

# INSTITUTIONAL & RESEARCH REPOSITORIES

## CHARACTERISTICS, RELATIONSHIPS AND ROLES

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General Library System

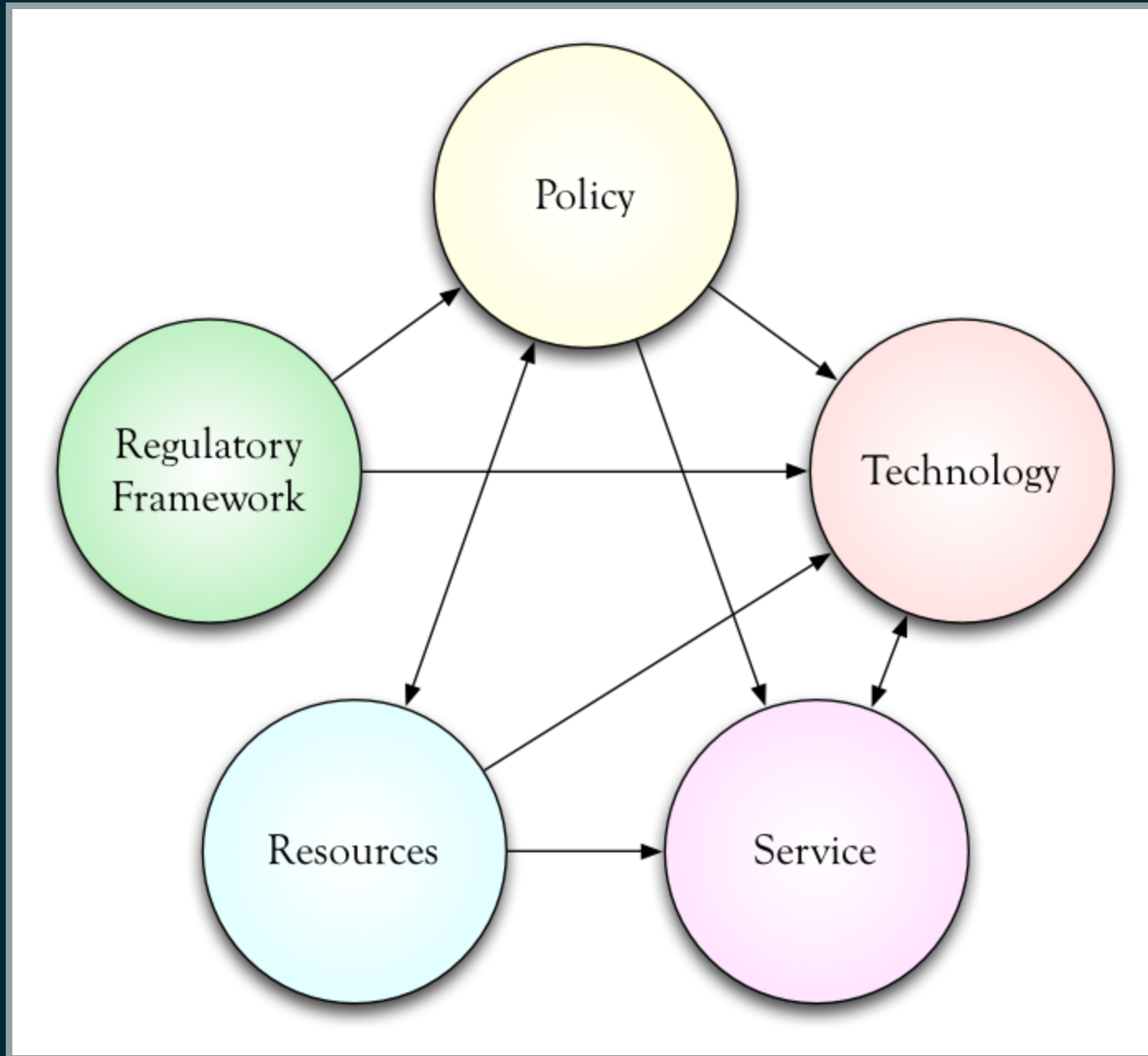
University of Wisconsin–Madison



## MY BACKGROUND

- University of Wisconsin–Madison [General Library System](#) (1994-)
- [University of Wisconsin Digital Collections](#) (1996-)
- [MINDS@UW](#) Institutional Repository (2004-)

I've organized this talk into 5 areas:



# 1. REGULATORY FRAMEWORK

- Copyright
- Retention (official records)
- Mandates (collection, preservation)
- Special Conditions

# 2. POLICY

Whose goals are we serving? There may be multiple answers. Interests may conflict, especially where time and effort are involved.

