Research Data Services in European Libraries: Current Offerings and Plans for the Future

Carol Tenopir
University of Tennessee
Hanken School of Economics, Helsinki
and
Wolfram Horstmann
University of Gottingen
LIBER Survey Builds on Previous DataONE Library Surveys

Library Baseline (2010)

Follow-up for comparison (2014)

Citations: 66

838 downloads (published Dec 2015)
LIBER Survey Responding Libraries

Survey Respondents
- North: 19%
- East: 17%
- West: 51%
- South: 13%

LIBER Academic Library Membership
- North: 15%
- East: 17%
- West: 53%
- South: 16%
Key Findings

1. LIBER academic libraries offer and are planning a range of Research Data Services, but…
   …Consultative RDS are most common
   …Fewer libraries offer technical RDS

2. There are some regional differences

3. Libraries use a variety of strategies for developing staff skills
1. LIBER academic libraries offer and are planning a range of Research Data Services
RDS offered by most libraries currently

- Discussing RDS with others: Consultative, 77%
- Involved in policy development/planning: Consultative, 66%
- Training colleagues on RDS: Consultative, 54%
- Consulting on data mgt plans: Consultative, 46%
- Consulting on data and metadata standards: Consultative, 44%
- Outreach/collaboration with other RDS providers: Consultative, 43%
RDS offered continued

- Providing tech. support for RDS: Technical 38%
- Providing ref. support for finding/citing data: Consultative 37%
- Creating webguides: Consultative 35%
- Direct participation with researchers: Consultative 32%
- ID datasets: Technical 26%
Currently offered and future plans for consultative-type services

- Discussing RDS with others on a regular basis: 77% Yes, 15% No, but plan to, 8% No, and no plans
- Involved in policy decisions or activities on RDS: 66% Yes, 25% No, but plan to, 8% No, and no plans
- Consulting on data management plans: 54% Yes, 34% No, but plan to, 13% No, and no plans
- Consulting on metadata standards: 46% Yes, 43% No, but plan to, 11% No, and no plans
- Outreach or collaboration: 44% Yes, 42% No, but plan to, 14% No, and no plans
- Creating Web guides: 41% Yes, 49% No, but plan to, 16% No, and no plans
- Providing reference support: 49% Yes, 49% No, but plan to, 16% No, and no plans
- Direct participation with researchers: 35% Yes, 37% No, but plan to, 15% No, and no plans
Currently offered and future plans for technical-type services

- Providing technical support for...
  - Yes: 21%
  - No, but plan to: 42%
  - No, and no plans: 38%

- Preparing data/sets for deposit
  - Yes: 26%
  - No, but plan to: 48%
  - No, and no plans: 26%

- Create/Transform metadata
  - Yes: 31%
  - No, but plan to: 44%
  - No, and no plans: 25%

- Deaccession of data
  - Yes: 30%
  - No, but plan to: 43%
  - No, and no plans: 30%

Legend:
- Yes
- No, but plan to
- No, and no plans
2) There are some regional differences
Regional differences in consultative RDS availability

<table>
<thead>
<tr>
<th>Region</th>
<th>Training colleagues on RDS</th>
<th>Discussing RDS with others</th>
<th>Provide support for finding/citing data</th>
</tr>
</thead>
<tbody>
<tr>
<td>West</td>
<td>10% (Yes)</td>
<td>4% (Yes)</td>
<td>9% (Yes)</td>
</tr>
<tr>
<td>East</td>
<td>29% (Plan to)</td>
<td>29% (Plan to)</td>
<td>29% (Plan to)</td>
</tr>
<tr>
<td>North</td>
<td>10% (No, no plans)</td>
<td>5% (No, no plans)</td>
<td>20% (No, no plans)</td>
</tr>
<tr>
<td>South</td>
<td>9% (No, no plans)</td>
<td>9% (No, no plans)</td>
<td>64% (Yes)</td>
</tr>
<tr>
<td>DataONE</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Regional differences in technical RDS availability

<table>
<thead>
<tr>
<th>Region</th>
<th>ID Datasets</th>
<th>Prepare data</th>
<th>Create/transform data/metadata</th>
</tr>
</thead>
<tbody>
<tr>
<td>West</td>
<td>33% Yes</td>
<td>37% Yes</td>
<td>36% Yes</td>
</tr>
<tr>
<td>East</td>
<td>22% Plan to</td>
<td>19% Plan to</td>
<td>17% Plan to</td>
</tr>
<tr>
<td>North</td>
<td>5% No, no plans</td>
<td>5% No, no plans</td>
<td>14% No, no plans</td>
</tr>
<tr>
<td>South</td>
<td>29% No, no plans</td>
<td>25% No, no plans</td>
<td>18% No, no plans</td>
</tr>
</tbody>
</table>

The bar chart shows the distribution of Yes, Plan to, and No, no plans across different regions and tasks.

