Reflections on Library Research Data Management Services

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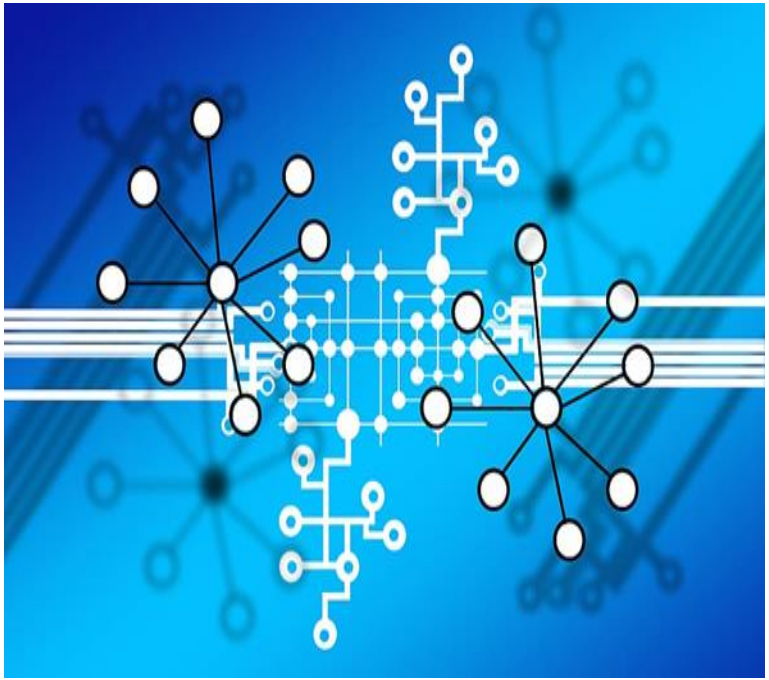
Outline

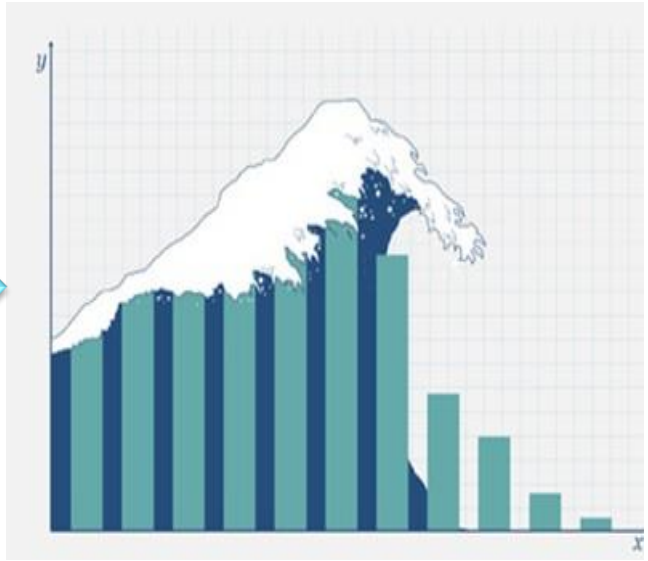
- Brief overview of RDM
- Benefits of RDM
- RDM Challenges
- RDM Skills and competencies
- Library RDM Services: where are we now?
- Where should we be heading with RDM Services?



Pxfuel (2021)

Lewislbonar (2017)

Information overload to **Data overload**



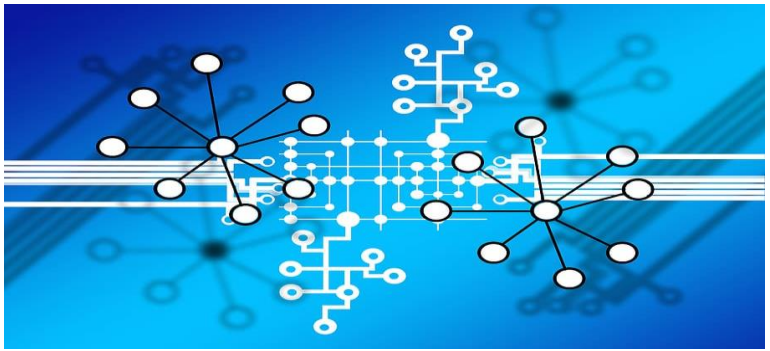
Elsedoudi (2011)

