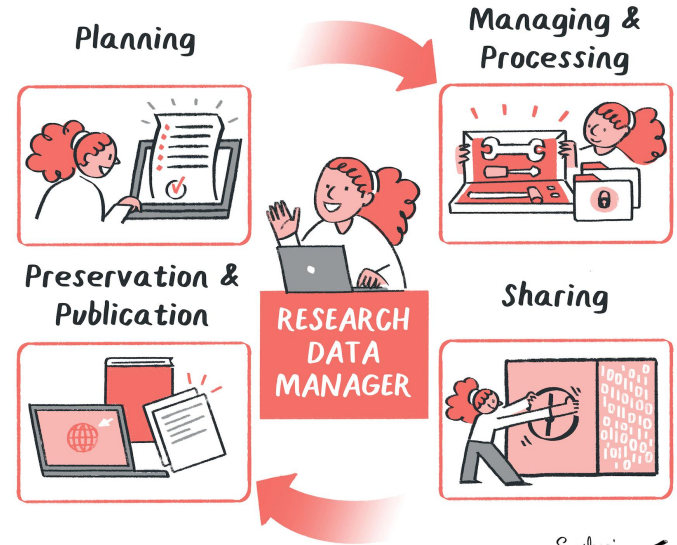


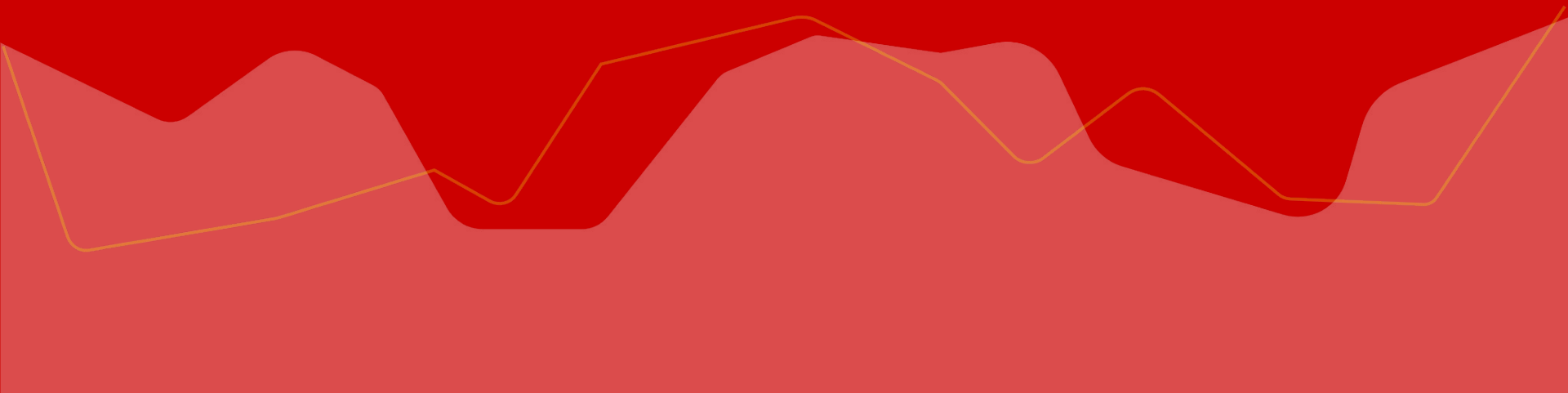
Data Management

Tuesday 11th November 2024



Scribbleina

What is 'data'?



Data:

'facts or information, especially when examined and used to find out things or to make decisions'

Primary Sources
(ancient manuscripts,
archival docs)

Digital representations
(photos, 3d models)

Events
(conferences, exhibits)

Publications
(journals, monographs)

**Borne-digital
artefacts**
(user online interactions)

Software

Standards
(discipline
conventions)

Websites

Corpora
(linguistics)

