Research Data Management Assessment
Why Research Data Needs Assessment?

• Data Management Plan requirements (and high levels of federal grant funding)
• Interest in treating research data as important scholarly work
• Growth area for academic library support
Research Data Needs Assessment at Georgia Tech

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Data Asset Framework (DAF)

1. **Planning the Audit**
   - A business case is developed, meetings scheduled and preliminary research conducted. The online tool has a calendar and address book to schedule meetings and track progress.

2. **Identifying and Classifying Assets**
   - An inventory of assets is created in this stage. The online tool can generate and circulate a questionnaire to help populate the inventory.

3. **Assessing Management of Data Assets**
   - Vital assets are assessed in detail to investigate data management approaches. The online tool pulls through information already collected.

4. **Reporting and Recommendations**
   - A report with recommendations is created. The tool analyses data collected to produce statistics and generate an appendix.
GT Methodology

Survey
Interviews
DMP Analysis
Case Studies
Survey Pilot

- Based on DAF examples
- Tested by at least one researcher from every College
- Modified based on feedback before wide deployment

Survey

- Live 2010-2013
- Drupal website with required CAS authentication
- Representation from all across the Institute
- Self-selected sample

Interviews

10 Interview questions

“How do you organize the data produced from your research?”

“How important is it for you or others to have access to your data over the long-term?”
Interview Sample

Georgia Tech Colleges and Research Centers

<table>
<thead>
<tr>
<th>College</th>
<th>Number of Participants</th>
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<tbody>
<tr>
<td>College of Architecture</td>
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<tr>
<td>College of Computing</td>
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<td>2</td>
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DMP Analysis

- Searched for
  - Repository services
  - Inter- and intradepartmental sharing of DMPs,
  - Use of cloud tools
- Not self-selected sample

Case Studies

- Aerospace, astrophysics, and computing
- Included preliminary interview
- Assessed both researcher needs and library capacity
Data Analysis

- Grounded Theory Lite
- Coding and Codebook
  - Checks for inter-coder reliability
- Interviewee Personas

Transcribe interviews

Web application for Qualitative and Mixed Methods research

Visualize major discussion points or code correlations
Coding
The Good. The Not So Good.

**Good**
- Multiple methods
- Campus engagement
- Learning through doing

**Not So Good**
- Codes that are too broad
- Un-representative sample
- Differences between what people say and what people do
Assessment Findings

1. Data management plans are still a frustrating burden for most researchers.

2. Georgia Tech researchers lack the guidelines, resources, standards, and policies to properly care for their research data.

3. A disconnect exists between the expectations of Principal Investigators and Graduate Assistants.

4. Researchers recognize the importance of documentation and metadata, but few capture this information adequately.

5. Sharing data with collaborators outside Georgia Tech is challenging.

6. Researchers are willing to share their data, but the conditions under which they are willing to do so vary widely.

7. Researchers rarely plan for the final disposition of their research data.

8. Very few researchers deposit data into repositories.

Next Steps

- Changes to local service
- Proposal to Campus Administration
- Research data repository
- IMLS grant to examine DMP’s
- Re-Assess
References


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