

Deep Dive into Data Workflow

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Goal

The goal of this workflow is to become familiar with the research data management landscape of a particular discipline or area of study. Finding answers to the following questions will provide you with relevant information that you can share with researchers in your department(s).

Advice

This workflow is iterative. Expect to keep circling back to look at different resource categories as you explore the landscape. Not all resource categories will be relevant to all disciplines.

Find an Entry Point and Dig Deeper

The research data management landscape of a particular discipline may be a complex web of funding agency requirements, data policies of academic societies and/or journals, subject-specific data repositories, metadata standards, and disciplinary best practices. How can you start exploring this landscape?

I. Data Requirements of Stakeholders

While exploring the research data management landscape of a particular discipline, search for data policies & requirements from these stakeholders:

A. Journals

- What journals do your faculty publish in most frequently?
- Do these journals have data sharing/access policies?
- Do these journals require specific metadata or other data documentation?
- Do these journals recommend/require specific data repositories?
- Do these journals accept datasets as supplementary materials?
- Do these journals have temporal access policies (e.g., data must be available for X years, option for an embargo, etc.)?
- Are there data journals or journals that accept data papers in your discipline? Do these journals recommend/require specific data repositories?

B. Funders

- Who is funding the research in your department(s)?
- Do these organizations have data sharing/access policies?
- Do these organizations require data management plans as components of grant proposals?
- Do these organizations have requirements for secure storage of sensitive data?

- Do these organizations have temporal access policies (e.g., data must be available for X years, option for an embargo, etc.)?

C. Societies

- What academic societies are most prominent within your discipline?
- Do those societies (or their publications) have data sharing/access policies, guidelines, or standards?

D. Institutes or Local Organizations

- Do local research organizations (e.g., U-M departments and programs, regional research organizations, etc.) have data sharing/access policies?
- Do local research organizations provide or recommend specific data repositories?

II. Data Repositories

A. Identify Relevant Data Repositories

- What data repositories have already surfaced in your explorations?
- Search or browse data repository directories to identify other relevant data repositories. What did you find?
 - OpenDOAR (<http://www.opendoar.org/>)
 - re3data (<http://www.re3data.org/>)
 - Open Access Directory (http://oad.simmons.edu/oadwiki/Data_repositories)
- Search Thomson Reuters' Data Citation Index to identify other relevant data repositories. What did you find?

B. Describe Relevant Data Repositories

- Use the Data Repository Description Tool to describe the data repositories you found (in terms of their subject focus, data deposit and access options, deposit fees, persistent identifiers assigned to datasets, etc.).
- Examine these data repositories more deeply to learn about their metadata requirements, preservation plans, etc.

III. Metadata Standards

- Does your discipline use common metadata standards or data documentation practices?
- Are there tools available for assisting with metadata creation?

IV. Subject-Specific Data Literature

- Have people written about data sharing or research data management in your discipline (e.g., journal articles, blog posts, etc.)?

V. Subject-Specific Culture of Data Sharing

- What have your explorations told you about the culture of data sharing in your discipline?
- What are some barriers to data sharing in your discipline (i.e., sensitive data, intellectual property concerns, no relevant data repositories¹, etc.)?

Put It All Together and Share the Information

Now that you have a deeper understanding of the research data management landscape for your discipline or area of study, what can you do with this information? How can you share this information with your researchers and members of the library community?

I. Research Guides

- Consider creating a Research Guide containing this information, either as a stand-alone guide or incorporated into a more general subject guide.

II. Instruction/Education

- How could this information be included in instructional sessions or education provided to students?

III. Outreach

- How could you share this information with researchers in your department(s) (e.g., departmental/faculty meetings, research symposia, one-on-one conversations, etc.)?
- How could you share this information with other librarians (e.g., internal special interest groups, conference presentations, etc.)?

IV. Other opportunities?

¹ Keep in mind that if your search fails to reveal data repositories that are relevant to your discipline, the University of Michigan Library's Deep Blue (<http://deepblue.lib.umich.edu/>) or general-purpose repositories such as FigShare (<http://figshare.com/>) can be alternative options.