Humanities, Arts and Social Sciences:
What have we learned, where are we going?

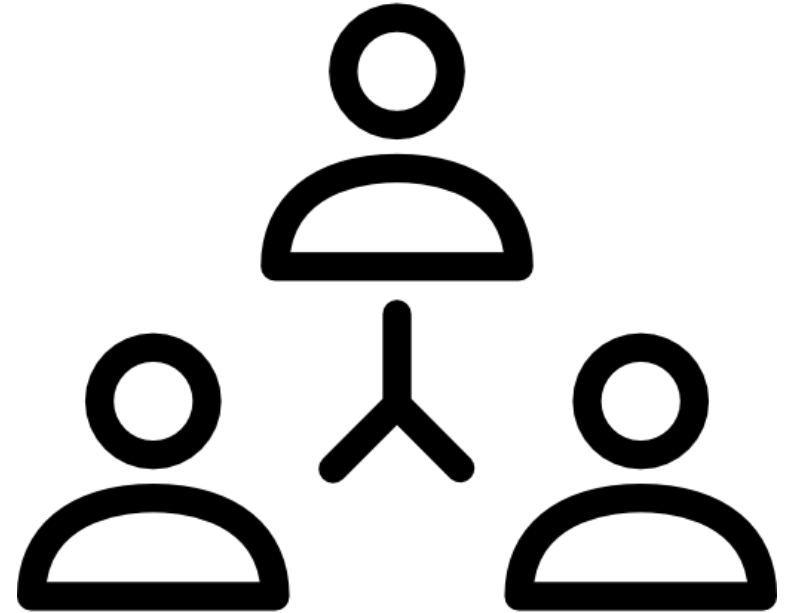eResearch New Zealand, February 2020

PRESENTED BY

Alexis Tindall, Senior Research Data Specialist

Ian Duncan, Director, eResearch Infrastructure & Services
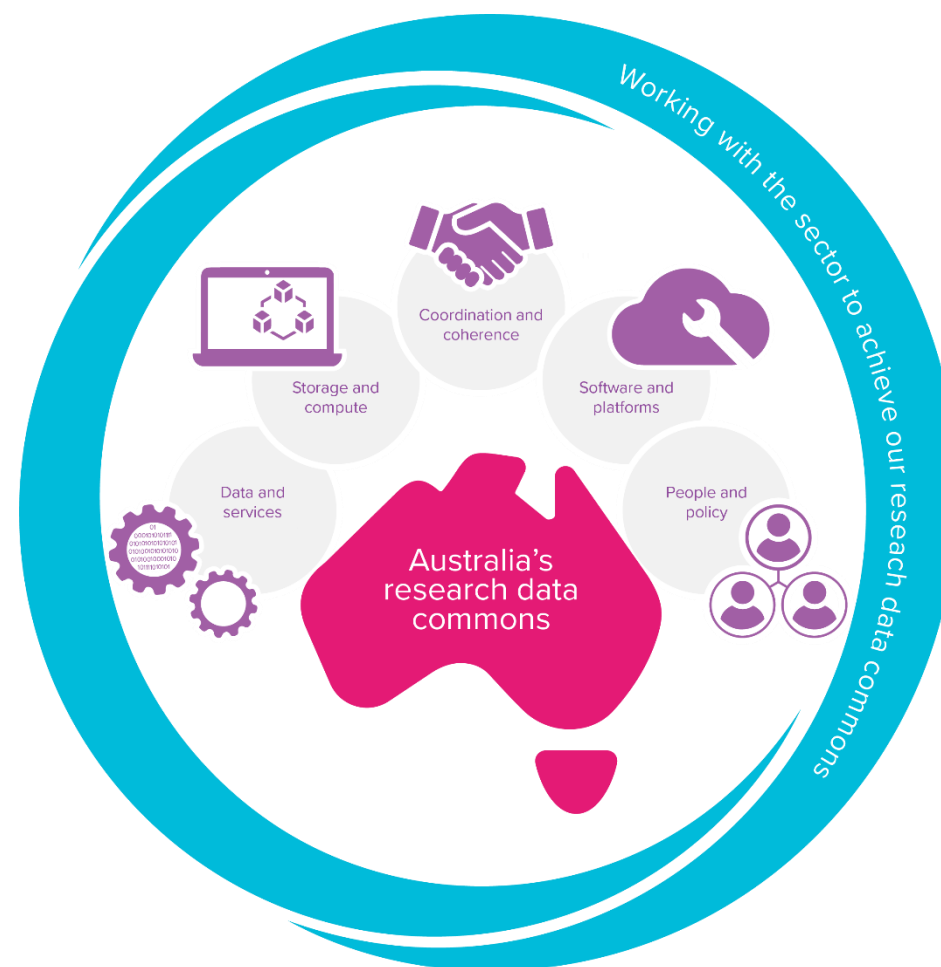
Today's presentation:

