

Collaborating to Manage Research Data

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Notre Dame Research Profile

- Research & Sponsored Programs Revenue

- FY09: \$120.9 million
- FY14: \$189.7 million
- \$68.8 million (56.9%) increase
- 9.4% annual growth rate

Data Growth Potential

- Investment in Research

- FY09: \$88.9 million
- FY14: \$161.9 million
- \$73 million increase (82.1%)
- 12.7% annual growth rate
- Advancing Our Vision
 - \$13 million recurring investment
 - 10 Disciplines (i.e. computational data, adult stem cell, nuclear physics)
 - 80 new faculty

Nature of Research Data

- Often requires enormous storage (volume, accumulative)
- Often exists in diverse formats
- Increasingly owned by faculty across institutions
- Requires intensive resources and new expertise

Related Materials: Any Format

Statistical Data

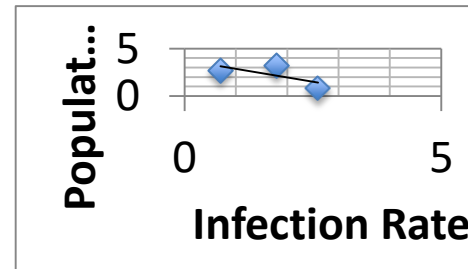
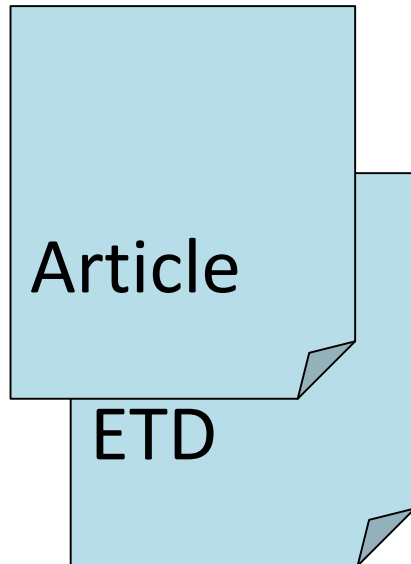