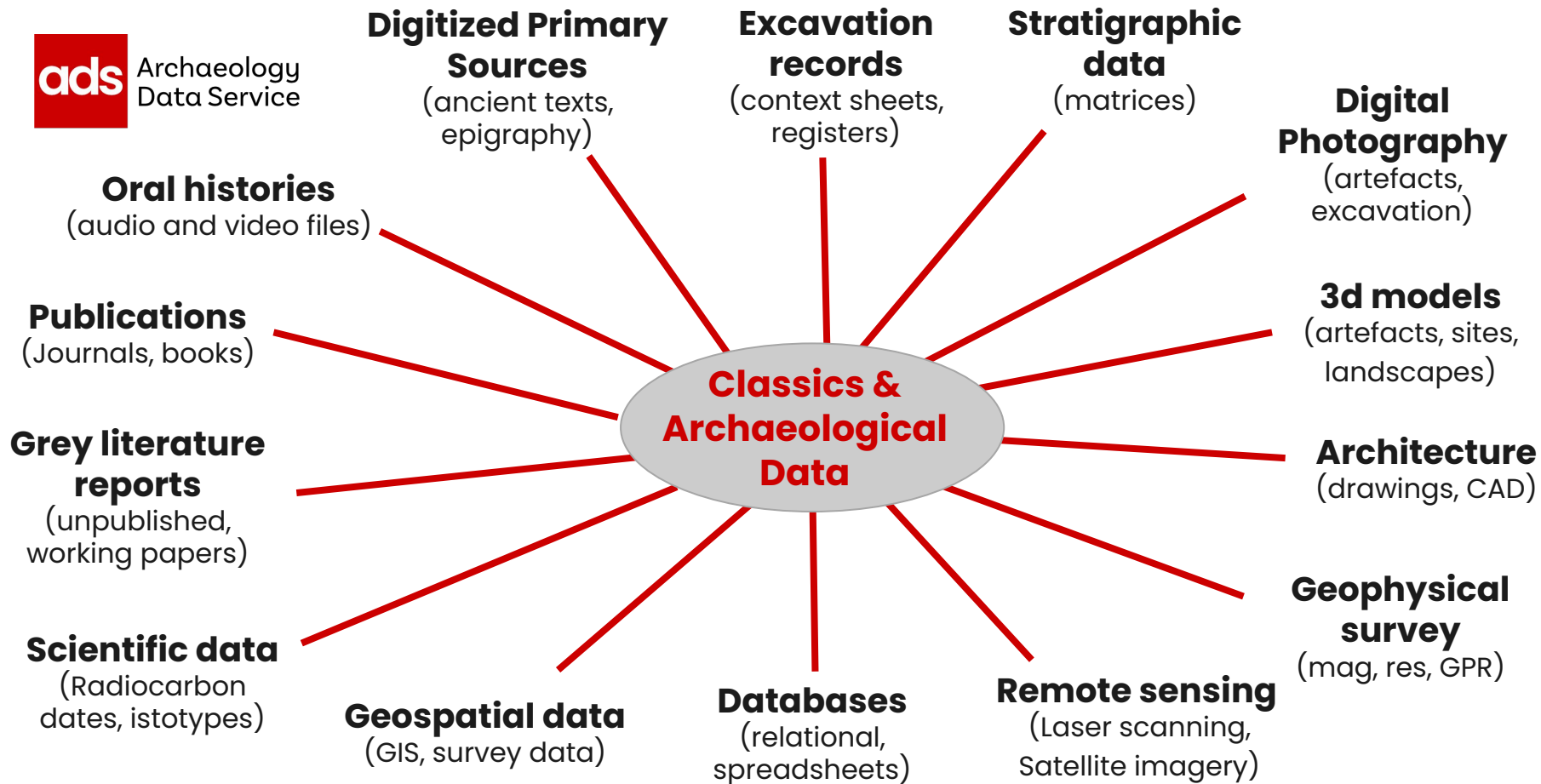
**Personal
data**

Documentation
(project notes,
funding reports)

