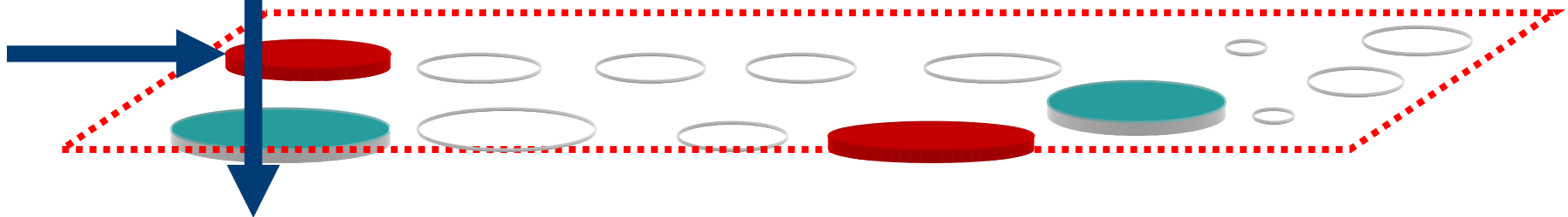
Communities of Practice and Information Exchange



Services



Capacity Building

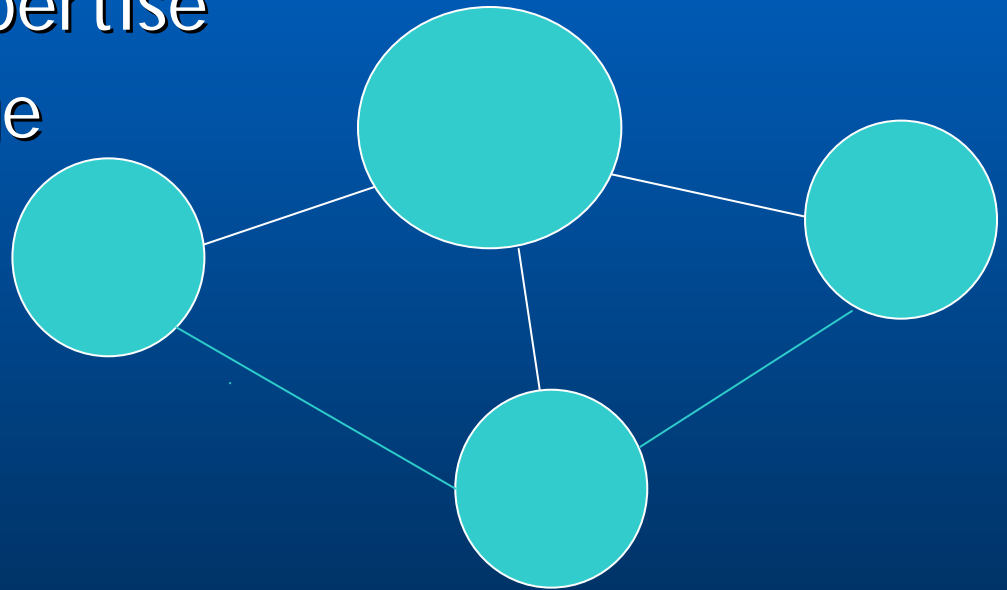


LESSONS

Organizational
models depend
upon strength of
leadership and
commitment

Centralized distributed

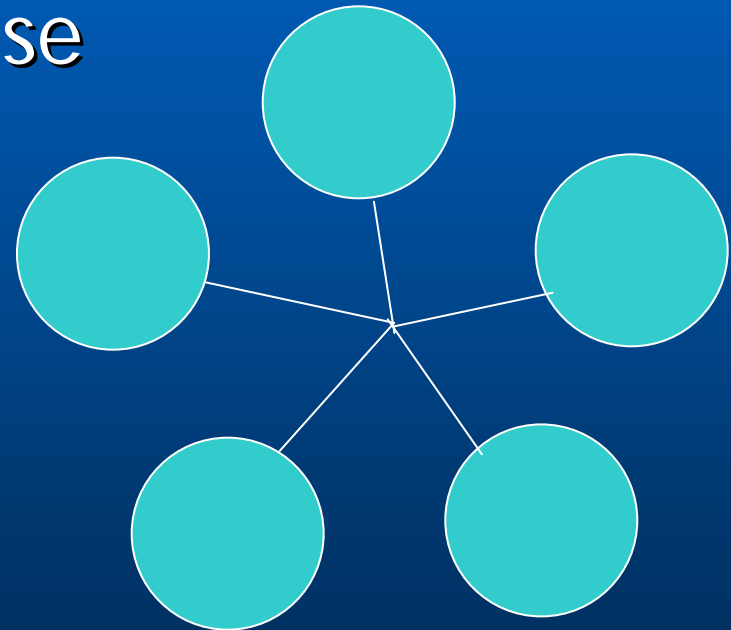
- Strong leadership
- Members unsure of long-term commitment
- Shared cost & expertise
- May not encourage ownership