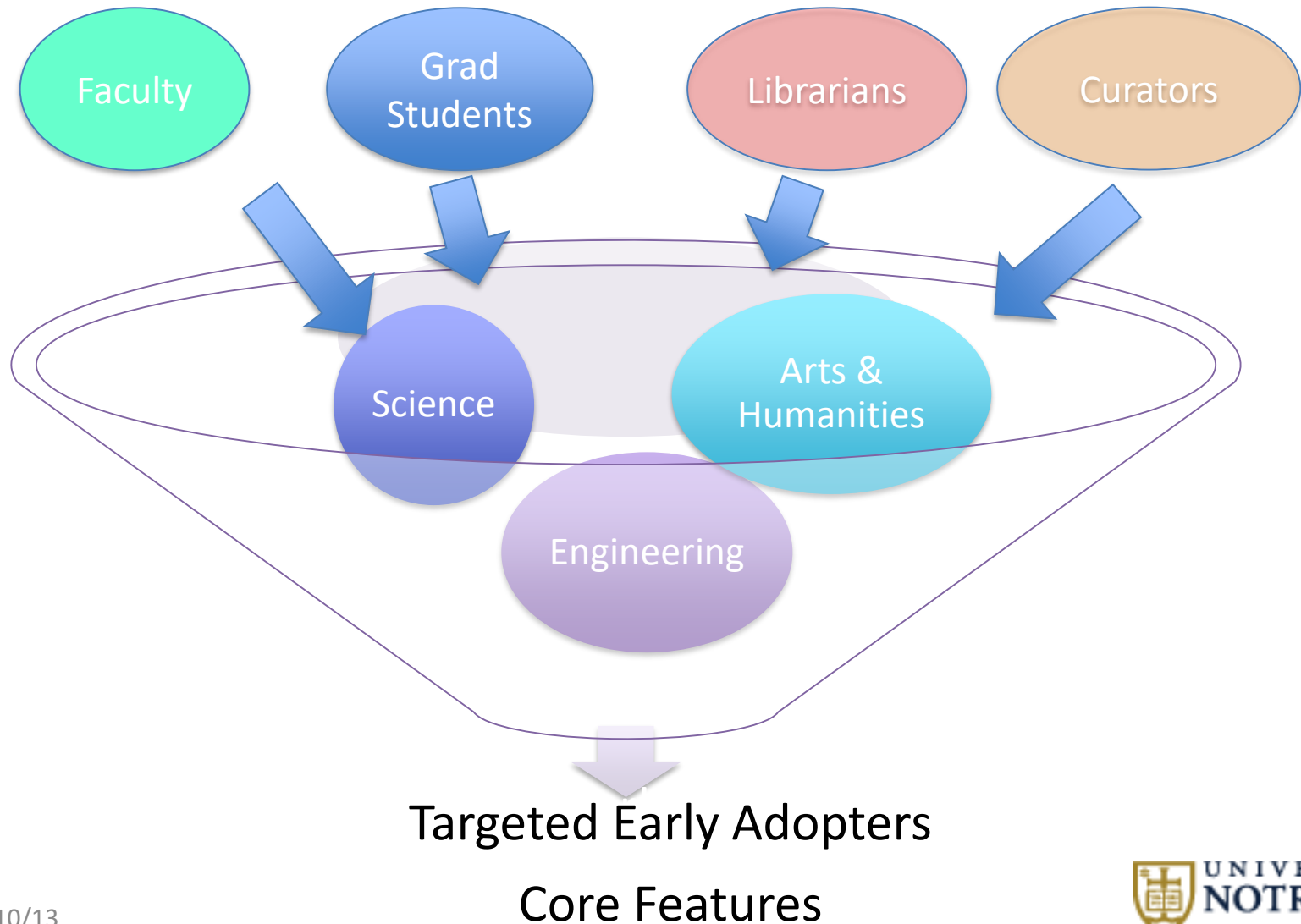
Image Data

Library Context

- Institutional Digital Repository

- Part of Hydra community
- Vertical Successes
- High demand due to the Open Data Mandate and Public Access Policies
- Storage allocation internal to library needs
- Digital Initiative Program staffing level

User-Centric Personas



Design Strategy

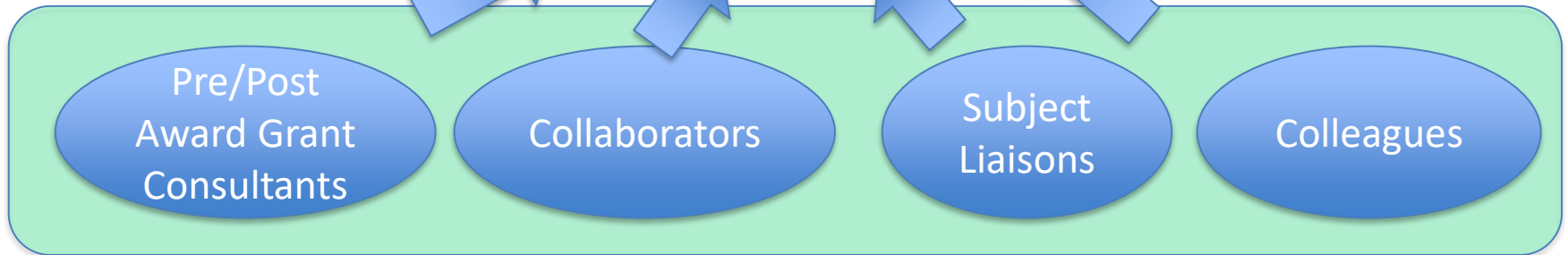
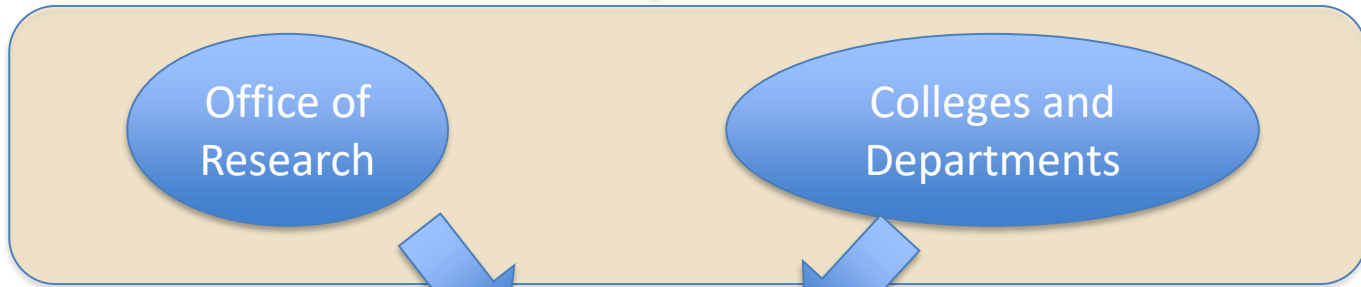
- Design for everyone, but optimize for intermediate (Alan cooper)
 - Critical needs
 - What are the core? Other advanced services?