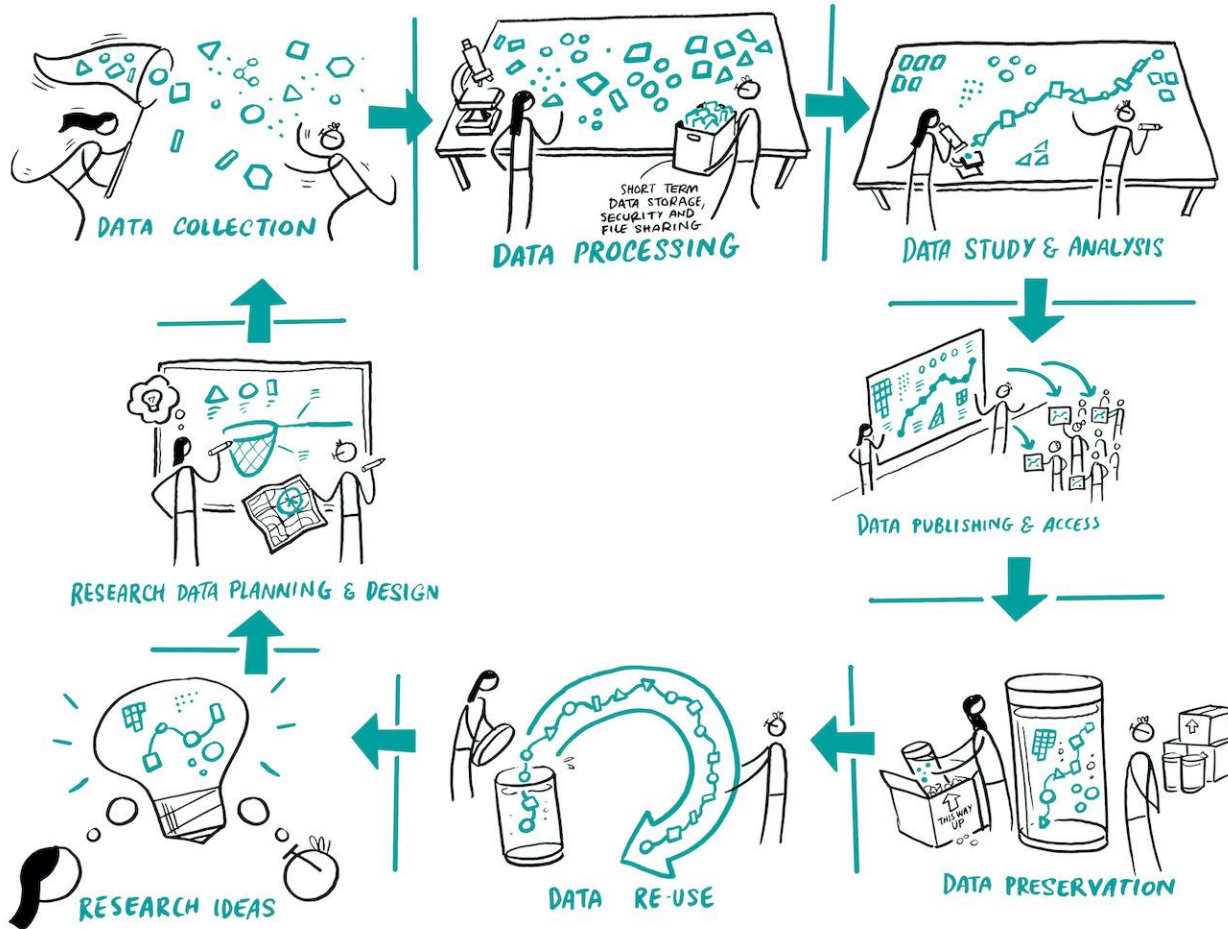
**Catalogues/
databases**

**Digital
infrastructures**
(mobile app, 3d viewer)

**Humanities
Data**



The data life cycle



An archaeological example - Star Carr Mesolithic Site

<https://doi.org/10.5284/1041580>

Data Collection



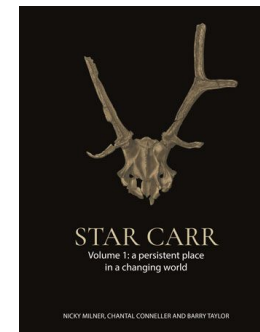
Processing / Analysis



internet
archaeology

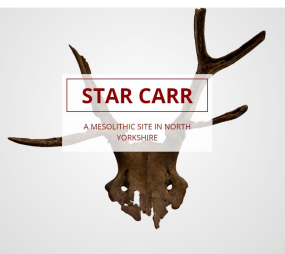
<https://doi.org/10.11141/ia.40.8>

Publishing



Planning & Design

[HOME](#) [ABOUT](#) [GALLERY](#) [EXPLORE](#) [FILM](#) [EXHIBITIONS](#) [SCHOOLS](#) [LINKS](#)