Webb, 2003

More equally distributed

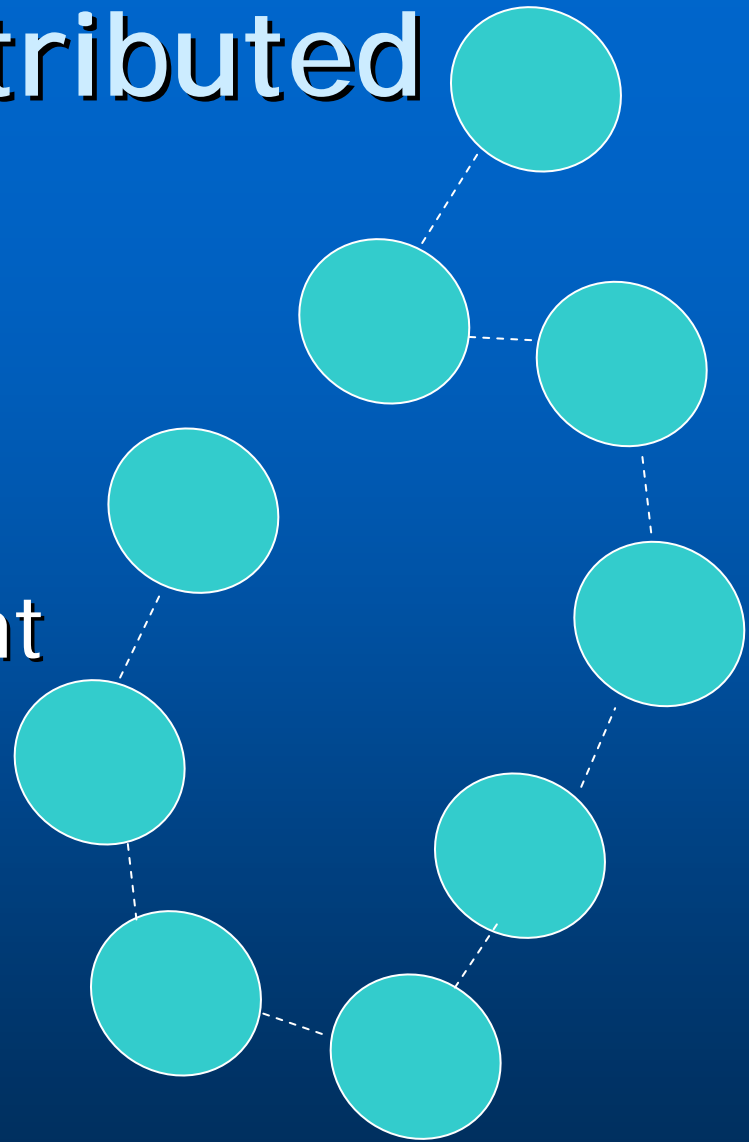
- No leader
- Members willing to share responsibility
- Share costs & expertise
- Difficult to establish effective leadership



Webb, 2003

Highly distributed

- Coordinator
- Members have limited responsibility
- Provides starting point
- High costs

