Findings from the euroCRIS/OCLC Research Survey of Research Information Management Practices

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Today’s talk

• Introducing OCLC Research, euroCRIS and their collaboration

• Discuss joint Survey of Research Information Management Practice: goals, scope, aims

• Share and discuss survey results and findings
• Devoted to challenges facing libraries and archives since 1978
• Community resource for shared Research and Development (R&D)
• Engagement with OCLC members and the community around shared concerns
• Learn more
  ▪ oc.lc/research
  ▪ Hangingtogether.org blog
OCLC Research publications on Research Information Management

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

Rebecca Bryant
OCLC Research (US)

Anna Cisneros
University of St. Andrews (UK)

Carol Foulkes
Notre Dame University (US)

David Groenenwegen
Wenen University of Technology (Australia)

Elena Haggard
La Trobe University (Australia)

Holly Marcar
University of Tennessee-Knoxville (US)

Renaza Milișanu
Australian National University (Australia)

Melissa O’Quinn
University of Arizona (US)

Anna Rauh
Sydney University (Australia)

John Wright
University of Delaware (Delaware)

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

Rebecca Bryant, Annette Dorrmund, and Constance Halpern

EuroCRIS Current Research Information Systems
An international not-for-profit association founded in 2002 to bring together experts on research information in general and research information systems (CRIS) in particular.
Survey of Research Information Management Practices

• Joint project between
  Rebecca Bryant, PI, OCLC Research
  Pablo de Castro, Strathclyde University and euroCRIS
  Anna Clements, University of St. Andrews and euroCRIS
  Annette Dortmund, OCLC EMEA
  Jan Fransen, University of Minnesota, Twin Cities
  Muhammed Javed, Cornell University
  Constance Malpas, OCLC Research
  Michele Mennielli, DuraSpace and euroCRIS
  Maliaca Oxnam, University of Arizona
  Rachael Samberg, University of California-Berkeley
  Julie Speer, Virginia Tech
  Plus a number of valuable collaborators at OCLC

• Report to be published in November 2018
Results we’ll be talking about

• Incentives for RIM Adoption
• Functions/Uses of RIM
• Interoperability
• RIM Stakeholders
• Use of Persistent Identifiers
Methodology & promotion

• Online survey data collection: Oct 2017 – Jan 2018
  • English and Spanish versions

• Survey promotion through:
  o OCLC and euroCRIS communications channels and events worldwide
  o Communications by CRIS vendors and user communities
  o Listservs, social media, and announcements to research & library organizations
### RIM Survey responses: geographic overview

381 survey respondents from 44 countries

<table>
<thead>
<tr>
<th>Country</th>
<th># Resp.</th>
<th>Country</th>
<th># Resp.</th>
</tr>
</thead>
<tbody>
<tr>
<td>United Kingdom</td>
<td>39 (10%)</td>
<td>Canada</td>
<td>4 (1%)</td>
</tr>
<tr>
<td>United States</td>
<td>39 (10%)</td>
<td>South Africa</td>
<td>4 (1%)</td>
</tr>
<tr>
<td>Peru</td>
<td>39 (10%)</td>
<td>Andorra</td>
<td>3 (1%)</td>
</tr>
<tr>
<td>Italy</td>
<td>28 (7%)</td>
<td>Colombia</td>
<td>3 (1%)</td>
</tr>
<tr>
<td>Australia</td>
<td>24 (6%)</td>
<td>Finland</td>
<td>3 (1%)</td>
</tr>
<tr>
<td>Germany</td>
<td>14 (4%)</td>
<td>India</td>
<td>3 (1%)</td>
</tr>
<tr>
<td>Netherlands</td>
<td>10 (3%)</td>
<td>Japan</td>
<td>3 (1%)</td>
</tr>
<tr>
<td>Portugal</td>
<td>7 (2%)</td>
<td>Austria</td>
<td>2 (0.5%)</td>
</tr>
<tr>
<td>Poland</td>
<td>6 (2%)</td>
<td>Bahrain</td>
<td>2 (0.5%)</td>
</tr>
<tr>
<td>Spain</td>
<td>6 (2%)</td>
<td>China</td>
<td>2 (0.5%)</td>
</tr>
<tr>
<td>Belgium</td>
<td>5 (2%)</td>
<td>Denmark</td>
<td>2 (0.5%)</td>
</tr>
<tr>
<td>Ireland</td>
<td>5 (2%)</td>
<td>New Zealand</td>
<td>2 (0.5%)</td>
</tr>
</tbody>
</table>