- Collection Development
  - Subject areas of interest
  - Content types (topical or technical)
  - Library collections
  - ...and faculty collections?
- Access or Preservation, or both?
  - Open Access
  - Dark archives
  - Limited commitment (e.g. exhibits)
  - ...or forever? (theses)
- Support

We need clear criteria for project acceptance ... while leaving flexibility

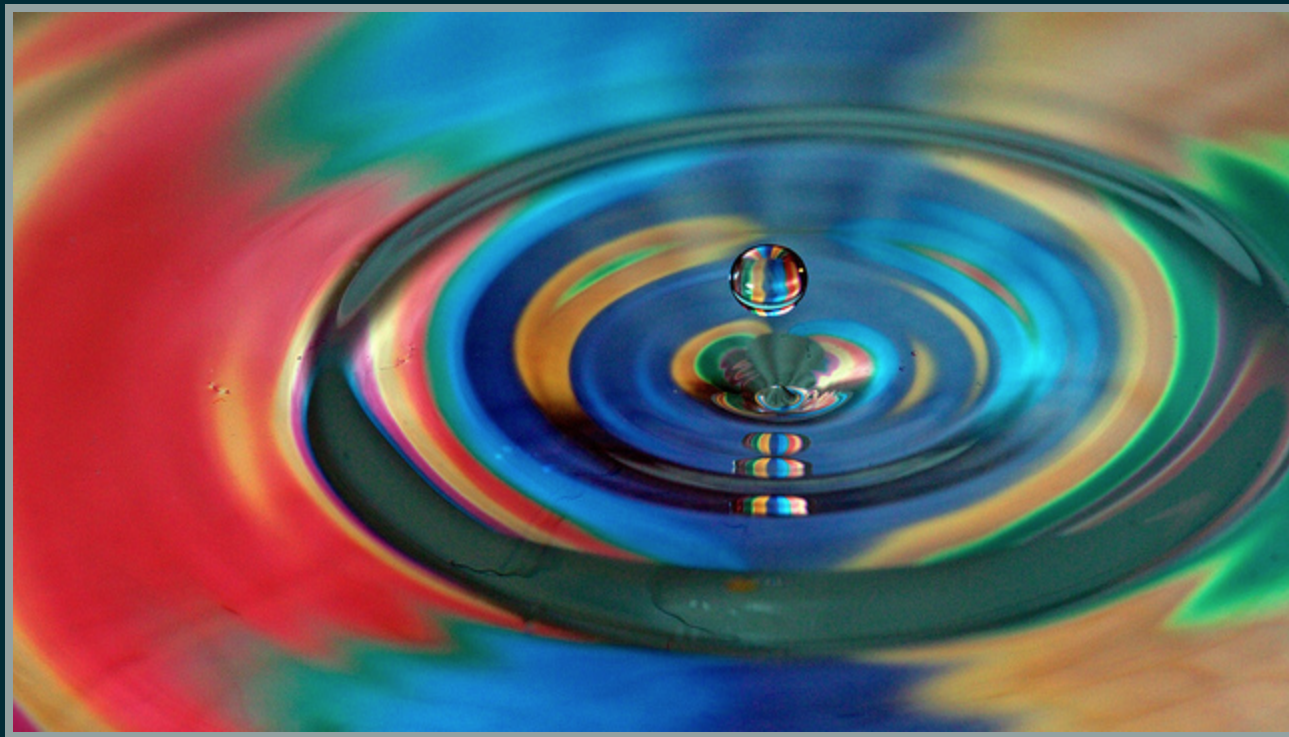
## 3. SERVICE

- Is this an Institutional Repository? (self-service)
- ...or a Digital Collection? (curated)

To our users, it may not matter

# WHO IS OUR AUDIENCE?

They are in layers of priority: the institution, the country, the world



*image: Scott Cresswell*

# WHO DOES THE WORK?

- Library digitization
- Self-service repository
- ...or a hybrid
- Consultation is also valuable service
  - digitization practices
  - metadata
  - copyright

# WHAT ARE WE *NOT* WILLING TO DO?

At UW–Madison:

- on-demand scanning
- official records
- non-research/instructional material
- narrow or marginal interest
- restricted access materials

# Whatever our service, we need to develop clear agreements with our partners: Memorandum of Understanding (MoU)



image: thinkpanama

# 4. RESOURCES

## STAFF:

- Production: scanning and conversion
- Metadata creation
- Liaison librarians
- Outreach specialists
- Technical staff
  - Development and/or integration
  - Technical support

# HARDWARE AND SOFTWARE

- Production equipment
- Servers and storage
- Software licenses

Hardware acquisition must include plans for support and replacement cycles. Replacing software, especially major systems, may be more costly and time consuming than replacing hardware.

# FUNDING MODELS

- Base budget
- Grants
- Endowment (especially for preservation)

# 5. TECHNOLOGY

## BUY?



*image: Georg Sander*

...OR BUILD?



