



To IT or not to IT: Embedding digital scholarship skills in a changing world of library work

Research & Information Literacy Skills in the Workplace seminar, CPUT

Thurs 3rd November 09:45 - 10:15 CPUT Bellville Campus

UCT Libraries

Division of Information Systems & Resources

Digital Library Services

- <u>Niklas Zimmer</u> (Manager)
- <u>Dr. Sanjin Muftic</u>
 (Digital Scholarship Specialist)









Past, Present and Future

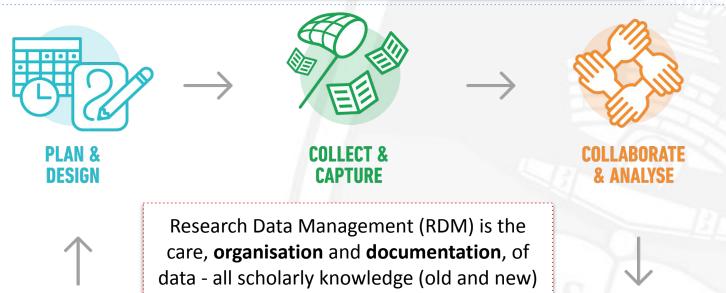
- a. Niklas: *The RDS that we built over the past 7 years*
- b. Sanjin: *Digital Scholarship: Practicing and Sharing*





The Research Project Lifecycle











- within the processes of a research project.





DISCOVER, REUSE & CITE SHARE 8
PUBLISH

MANAGE, STORE & PRESERVE

Ibali is an online publishing system for showcasing UCTs Digital Collections as semantic websites.





UCT DMP is an web-based tool provided to help you develop a data management plan.

ZivaHub is the data repository of UCT, for publishing research data and scholarly outputs.











Research Data Services



COLLECT & CAPTURE



MANAGE, STORE, PRESERVE

Digital Scholar Series

The Digital Scholarship service helps you with planning and preparing your projects and managing your data.

UCT OSF (Open Science Framework)

is a free, online platform that supports your digital research workflow.



COLLABORATE & ANALYSE

For further information, contact the Digital Library Services (DLS) team

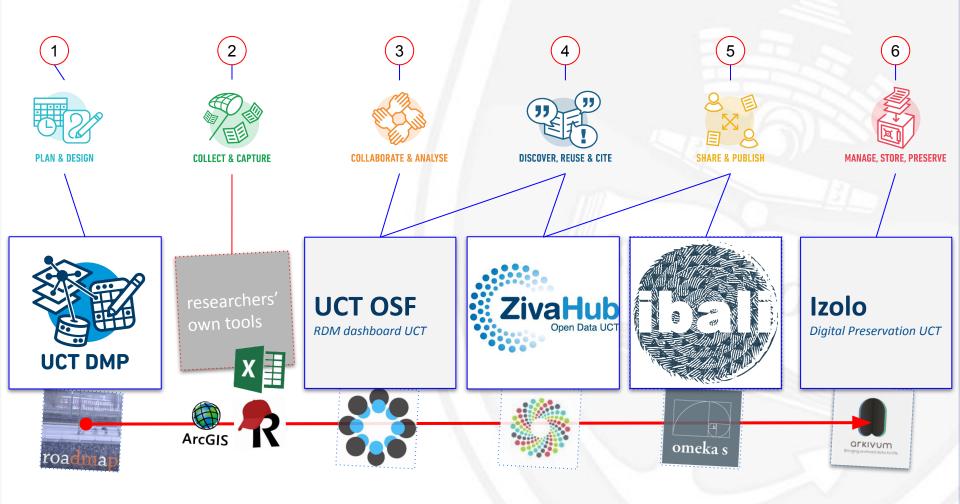


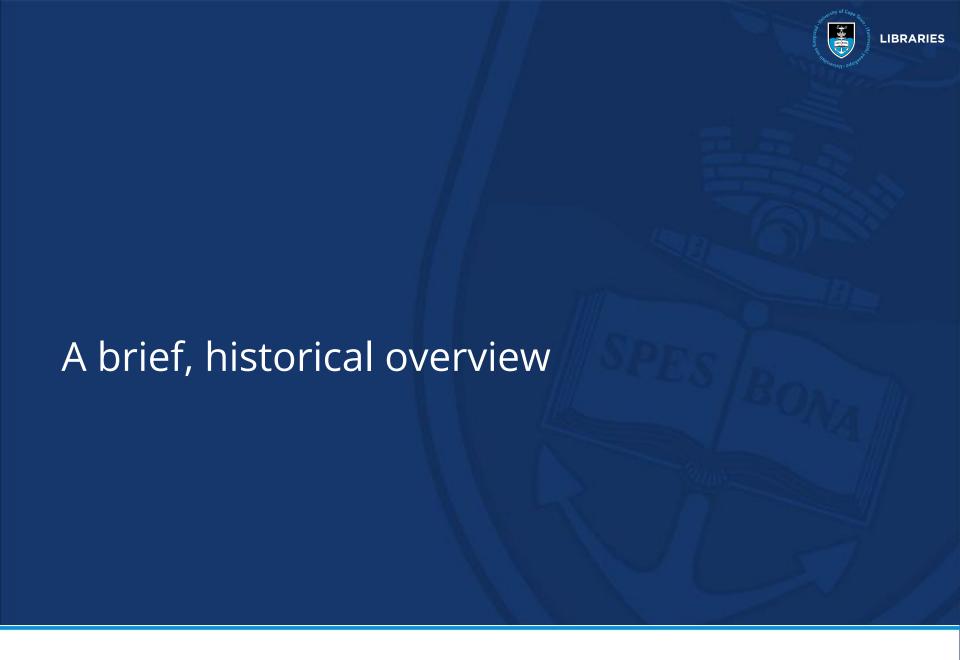
Izolo is a UCT-wide digital preservation service, ensuring that your digital files created today can be used tomorrow.