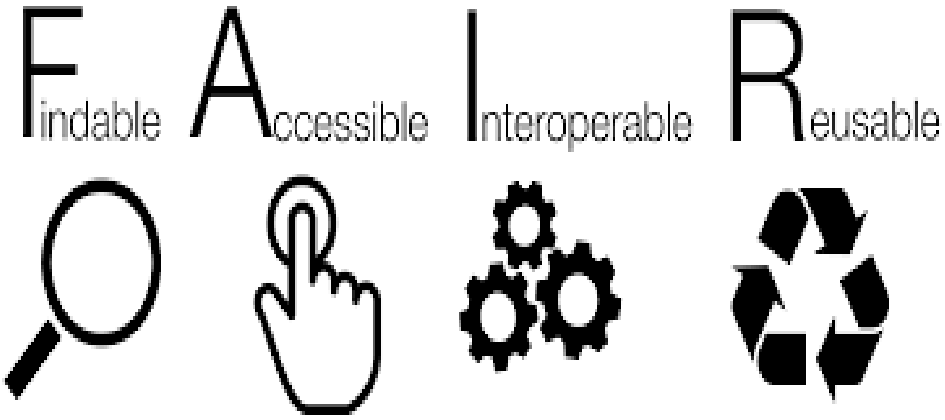
Overview

- Data Overload – due to design failure, not human limitations (Mckenna, 2018)
- RDM – ongoing conversation - publications since 1978 on Scopus
- Many stakeholders invested heavily in data collection (Dodd, 1979: 77).
- Researchers mandated by funders and publishers to share data
- Academic libraries play a key role in supporting research through providing RDM services

What is Research Data Management?

"a research component specifically dealing with proper organisation and preservation of research data for the purpose of current and future access and use", and contributes to practicing "good science"(Chawinga and Zinn, 2020).




Findable
Accessible
Interoperable
Reusable

Benefits of RDM

- Verification of data
- Practice of ‘Good Science’ (Chawinga and Zinn, 2020)
- Secondary data analysis – different / new data interpretation beyond initially intended
- Impact - discoverable, understandable and reusable (Ball & Duke,2015: 14)
- Save time and money – student research projects

RDM Challenges

- Experiencing data overload: 1) irrelevant data retrieved, 2) inappropriate data presentation, 3) not enough data (Mckenna, 2018)
- Mixed feelings by researchers about RDM (Kleinveldt, 2018)
- Researchers reluctant to share data, irrespective of policy (Savage & Vickers, 2009).
- Existing data is underutilized and, in most cases, unknown to potential users" (Dodd, 1979: 77).
- Data storage capacity (Walters & Skinner, 2011: 63)
- RDM skills needed by researchers and librarians (Chawinga and Zinn, 2020).

RDM Skills and competencies

- RDM job requirements - '**ICT centric**' (Kim et al, 2013)
- RDM skills include curation standards and practices, models that guide data curation, long and short-term data curation activities, selection of data for preservation and data citation (Higgins, 2008 as cited by Chawinga and Zinn, 2020).
- "You can be data-literate and understand the principles of RDM without ever running analyses, building visualizations, or standing up a server" (Morin, 2020)

RDM Services: where are we now?

EUROPEAN OPEN SCIENCE CLOUD

DMP ONLINE

RDM Policy and guidelines

The Dataverse® Project

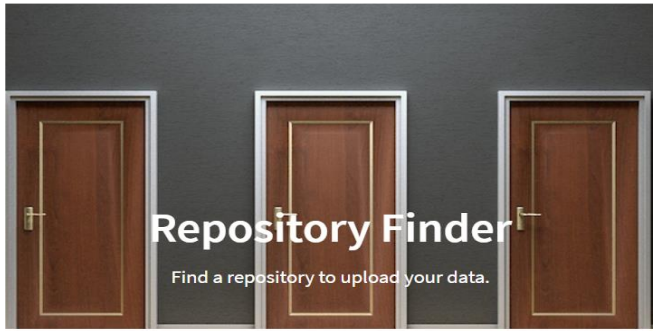
Open source research data repository software

ands AUSTRALIAN NATIONAL DATA SERVICE

figshare

openAFRICA by Code for Africa

SOUTH AFRICA DATA PORTAL



IFLA

Dataverse coverage

Library RDM Services: where are we now? 74 Higher education institutions globally using Figshare