Research Ideas

Star Carr
Archives
Project

Re-use



<https://doi.org/10.5284/1019856>

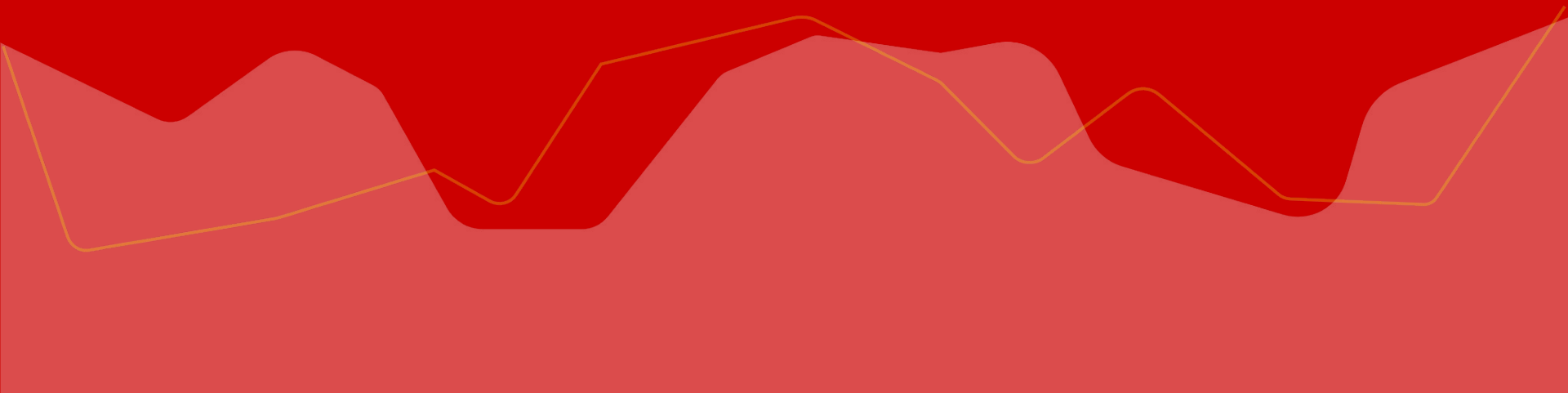


Preservation

<https://doi.org/10.5284/1041580>



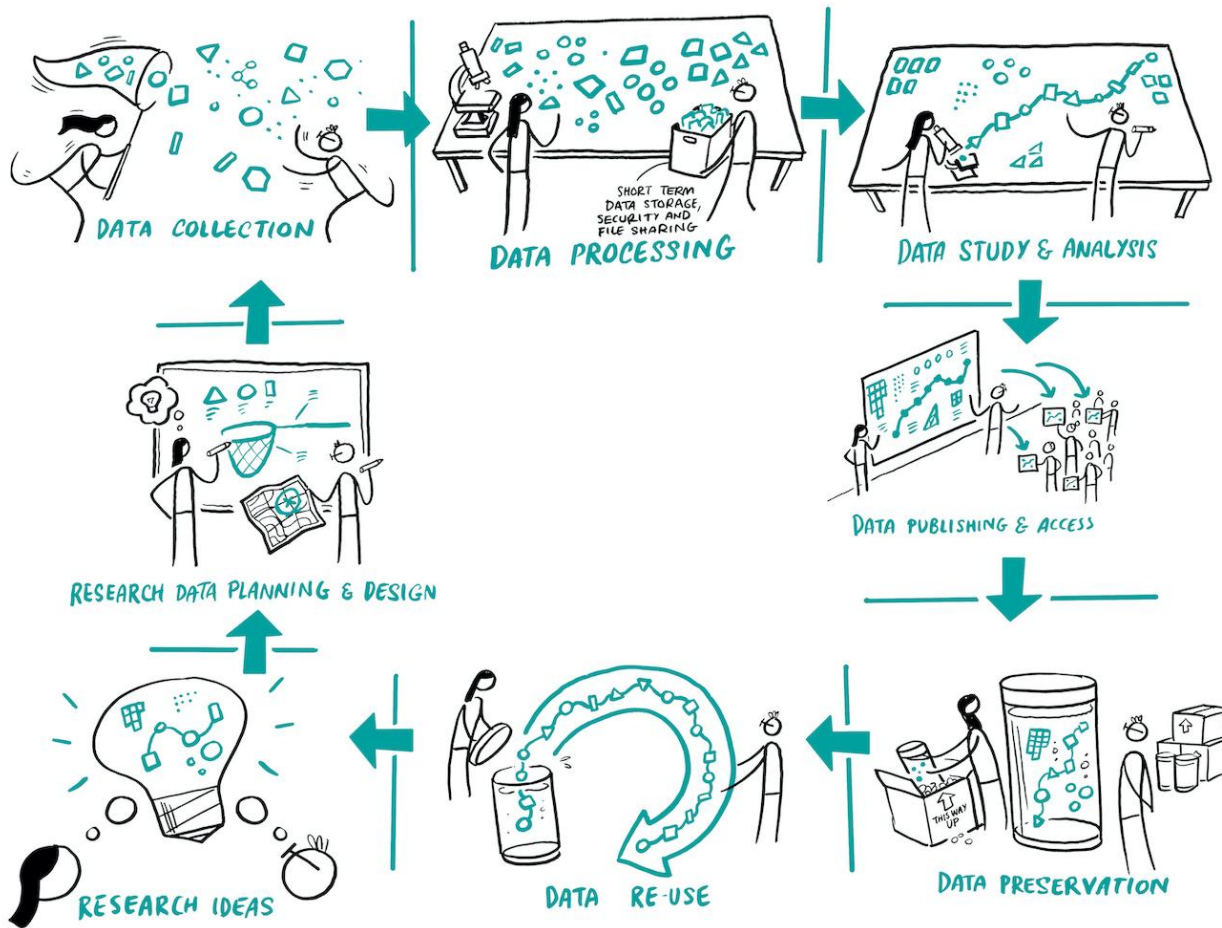
Data management



Research Data management (RDM):