- ARDC and the humanities, arts and social sciences community

- NCRIS and research infrastructure for this community

- Observations emerging from the HASS Research Data Commons consultation

- Sharing experiences and challenges

ARDC – The Australian Research Data Commons

The ARDC is a transformational, sector-wide initiative, working with sector, government, and industry partners to build a coherent national and collaborative research data commons. This will deliver a world-leading data advantage, facilitate innovation, foster collaboration and enhance research translation.

ARDC – Five Themes

Coordination and Coherence

Facilitating an "Australian research data commons"

People and Policy

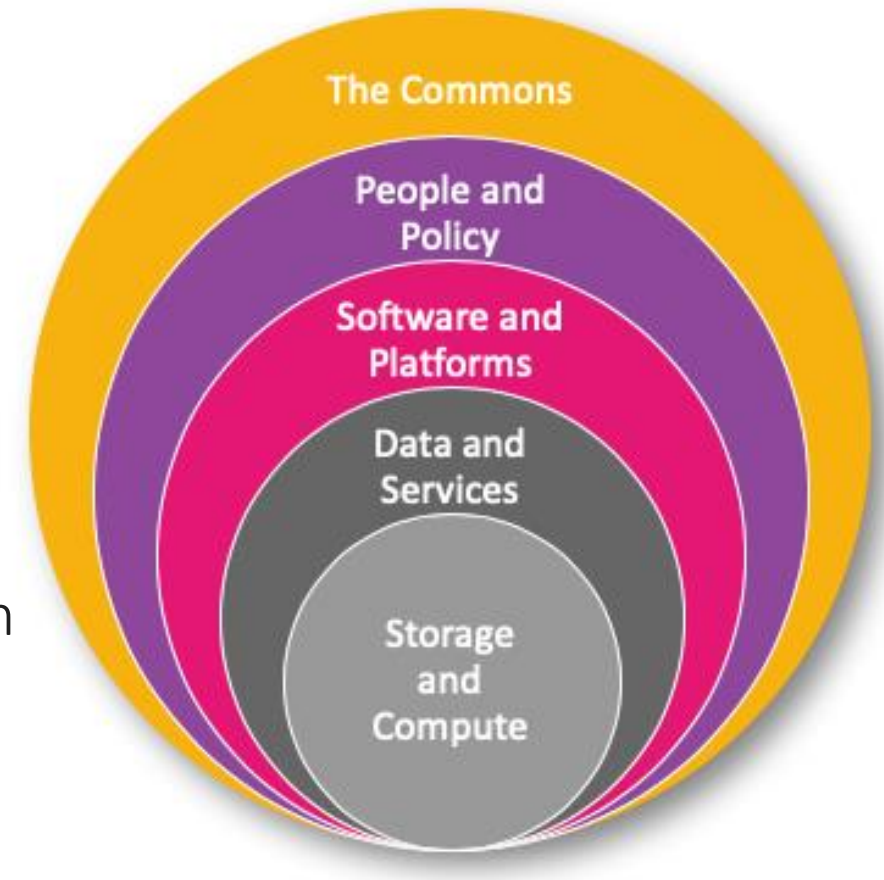Transforming culture and community

Data and services

Maximising the value of Australia's data assets

Software and Platforms

Enabling research insights & supporting collaboration
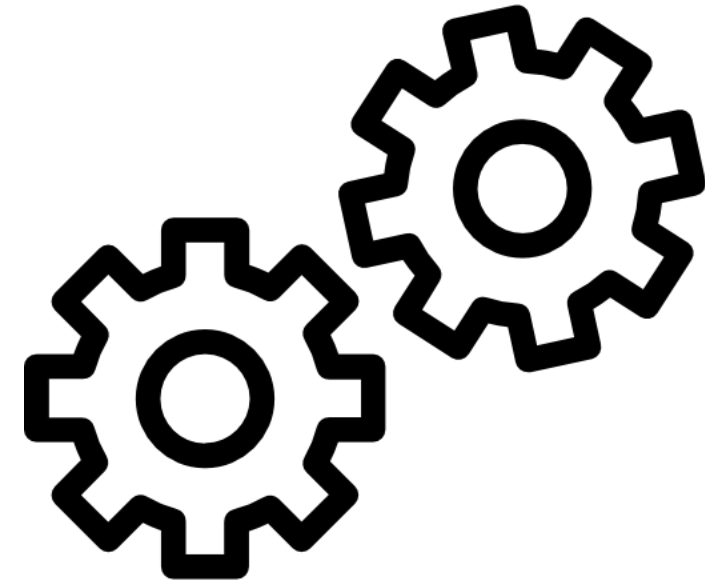
Storage and Compute

Providing foundation infrastructure

The Commons
People and Policy
Software and Platforms
Data and Services
Storage and Compute

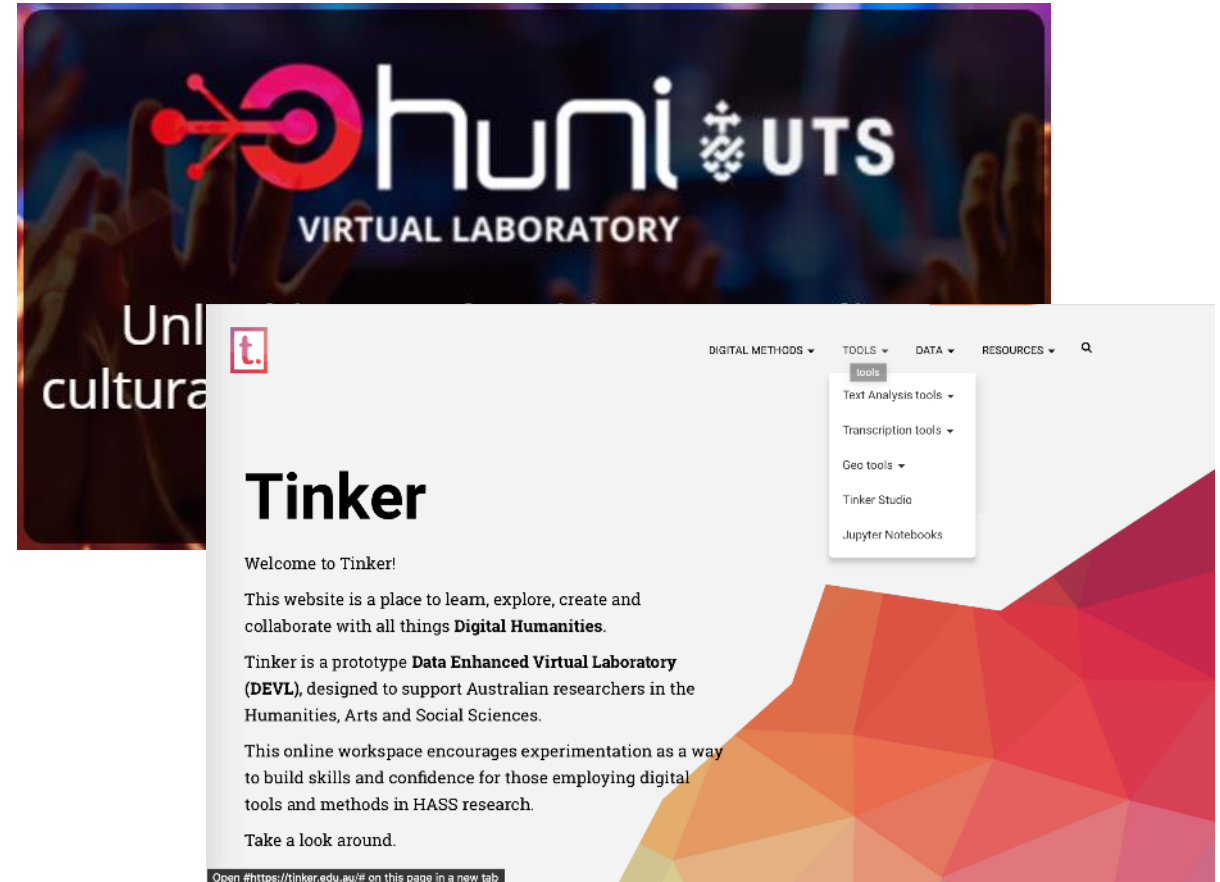ARDC
Australian Research Data Commons

ARDC & HASS community: broadly

- Data discovery and access through Research Data Australia and Research Vocabularies Australia