Ryerson University

Central Queensland University

Virginia Tech

Utrecht University

University of the Free State

University of the Arts London

University of Johannesburg

University of Illinois at Chicago

The University of Hong Kong

University of Wyoming

4TU.ResearchData

Sefako Makgatho Health Sciences University

University of Sussex

University of South Africa

University of Salford

University of Fort Hare

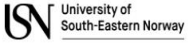
University of Cape Town

University of Arizona

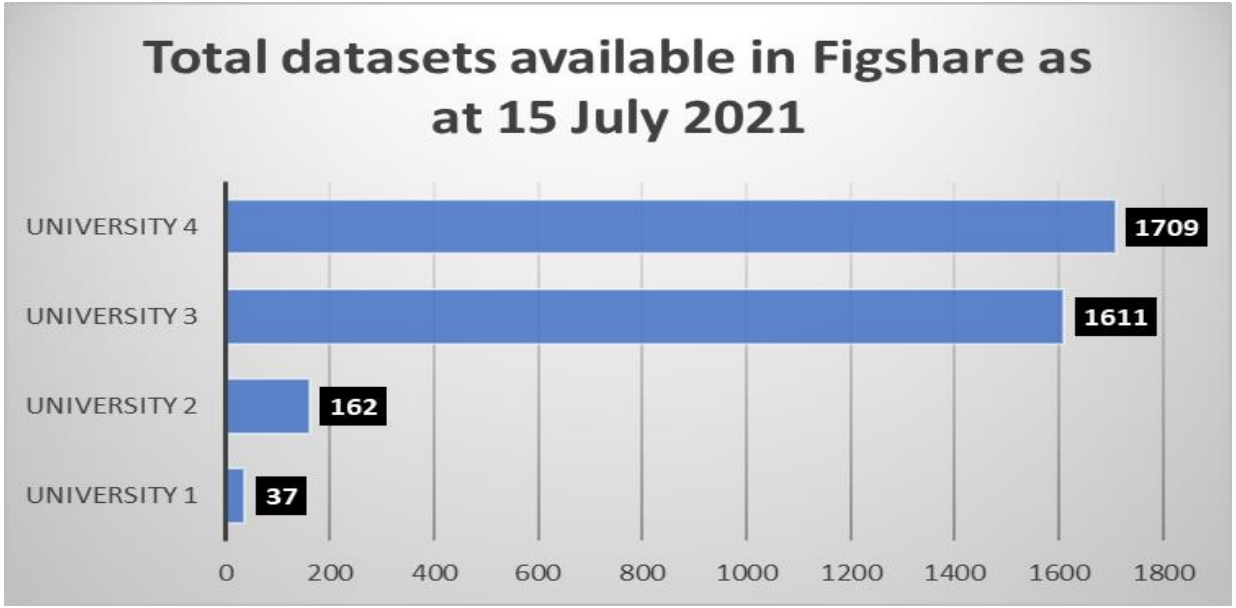
Zuyd University of

Wesleyan University

Walter Sisulu University



Library RDM Services: where are we now?



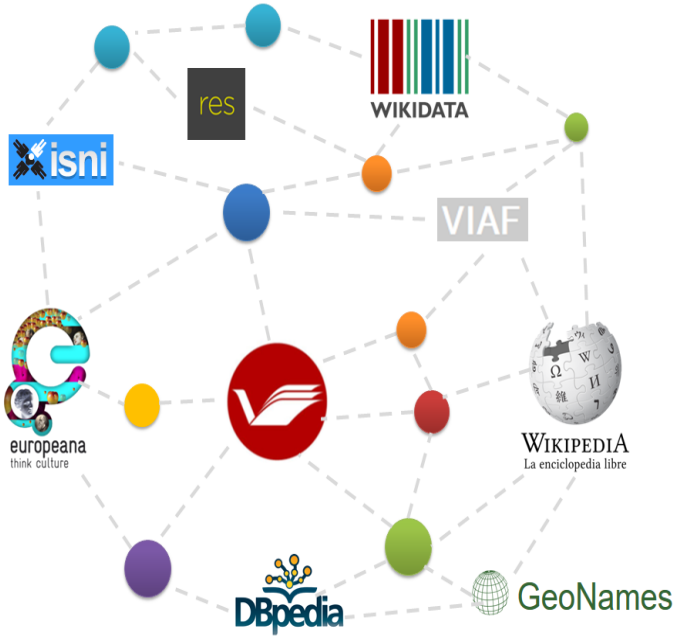
Higher education institutions in a selected province in South Africa using Figshare

Are researchers willing to share data?

PLoS journals - Only 1 out of 10 researchers (Savage & Vickers, 2009).

Where should we be heading with RDM Services?

- To create a better research environment – communication is key - collaborate
- Keep on promoting
- Keep on learning - “a little extra training never hurts” (Morin, 2020)
- Offer faculty guest lectures
- Advanced Information Literacy Programmes to embed RDM into research methodology subjects
- Linked data remain key
- Shifting the attention to postgraduate students means increasing academic librarian capacity



Candela (2017)

Concluding remarks

To what extent is data currently being re-used to create new science and knowledge?

Thank You!

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