1 respondent from each of the following countries: Afghanistan, Albania, Azerbaijan, Barbados, Belize, Brazil, Hungary, Lebanon, Mexico, Namibia, Russia, Saudi Arabia, Slovakia, Sri Lanka, Sweden, Trinidad and Tobago, Turkey, Uganda, United Arab Emirates and Uruguay

**Diagram:**

- **EMEA (Europe, Middle East, and Africa):** 152 (40%)
- **AMER (Asia, Middle East, and Latin America):** 90 (24%)
- **Unknown:** 107 (28%)

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Well over half (58%) have a live RIM System

Live RIM Systems (n=193)*

<table>
<thead>
<tr>
<th>System</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pure (Elsevier)</td>
<td>30%</td>
</tr>
<tr>
<td>Developed in-house</td>
<td>28%</td>
</tr>
<tr>
<td>Elements (Symplectic)</td>
<td>12%</td>
</tr>
<tr>
<td>DSpace-CRIS (Open source)</td>
<td>10%</td>
</tr>
<tr>
<td>Converis (Clarivate Analytics)</td>
<td>10%</td>
</tr>
<tr>
<td>VIVO (Open source)</td>
<td>4%</td>
</tr>
<tr>
<td>Profiles (Open source)</td>
<td>1%</td>
</tr>
<tr>
<td>Other</td>
<td>36%</td>
</tr>
</tbody>
</table>

*Note: 29 respondents did not provide their RIM system

Research Information Management Systems

Live RIM Systems in Use by Geography

- Europe (exc UK) (n=68)
- UK (n=27)
- US & Canada (n=22)
- Australia (n=21)
- Other (n=19)
- Unknown (n=35)

Legend:
- Pure (Elsevier)
- Developed in-house
- DSpace-CRIS (Open source)
- VIVO (Open source)
- Elements (Symplectic)
- Profiles (Open source)
- Converis (Clarivate Analytics)
- Other

Live implementations of Pure, by country  (n=47)

- Japan: 1
- Italy: 1
- Denmark: 1
- Columbia: 1
- China: 1
- Portugal: 2
- Finland: 2
- Belgium: 3
- Australia: 4
- Netherlands: 6
- Unknown: 7
- United States: 7
- United Kingdom: 11
1. Please indicate the importance of the following reasons for pursuing research information management (RIM) activities.*

[Using a scale of Extremely Important – Important – Somewhat Important – Not Important – N/A or Not Sure]

- Managing annual academic activity reporting
- Supporting expertise discovery
- Supporting institutional compliance (e.g., funder mandates, national assessment exercise like REF or ERA, etc.)
- Supporting institutional reputation and strategic decision making
- Improving services for researchers
- Recording institutional research facilities and their use
Reporting and compliance drive RIM adoption

Importance of Reasons for Pursing RIM Activities (n=222)

Base: Institutions with a live RIM

Managing annual academic activity reporting
- Extremely important: 58%
- Important: 28%
- Somewhat important: 9%

Supporting institutional compliance
- Extremely important: 53%
- Important: 26%
- Somewhat important: 12%

Supporting institutional research reputation and strategic decision making
- Extremely important: 40%
- Important: 42%
- Somewhat important: 16%

Improving services for researchers
- Extremely important: 36%
- Important: 43%
- Somewhat important: 16%

Supporting expertise discovery
- Extremely important: 23%
- Important: 46%
- Somewhat important: 20%
- Not important: 7%

Recording IR facilities and their use
- Extremely important: 11%
- Important: 32%
- Somewhat important: 25%
- Not important: 17%
- N/A or Not sure: 14%

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Importance of External Research Assessment Workflows

Base: institutions with a live RIM system

United Kingdom (n=27)
- Extremely important: 23
- Important: 2
- Somewhat important: 2

Australia (n=21)
- Extremely important: 18
- Important: 1
- Somewhat important: 2

Italy (n=27)
- Extremely important: 14
- Important: 10
- Somewhat important: 1

Netherlands (n=8)
- Extremely important: 4
- Important: 3
- Somewhat important: 1