- Persistent identifiers

- Supporting community around sensitive data, trusted data archives and software and platforms that use this data

- Cloud computing, storage and infrastructure environment

- Workforce development

- Policy

- International collaborations and partnerships

ARDC

Australian Research Data Commons

ARDC & HASS community: specifically

- ANDS/RDS/Nectar:
  - Cultures and Communities
  - Humanities Networked Infastructure
  - Tinker

- 2020 Platforms:
  - FAIMS 2.0: Field data collection
  - CADRE: Linked sensitive government data
  - Australian Transport Research Cloud
  - Plus EcoCloud adaptation

Australian Research Data Commons

Humanities, Arts and Social Sciences Research Data Commons: Background

- 2016 National Research Infrastructure Roadmap called for Platforms for Humanities, Arts and Social Sciences

- 2019, announcement of the National Research Infrastructure Scoping Study

- Consultation: Related work from the Australian Academy of Humanities looking at international exemplars
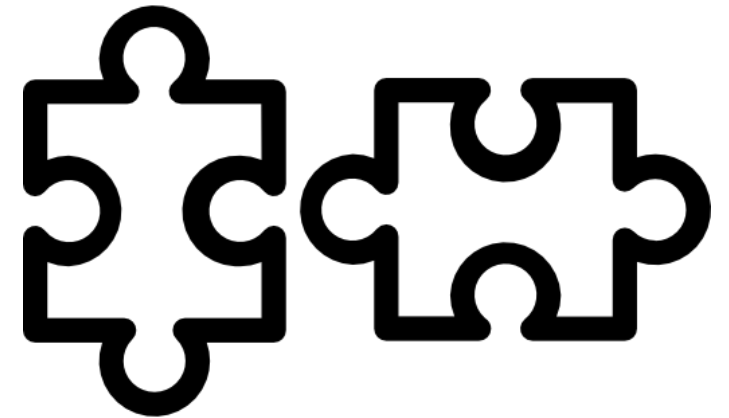

2.2 Platforms for Humanities, Arts and Social Sciences

This national research infrastructure focuses on enabling inquiry across the research spectrum including research into cultures, communities, environments, health and social well-being. Humanities, Arts and Social Sciences (HASS) platforms range from physical collections across the humanities, arts, environmental and medical sciences to online portals that facilitate the digitisation of and digital access to original artefacts, materials and knowledge. In addition, HASS based platforms can be used to manage and integrate data to enable the development of solutions for complex social problems for the benefit of all Australians.

ARDC

Australian Research Data Commons

Humanities, Arts and Social Sciences Research Data Commons: Brief of work

- Overview of the HASS data landscape

- HASS research communities, activities, needs, priorities, opportunities

- Relevant activities that can be leveraged or enhanced

- Consider interoperability, national significance, national vs institutional responsibilities
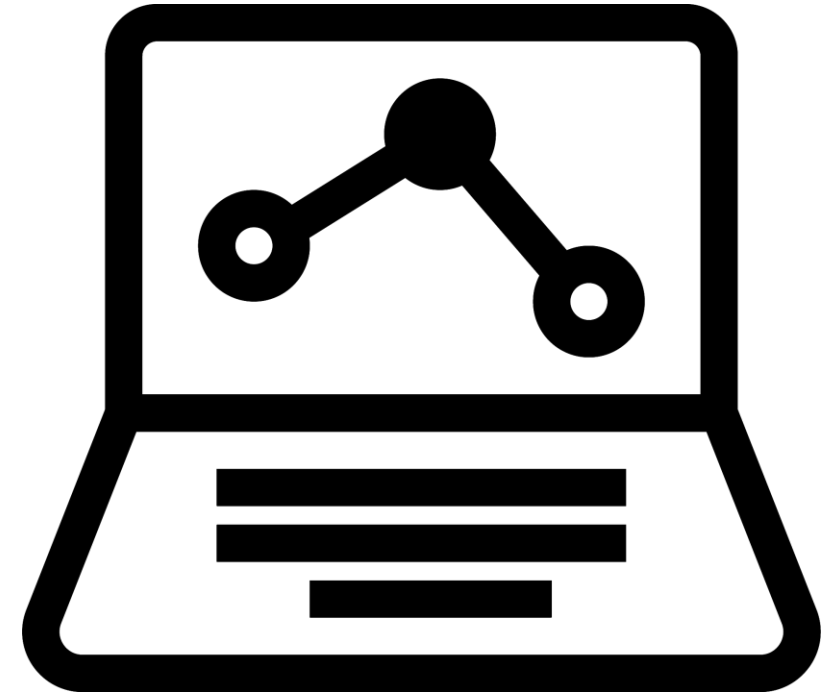
What is a research data commons?