*'the active curation of data
throughout the research lifecycle'*

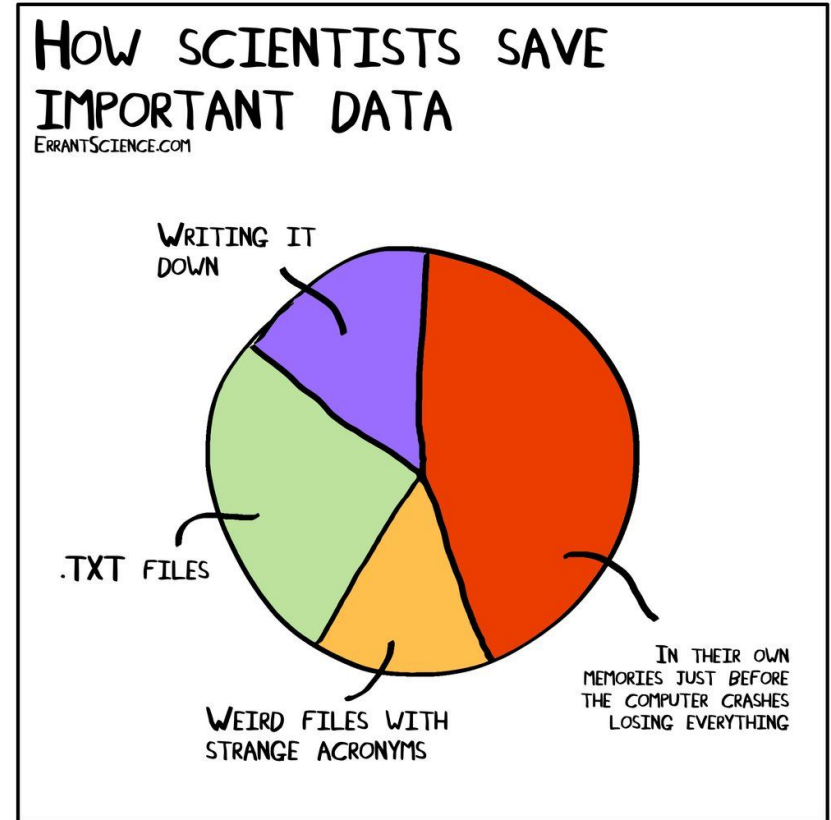
<https://www.york.ac.uk/library/research-creativity/rdm/management/>



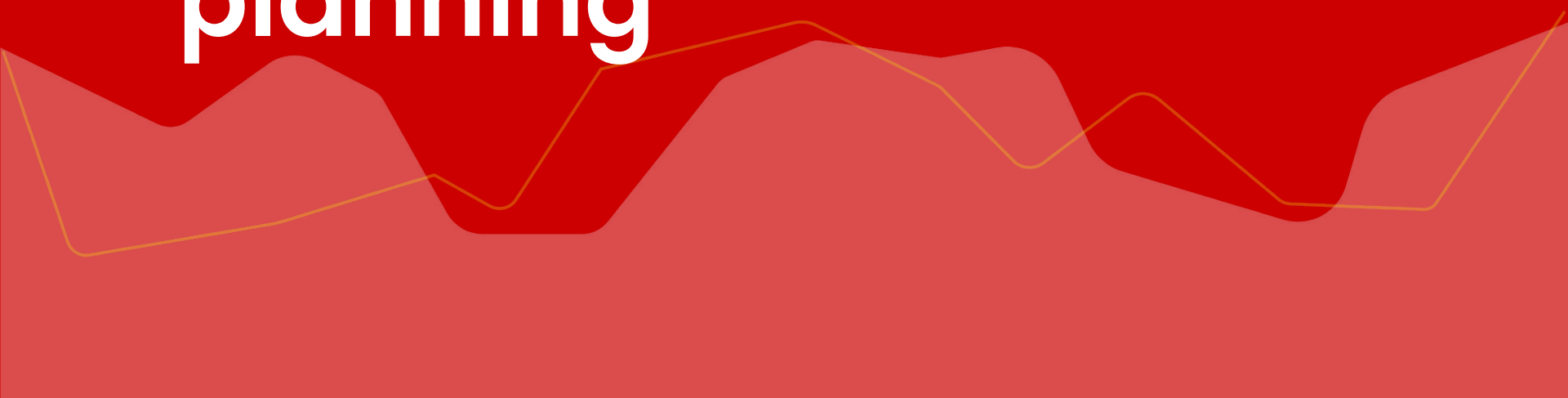
Research data life cycle

Importance of Data Management

- Saving you time and resources by avoiding duplication of effort
- To provide consistency across the project
- Research integrity (validation)
- To facilitate long term preservation
- To make your data FAIR
- Greater chance of re-use (by you and others)



Effective Data management planning



Understanding your data

- Purpose
- Content
- Method of Creation
- Attributes
- Relationships
- Constraints & Dependencies