Peru (n=6)
- Extremely important: 3
- Important: 2
- Somewhat important: 1

US & Canada (n=21)
- Extremely important: 2
- Important: 3
- Somewhat important: 5
- Not important: 6
- N/A or Not Sure: 5
### Importance of Supporting Expertise Discovery

**Base:** Institutions with a Live RIM System

<table>
<thead>
<tr>
<th>Country</th>
<th>Extremely Important</th>
<th>Important</th>
<th>Somewhat Important</th>
<th>Not Important</th>
<th>N/A or Not Sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peru (n=6)</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>United States (n=21)</td>
<td>9</td>
<td>6</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>United Kingdom (n=27)</td>
<td>5</td>
<td>15</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Italy (n=27)</td>
<td>3</td>
<td>16</td>
<td>5</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Australia (n=21)</td>
<td>2</td>
<td>10</td>
<td>6</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Netherlands (n=8)</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Summary: Incentives for Adoption

• US is an outlier
  – No national compliance requirements
  – Early emphasis on Research Networking Systems (e.g., Harvard Profiles)

• Action for the next survey
  – Different platforms emphasize different capabilities, so…
  – Increase promotion to Profiles RNS and VIVO communities

• Research Question for the next survey
  – Will incentives for new adopters of RIM shift away from compliance and toward expertise discovery?
  – Most institutions with reporting mandates will have already implemented RIM
3. How important are the following functions of RIM at your institution?*

[Using a scale of Extremely Important – Important – Somewhat Important – Not Important – N/A or Not Sure]

- Registry of institutional research outputs
- Publicly available researcher profiles
- Reporting scholarly impact
- Reporting societal impact
- External (e.g., National) research assessment
- Internal reporting
- Annual academic activity reporting workflows
- Awards/grants management workflows
- Compliance and open access to publications
- Reuse (in CVs, biosketches, other web pages)
- Identifying collaborators or expertise
## Important Functions of RIM (n=203)

**Base:** Institutions with a live RIM

<table>
<thead>
<tr>
<th>Function</th>
<th>Extremely important</th>
<th>Important</th>
<th>Somewhat important</th>
<th>Not important</th>
<th>N/A or Not sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registry of institutional research outputs</td>
<td>77%</td>
<td>16%</td>
<td>1%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>External (e.g., National) research assessment</td>
<td>56%</td>
<td>19%</td>
<td>11%</td>
<td>7%</td>
<td>7%</td>
</tr>
<tr>
<td>Internal reporting</td>
<td>52%</td>
<td>37%</td>
<td>8%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Publicly available researcher profiles</td>
<td>44%</td>
<td>34%</td>
<td>11%</td>
<td>8%</td>
<td></td>
</tr>
<tr>
<td>Compliance and open access to publications</td>
<td>45%</td>
<td>29%</td>
<td>14%</td>
<td>7%</td>
<td>5%</td>
</tr>
<tr>
<td>Annual academic activity reporting workflows</td>
<td>35%</td>
<td>31%</td>
<td>15%</td>
<td>7%</td>
<td>11%</td>
</tr>
<tr>
<td>Reporting scholarly impact</td>
<td>32%</td>
<td>42%</td>
<td>20%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Awards/grants management workflows</td>
<td>29%</td>
<td>26%</td>
<td>15%</td>
<td>14%</td>
<td>16%</td>
</tr>
<tr>
<td>Reuse (in CVs, biosketches, other web pages)</td>
<td>27%</td>
<td>39%</td>
<td>19%</td>
<td>5%</td>
<td>10%</td>
</tr>
<tr>
<td>Compliance and open access to research datasets</td>
<td>28%</td>
<td>26%</td>
<td>21%</td>
<td>13%</td>
<td>13%</td>
</tr>
<tr>
<td>Identifying collaborators or expertise</td>
<td>22%</td>
<td>36%</td>
<td>26%</td>
<td>5%</td>
<td>10%</td>
</tr>
<tr>
<td>Reporting societal impact</td>
<td>20%</td>
<td>33%</td>
<td>29%</td>
<td>6%</td>
<td>12%</td>
</tr>
</tbody>
</table>

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Importance of RIM system as a Registry of Institutional Research Outputs

