The Realities of Research Data Management

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The Realities of Research Data Management

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The Realities of Research Data Management

• Research data: key part of evolving scholarly record
• How universities acquire RDM capacity:
  • Context, influences, choices
• Key decision points:
  • Deciding: 1) to act  2) what to do  3) how to do it
• Case studies:

University of Edinburgh
Wageningen University & Research
Monash University
University of Illinois - UC
- Framework
- RDM as a bundle of services
- Scope of the RDM capacity in each of the four universities
- Specific services in each cluster
- Institutional problem to be solved
- Internal and external incentives
- Build or buy? Local or external?
- Below, above or at institution-scale?
Research Data Management Service Categories

**EDUCATION**
Raise awareness of RDM’s importance, encourage RDM skill-building, and disclose RDM tools and resources

**EXPERTISE**
Decision support for, and customized solutions to, specific research data management problems

**CURATION**
Technical infrastructure and related services that support data management throughout the research cycle
“... it is important to emphasize that full coverage of all three components of our RDM framework should not necessarily be the goal of every institution setting out to acquire RDM capacity; nor should the lack of services in one or more categories be construed as a mark against the quality of RDM support at a particular institution.”
Scope
RDM Service Bundle Highlights
University of Edinburgh

EDUCATION
- MANTRA Courses & Workshops
- RDM MOOC
- Customized Training

EXPERTISE
- General Email Contact Point
- Staff Contact Information
- Digital Curation Centre

CURATION
- Dataverse
- DataSync
- DataShare

RDM Service Bundle Highlights
University of Illinois at Urbana-Champaign

EDUCATION
- Customized DMP Tool
- RDM Workshops
- Outreach
- Data Help Desk Drop-in
- Data Nudge

EXPERTISE
- DMP Review/Feedback
- General Email Contact Point
- Staff Contact Information
- Scholarly Commons
- Digital Curation Network

CURATION
- Illinois Data Bank
- U of I Box
- Active Data Management Support

RDM Service Bundle Highlights
Monash University

EDUCATION
- Online Resource Library
- Professional Development Activities for Researchers & Students

EXPERTISE
- General Email Contact Point
- Referrals to Campus Units
- Australian National Data Service

CURATION
- Monash.Hingshare
- Vicklede
- Store Monash
- Research Data Australia
- DOI Handle service

RDM Service Bundle Highlights
Wageningen University & Research

EDUCATION
- "Browse by Subject/FAQ"
- Online Resources
- Training Courses
- News Feed

EXPERTISE
- Online Contact Form
- DMP Review/Feedback
- Consultation for Data and Metadata Preparation
- Preprint Deposit

CURATION
- DANS-EASY
- 4TU Research Data
- GfK/MUR
- Pure/ARCoS

“RDM Service Bundle Highlights” by OCLC Research, from The Realities of Research Data Management Part Two: Scoping the University RDM Service Bundle (https://doi.org/10.25333/C3PG8J), CC BY 4.0
RDM Service Bundle Highlights
University of Edinburgh

EDUCATION
- MANTRA
- Courses & Workshops
- RDM MOOC
- Customized Training

EXPERTISE
- General Email Contact Point
- Staff Contact Information
- Digital Curation Centre

RESEARCH DATA MANAGEMENT

CURATION
- DataStore
- DataVault
- DataSync
- Pure
- DataShare

"RDM Service Bundle Highlights: University of Edinburgh" by OCLC Research, from The Realities of Research Data Management Part Two: Scoping the University RDM Service Bundle (https://doi.org/10.25333/C3PG8J), CC BY 4.0
“RDM is not a monolithic set of services duplicated across universities; it is a customized solution shaped by a range of internal and external factors operating on local decision-making.”
Incentives for Building University RDM Services
Rebecca Bryant, Brian Lavoie, and Constance Malpas
Compliance with external policies is a strong driver in some locales

Evolving scholarly norms are not uniform, disciplinary diversity is also a challenge

Institutions built services in anticipation of rather than response to researcher demands

Developing RDM expertise may be part of an institutional strategy to increase library support for research workflows

“Incentives to Acquire RDM Capacity” by OCLC Research, from The Realities of Research Data Management Part Three: Incentives for Building University RDM Services (https://doi.org/10.25333/C3S62F), CC BY 4.0
Sourcing & Scaling
Forthcoming April 2018
“An RDM service bundle includes not just what is built and deployed locally, but the full range of services, sourced locally and externally, that the institution manages, or to which it brokers access.”
Framing Sourcing and Scaling Choices for RDM Services

RDM Service

Above the Institution

4TU.DataCentre
DANS-EASY
Pure/NARCIS

DMP review and consultation
Education in partnership with Graduate Schools

SOURCING (provision)

SCALING (consumption)

Internal

External

Institution

Below the Institution

WAGENINGEN UNIVERSITY & RESEARCH

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Framing Sourcing and Scaling Choices for RDM Services

- Above the Institution
  - RDM Service
    - Data Curation Network
  - Customized DMPTool
- Institution
  - RDM Service
    - Illinois Data Bank
- Below the Institution
  - Internal
  - External

SOURCING (provision)

SCALING (consumption)

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Strategic Sourcing of RDM Capacity in Four Case Study Universities

- **Build**
  - Maximize control, customization

- **Partner**
  - Share development costs, scale expertise

- **Buy**
  - Manage costs, relinquish some control
“It would be a mistake to imagine that there is a single, best model of RDM service capacity, or a simple roadmap to acquiring it.

The appropriate value-maximizing strategy for institutions of different types ... will vary; choices about sourcing RDM capacity and scaling its deployment will inevitably be driven by local institutional incentives.”
Thank you.

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