Bring together data and related resources to enable researchers to conduct and collaborate on world-class data intensive research.

- Access to data, methods of sharing

- Analytical tools and working environments

- Computing resources, storage and other support

- Sharing methods and models, training, skill and community building

Consultation

- Consultation

  - Research communities (ANZSRC FOR 12 through 22)
  - Data providers
  - Related initiatives

- DDeRP partners and Learned Academies

- Input from the ARDC Platforms Program

- Group consultations
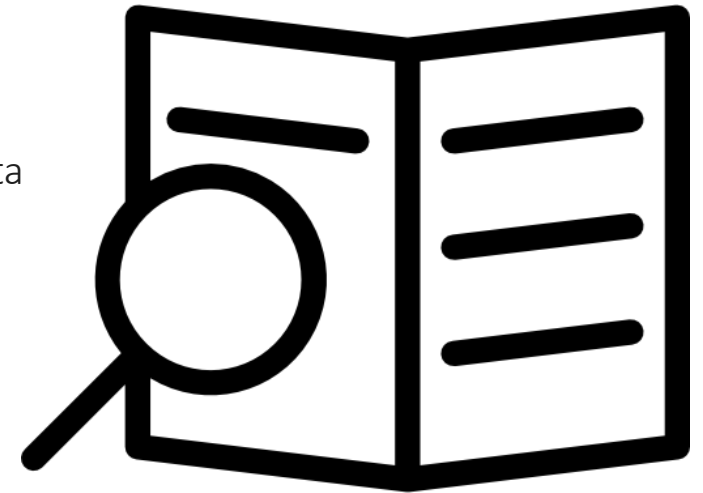
Photo by You X Ventures on Unsplash

Current state

Research communities:

- Diversity of discipline, diversity of readiness
- Useful methods of clustering activities and priorities?
- Methods and tools/ data types (quantitative, qualitative, text, images, machine data)/ data source
- Multiple stakeholders – stakeholder communities, public,

Data landscape:

- De facto national infrastructure, sustainability concerns
- GLAM digitization
- Institutional collections
- Lost collections and collections at risk, culture of data sharing
- Indigenous data governance

Emerging challenges:

Data and services

- Access to data, large and small
- Preservation, including rescuing lost or at risk data
- Metadata vs data level access
- Data linkage
- Ethics, sensitive data

Software and platforms

- Collaboration environments
- Aggregation facilities
- Collaboration with eResearch support or cross-disciplinary collaboration

Storage and compute

- Scaling up data access and use
- Practical methods of aggregation
- Robust models of mediated access
- Sharing new digital methods

People and Policy

- Skills and digital research methods
- Culture of sharing
- Indigenous data governance
- Mediated data access
- Rewarding digital excellence and championing research data culture

Australian Research Data Commons

Key principles:

1. More and better access to data

- Galleries, Libraries, Archives and Museums
- Government data
- Data generated through research

2. Platforms for aggregation, tools and collaboration

- Discipline or research community relevant in the first instance, longer term path to more general facility
- Capability building as part of development