Research Data Services at UCT Libraries



Systems and services for every stage of the data/project lifecycle

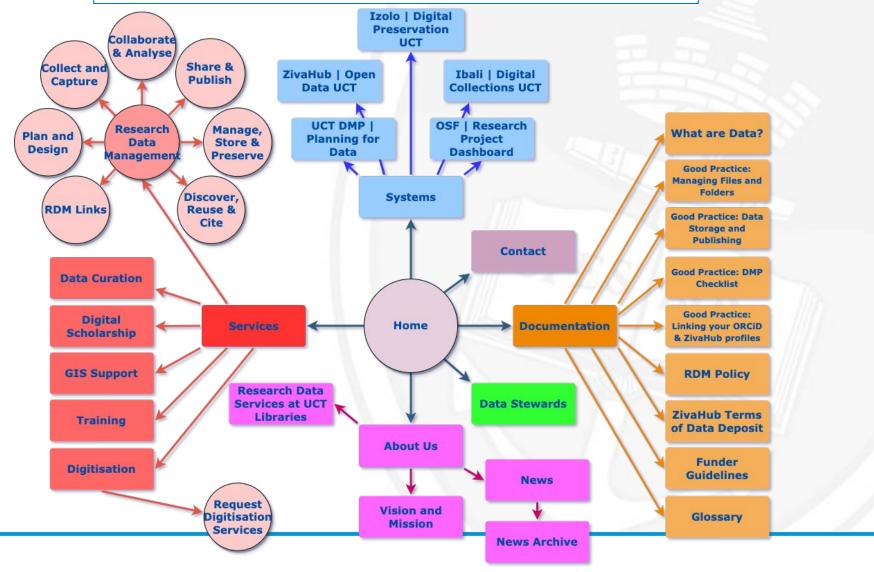




DLS services: Website



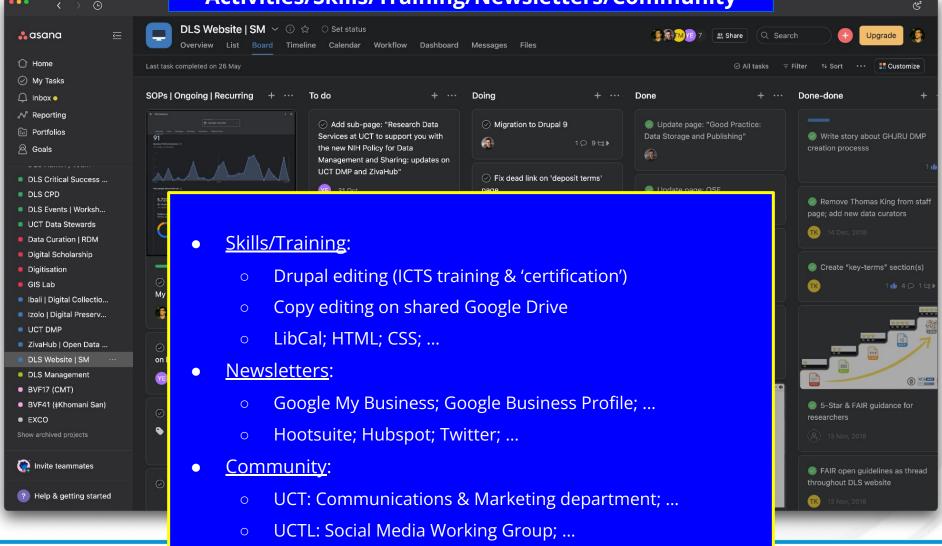
A sitemap of: https://lib.uct.ac.za/digitalservices



DLS services: Website (online presence)







DLS services: Digitisation



http://www.digitalservices.lib.uct.ac.za/dls/services/digitisation

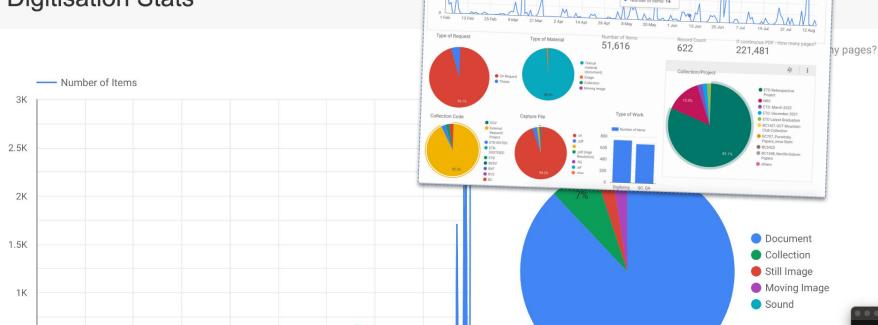
Digitisation

We offer **digitisation for curation and preservation** services for a wide variety of audio-visual, photographic and paper documents to enable and support long-term preservation of, and access to, digital collections. We digitise objects according to international archival preservation and access standards. We also transcode, edit, and curate born-digital objects.

Request for Digitisation

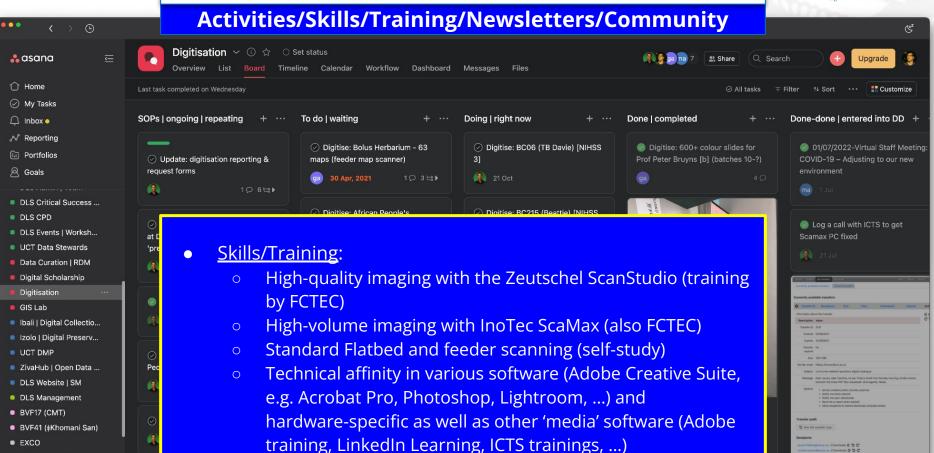
Find out more about making a **request for our digitisation services**.

