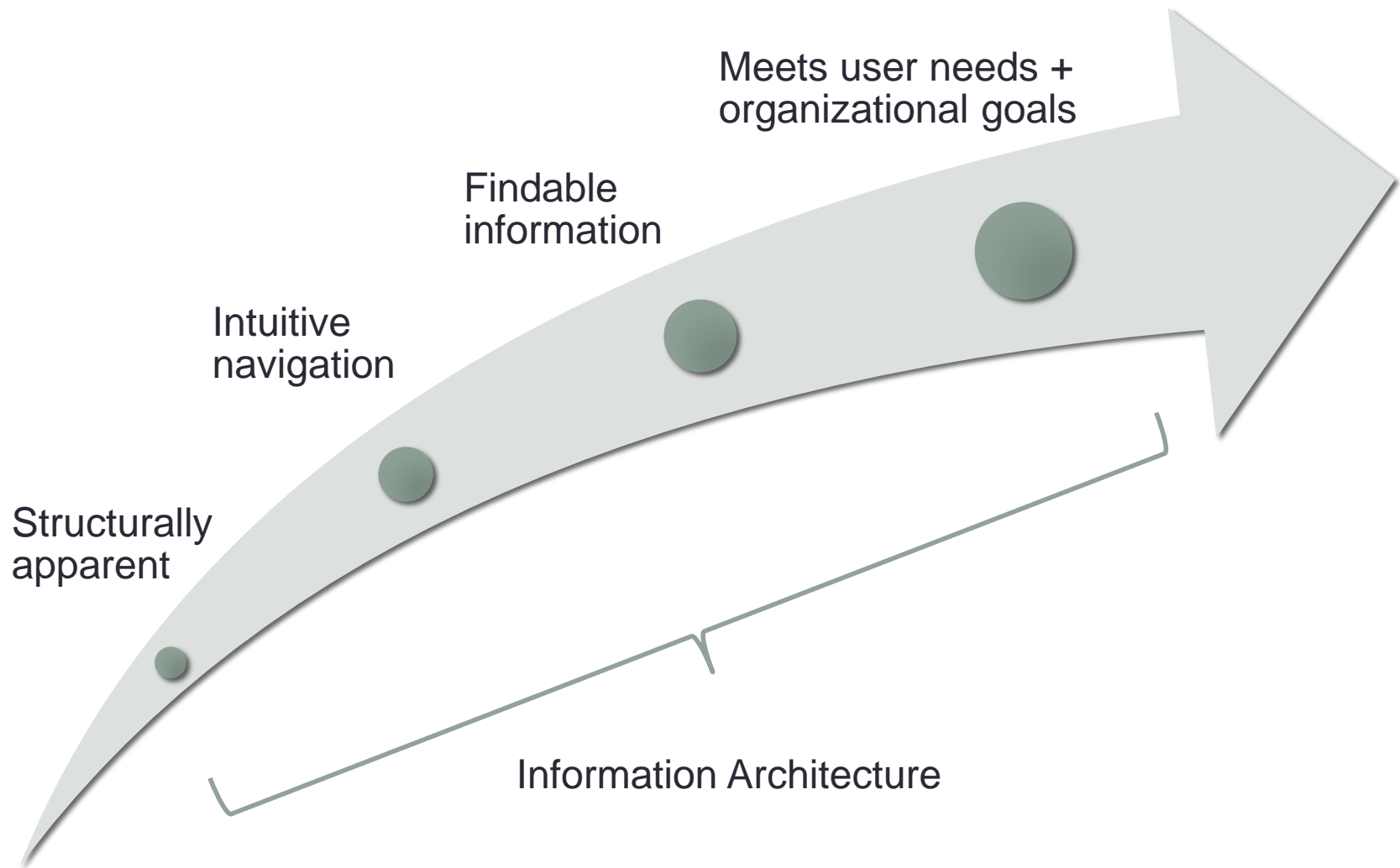


INFORMATION SYSTEMS & HIGHER EDUCATION

Steve Kutay
Digital Services Librarian
Oviatt Library
CSUN

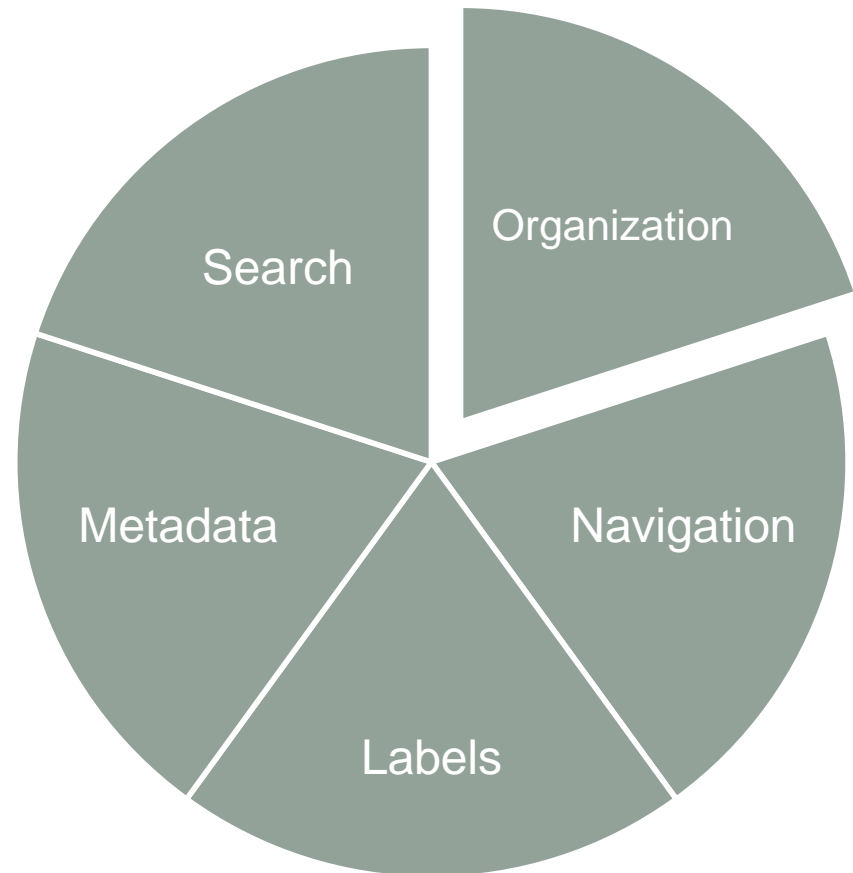


Indicators of Successful Info Systems



Information Architecture (IA)

Components that form the human logic of networked digital information products



Information Architecture Method

IA process informs the design of digital information systems¹

```
graph TD; Research[Research] --> Strategy[Strategy]; Strategy --> Design[Design];
```