Partnerships are Key

- Increasing complexity demands support of experts
 - Funding Agency Requirements
 - Copyright and Intellectual Property
 - Metadata and Data Structuring
 - Data sharing and Preservation

How Do We Connect with Researchers?

Top Down



Grass Roots

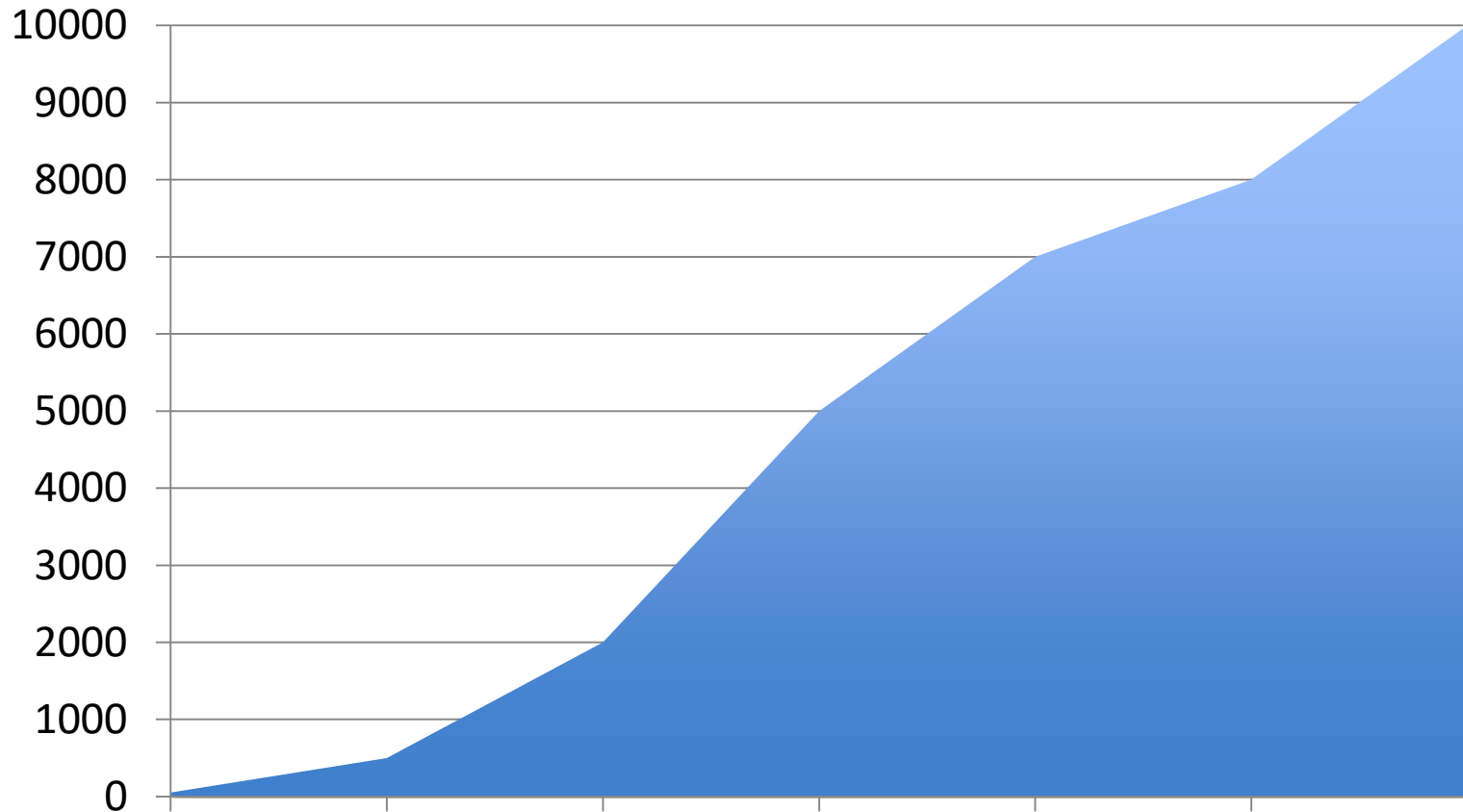


Priorities First Phase

- Wide format support, with mixed collections
- Focus on Preservation and Curation
- Get Users Engaged Early
- Release Early; Release Often

