DATA CURATION MOUNTAIN Stories from the Summit

Nova et Aucta Orbis Terrae Descriptio ad Usum Navigantium Emendate Accommo

Tensions between Sharing and Backup

This mind map was developed to better understand the tensions and synergies between data sharing and data backup. The mapping between sharing and backup is far from exact, but the development of the visualization was an excellent heuristic exercise.

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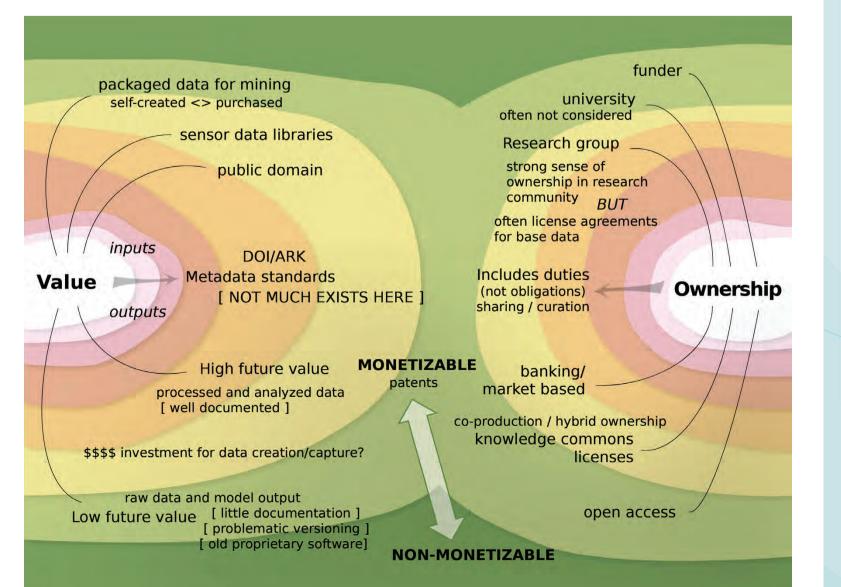
Introduction

Data curation in the context of academic research is now considered a necessary collaborative effort to be organized at and among research institutions worldwide. At the University of Miami several actors including the Libraries, Information Technology, and the Center for Computational Science recognized the need to start building services around the stewardship of research data as early as 2008. In early 2015 a formal data curation initiative was launched under library leadership with four main components: socialization of the initiative within the research community, assessment of data curation practices and needs, piloting data management/ curation services, and programmatic development of data services. This poster includes a visualization developed for the socialization phase and reports results from both the socialization and assessment phases.

Methodology

A mixed-method anthropological research design was chosen to develop a qualitative understanding of data curation practices. The socialization work started prior to the 2015 initiative launch and is still ongoing. This phase includes outreach to faculty and administrators, graduate student seminars, and community building work within the libraries and across the university. The bulk of the assessment phase was undertaken from March to June of 2015 and consisted of many informal conversations and over twenty formal semi-structured faculty interviews. Two principal results have emerged from these processes: a deep(er) institutional knowledge of data curation practices and a growing sense of community around data curation.

antwerp, 1593) (British Library Maps C.7.c.13,

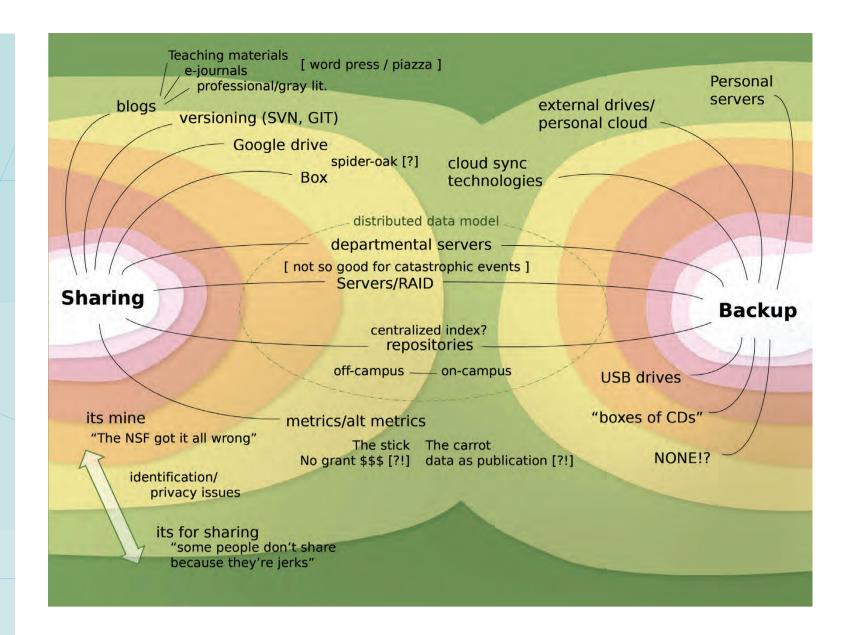


Observations on Data Curation:

The findings show that 'data curation' takes significantly different meanings across the research community. While the term 'curation' is fairly straightforward, the term 'data' poses difficulties. Data is conceived in a variety of structures, forms and sizes. Yet very generally we can understand data curation as the collection, processing, synthesis, analysis, and dissemination of research data products. The 'map' below was used to start conversations and build more nuanced understandings with investigators.

Tensions and Synergies:

Several broad tensions and synergies between the sharing, backup, ownership and value of research data were made visible through the assessment process. While there are several shortcomings to making the abstractions shown to the upper right and lower left, the paired relationships can inform our thinking on data curation, nevertheless.



(economic/environmental)

data publication

repository submission

METADATA CREATION

cleaning / weeding

data citation

intellectual licensing property

Research Data Products

Library Digital Collections

Storage audio / video METADATA CREATION grey literature

old maps

0

value++

Archives dark archives migration Preservation server farms

Data Curation institutional repository faculty publications theses / dissertations database str B

Discovery search engir ANALYSISA 10 PERP

public domain the information commons research data cycle

data management plans research databases / code recorded sensor data physical specimens annotated literature communications

interoperable

DISSEMINATE

identifying research needs

buying / licensing discipline specific repositories **METADATA CREATION** data collection services budget management data consolidators ocal collection development

External Data Resources

overnment data centers international networks

secure

Conclusion

At the University of Miami exceptional and exemplary research units invent

curation practices in their field. At the other end of the spectrum research projects have no curation

practices in place. Across this continuum there is a tendency to implement

open

access

ad-hoc solutions that may not serve for long-term access to and preservation of research data. Long-term data curation requires human and machine readable descriptions of data—metadata—and there is a lack of human resources and knowledge, both discipline-specific and transdisciplinary, to implement this practice. In addition to this lacuna, the institutions that govern data curation, understood as rules of the game and community based norms, are underdeveloped at the University of Miami.

Tensions between Value and Ownership

This visualization was developed to better understand the relationships between value and ownership of research data products. The mapping between value and ownership is not exact, particularly with future values of research data; value can be assigned in ways other than monetary.



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