Research

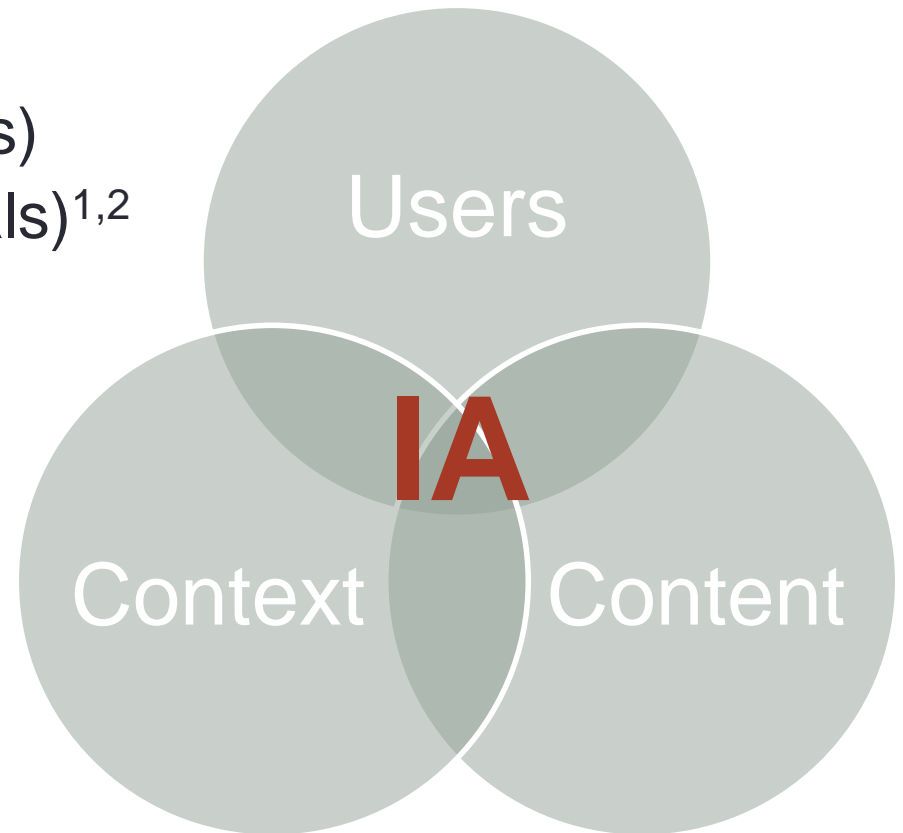
Strategy

Design

IA Research

Identify relationships between:

- *users* (audience/needs)
- *content* (documents/objects)
- *context* (organizational goals)^{1,2}



IA Strategic Development

Using research findings, plan strategies for...

- Administration
- Technology integration
- Organizational hierarchy
- Labeling (terminology)
- Navigation
- Content models
- Metadata



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IA Design

From strategies, communicate & implement design

- personas & scenarios
- content inventories
- content models
- wireframes
- metadata scheme
- vocabularies



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IA Challenges in Higher Education

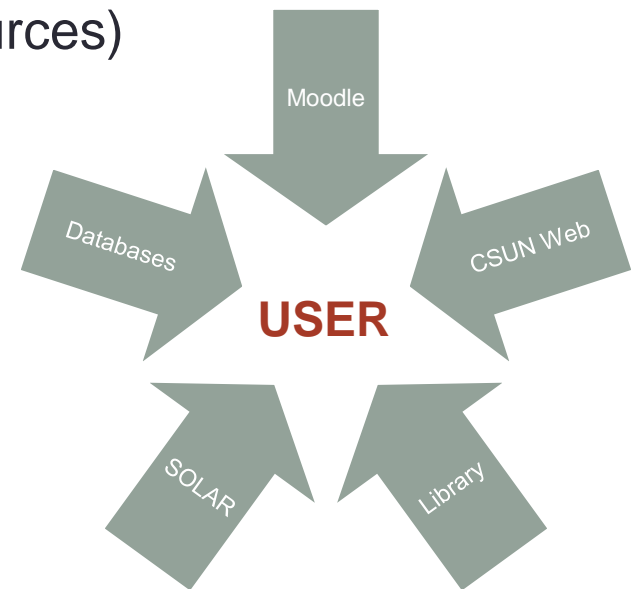


- Diverse Users
(competing tendencies)
 - *Instructors...*
 - produce strong search queries
 - slow to embrace new tech
 - *Students...*
 - embrace new technologies
 - struggle with search queries
 - *IT & Library personnel...*
 - are technically oriented
 - require advanced functions

IA Challenges in Higher Education

- Silos – Users must navigate multiple architectures
 - Administrative Management Systems
 - Content Management Systems (webpages)
 - Learning Management Systems
 - Online Public Access Catalog (info resources)
 - Digital Asset Management Systems
 - Journal Databases