Organising your data

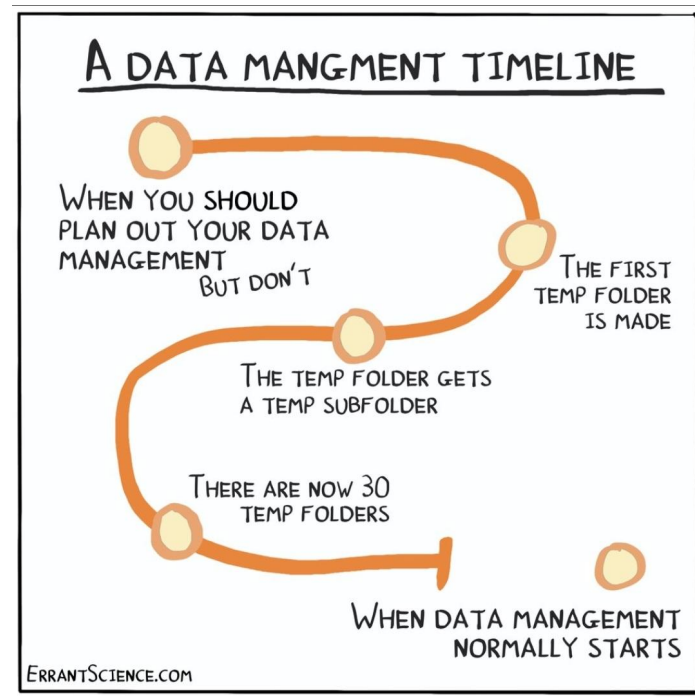
- File Structure
- Filenames
- Version Control
- Discard policy
- Backup and Security
- Documentation



Develop a Data Management plan

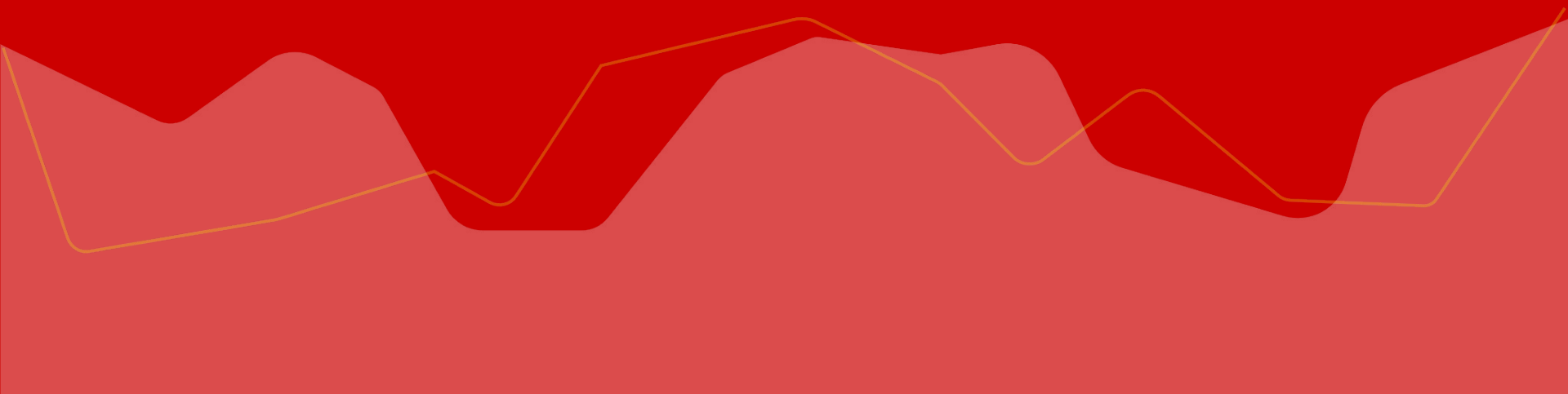
“A data management plan helps achieve optimal handling, organising, documenting and enhancing of research data. It is particularly important for facilitating data sharing, ensuring the sustainability and accessibility of data in the long-term and allowing data to be reused for future research.”

[UK Data Service](https://www.ukdataservice.ac.uk/)



A Data Management Plan, is an iterative document describing how you plan to manage the data gathered through the delivery of a specific project, and what will happen to that data once the project is complete.

