





# RDM@McMaster: Initiating a Research Data Management Conversation

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Research Data Management – What and why?

RDM@McMaster: Ongoing work

Where we can help

The road ahead









- \$Bs invested in research yearly
- Large volumes of data produced
- Data has value not only in original use, but for re-use
- Reusing & integrating data improves ROI and is a public good





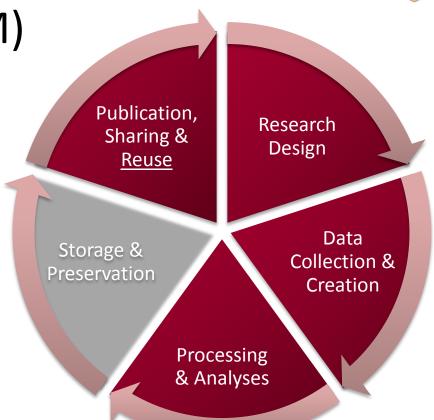
## Research Data Management



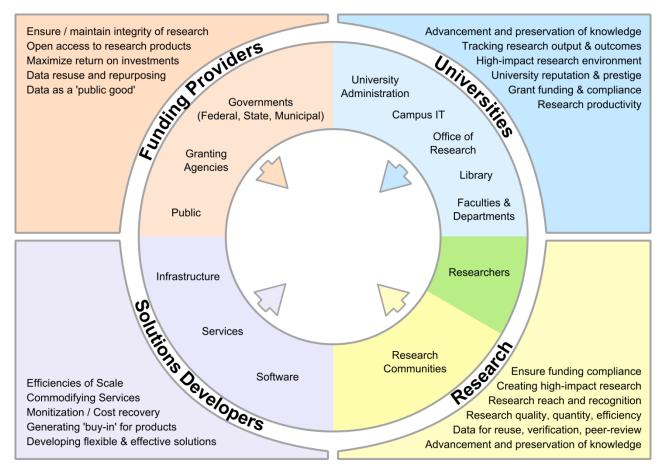
(RDM)

The **active** organization and maintenance of data throughout its entire **lifecycle**.

Application of best practices to ensure data security, accessibility, usability, and integrity throughout the project and after its completion



# **RDM Stakeholders**





# Why RDM?



# Rewards for RDM practices are manifold:

- Granting Agencies
- Researchers
- Universities
- Research Output
- The Public







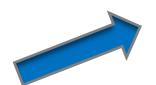
# The Emerging Landscape















#### **Prerequisites:**

- Infrastructure (hard & soft)
- Capacity
- **Standards**





# RDM in Canada: Identified Challenges

- Hard & soft infrastructure requirements.
- Centralized vs. decentralized.
- Disciplinary differences in data norms, cultures and requirements.
- Managing sensitive / confidential data.
- How to monitor compliance?

- Stewardship vs. ownership.
- What data to keep? How long? Who decides?
- Canada-wide protocols & standards.
- Training requirements.
- Who provides RDM services? Who pays for it?

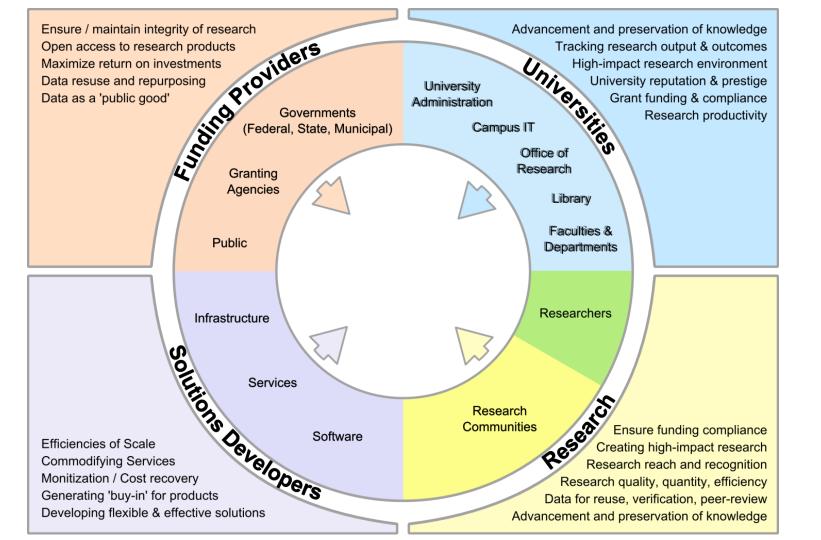






## **ONGOING WORK**

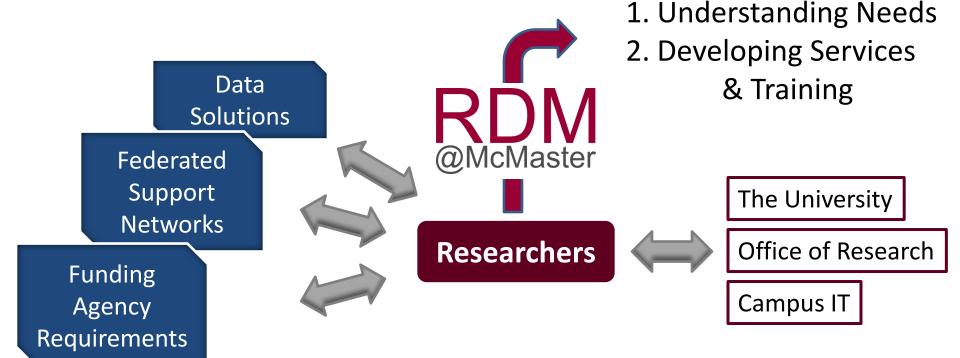








# RDM @McMaster







# **Understanding RDM Needs**

- 1. RDM needs are variable across disciplines & researchers
  - Data volume, types, requirements
  - No "one-size-fits-all"
- 2. Preparedness & engagement for RDM ranges widely
  - Dedicated DM operations