3. Data governance, sensitive data

- Indigenous data governance
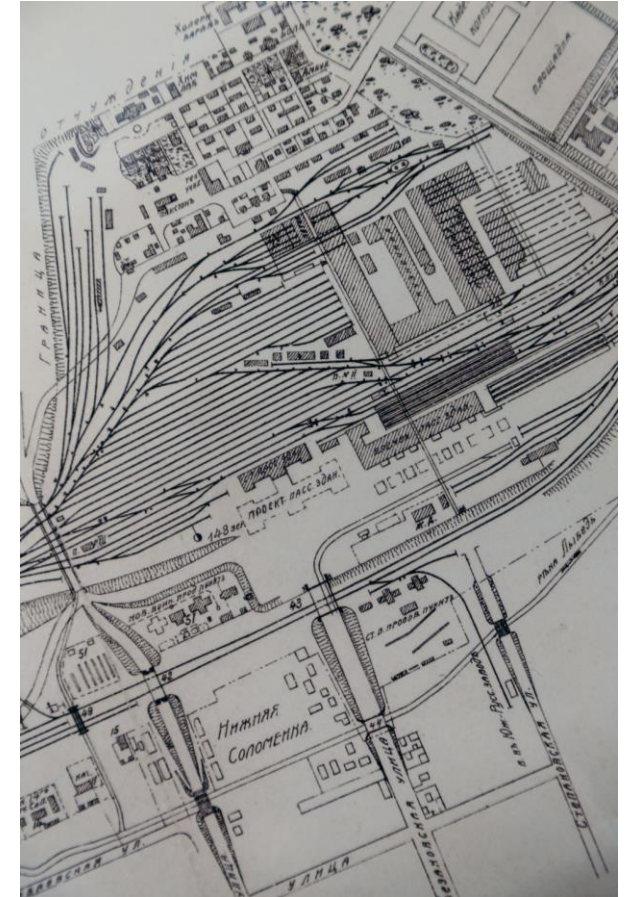- Sensitive data linkage and analysis environments

Photo by Марьян Блан | @marjanblan on Unsplash

Discussion…

How would you characterize the humanities, arts and social sciences data landscape in NZ?

Discussion…

How would you describe the ambitions of the humanities and social sciences researchers that you work with?

How would you characterize their readiness to exploit new opportunities emerging from improved digital research infrastructure? Are there strengths you would like to highlight?

Australian Research Data Commons

Discussion…

Can you share examples of research infrastructure working well for NZ or Australian researchers?

How do we support researchers as new digital opportunities emerge?

Ideal future state

Highly skilled digital humanities and social sciences researchers working in multidisciplinary teams, using and contributing to best digital methods to generate new insights into society, culture and the past while providing reliable and effective forecasting on social issues, strategies and the future.

Efficiency and innovation aided through integration of data and computing services, while large datasets will inspire and benefit from new modes of analysis, including technologies such as machine learning, attract communities of innovative leading researchers and train a pipeline of emerging researchers.

Photo by Jaredd Craig on Unsplash

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Models?

- International models: Social Sciences and Humanities Open Cloud, maturity of European developments

- Examples of high performance computing and computational research in national libraries and archives
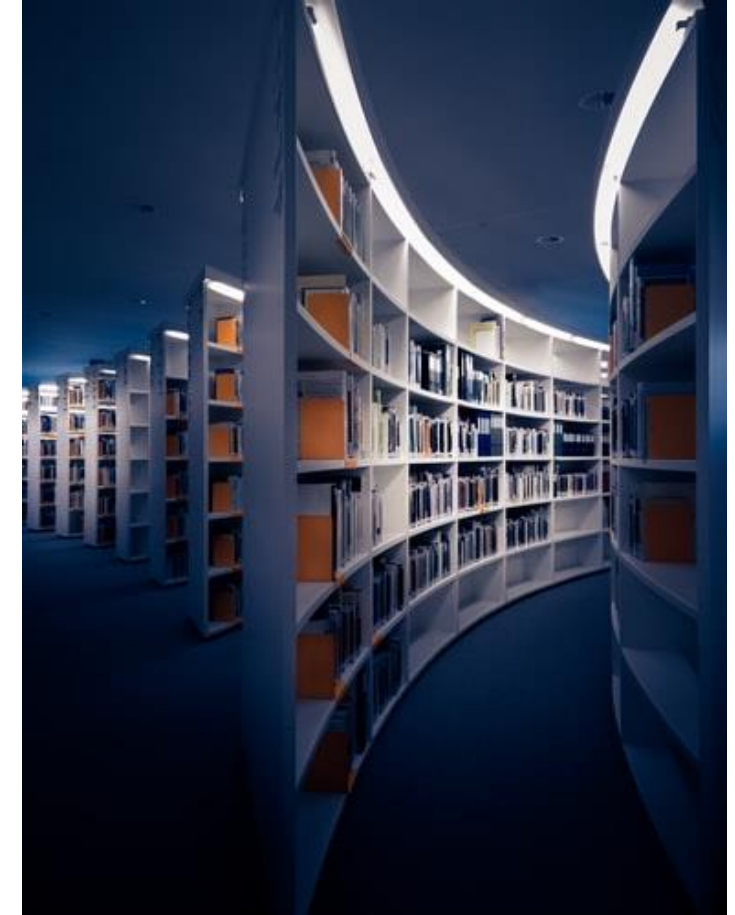
- Integrated Data Infrastructure in NZ?