Grow Together

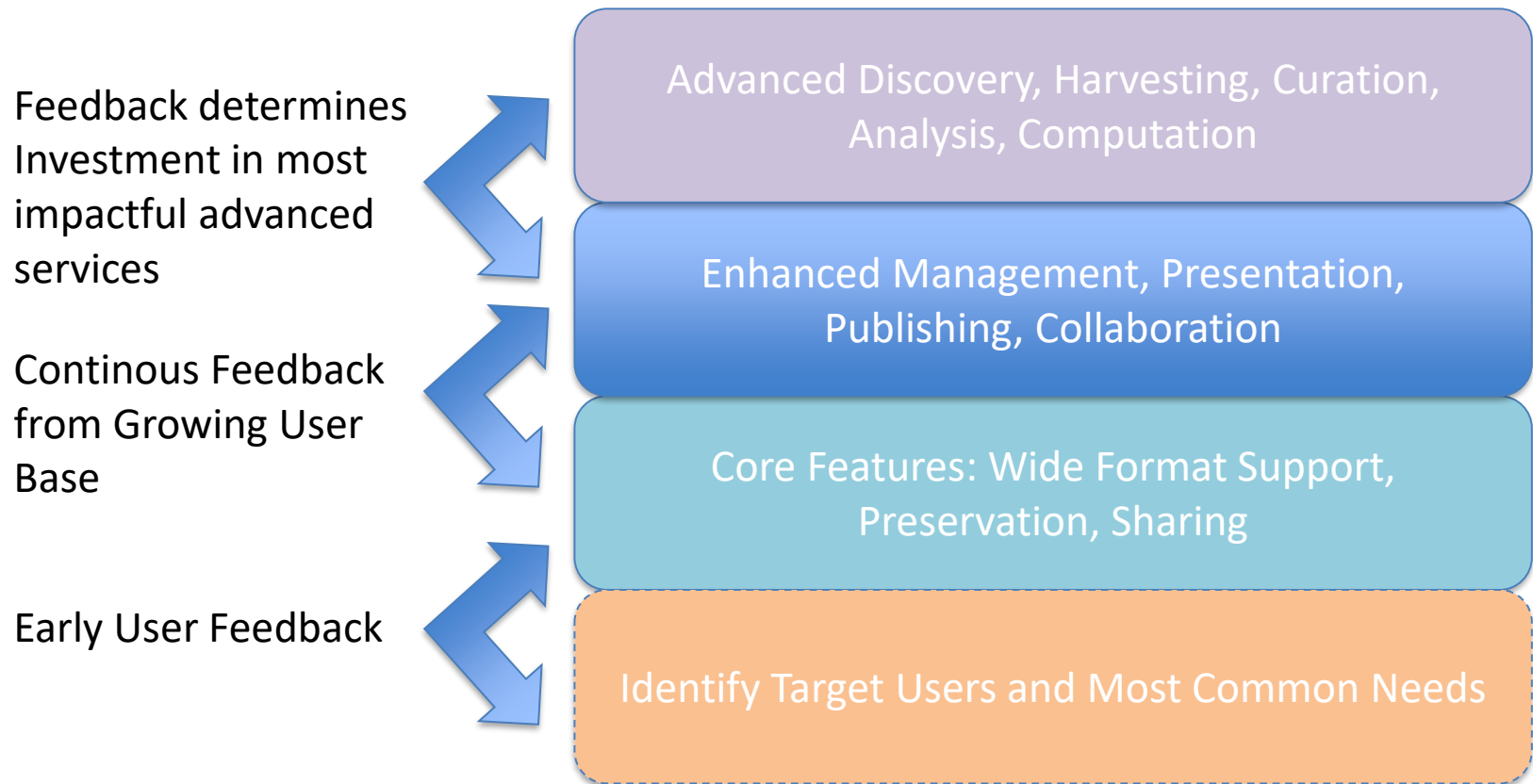
User Base