Our Digitisation Stats



DLS services: Digitisation







tools

DPC (Digital Preservation Coalition); NEDCC (Northeast Document Conservation Centre)

Knowledge of various file formats/codecs and conversion



Invite teammates

? Help & getting started

Digitise: Human skeletal remains accession register (UCT

Anthropology collection, Human

DLS services: Data Curation/RDM



https://lib.uct.ac.za/digitalservices/services/data-curation

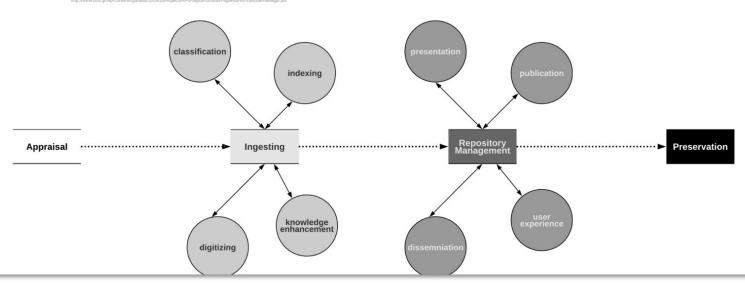
Home > Services

Data Curation

Data curation is the active management of digital files through their lifecycle to enable discovery and provide for reuse over time. It comprises several processes, including digitisation (conversion of physical media formats into digital files), preservation (ensuring that the files are going to work for a long time), and showcasing (publishing of items for access). Data curation also includes the process of file selection and how to best describe them to ensure that they can be found and re-used.

Data Curation - Digital Resources Lifecycle Management

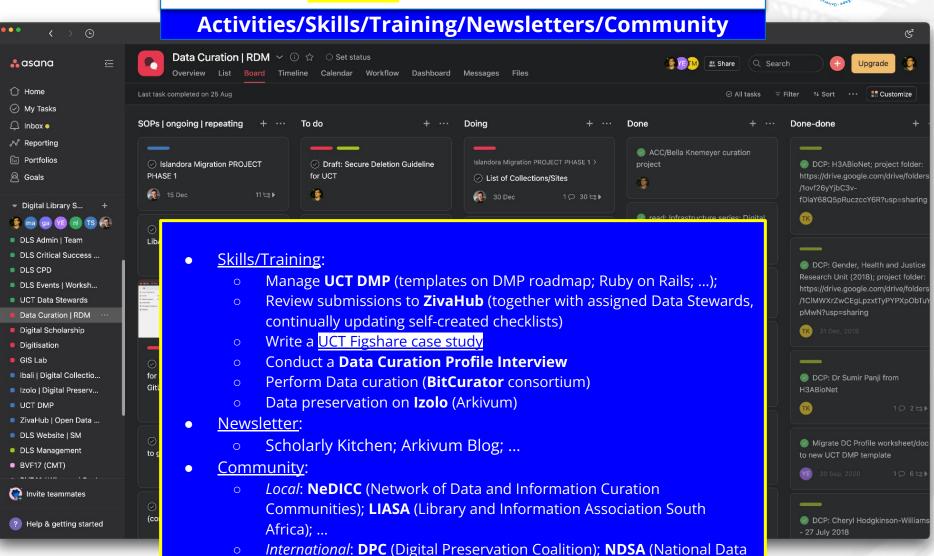
Adapted from: Constantopoulos, P and Dallas, C. (2006). Aspects of a digital curation spenda for cultural heritage. [cnline] Available at





DLS services: Data Curation/RDM





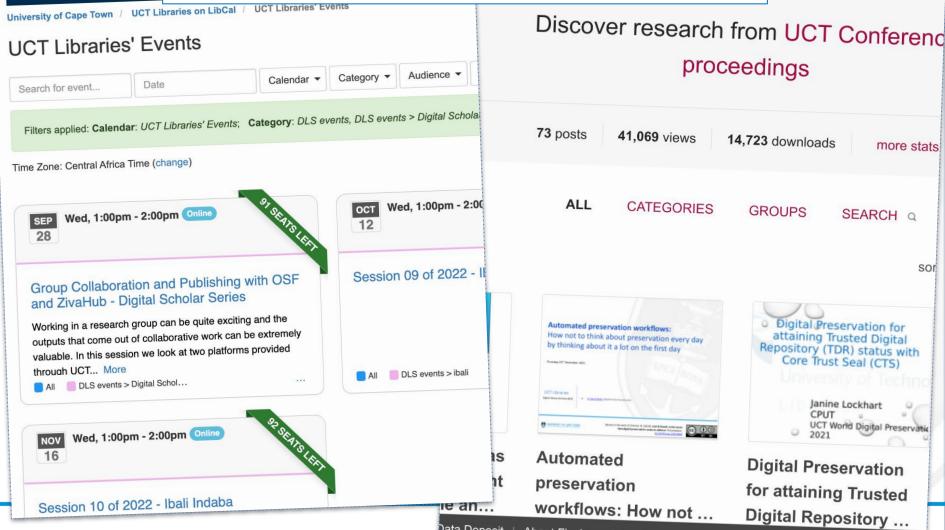
Stewardship Alliance); BitCurator consortium; ...



DLS services: Training

https://uct.ac.za.libcal.com/calendar/libraryevents

https://zivahub.uct.ac.za/Conferences at UCT



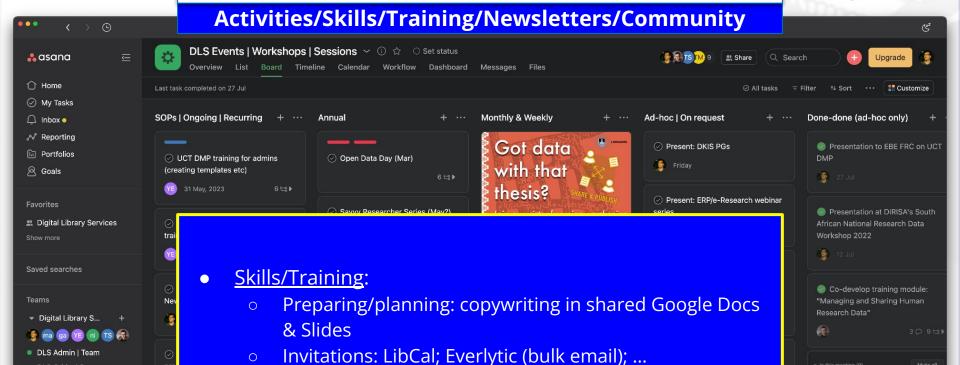
Data Deposit

LIBRARIES

of Cap...

DLS services: Training





- Moderating: MS Teams (ICTS training); playlists; ...
 Newsletters:
 - Subscribing to LIB mailing lists for various training opportunities
- Community:
 - Borrowing examples from other Libraries training sessions and libguides



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Trai

DLS Critical Success ...