Base: Institutions with a live RIM system

- **US & Canada (n=21)**: 10 Extremely important, 8 Important, 2 Somewhat important, 1 N/A or Not Sure
- **United Kingdom (n=27)**: 25 Extremely important, 2 Important, 1 Somewhat important, 1 N/A or Not Sure
- **Peru (n=6)**: 5 Extremely important, 1 Important, 1 Somewhat important, 1 N/A or Not Sure
- **Netherlands (n=8)**: 8 Extremely important, 1 Important, 1 Somewhat important, 1 N/A or Not Sure
- **Italy (n=27)**: 21 Extremely important, 6 Important, 1 Somewhat important, 1 N/A or Not Sure
- **Australia (n=21)**: 20 Extremely important, 1 Important, 1 Somewhat important, 1 N/A or Not Sure

Importance of Compliance and Open Access to Publications

Base: Institutions with a live RIM system

US & Canada (n=21)
- Extremely important: 3
- Important: 3
- Somewhat important: 8
- Not important: 6
- N/A or Not Sure: 1

United Kingdom (n=27)
- Extremely important: 23
- Important: 3
- Somewhat important: 1
- Not important: 1

Peru (n=6)
- Extremely important: 4
- Important: 2

Netherlands (n=8)
- Extremely important: 4
- Important: 4

Italy (n=27)
- Extremely important: 10
- Important: 11
- Somewhat important: 4
- Not important: 2
- N/A or Not Sure: 2

Australia (n=21)
- Extremely important: 8
- Important: 8
- Somewhat important: 2
- Not important: 2
- N/A or Not Sure: 1

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Importance of Compliance and Open Access to Datasets

Base: Institutions with a live RIM system

US & Canada (n=21)
- Extremely important: 3
- Important: 5
- Somewhat important: 9
- Not important: 4

United Kingdom (n=27)
- Extremely important: 14
- Important: 8
- Somewhat important: 3
- Not important: 2

Peru (n=6)
- Extremely important: 4
- Important: 1
- Somewhat important: 1

Netherlands (n=8)
- Extremely important: 2
- Important: 3
- Somewhat important: 3

Italy (n=27)
- Extremely important: 6
- Important: 7
- Somewhat important: 7
- Not important: 1

Australia (n=21)
- Extremely important: 6
- Important: 6
- Somewhat important: 4
- Not important: 2

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Summary: RIM uses

- For most, RIM is valuable as a registry of the institution’s research outputs
- RIM has *multiple* uses at most institutions
  - External & internal assessment are among the most important (and unsurprising)
  - Managing OA compliance is also important
  - Supporting the discovery of potential research collaborators is less important
- As expected, some of these differences appear to vary by region
Interoperability
Publication Metadata Sources that Populate your RIM system  
(n=185)

Base: Institutions with a live RIM system
Note: Respondents could select more than one answer

- Scopus: 72%
- Web of Science: 63%
- PubMed: 61%
- CrossRef: 44%
- ArXiv: 37%
- Europe PubMed Central: 26%
- Google Books: 12%
- CiNii: 11%
- SSRN: 10%
- RePEc: 9%
- WorldCat: 7%
- MLA International Bibliography: 7%
- dblp: 6%
- Scielo: 4%
- SAO/NASA Astrophysics Data System: 4%
- Other (Please specify): 11%
- None of the above: 14%

**Does your RIM system serve as your default...**
Base: Institutions with a live RIM system

<table>
<thead>
<tr>
<th>Repository Type</th>
<th>Yes (%)</th>
<th>No (%)</th>
<th>Don't know (%)</th>
<th>N/A (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institutional Repository</td>
<td>54</td>
<td>41</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>ETD Repository</td>
<td>37</td>
<td>52</td>
<td>9</td>
<td>2</td>
</tr>
<tr>
<td>Research Data Repository</td>
<td>24</td>
<td>64</td>
<td>3</td>
<td>9</td>
</tr>
</tbody>
</table>

**Does Pure serve as your default...**
Base institutions with live Pure n=47

<table>
<thead>
<tr>
<th>Repository Type</th>
<th>Yes (%)</th>
<th>No (%)</th>
<th>Don't know (%)</th>
<th>N/A (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institutional Repository</td>
<td>58</td>
<td>38</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>ETD Repository</td>
<td>29</td>
<td>51</td>
<td>4</td>
<td>16</td>
</tr>
<tr>
<td>Research Data Repository</td>
<td>29</td>
<td>60</td>
<td>2</td>
<td>9</td>
</tr>
</tbody>
</table>
Does your RIM system serve as your default...