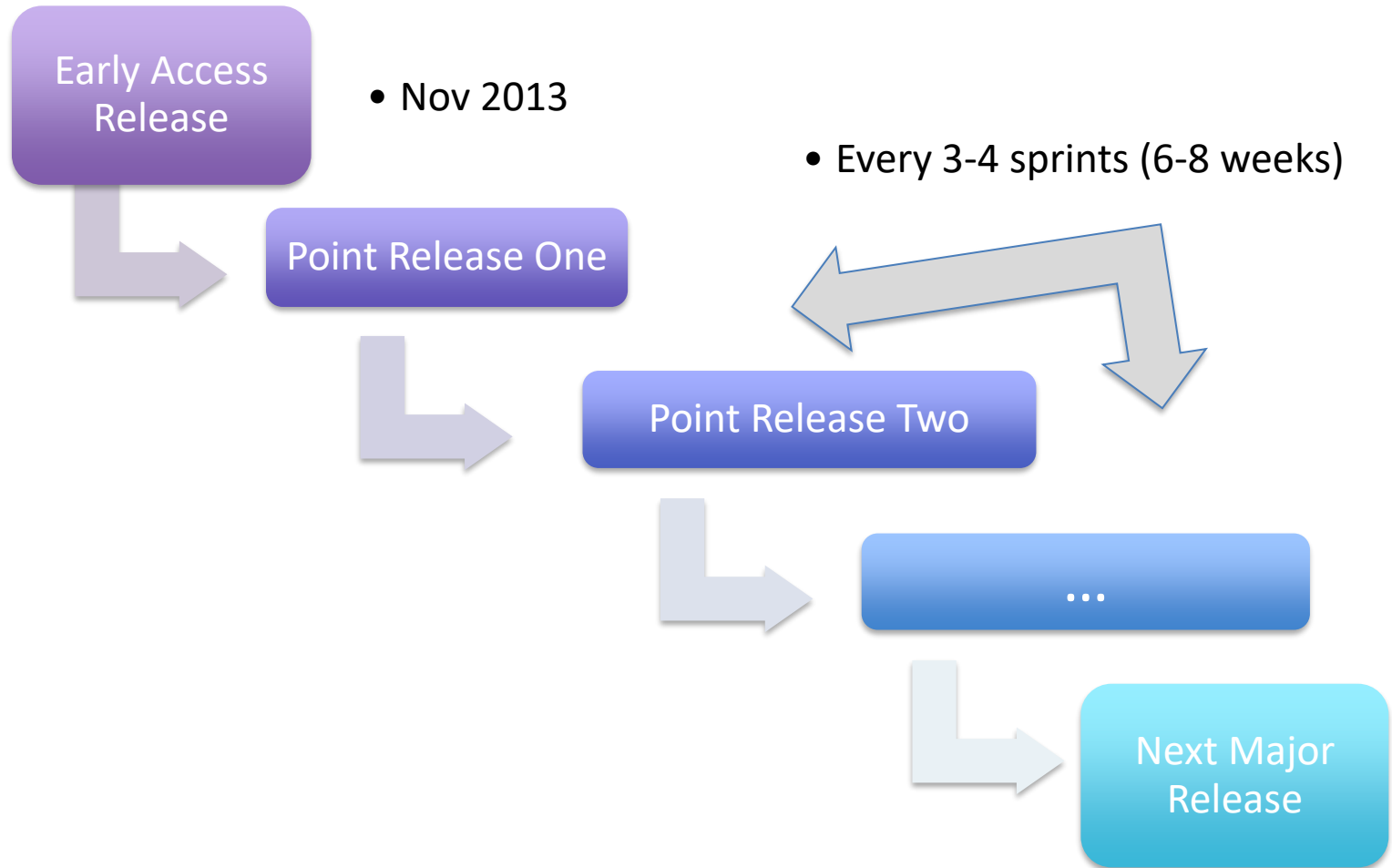
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Features