A Data management plan (DMP)



7 key areas of a Data Management Plan

1. Context
2. Roles and Responsibilities
3. Data description
4. Standards and Methods
5. Ethics and IPR
6. Sharing, Access and Security
7. Preservation and Access

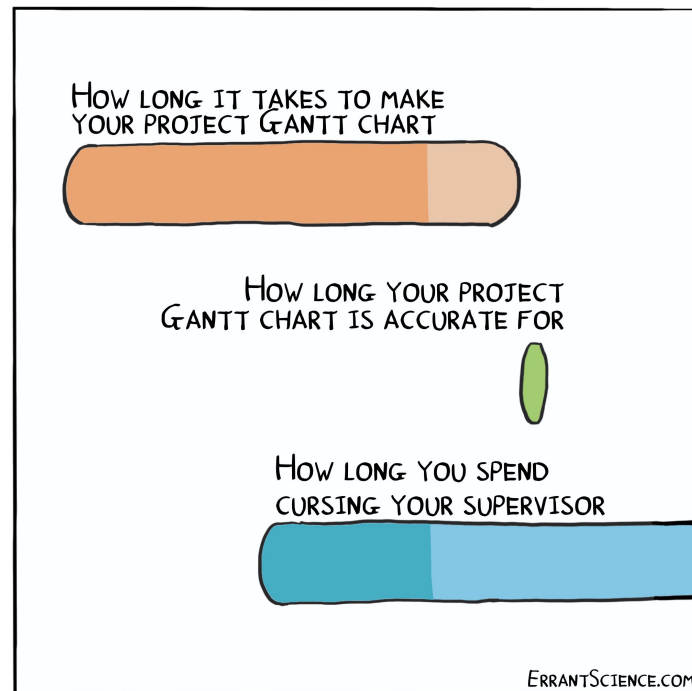


Context

E.g. Project name, Unique identifiers, Name of Funding bodies, Creation/edited date of document, Version number, Related policies/documentation

Roles and Responsibilities

E.g. Responsible person, Roles for activities within the DMP, Collaborative partners (names and roles), Agreements/Contracts between partners



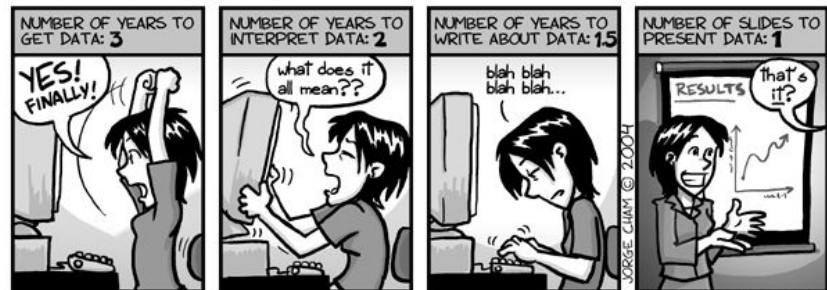
Data Description

E.g. What data types/formats will be collected, Volume/size of data, Software used and justification, Details about existing data that is being collated.

Standards and Methods

E.g. Method of data collection/creation, Discipline specifics for data standards and methodologies, Data structure, Version control for data, Quality assurance, What metadata will be collected.

DATA: BY THE NUMBERS



Ethics & Intellectual Property Rights

E.g. Copyright holders, Data sharing agreements,
Ethical considerations/reviews undertaken,
Personal/sensitive data, Compliant with appropriate
legislation, Data sharing restrictions.

Sharing, Access and Security

E.g. Appropriate storage provision, Security/backup
procedures, Data recovery procedures, Control access
and transfer between collaborators.