DLS Events | Works...

UCT Data StewardsData Curation | RDM

Digital Scholarship

Invite teammates

Help & getting started

Digitisation

CIC Lab

DLS CPD

Niklas Zimmer

Els, Dierdre (Ms) (Summerstrand...

DLS services: Digital Scholarship



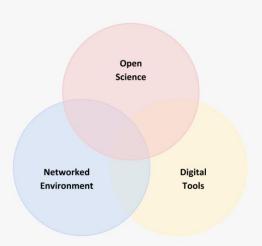
http://www.digitalservices.lib.uct.ac.za/dls/services/digital-scholarship-full

Digital Scholarship

Most of us studying, teaching or researching are digital scholars, because of our regular engagement with digital technologies. These engagements include browsing the internet, listening to recordings of audio interviews, performing data calculations using spreadsheet programmes and re-using other's data thanks to Open Science.

Digital Scholarship may go beyond daily technological interactions, looking at how the combination of digital tools, networked environments, and Open Science can transform and enhance research.

- · How can digital tools help with research analysis?
- How can a networked environment help collaborators access data?
- How can Open Science enable research continuity?



DLS offers guidance on a variety of platforms, processes and provides guidance to the diverse tools that enhance digital scholarship practices. Our strength is in being able to translate your digital research desires into concrete needs and requirements. Our support centres around:

- facilitation of best practices in data and metadata documentation
- setting up online exhibition spaces
- enhancing geographic information system projects
- advocating for good research data management and Open Science.

Digital Tools

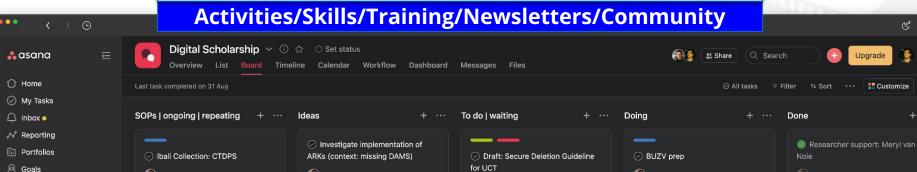
Academics and researchers are exposed to numerous research field specific digital tools. Finding open source digital tools with a broad user base simplifies the research process. DLS facilitates interactions between academics, researchers and digital tools. These sessions provide



DLS services: Digital Scholarship



(5Z



Skills/Training:

- Data Curation (training by CODATA-RDA Open Science Summer School): ...
- Semantic web tech; web admin: Omeka S; iiif (iiif community of practise), RDF
- Web design: HTML; CSS; ...

31 May, 2023

- Data manipulation: R; Python; OpenRefine; ...
- Community/client liaison: draft Project Plan, MoU, etc
- Code preservation/change management: GitLab/GitHub

Community:

RDA PDS WG (Research Data Alliance Professionalising Data Stewardship Working Group); DPC (Digital Preservation Coalition); Omeka Forum, IIIF Community



▼ Digital Library S... ma ga YE ni TS 🦪

DLS Admin | Team

DLS CPD

Digitisation

GIS Lab

DLS Critical Success ...

DLS Events | Worksh... UCT Data Stewards

Data Curation I RDM

Digital Scholarship

Ibali I Digital Collectio...

Izolo | Digital Preserv... UCT DMP

ZivaHub | Open Data ... DLS Website I SM

DLS Management

Invite teammates

? Help & getting started

BVF17 (CMT)

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Exhibition Site

Dali Collection: Jagger Fire

Ibali Collection: Institutional

Planning CHE Portfolio

Ibali Collection: WOAC

SDTC applications for SUN Open Repositories Conference

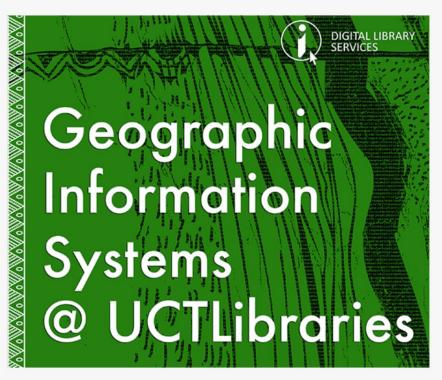
Researcher Support Project:

DLS services: GIS support



http://www.digitalservices.lib.uct.ac.za/dls/services/gis-support

GIS Support



Geographic Information Systems (GIS) support is now available in UCT Libraries as part of Digital Library Services.

GIS support unit

We are available to support UCT staff and postgraduate researchers with their GIS and spatial data needs:

- Troubleshooting, Project Planning, Analysis, Cartographic Design and Data Handling.
- GIS Training
- Apply for an ESRI Software license. You will have to be signed in to your UCT Google Account to access the form. To access your UCT Google Account sign in to Google Drive using your UCT single sign-on credentials.

Our primary goal is to help users develop their GIS skills in order to perform sound data capture, geospatial analysis and map production.

Undergraduate GIS support, training access and software licensing is managed through departmental course convenors in consultation with the GIS Lab, not on an individual basis.