1. West: ID Datasets (33% Yes), Prepare data (37% Yes), Create/transform data/metadata (36% Yes)
2. East: ID Datasets (22% Plan to), Prepare data (19% Plan to), Create/transform data/metadata (17% Plan to)
3. North: ID Datasets (5% No, no plans), Prepare data (5% No, no plans), Create/transform data/metadata (14% No, no plans)
4. South: ID Datasets (29% No, no plans), Prepare data (25% No, no plans), Create/transform data/metadata (18% No, no plans)
3) Libraries have a variety of strategies for developing staff skills
Have you hired staff for RDS in the last 12 months?

- Yes: 38.80%
- No: 61.20%
Has your library provided opportunities for library staff to develop skills related to RDS?

- Yes: 83.9%
- No: 16.1%
Which of the following opportunities has your library provided for library staff to develop skills related to RDS?

- Support for staff to attend conferences & workshops: 78%
- Support for staff to take courses related to RDS: 60%
- Support for staff to join working groups related to RDS: 59%
- In-house staff workshops: 47%
- Collaboration with others with skills related to RDS: 9%
Staff Skills Development

Strategies

- Collaborated with another institution to develop a skills-based MOOC
- Hired staff for projects (not permanent)
- Refocused an existing role
- Moved staff from other support unit [ITS]
- Dramatically increase the workload of some poor individual librarian
Tools for RDS Education and Assistance

https://www.dataone.org/education-modules

**Lesson 1: Data Management**

*View all Education Modules at [https://www.dataone.org/education-modules](https://www.dataone.org/education-modules)*

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**The world of data around us**

The data deluge has created a surge of information that needs to be well-managed, discoverable, and accessible.

The amount of available storage is not keeping pace with the amount of data being produced.

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**Information vs. Available Storage**

<table>
<thead>
<tr>
<th>Year</th>
<th>Information</th>
<th>Available Storage</th>
</tr>
</thead>
<tbody>
<tr>
<td>2025</td>
<td>100,000</td>
<td>100,000</td>
</tr>
<tr>
<td>2050</td>
<td>1,000,000</td>
<td>1,000,000</td>
</tr>
<tr>
<td>2075</td>
<td>10,000,000</td>
<td>10,000,000</td>
</tr>
</tbody>
</table>

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**Causes of data loss**

- Natural disasters
- Facilities infrastructure failures
- Storage failure
- Server hardware or software failure
- Application software failure
- Human errors
- Malicious attack
- Format obsolescence
- Loss of competencies
- Loss of funding
- Loss of institutional commitment

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**Why manage data:**
the researcher perspective

- Keep yourself organized to find your own files!
- Track your processes for reproducibility
- Better version control of data
- More efficient data quality control
- More backups to avoid data loss
- Format your data for reuse by yourself & others
- Document your data for underestability and reuse
- Prepare it to share it & gain credibility and recognition for your scientific efforts

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**Data Reuse Example**

Researchers reused and aggregated data from several different sources to determine migration routes for specific bird species.

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**The Case for Data Management**
DataONE Education Modules

1. Why Data Management
2. Data Sharing
3. Data Management Planning
4. Data Entry and Manipulation
5. Data Quality Control and Assurance
6. Data Protection and Backups
7. Metadata
8. How to Write Quality Metadata
9. Data Citation
10. Analysis and Workflows
11. Legal and Policy Issues
Thank You!

Carol Tenopir-University of Tennessee  
Sanna Talja-University of Tampere  
Wolfram Horstmann-University of Gottingen  
Birgit Schmidt-University of Gottingen  
Elina Late-University of Tampere

Lynn Baird- University of Idaho  
Robert Sandusky- University of Illinois-Chicago  
Suzie Allard-University of Tennessee  
Dane Hughes-University of Tennessee  
Danielle Pollock-University of Tennessee