Photo Pixabay

Australian Research Data Commons

Opportunities:

- High interest in sharing Australian Government data

- Projects:
  - Funded infrastructure (including new LIEF projects)
  - ARDC Platforms
  - Related national collections (including emerging big data)
- Data sharing requirements of funding council
- Community initiatives

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ARDC
Australian Research Data Commons

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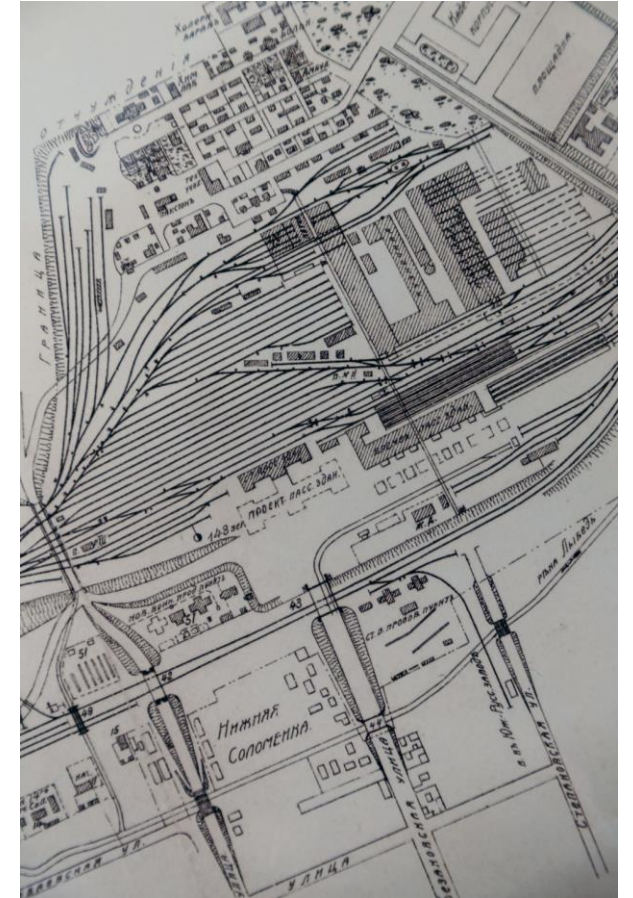- Sensitive data linkage and analysis environments

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Australian Research Data Commons

Our approach

- Multi-year pathway to realizing the Research Data Commons

- Recommend targeted opportunities that will demonstrate impact in the short term, informing further development in the longer term
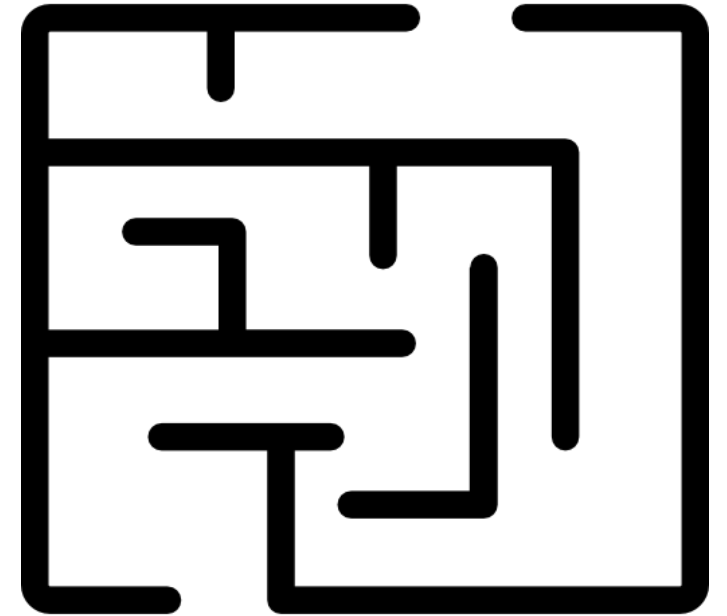

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Where to from here?

Consultation with community (end of February)

Final report (end of March)

and then...?

15th Research Data Alliance Plenary Meeting

Melbourne Convention and Exhibition Centre, MCEC

18-20 MARCH 2020

MELBOURNE AUSTRALIA

#rdaplenary
www.rd-alliance.org

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