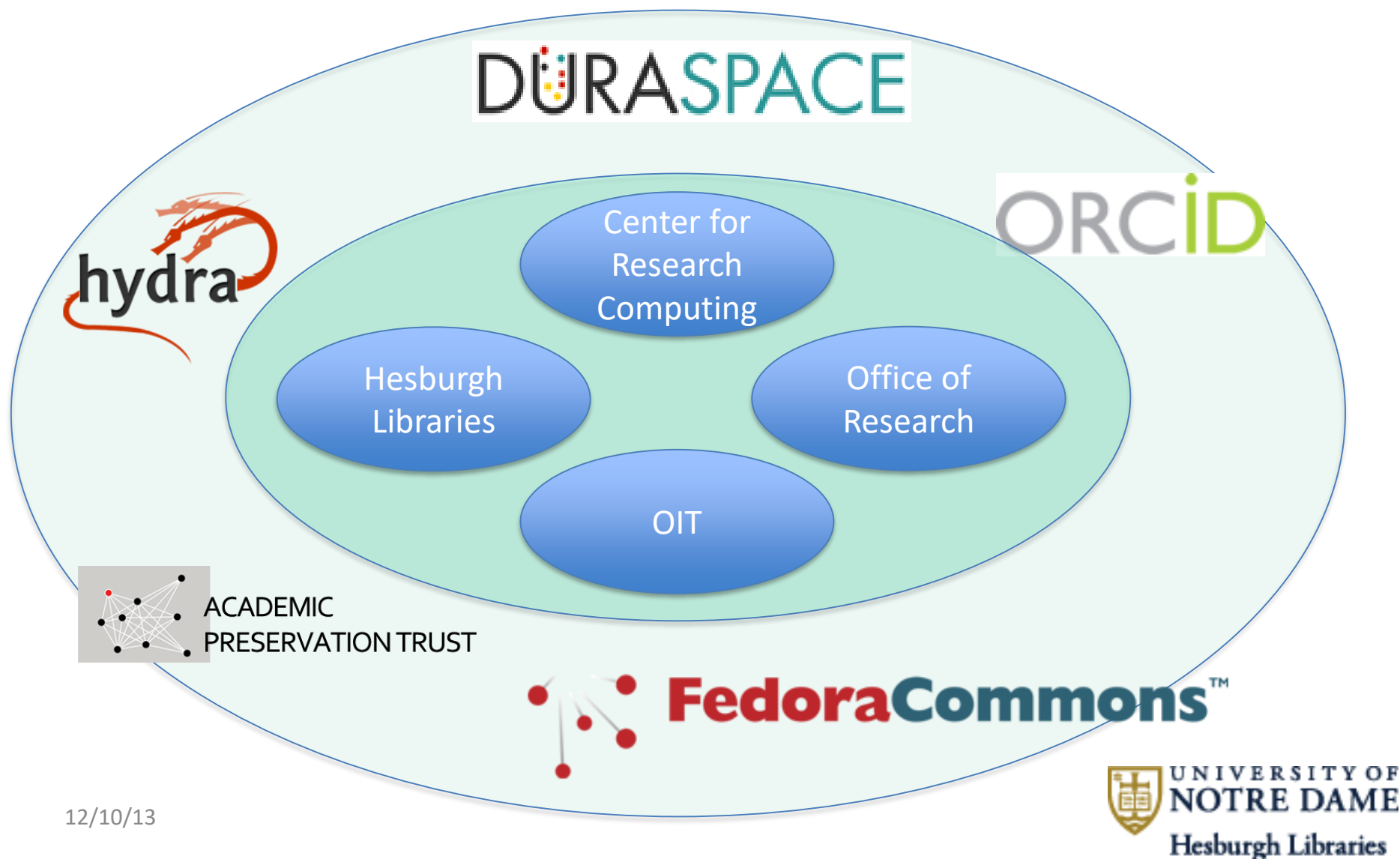
Layered Continuous Improvement



Release Early; Release Often



Sustain through Community



Sustain through Community

Shared IR Project

- Complete Multi-Institutional Collaboration from top to bottom within the Hydra Community
 - Shared Roadmapping and Governance
 - Community and Local Roles
 - Rotate Resources

