Obstacles and opportunities in research information management (RIM) in the United States

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Research Information Management: Defining RIM and the Library’s Role

Convenience and Compliance: Case Studies on Persistent Identifiers in European Research Information Management

Practices and Patterns in Research Information Management: Findings from a Global Survey
Research Information Management in the United States

Methodology

- Case study approach
- 5 US research universities with a diversity of:
  - Uses
  - Products
  - Scale
  - Stakeholders
- Semi-structured interviews with 39 individuals at 8 institutions

Case study institutions

- Penn State
- Texas A&M
- Virginia Tech
- UCLA
- University of Miami

oc.lc/us-irim-project
Research Information Management in the United States

**Project Team**

- Rebecca Bryant, PhD, OCLC Research co-PI
- Jan Fransen, University of Minnesota co-PI
- Pablo de Castro, euroCRIS & Strathclyde University
- Brenna Helmutstlter, Syracuse University
- David Scherer, Carnegie Mellon University

**Outputs & amplification**

- Report publication
- 5-part Hanging Together blog series
- RLP webinars, discussions, & social media
- Presentations at Educause, user group meetings, CNI...
Goals

Differentiate US RIM practices from those in Europe+

Identify US uses and unite

Offer recommendations to institutional leaders

Demonstrate the central role of the library

Accelerate collaboration & innovation by encouraging vendor-agnostic community of practice
PART ONE
Findings and Recommendations
Research Information Management in the United States

PART TWO
Case Studies
Research Information Management in the United States

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Most institutions have multiple RIM systems, supporting multiple uses

Penn State
- Research portal (Pure)
- Activity Insight (Digital Measures)
- Researcher Metadata Database (homegrown)

Texas A&M
- Scholars@TAMU (Elements/VIVO)

Virginia Tech
- eFARS (Elements)

UCLA
- UCLA Profiles (Profiles RNS)
- Opus (homegrown/Interfolio)
- UC Publication Management System (Elements)

University of Miami
- Research Profiles (Pure)
- Florida ExpertNet (homegrown)
- Scholarship@Miami (Esploro)
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RIM use cases

- Faculty activity reporting (FAR)
- Public portal
- Metadata reuse
- Strategic reporting & decision support
- Open access workflow
- Compliance monitoring
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<tr>
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<th>Faculty Activity Reporting</th>
<th>Public Portal</th>
<th>Metadata reuse</th>
<th>Strategic Reporting &amp; Decision Support</th>
<th>Open Access Workflow</th>
<th>Compliance Monitoring</th>
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<tr>
<td><strong>Texas A&amp;M</strong></td>
<td>Decentralized</td>
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<td><strong>Penn State</strong></td>
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UNITE DIVERSE PRACTICES
Research Information Management (RIM) systems support the transparent aggregation, curation, and utilization of data about institutional research activities.

This includes:

- Research Networking System (RNS)
- Researcher Profile System (RPS)
- Expert Finder System (EFS)
- Faculty Activity Reporting (FAR) system
- Current Research Information System (CRIS)
• Faculty Activity Reporting
• HR/Academic Affairs sectors

• Open source, seeded by NIH
• Public portals

Home grown

• CRIS systems
• Publishing sector

New entrant, with institutional repository at the core
• Library sector
CASE STUDIES
About Penn State University

- The Pennsylvania State University ("Penn State") is a state-related research-intensive university
- **Enrollment:**
  - ~75,000 undergraduates
  - > 15,000 graduate and professional students
- **24 campuses**
Research Portal
- Public portal with profiles for about 5,500 researchers
- Managed by research office & medical college

Activity Insight
- Supports Faculty activity reporting (FAR) for >7,000 faculty on 24 campuses
- Managed by library
  - Library supports data entry

Researcher Metadata Database (RMD)
- Supports institutional OA workflow
- Aggregates metadata from Pure & Activity Insight
- Supports strategic reporting & metadata reuse
- Managed by library

Home grown
<table>
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<tr>
<th>RIM Use Cases Penn State</th>
<th>Penn State</th>
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<tbody>
<tr>
<td><strong>Faculty Activity Reporting (FAR)</strong></td>
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<tr>
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<td>• Library manages Activity Insight FAR system for 24 campuses</td>
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<tr>
<td><strong>Public Portal: Expertise Discovery &amp;/or Research Showcase</strong></td>
<td>✔️</td>
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<tr>
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<td>• Elsevier Pure portal includes 5,500 faculty profiles for all campuses and colleges</td>
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<td></td>
<td>• Managed jointly by Office of Research and College of Medicine</td>
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<tr>
<td><strong>Open Access Workflow</strong></td>
<td>✔️</td>
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<td>• Home grown Research Metadata Database (RMD) supports institutional OA policy</td>
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<td>• Research Metadata Database (RMD) supports data sharing</td>
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Penn State Activity Insight System

DATA SOURCES
- Publication Databases
- Local Knowledge
- Local Data Sources
  - HR, Academic History
  - Sponsored Projects

DATA PROCESSING
- ETL Processes
- Metadata Editor
  - Activity Insight
- Data Store
  - Activity Insight

DATA TRANSFER METHODS
- Activity Insight API, Homegrown API

DATA CONSUMERS
- Faculty Activity Reporting
- Metadata Reuse
  - Researcher Metadata Database
Penn State Research Portal
About Virginia Tech

• Public research university
• Enrollment:
  ~30,000 undergraduates
  >7,000 graduate & professional students
Virginia Tech—key facts

Relies primarily on Elements

Administrative responsibility is shared
- Office of Faculty Affairs (Provost)
- Libraries
- Office of Analytics & Institutional Effectiveness

Publication metadata is seen as an institutional asset
- University Data Commons
- Ingests Elements data/combines with other institutional data
- Supports incentive-based budget planning/tracking
- Data governance for campus
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<th>Virginia Tech Use Cases</th>
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| **Faculty Activity Reporting** | ✔ | • Provides a database of information that supports faculty annual reports and generates P&T materials.  
• Supports program-level accreditation reports. |
| **Public Portal: Expertise Discovery & Research Showcase** | Launching soon | • Using the Elements Discovery module |
| **Open Access Workflow** | Planned | • Faculty members can now deposit open access versions of their publications in institutional repository directly from Elements.  
• Campus OA policy recently approved; Library is working to support compliance. |
| **Strategic Reporting & Decision Support** | ✔ | • Specifically, supports the PIBB budget model.  
• Conducted through the University DataCommons  
• Assists colleges in goal setting. |
| **Metadata Reuse** | ✔ | • Maintains a comprehensive database of Virginia Tech faculty scholarship, accounting for different disciplines and types of scholarly products.  
• The University DataCommons provides that database, with control over how and what information is entered as well as how the data are collected and used. |
| **Compliance Monitoring** | | |
Elements at Virginia Tech
RECOMMENDATIONS FOR INSTITUTIONAL LEADERS
Six recommendations to make the most of your RIM system

- Invest in institutional data curation
- Support adoption of persistent identifiers (PIDs)
- Don’t expect a turn-key system
- Support cross-functional teams
- Invest in dedicated personnel
- Include research information in enterprise data governance efforts

From Research Information Management in the United States, OCLC Research, 2021.
Libraries are essential partners in research information management (RIM)

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