Base: Institutions with a Live RIM system

Europe (n=95)  US & Canada (n=22)  Australia (n=21)  Other (n=19)

Institutional repository: 69%  14%  33%  47%
Research data repository: 23%  9%  14%  53%
ETD repository: 48%  24%  42%
Interoperability between RIM and repository systems (n=184)
Base: Institutions with a live RIM system

- Institutional repository: 43%
- Research data repository: 16%
- ETD repository: 20%

Which of the following internal systems interoperate with your RIM system(s)?

Base: Institutions with a Live RIM system

- Institutional repository (e.g., via a connector between DSpace and Pure):
  - Europe (n=93): 42%
  - US & Canada (n=22): 27%
  - Australia (n=21): 48%
  - Other (n=19): 68%

- Research data repository:
  - Europe (n=93): 15%
  - US & Canada (n=22): 14%
  - Australia (n=21): 47%
  - Other (n=19): 17%

- ETD repository:
  - Europe (n=93): 17%
  - US & Canada (n=22): 19%
  - Australia (n=21): 42%
  - Other (n=19): 42%
Some summary findings

- Fairly high degree of RIM system interoperability with other institutional systems – including IRs
- Significant workflows for funding information exchange both internally and externally
- Institutions leverage publications metadata harvesting
- OAI-PMH & CERIF-XML important standards
Stakeholders
Stakeholders with "Primary Responsibility" for 14 Specific RIM Activities

by # of mentions

- Research Office: 1,044
- Library: 744
- IT/Systems: 479
- Provost/Chancellor: 325
- Academic Units: 191
- Other: 168
- External Agency/Vendor: 75
- Human Resources: 18

by OCLC Research

Stakeholders with Primary Responsibility for RIM Activities by Country

Based on # of Mentions (Decreasing Importance of Library)
Base: Institution with a Live RIM system

Netherlands: Library 50%, Academic Units 39%, Research Office 9%, IT/Systems 5%, Provost/Chancellor 5%, Other 4%, Human Resources 14%, Don't know 8%

US & Canada: Library 48%, Academic Units 28%, Research Office 5%, IT/Systems 5%, Provost/Chancellor 17%, Other 6%, Human Resources 16%, Don't know 8%

UK: Library 48%, Academic Units 24%, Research Office 12%, IT/Systems 17%, Provost/Chancellor 16%, Other 6%, Human Resources 5%, Don't know 8%

Australia: Library 48%, Academic Units 24%, Research Office 12%, IT/Systems 5%, Provost/Chancellor 5%, Other 4%, Human Resources 15%, Don't know 14%

Italy: Library 30%, Academic Units 20%, Research Office 18%, IT/Systems 15%, Provost/Chancellor 14%, Other 8%, Human Resources 8%, Don't know 8%

Peru: Library 26%, Academic Units 24%, Research Office 18%, IT/Systems 17%, Provost/Chancellor 15%, Other 6%, Human Resources 5%, Don't know 4%

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Persistent identifiers
Researcher Identifiers Used in Your RIM system (n=182)

Base: Institutions with a live RIM system
Note: Respondents could select more than one answer

- ORCID: 73%
- Scopus ID: 60%
- ResearcherID: 35%
- PubMed ID: 29%
- ArXiv ID: 9%
- National authority files: 7%
- ISNI: 3%
- VIAF: 0%
- Other (Please specify): 21%
- None of the above: 15%

Google Scholar ID (n=4)
SSRN (n=3)
Codice fiscale (Italy) (n=19)
Organization Identifiers Used in Your RIM system (n=162)

Base: Institutions with a live RIM system
Note: Respondents could select more than one answer

- None of the above: 77%
- National authority files: 6%
- GRID: 6%
- Ringgold: 5%
- CrossRef Funder Registry: 2%
- ISNI: 1%
- Other (Please specify): 5%
Some summary findings

- Congruent with our qualitative *Convenience and Compliance* findings
- Strong adoption of person identifiers
  - ORCID becoming a *de facto* standard in scholarly literature, but other identifiers also needed and used
  - Organizational identifiers largely unused
Discussion

• Survey results and data to be published as an OCLC Research Report in November 2018

• More information at oc.lc/rim

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References


euroCRIS & OCLC Research. International Survey on Research Information Management Practices. Publication of results as an OCLC Research report expected in 2018