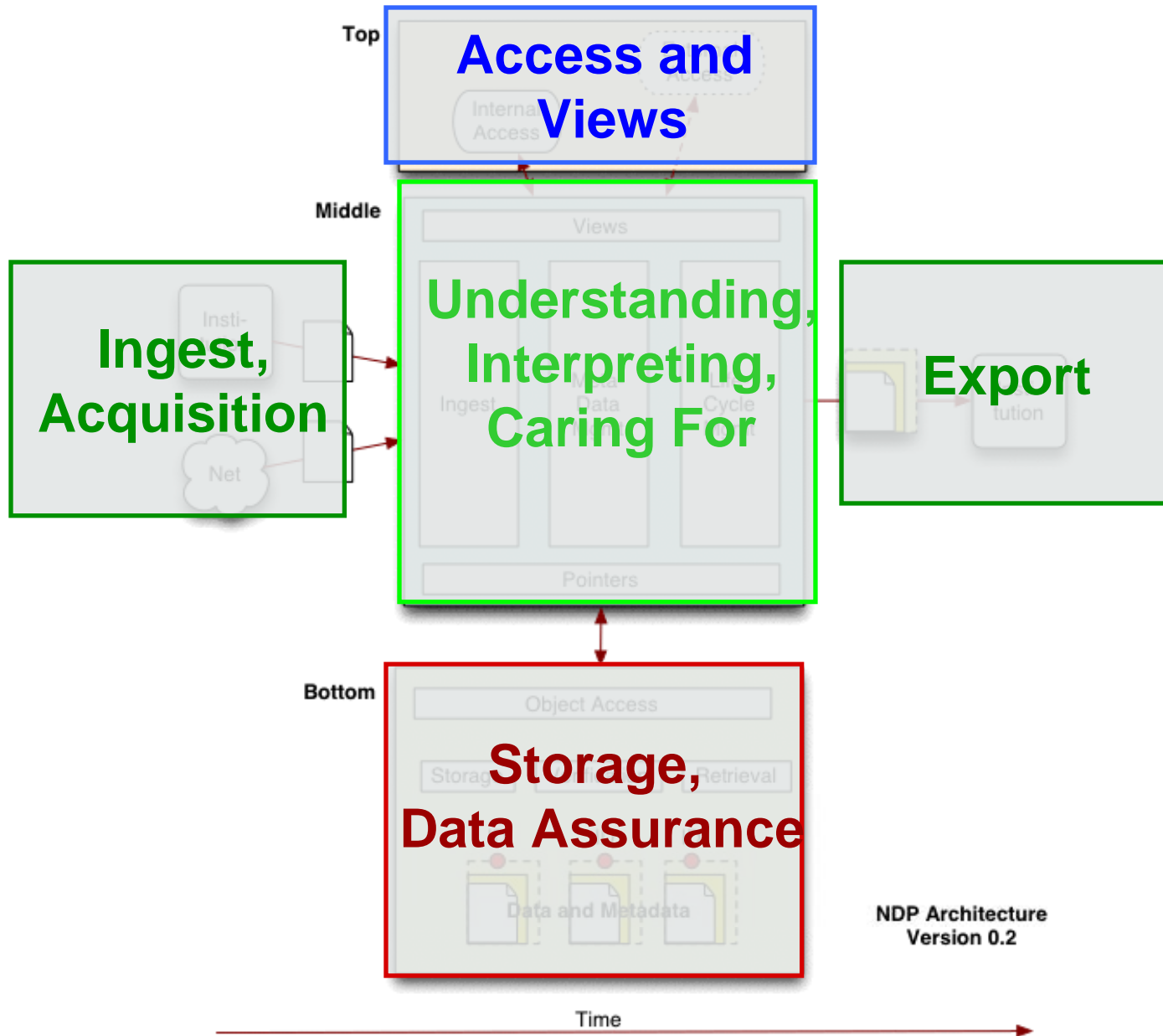


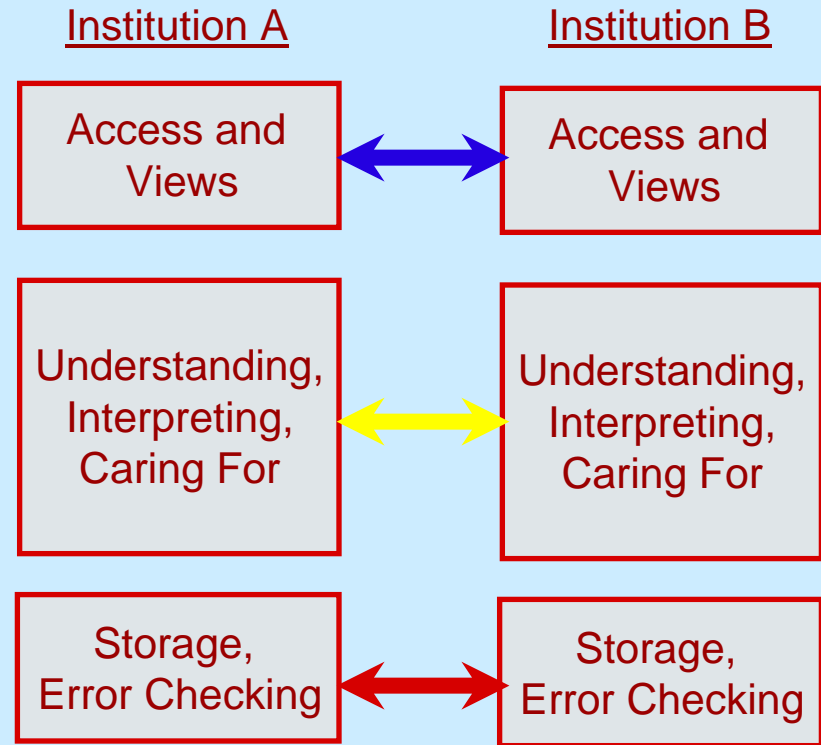