"DIY-RDM"

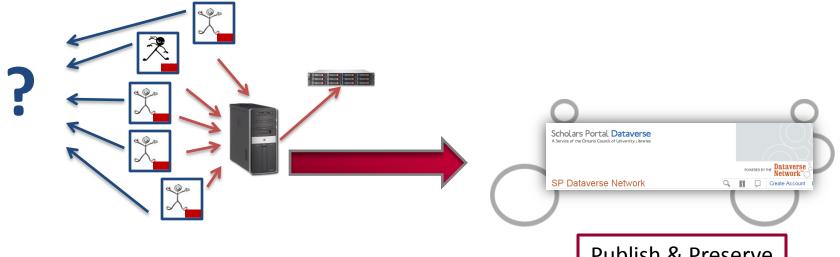
Norms and culture are very important





# **Developing Solutions**

#### The Mid-Career Researcher



Publish & Preserve



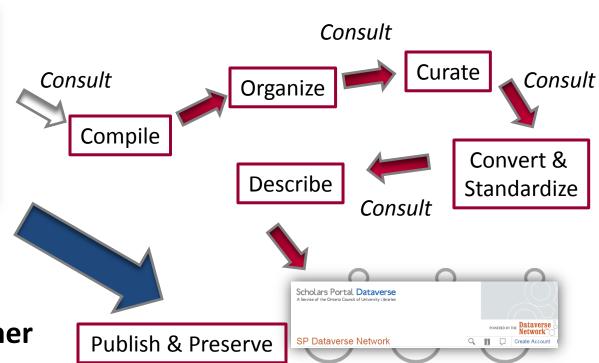


# **Developing Solutions**



(The original Dropbox)

The Late Career Researcher









#### RDM workshops in development:

- Introduction to research data management
- Research data management planning
- Data management best practices
- Data organization, storage & preservation
- Domain-specific RDM activities
- Data description & publishing







## WHERE WE CAN HELP





## It All Starts With a Plan...



#### Research Data Management Plan

- Interview- or template-driven
- Details all RDM activities

#### A Good RDM Plan:

- Ensures compliance
- Organizes research activities
- Identifies support requirements
- Begins conversations; Builds a culture





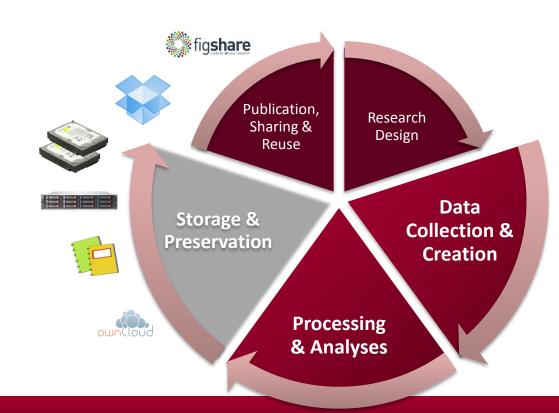




 Variability of researcher needs and capabilities

Importance of ongoing stewardship

 Need for technical and systematic solutions







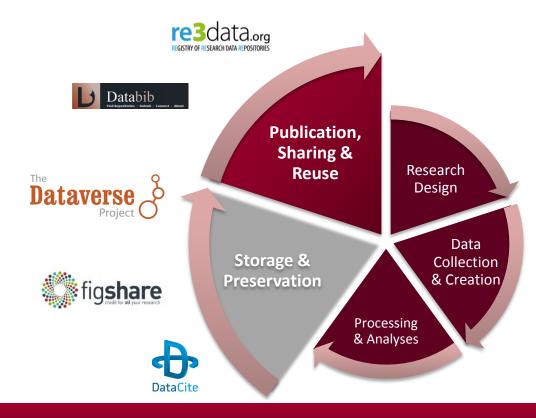


#### **Data Description**

Metadata standards

#### **Data Depositories:**

- Institutional
- Federated
- Commercial
- Discipline-specific









### THE ROAD AHEAD









#### **Next Steps:**

- Continue and extend the RDM conversation across campus
- Build partnerships with selected stakeholders to develop services, tools and training
- Coordinate McMaster's RDM interests/needs internally and externally



# Thank You!





Check us out:

library.mcmaster.ca/rdm

Contact us:

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#### Slide 3:

- http://www.ucl.ac.uk/qatar/images/content\_images/research/research-landing-page.jpg
- http://regmedia.co.uk/2012/08/23/acer\_aspire\_5733\_15in\_notebook.jpg
- http://makezineblog.files.wordpress.com/2010/04/makersntbk.jpg
- http://jasss.soc.surrey.ac.uk/11/1/reviews/pujol.gif

#### Slide 6:

- http://wheelsms.files.wordpress.com/2014/04/leadership\_picture.jpg
- https://www.espatial.com/articles/big-data-why-a-data-map-is-the-best-place-for-it