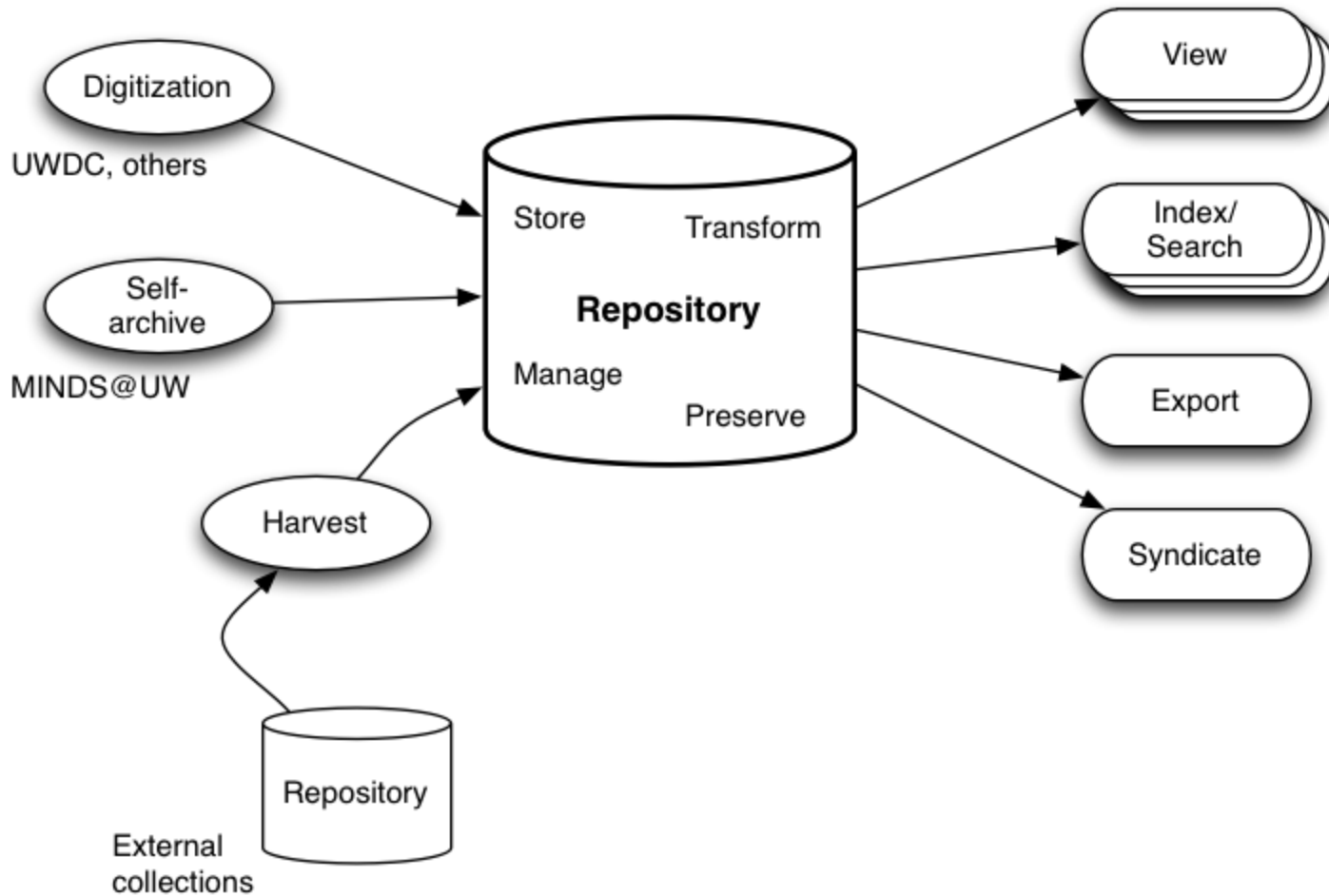
*image: Bob Travis*

# SYSTEM AND OBJECT ARCHITECTURE

Some criteria for designing or selecting:

- Data Model: if it's not determined by the platform, look for **community standards**
- Data independence: content and metadata standards should not be dependent on a particular system
- Modularity: try to keep the components separate

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## Repository architecture and access services

pcg 2015-06

# SERVERS

- Separate development/test and production servers, on different hardware
- Secured (write) access is critical, especially for preservation repositories

# STORAGE

Three principles of bit preservation\*

- The more copies the safer.
- The more independent the copies the safer (geographic and technical!).
- The more frequently the copies are audited the safer.

\* Rosenthal, David S. H. "Bit Preservation: A Solved Problem?" *The International Journal of Digital Curation*, Vol. 5, Iss. 1 (2010).

# STORAGE

- Local vs. cloud
- If local, we need an ongoing migration strategy, to deal with obsolescence (especially with tapes)
- If in the cloud, it is important to know performance, availability, and data retention statistics

# PAXMET!