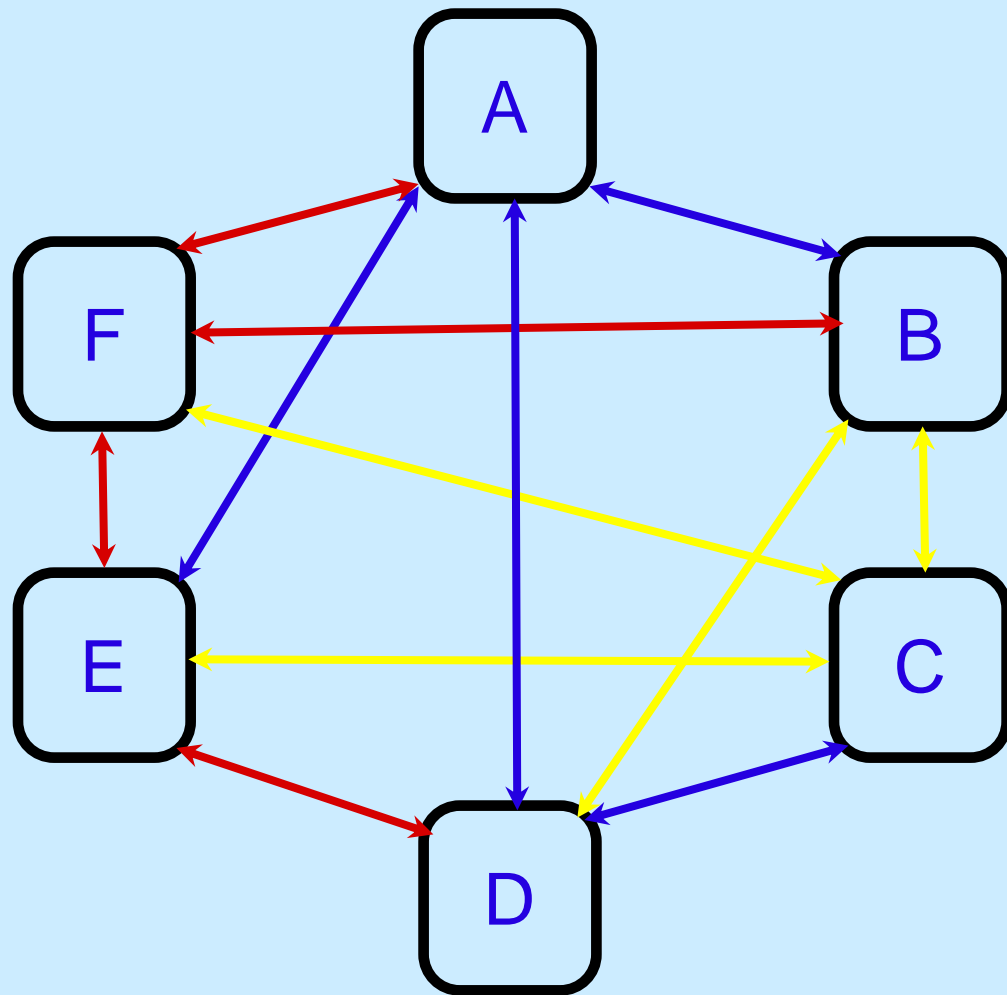
Webb, 2003