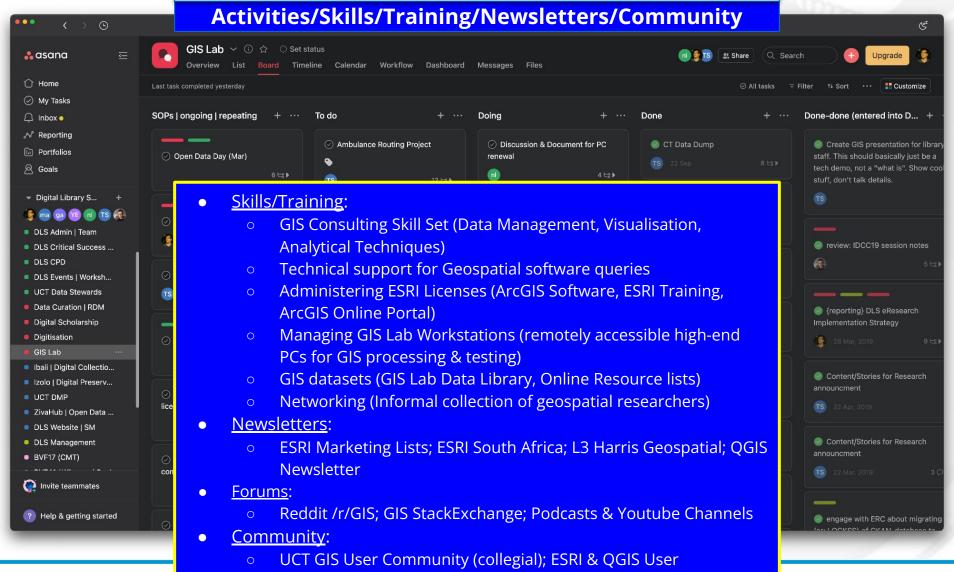
GIS Online Training Resources

Esri Training

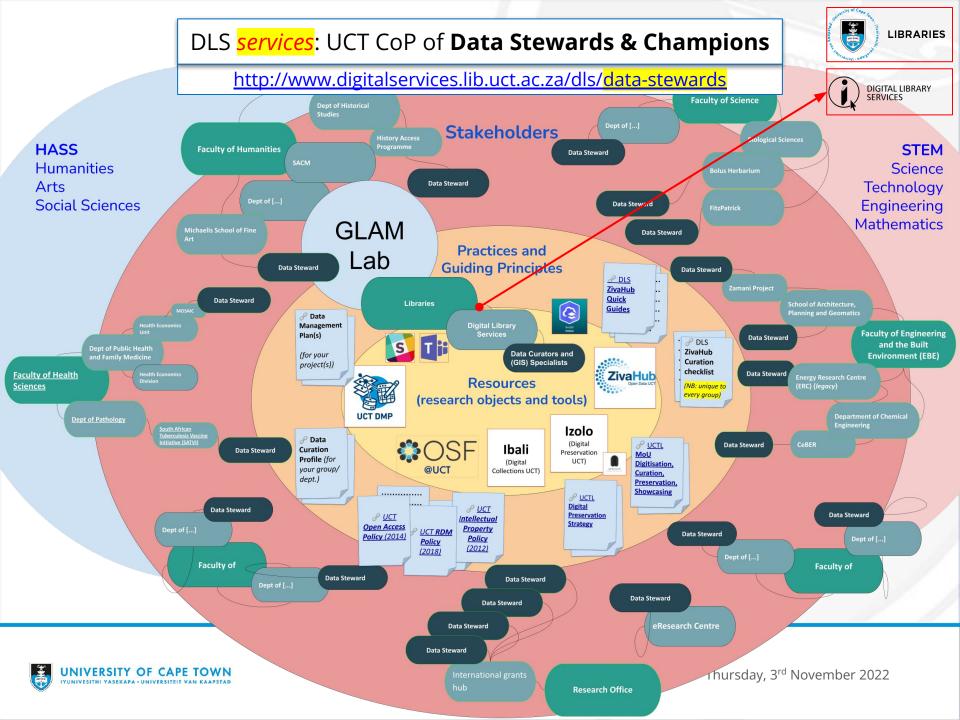


DLS services: GIS support



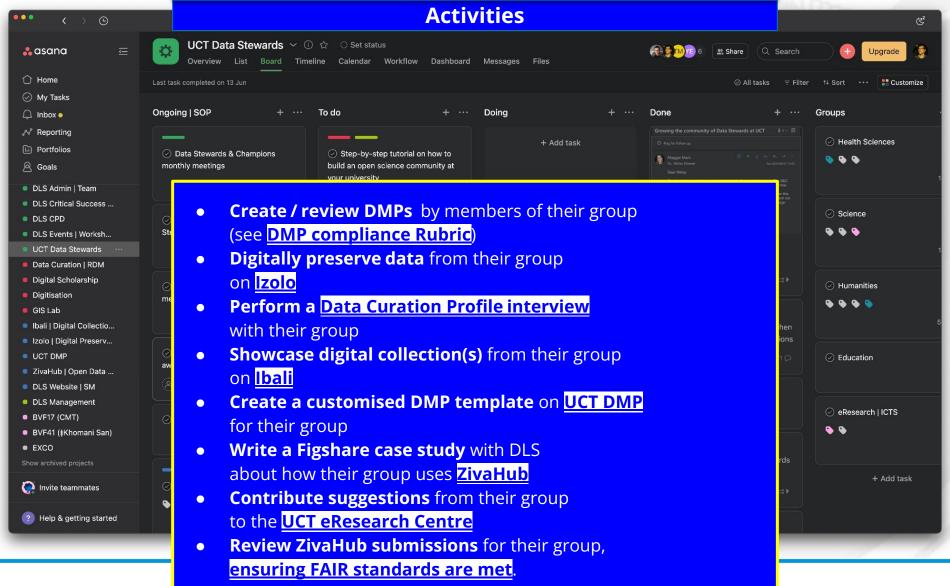


Communities (International & Local branches)



DLS services: UCT CoP of Data Stewards & Champions

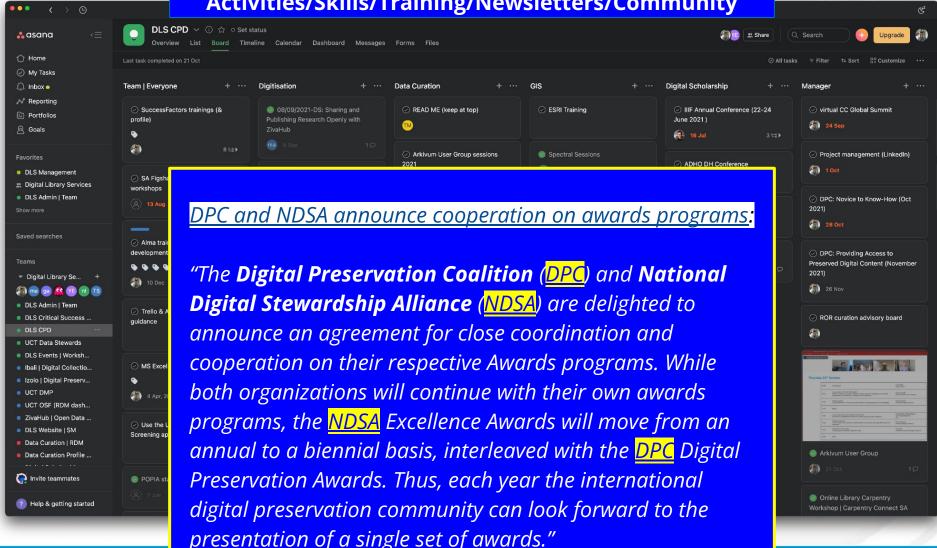




Continuous Professional Development of DLS staff



Activities/Skills/Training/Newsletters/Community





Being Scholars in Digital Times



Digital Scholarship is the application and integration of digital tools and methods in discovery, research, teaching and learning.