DATA CURATION EXPERTS



INDIANA UNIVERSITY



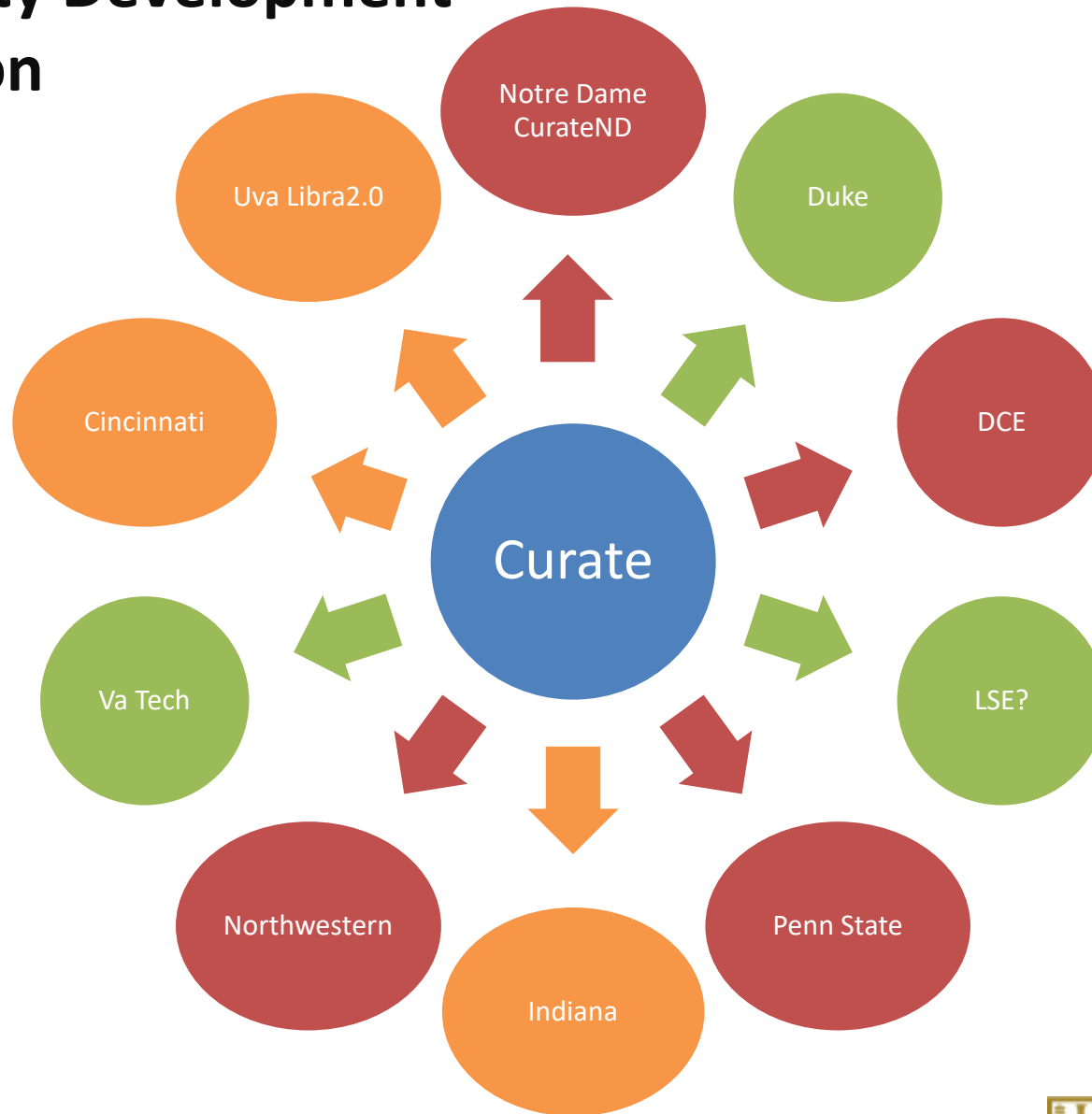
NORTHWESTERN
UNIVERSITY

PENNSTATE

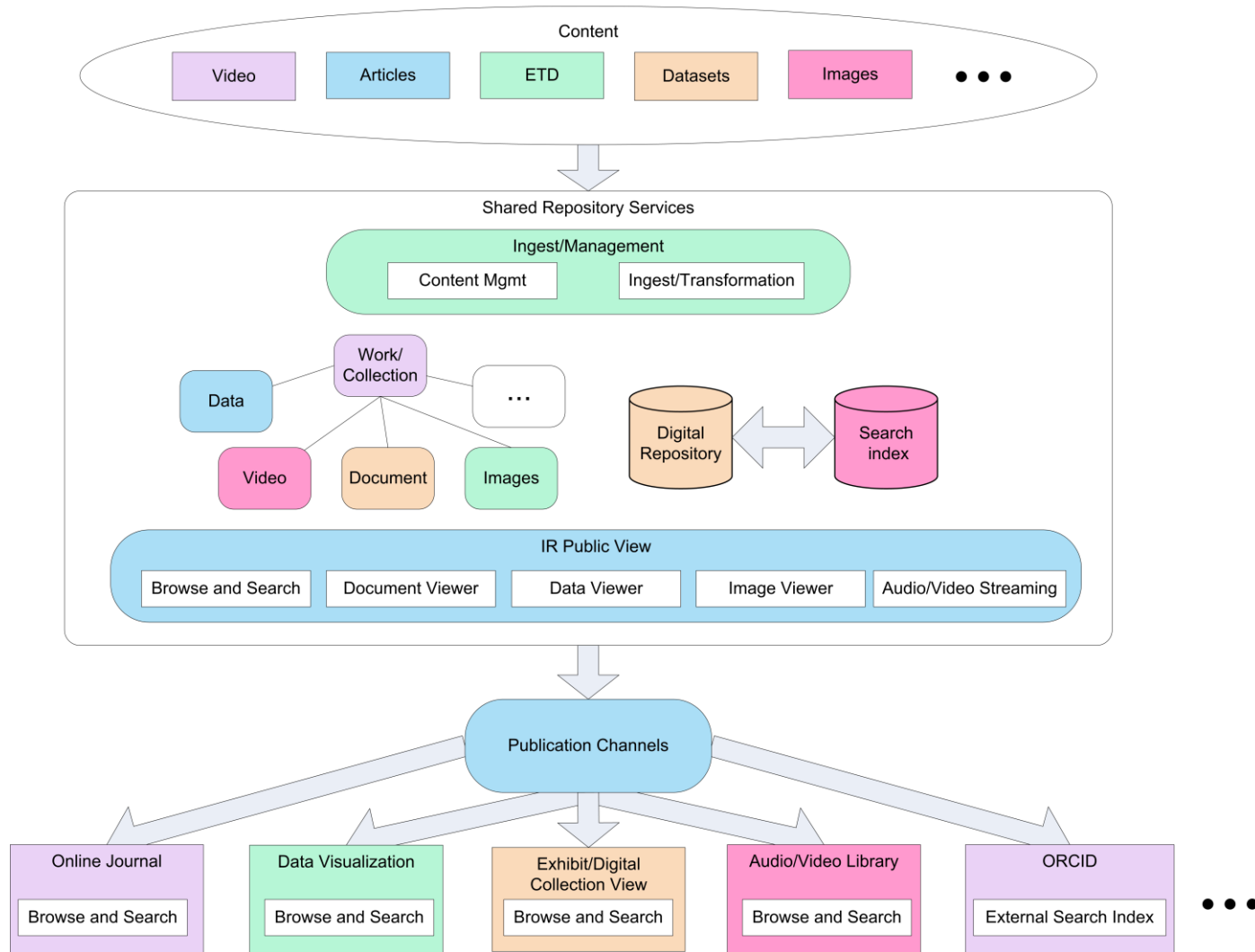


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Community Development & Adoption



Mixed Architecture



Future Priorities

- By April
 - Improved Organization and Managed Collection Support
 - Submission, Review, and Publish Workflows
 - Integration with ORCiD
 - Bulk Ingest Support

Future Priorities

- April and beyond
 - Enhanced Publishing Layer to Digital Exhibits, Online Journals
 - Tuned and Optimized for large datasets
 - Integration with SHARE
 - Pluggable support for solution bundles

Shared IR Bundles/Plugins

Publish

ORCID Plugin

SHARE
Plugin

Digital Exhibits
Plugin

Online Journal
Plugin

ArchivesSpace
Plugin

Google Scholar
Plugin

Primo Plugin

Browse

Image Bundle

Data Bundle

Audio/Video Bundle

ETD Bundle

Image Collection
Browser

Data Browser

Audio/Video Collection Browser

Document
Browser

Workflow

Image Workflow

Data Workflow

Audio/Video Workflow

ETD Workflow

Article Workflow

Viewers

Image Viewer

Data
Visualization

Audio Player

Video Player

Document Viewer

Works

Image

Dataset

Audio

Video

ETD

Article

Core

Curate

Bulk Uploader/BrowseEverywhere

Local Discovery

Submission Workflow

Self Deposit

Web Based Description, Preservation

Quick Demo

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HESBURGH LIBRARIES

CurateND

Go

What is CurateND?

CurateND is a secure repository service enabling the University of Notre Dame community to share its research and scholarly work with a worldwide audience. Faculty, staff, and students can use CurateND to collect their work in one location and create a durable and citeable record of their papers, presentations, publications, data sets, or other scholarly creations.

[Get Started](#)

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- Hydra Shared IR Project Wiki:
 - <https://wiki.duraspace.org/display/hydra/Shared+IR+project>
- <http://curate.nd.edu>