LESSONS

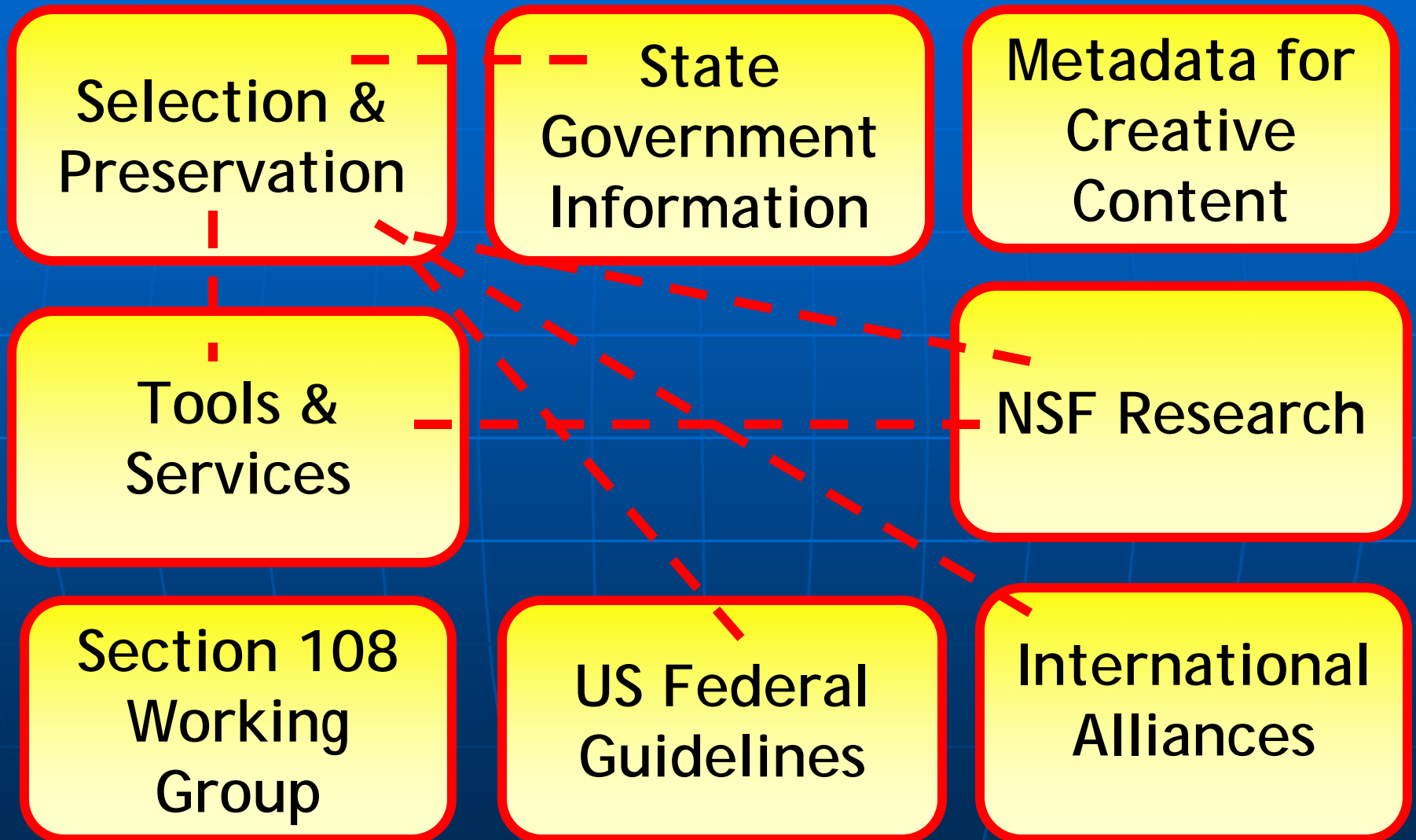
No one organization
can meet the
challenge alone.

