Coordinating Data Services in a Decentralized Environment: Building a Successful Institutional RDM Strategy

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WHY ARE ALISON AND IAN WORKING TOGETHER ON RDM?
What is Research Data Management?

- Research data management (RDM) refers to the processes applied through the lifecycle of a research project to guide the collection, documentation, storage, sharing and preservation of research data.

- Tri Agency FAQ on RDM Policy
The Need for an RDM Strategy

- For those who do not follow every twist and turn of Canadian higher education research policy! (how dare you)

- **Tri-Agency Research Data Management Policy**
  - The agencies believe that research data collected through the use of public funds should be responsibly and securely managed and be, where ethical, legal and commercial obligations allow, available for reuse by others. To this end, the agencies support the FAIR (Findable, Accessible, Interoperable, and Reusable) guiding principles for research data management and stewardship.

- Data management plans (DMPs) are beginning to (slowly) appear across Tri-Agency grants.

Note: Canada is big. This is 3,435km away from our campus..

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SO, BY MARCH 1\textsuperscript{ST}, ALL CANADIAN INSTITUTIONS THAT RECEIVE RESEARCH FUNDS NEED AN INSTITUTIONAL RDM STRATEGY!
But the World of RDM is Big

- We tell researchers even if Canada hadn’t gone down the RDM hole, they’d be thinking about RDM + DMPs!
  - Examples from NIH, Nature, PLOS, Wellcome Trust, Horizon, Australia, etc.

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And RDM = Research Excellence

- We truly believe in research excellence as enabled by RDM
- Stewarding your data, describing it, preserving it, and sharing it (if appropriate) – beyond buzzwords, they’re things that help foster research excellence
  - Thinking about your data architecture at the beginning prevents headaches later down the road (incl. Security, IP debates, etc.)
  - You can access your older data and understand it
  - You can share it with other people so they can build on your work – and vice versa
  - You are protected from… data calamity.
- We don’t want to just have researchers putting data on disk for no reason.
Scoping Challenges

- RDM is part of a broader landscape/ecosystem of **research support**, including research IT support, research ethics, grant support; and spanning an ecosystem of Library, central IT, decentralized Faculty supports, etc.

- **How do we adequately scope this?**
  - Creating “just” an RDM portal might not make sense!
  - But it is *ultra vires* to step on other toes…

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In this context, a team came together to write a strategy...

- Sponsored by Information Systems and Technology (IST), Library, and the Office of Research (OR)
- Co-chaired by the Library and OR (Team Alison + Ian)
- With representation from IST, Library, OR, and individuals from our decentralized faculty (both a faculty member and a research support officer)
- Support from the amazing Athenaeum21!

Note: Due to social distancing, I should have used a Teams react emoji

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SO HOW DID OUR WORKING GROUP BUILD THE STRATEGY?
Needs Assessment: Knowing Your Audience

- We wanted to understand the current state of RDM, so we surveyed our campus and received 476 responses (254 faculty, 166 grad students + other)

- And we learned a few things!
  - No one-size-fits all!
  - Researchers are overwhelmed and don’t deal with RDM until it’s too late
  - Too many confusing and conflicting policies
  - Want training and guidance, but don’t want it to be required
  - Communication is key
  - Skilled staff and HQP to support new (and existing) requirements
  - Analog data are also important and need to be supported.
Advisory, Focus, and Working Groups, oh my: Working Together

- Alison and Ian also knew we could not do it alone!
  - A **Working Group**: Broad representation from Library, Research, IST, faculty support, and a faculty member.
  - An **Advisory Group**: Researchers (faculty and staff) from across campus, plus a postdoctoral fellow and a graduate student.
  - And ad-hoc **focus groups**: Data Managers, Indigenous Research, IT staff.
SO HOW ARE WE PLANNING TO COORDINATE SERVICES ON OUR DECENTRALIZED CAMPUS?
In part, some of our principles reflect this landscape!

▪ Collaboration

▪ We recognize that RDM is a whole-institution effort that will require deep collaboration and coordination between the researchers, Faculties, Library, IST, Office of Research, Centres, and Institutes

▪ We will leverage existing expertise and infrastructure around the University, as well as regionally, nationally and internationally

▪ Ease

▪ We will make it easy for researchers to adopt RDM best practices

▪ We will make it easy for researchers to identify and access the most appropriate and secure infrastructure for their specific research needs
... and some of the potential options reflect various approaches!

- When thinking about how we could bring a body together to coordinate these RDM services, a few different options:
  - A CENTRE/HUB
  - A NETWORK/COMMUNITY
  - A MUDDLE
WE ALL LOVE PORTALS!

But a portal alone does not make a strategy.
The CENTRE/HUB

- **A formal service partnership** between key stakeholders (i.e. IT/Library/Research)

- **Dedicated staff** and **leadership** who offer services and **offer dedicated support**.

- A node of **core central services** that can coordinate with value-add distributed services
The NETWORK/COMMUNITY

- A committee or body that coordinates activities across campus.
- Occasional definite-term project-based funding and support.
- Knowledge/skills building through community of practice
- Distributed model with voluntary participation in a coordinating group
The MUDDLE

- Kinda just keep on doing what we’re doing, and deal with situations on an *ad hoc* basis.

- For less-frequent items, sometimes this isn’t the end of the world! But if DMPs are becoming more common, perhaps less useful…

WELL, BASICALLY, I JUST COPIED THE PLANT WE HAVE NOW. MM... THEN, I ADDED SOME FINS TO LOWER WIND RESISTANCE.
The important thing is that we learn to collaborate!
OCLC Research on Social Interoperability

*Social interoperability* is the creation and maintenance of working relationships across individuals and organizational units that promote collaboration, communication, and mutual understanding.

Suggested strategies and tactics

Secure buy-in
- Know your audience
- Speak their language
- Offer concrete solutions
- Be sensitive to timing

Build relationships
- Find opportunities to connect
- Leverage shared staff
- Utilize embedded staff

Troubleshoot
- Find ‘connectors’
- Manage personalities
- Be confident in your value
- Manage resistance & sustain energy

Used with permission from Rebecca Bryant. Slide from “OH, THE PLACES YOU’LL GO” together: Case studies in cross-institutional collaboration.” Charleston Conference 2022.
Back to the beginning... almost

- All of this can sound good on paper, but we need to have a strong value proposition for why this is an all-hands-on deck challenge
- We have buy-in on the strategy document, now we need buy-in on strategy implementation
- We need to build shared understanding
- We need a new round of conversations!
Next Steps @ Waterloo

- Finalizing the strategy
- Developing a road-map for the strategy goals
- Facilitating resourcing discussions
- Figuring out a coordination model, probably with a phased approach
- Expanding our circle of conversations
Discussion: over to you!

Some questions to get things started:

- what are the challenges you’ve encountered? how are you navigating them?
- what models or approaches have worked at your institution?
- what are the biggest sticking points when trying to work across campus? budget? different priorities?
- how have you promoted the importance of RDM to your researchers?
- how have you involved your researchers in planning research/RDM services?
Our greatest impact happens together.