Open Science **Digital Networked Environment Tools**

Adapted from: Weller, M. 2011. The Digital Scholar: https://www.open.edu/openlearn/ocw/mod/oucontent/view.php?id=48677§ion=2



Digital Scholarship = Information Technology





Coding/Automating	Analytical Abilities
Database Design	Communication
Data Cleaning	Project Management
Workflow Design	Troubleshooting
Information Transfer & Security	Perseverance

...application and integration of digital tools and methods...

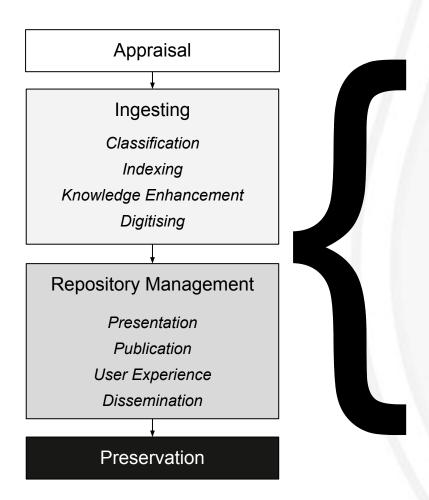
Adapted from: Weller, M. 2011. The Digital Scholar: https://www.open.edu/openlearn/ocw/mod/oucontent/view.php?id=48677§ion=2





Digital Curation Workflow





- Bulk converting, managing,
 processing, converting digital objects
- Set up Workflows for capturing metadata
- Suggesting workflows for data management
- Cleaning up and Transforming
 Metadata
- Geocoding
- Design showcase Sites

Adapted from: Constantopoulos, P and Dallas, C. (2006). Aspects of a digital curation agenda for cultural heritage. [online] Available at: http://www.dcu.gr/wp-content/uploads/2016/10/Aspects-of-a-digital-curation-agenda-for-cultural-heritage.pdf

Using forms to capture metadata



LRGRU Metadata

*Required

Name of Data Capturer *

Your answer

Barcode *

Your answer

Type of Material *

Facilitator Guide

O Participant Workbook

Additional Readings

Workshop Title *
as it appears on the book

Your answer

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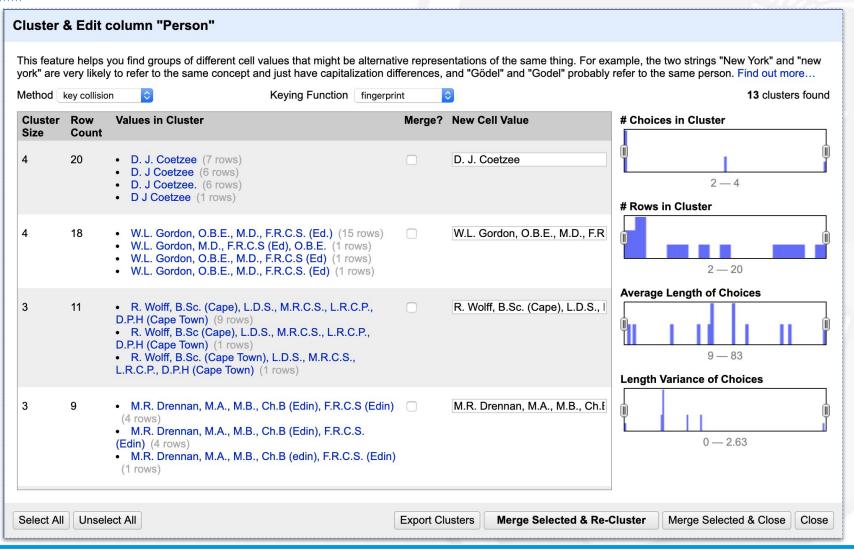
Your answer





Data Cleaning with OpenRefine





Using Rstudio to transform Data



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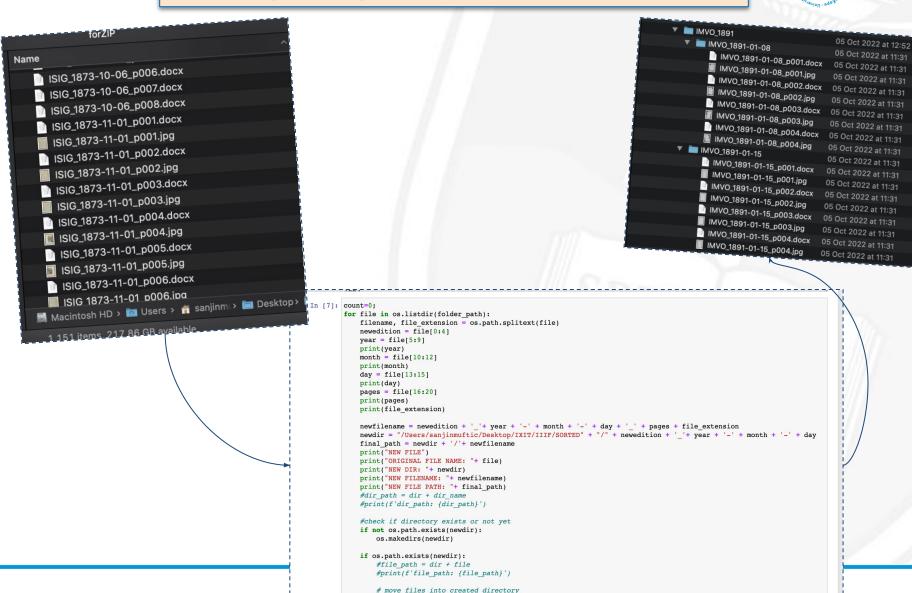
43496 entry2

43497 entry1 43497 entry2



Organising Files to match Structure





#shutil.move(file_path, dir_path)
copyfile(file, final_path)

count += 1
print(count)

Using API to do batch uploads/publishing



LIBRARIES

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Bolus Herbarium (BOL)

+ Follow Published on 27.05.2021 - 15:30 by Cornelia Klak

The Bolus Herbarium, established in 1865, is the oldest functioning herbarium in South Africa. As part of an academic institution its primary function is to aid in the teaching and research of the diversity of the southern African flora, particularly that of the Cape Floristic Region. Research associated with the herbarium focuses mainly on taxonomy. systematics, biogeography and endemism.