Research across many systems is exceedingly difficult



Students/Scholars are Producers

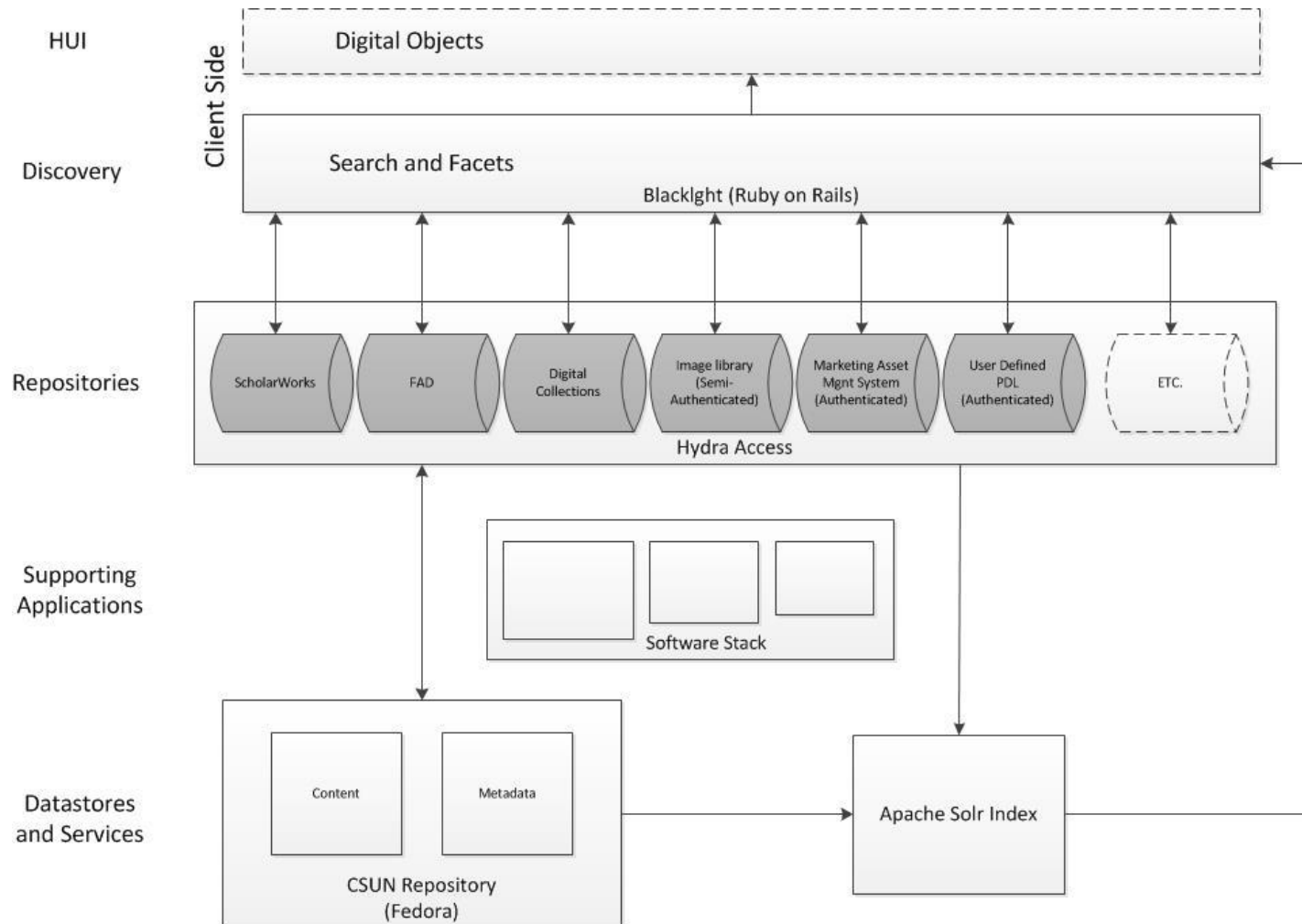
- IA stops at the borders of each system, no lifecycle support across...
 - Communication and project management
 - Asset Acquisition (copyright considerations)
 - Storage (local, network and cloud)
 - Retrieval (effective description)
- Data
 - Preservation, security and management
- Third-party solutions...
 - often fall short (one-size fits all)
 - do not yet exist

How Academic Libraries are Helping

- Open source asset management systems provide support of scholarly output and learning resources
- Multiple & extensible repositories, one architecture!
- [Hydra Project](#) (Fedora Repository Platform)
 - Institutional Repositories
 - Media/Image Libraries
 - Project/Workflow management
 - Archives
 - Applications



Asset Management Model (example)



How Academic Libraries are Helping

- Data Curation Services (Data Management Plan)
 - Libraries describe, preserve and make accessible raw datasets
 - Ensures authenticity/data integrity
 - Datasets typically reside in Institutional Repositories
 - DMP Required by some funding agencies
 - [DMP Tool](#) (UC)
 - [DMP Tool](#) (Purdue)
- [ICPSR](#) (inter-university data consortium - UMich)
- Use librarians as research collaborators
 - Manage data, assets and communication through research lifecycle

Think like an Information Architect.

For related info see:

- [Advancing Digital Repository Services for Faculty Primary Research Assets: An Exploratory Study](#)
- [Digital Darwinism: A Brief Survival Guide to Personal Information Management](#)

References

1. Rosenfeld, L. , & Morville, P. (2007). *Information Architecture for the World Wide Web*. Beijing ; Cambridge, MA: O'Reilly.
2. U.S Department of Health and Human Services. (n.d.). *Information Architecture Basics*. Retrieved November 13, 2014 from <http://www.usability.gov/what-and-why/information-architecture.html>