In Aggregate: Trends, Needs, and Opportunities from Faculty Research Data Management Surveys

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IASSIST 2017
US Federal Data Management

- National Science Foundation Data Management Plan Requirement (2011)
- Office of Science and Technology Policy Memo (2013)
- HR 1770 / S760 OPEN Government Data Act (2017)
What **are** the educational needs of faculty (and staff, graduate students, undergraduates, etc) at my institution?
Let’s do a survey!

How many exist and are there general conclusions?
Methodology

- Searched LISTA, Google Scholar
- Reviewed reference and citation lists of identified articles

Categorization and Coding

- General Article Information
- Instrument Metadata
- Needs Assessment Audience
- Question Types
- Needs Assessment Results
- Library Outcomes
Criteria

- **Inclusion Criteria**
  - Case Studies
  - Focused on RDM needs and behaviors of researchers
  - Single or multi-institution
  - Discipline specific or agnostic
  - Survey, focus groups, or interview methodologies
  - United States institutions
  - Published or completed manuscript prior to December 2016

- **Exclusion Criteria**
  - International or undefined population
  - Library RDM service implementation
  - Case studies of general library service evaluation
  - Not a conference presentation or poster only
Results

50 potential studies
35 documents
33 unique case studies
Results: Study Demographics

- Publication Dates (2007-2016)
  - Highest years of publication: 2015 (n=9); 2014 (n=4)
- Place of publication
  - 22 journals; 3 white papers; 1 unpublished manuscript
- Number of Authors (1-6)
  - Most common number of authors was 2 (n=15)
- Type of Institution
  - Highest Research, Doctoral Granting [Carnegie Classification] (n=24)
  - Public Institutions (n=25)
Results: Case Study Methodology

- Interviews, Surveys, and Focus Groups
- Count of Methodology Type

- Response Size/Rate
  - Interviews: 5-56 participants
  - Surveys: 5%-65.6% of target population
  - Focus Groups: 8-31 participants

- Instrument availability
  - ~60% were available as appendices or supplemental documents
Results: Recruitment and Respondents

Faculty Only
n=21

Total Respondents: 5021

- Administrators, 70, 1%
- Post-Docs, 114, 2%
- Undergrad, 143, 3%
- Staff, 550, 11%
- Grad Students, 581, 12%

Faculty, 3505, 71%
Questions Administered
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<th>Percentage</th>
<th>Requirements</th>
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<td>50%</td>
<td>Storage; Data Sharing; Format; Data Size; Backup</td>
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<td>25-50%</td>
<td>Preservation; DMPs; Statement of Research; Retention; Organization; Persons Responsible for Data; Training/Education; DM Requirements; Privacy</td>
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<td>&gt;25%</td>
<td>Security; Policy; Life Cycle; Finding Data</td>
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Results Discussed
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Discussion: Findings

- These needs assessments are being published by public research institutions.
- The majority have an extremely low response rate.
- Post-docs, staff, and undergraduates are not clearly represented.
- STEM/STEM Adjacent most heavily represented.

- Training and Education needs were expressed in nearly 50% of the case studies.
- Sharing data is a major concern.
- Both active and preservation storage are problematic.
Recommendations

- Future research may be needed to address
  - Non-faculty audience (staff, students)
  - Liberal Arts; Community Colleges; Smaller Research Institutions
  - Humanities, Business, and Social Science Scholars

- Future research unlikely to be needed
  - Only faculty needs assessments
  - Highest Research, Doctoral Institutions

- Reuse available survey instruments
- Release full survey instruments, sources, and modifications
Questions?

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