Architecture of Cooperation





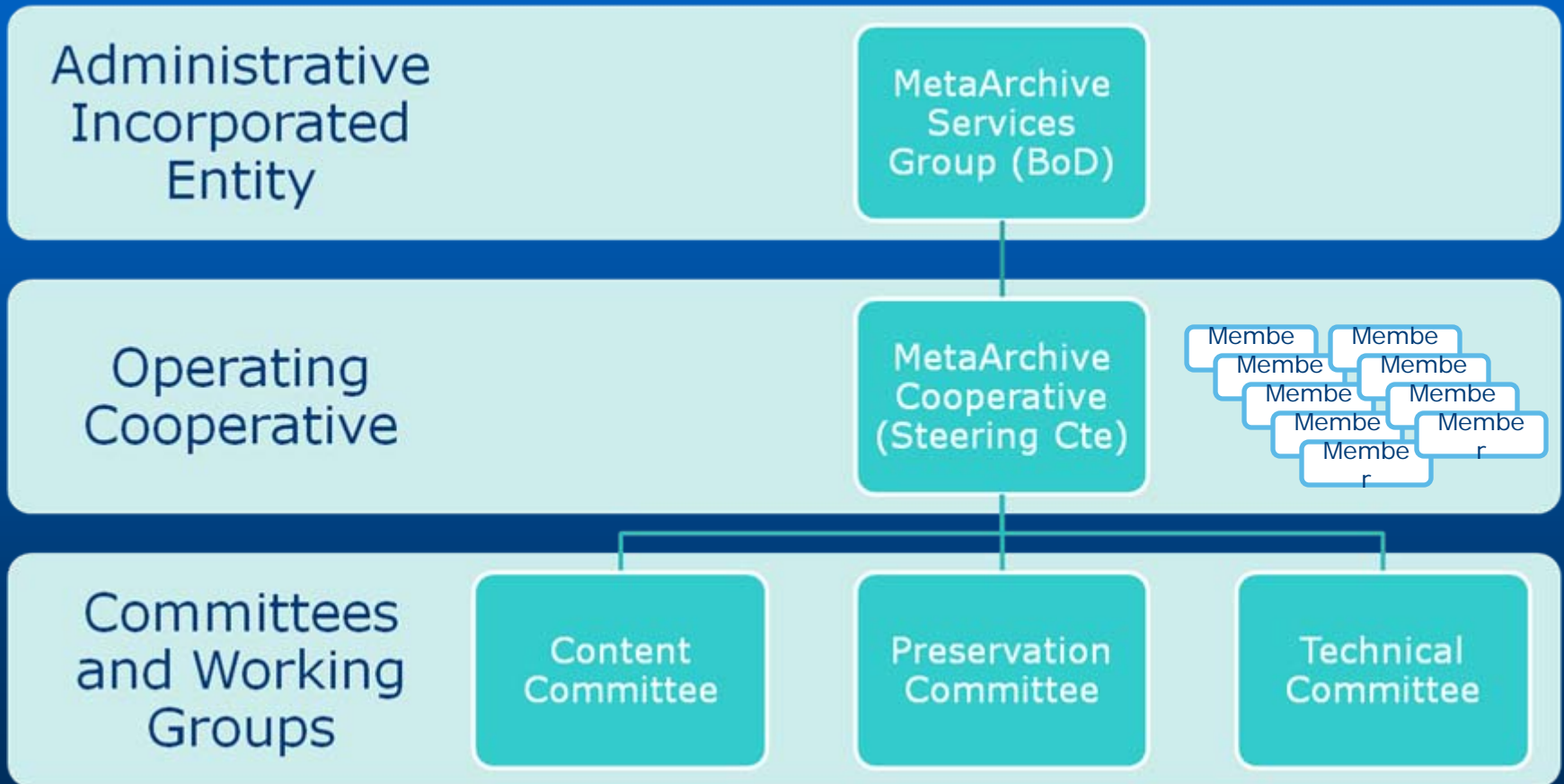
Initiatives and Actions



LESSONS

Interoperability is
not only for
technology and data.

MetaArchive Cooperative



LESSONS

Keep it simple.