With a collection of over 350,000 specimens, it is the third largest herbarium in South Africa and the third largest university Herbarium in the southern Hemisphere. The collection is recognised for its superb representation of the Cape Flora and the large

CITE ITEMS FROM THIS PROJECT

cite all items

CK Cornelia Klak Sanjin Muffic TM Thandokazi Maceba

USAGE METRICS

204

Bolus Herbarium

MEMBERS (5)

search content on this project.

21,581 results found

Erythrina humeana (152991)

Physical object posted on 30.03.2022 in University of Cape Town

Bolus Herbarium



Podalyria biflora (44328)Physical object posted on

09.03.2022 in University of Cape Town

Bolus Herbarium





Podalyria oleifolia (44326)

Physical object posted on 09.03.2022 in University of Cape Town

Bolus Herbarium



Podalyria biflora (44329)

Physical object posted on 09.03.2022 in University of Cape Town Bolus Herbarium



(44332)

Bolus Herbarium

Podalyria biflora (44331)Physical object posted on Physical object posted on 09.03.2022 in University of 09.03.2022 in University of

Cape Town

Podalyria myrtillifolia (44330)Physical object posted on 09.03.2022 in University of

Cape Town



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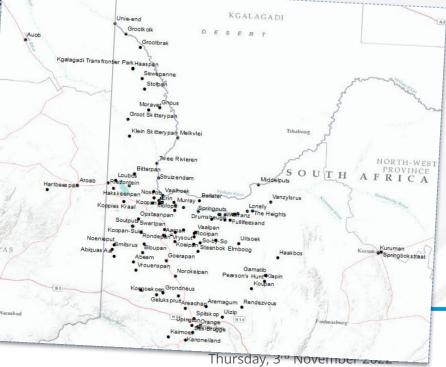
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GeoCoding Place Names



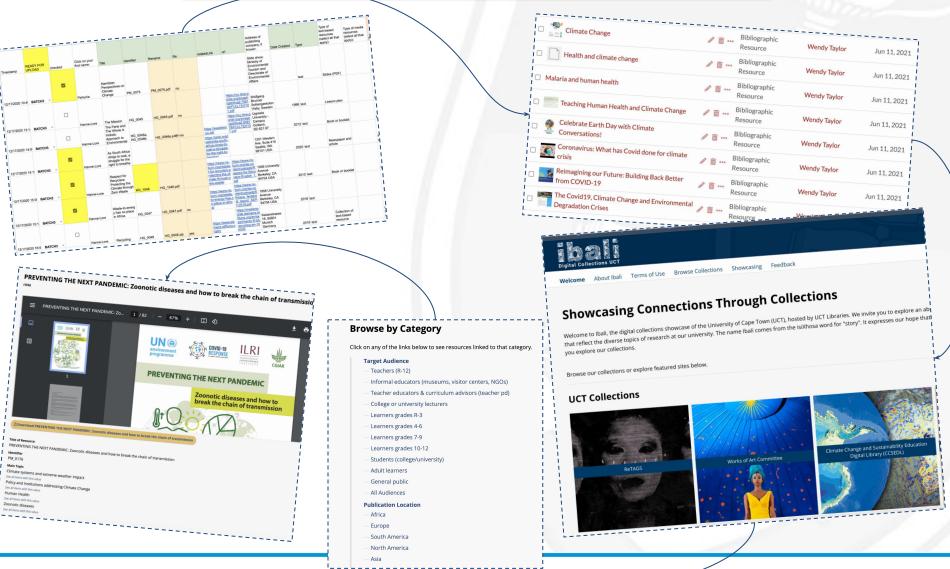
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Boskop			Old Boskop is a farm. If you go along the black s the red dunes after Old Scholtz farm. There is a which has a big farm house. Boskop is near a fa far from Askham.
Bokspits	-26.9048977	20.6900908	
Bokpootjie			Farm near Dankbaar, Haas Pan and Kraaipan. Also near Nossob (river). Could be Bokooitjie, only one recording
Bloupan	-27.5854252	20.4854154	
Bloubos			Grondneus (-28.07279,20.7681). Name of a farm near Grondneus
Bloemfontein	-29.1199892	26.1531832	
Black Ridge			Farm where Antjie Kassie worked picking grapes. They also worked on Meyers Island and Kanon Island.
Bitterpan	-26.614408	20.341025	
Ballater	-26.91120687	21.16100501	Scottish Name. Found along the Kuruman rivier
Avondskyn			Farm found along the Kuruman rivier near Drumsheugh, Eensaam Kasteel and Klein Hemelstraat.
Auob	-25.0249081	18.9001578	River
Aroab	-26.7984846	19.6389413	Namibian town in Keetmanshoop area.





Build Showcase sites with Omeka S

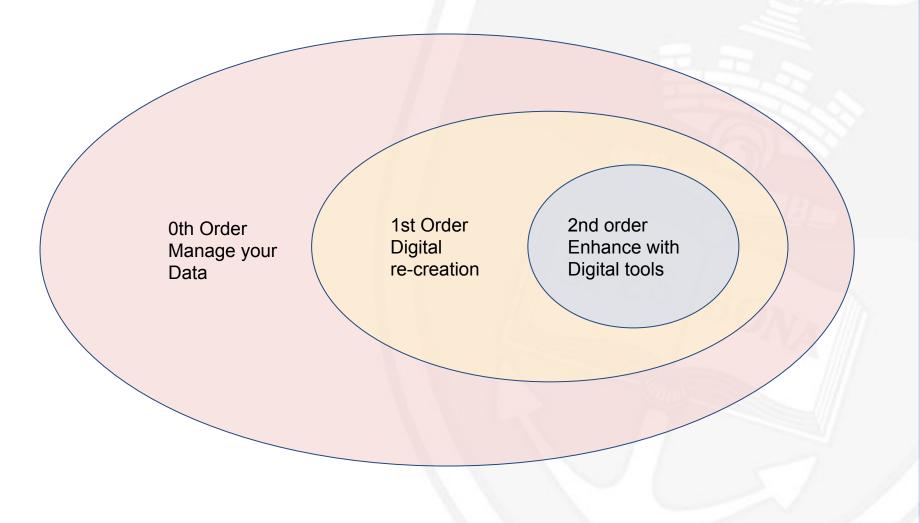






Scales of Digital Scholarship





Source: Hartsell-Gundy, A., Braunsten, L., Golomb, L. (Eds.), 2015. Digital Humanities in the Library. American Library Association.

Digital Scholar Series



	Getting your Items in Order - Session 05 of 2022 - Ibali Indaba	Wednesday 22 June 2022
	How ZivaHub can help you share and publish your thesis data - Digital Scholar Series Bonus	Wednesday 29 June 2022
	Re-Introduction to GIS at UCTL - Digital Scholar Series	Wednesday 27 July 2022
DIGITAL LIBRARY	Launch of CTDPS on Ibali Site - Session 07 of 2022 - Ibali Indaba	Wednesday 3 August 2022
SERVICES	State of the DMP: A Recap Check on your RDM for your project - Digital Scholar Series	Wednesday 10 August 1
	How ZivaHub can help you share and publish your thesis data - Digital Scholar Series	Wednesday 24 August 1
	Working with Sensitive Data at UCT - Digital Scholar Series	Wednesday 31 August 1
	Migrating Collections across Platforms - September Ibali Indaba	Wednesday 7 1 September 2022
	Capture and Manage Data with Forms and Spreadsheets - Digital Scholar Series	Wednesday 14 September 2022
	Cleaning your Data for Analysis with Open Refine - Digital Scholar Series	Wednesday 21 1 September 2022
	Group Collaboration and Publishing with OSF and ZivaHub - Digital Scholar Series	Wednesday 28 September 2022
	Series	ay, 3 rd November 2022
		-

How do we figure this out



- Search the internet/forums
 - Somebody has had the same problem and some of those have either asked the question or share the solution
- Improve skills through online courses and sites (such as https://www.freecodecamp.org/learrn)
- Document the process and leave the SOP behind you

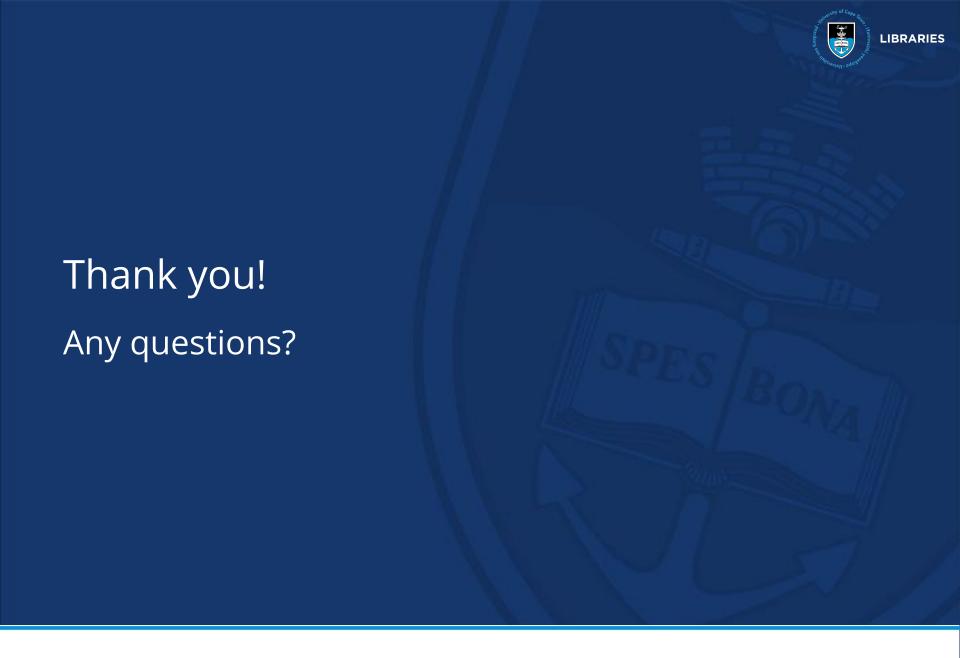
Open Science

Networked Environment

Coding / Automating



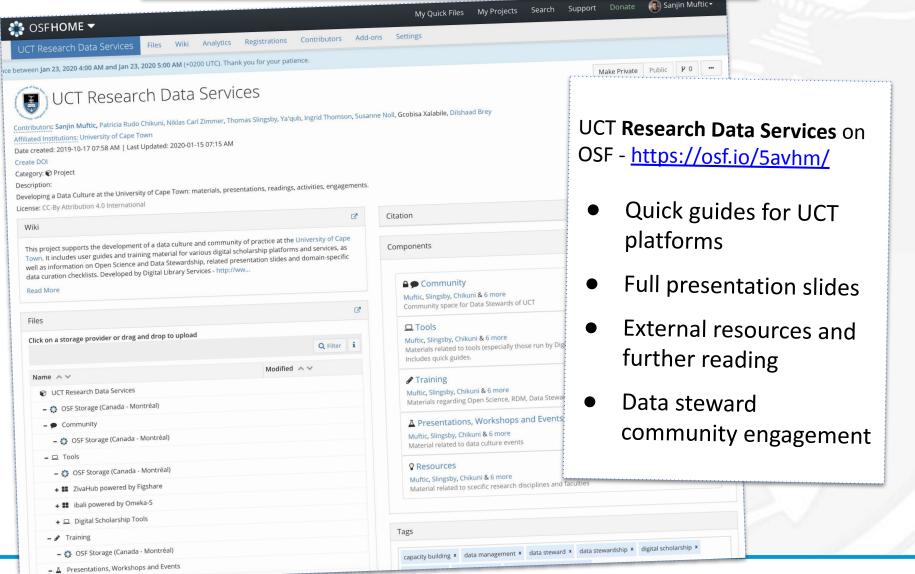
- Volume of Data / Digital Assets Increasing
 - More action with fewer keystrokes/mouse clicks
- Breaking Problems down into manageable repetitive steps that can be reproduced
- Getting comfortable with command line tools
- Finding solutions that do not require you to pay for software (free coding libraries to make pdfs from command line)
- Harnessing machines to do the boring stuff





Openly accessible RDS resources





Let's change what we value in research.









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Data Stewards Community



http://www.digitalservices.lib.uct.ac.za/

