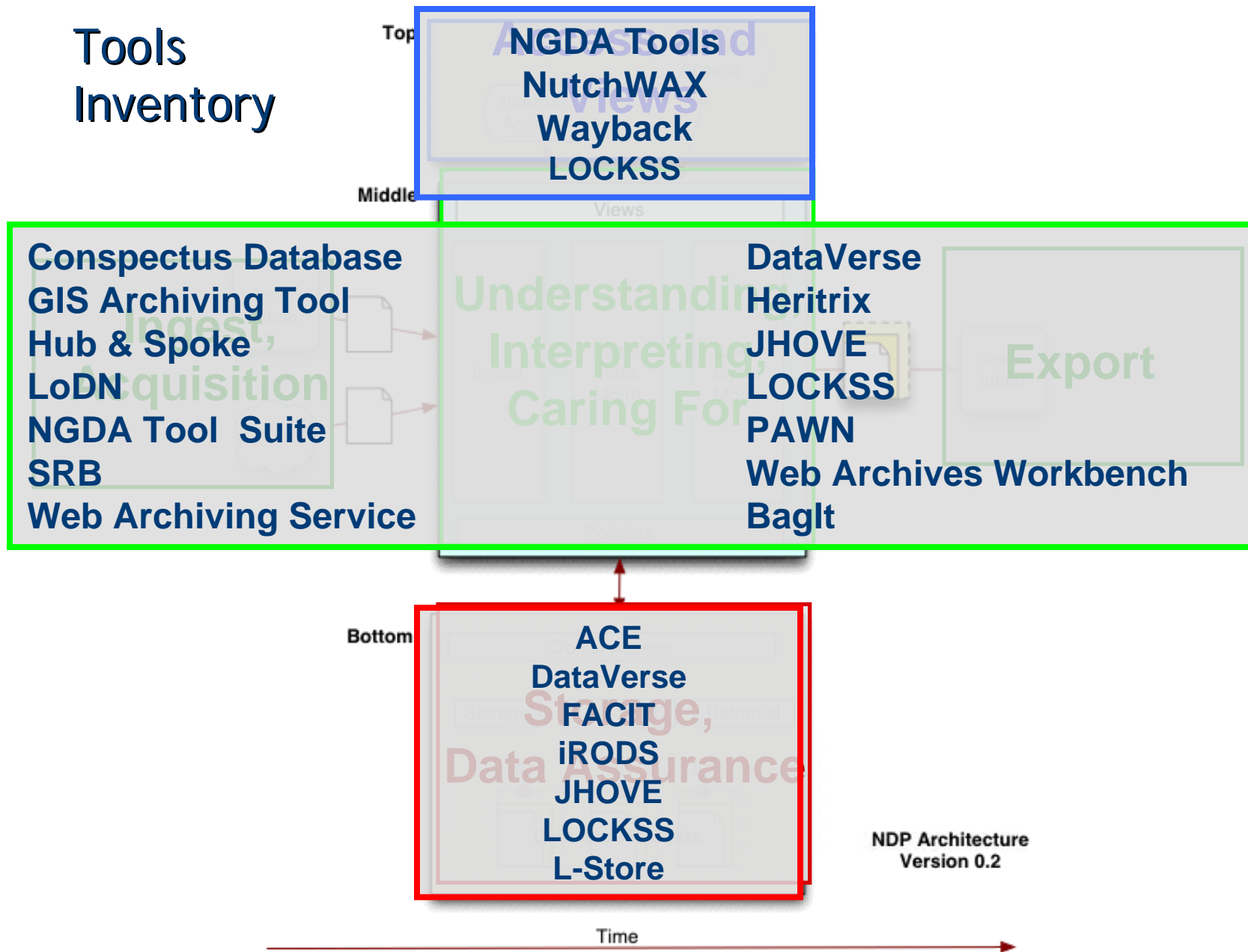
Tools for Transfer

a transfer spec and an Open Source project for tools

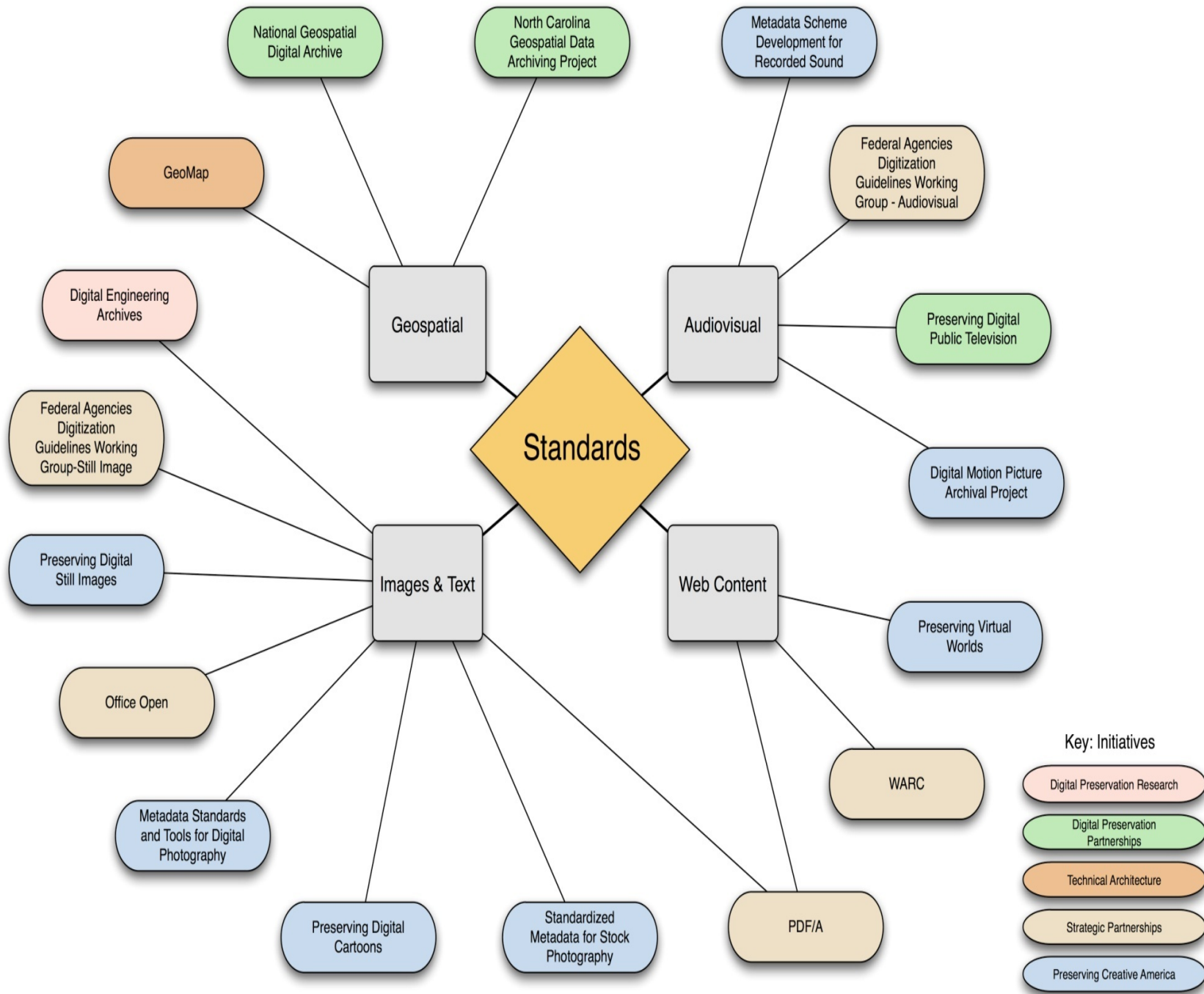


Architecture of Cooperation

Tools Inventory



STANDARDS



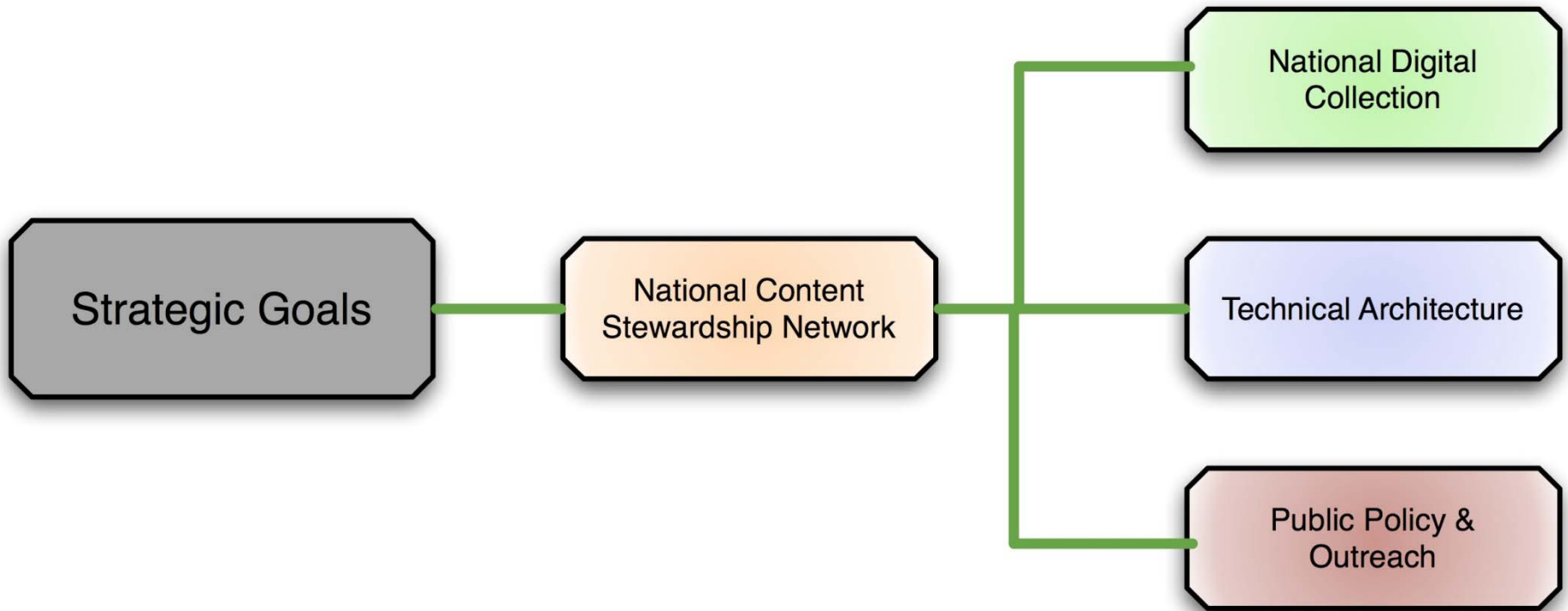
The network learned to

- Take early action
- Work locally, share globally
- Build upon existing work
- Collaborate in competitive environments
- Handle complexity with simplicity

LESSONS

It is time to charter a national network.

National Digital Preservation Strategy



DIGITAL
PRESERVATIONSearch this site 

- [Digital Preservation Home](#)
- [Importance of Digital Preservation](#)
- [What the Library Is Doing](#)
- [Partners](#)
- [Achievements](#)
- [What You Can Do](#)
- [News & Events](#)
- [Contact Us](#)

Related Resources

- [Standards at the Library of Congress](#)
- [Digital Collections & Programs](#)
- [U.S. Copyright Office](#)
- [Section 108 Study Group](#)
- [Web Capture](#)
- [Digital Formats Sustainability](#)

 [RSS](#) | [Blog](#)


TODAY

TOMORROW

FOREVER

National Digital Information Infrastructure and Preservation Program
(NDIIPP)Talking about
Digital
Preservation

- David Kirsch, University of Maryland
- Abby Smith, consultant to NDIIPP
- American Voices: Digital Preservation

Video Transcripts

|| Meeting the Challenge ||



The Library has just opened a state-of-the-art conservation center for its audio and visual works. Learn what the Library is doing.

[Read more](#)

|| Digital Preservation Pioneers ||



In Michael L. Nelson's view of digital preservation's future, dead Web sites will be brought back to life, digital data will be born archivable, files will describe themselves and data will spread freely among the masses for safekeeping.

[Read More](#)

|| News & Events ||

North Carolina States Project Holds Kick-Off Meeting

The inaugural meeting of the Geospatial Data Exchange Network for Preservation (GDENP).

[Read More](#)
NDIIPP Launches Newsletter

The digital preservation program launches a monthly newsletter.

[Read More](#)
Arizona States Project Kicks Off

Arizona State government preservation project holds kick-off meeting.

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[More News and Events](#)

|| Did You Know? ||



Did you know that digital materials can be more difficult to preserve than physical ones?

[Read More](#)

NDIIPP Web Site
<http://www.digitalpreservation.gov/>