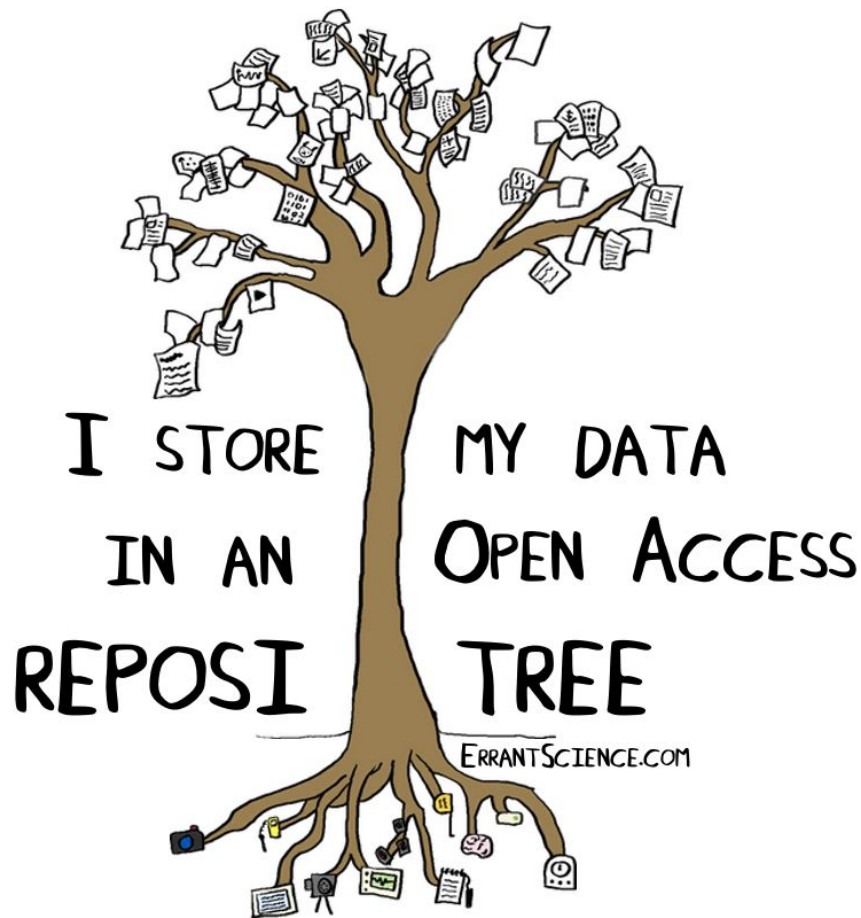


"Before I write my name on the board, I'll need to know how you're planning to use that data."

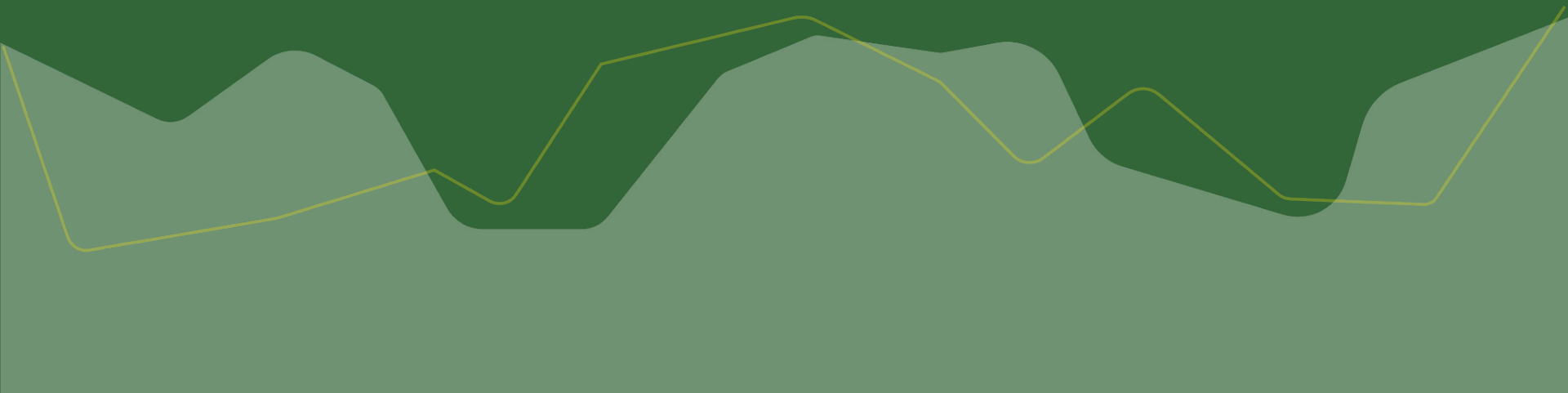


Preservation and Access

E.g. Selection strategy, what will happen to data not selected, Details of data relationship to Publication or Dissemination, Where will your data be deposited and why, Data licence, Future reuse.



Exercise



Exercise: Review and critique data management plans from different archaeological projects

1. Split into two groups (4 people each)
2. Review the data management plan example (1 plan per group)
3. Discuss the pros and cons of the DMP
4. Report back to the group

Feedback



WallCAP: Hadrian's Wall Community Archaeology Project

An National Lottery Heritage Fund project hosted by Newcastle University.

The project was designed to address priorities identified by the Hadrian's Wall Research Framework and the Management Plan for the World Heritage Site by integrating these priorities through a series of engagements across audiences. Namely, WallCAP sought to:

- Address pressing conservation concerns for a number of sites located in the World Heritage Site;
- Gather new data to address questions and gaps in knowledge;
- Incorporate volunteers and local communities, wherever feasible, to embed an appreciation of the heritage of Hadrian's Wall across in local audiences.



The Avebury Papers – Digitisation, exploration & creative re-use of a uniquely important archaeological archive

The Avebury Papers is a four-year Arts and Humanities Research Council (AHRC) funded project to digitise, explore, and share the multimedia archive of Avebury's Neolithic origins and its subsequent life-history.

The Project aims to:

- Digitise the full archive of 20th century excavation and fieldwork carried out at Avebury henge.
- Complete outstanding analyses of previously excavated artefactual material and provide a new interpretative synthesis.
- Design and implement a series of innovative tools to allow for academic, public and creative engagement with the digital datasets created.

John Moore Heritage Services – Great Hampden

JMHS is an archaeological contractor from the UK who operates primarily in southern England. This DMP represents an evaluation in the churchyard of St Mary Magdalene in Buckinghamshire.

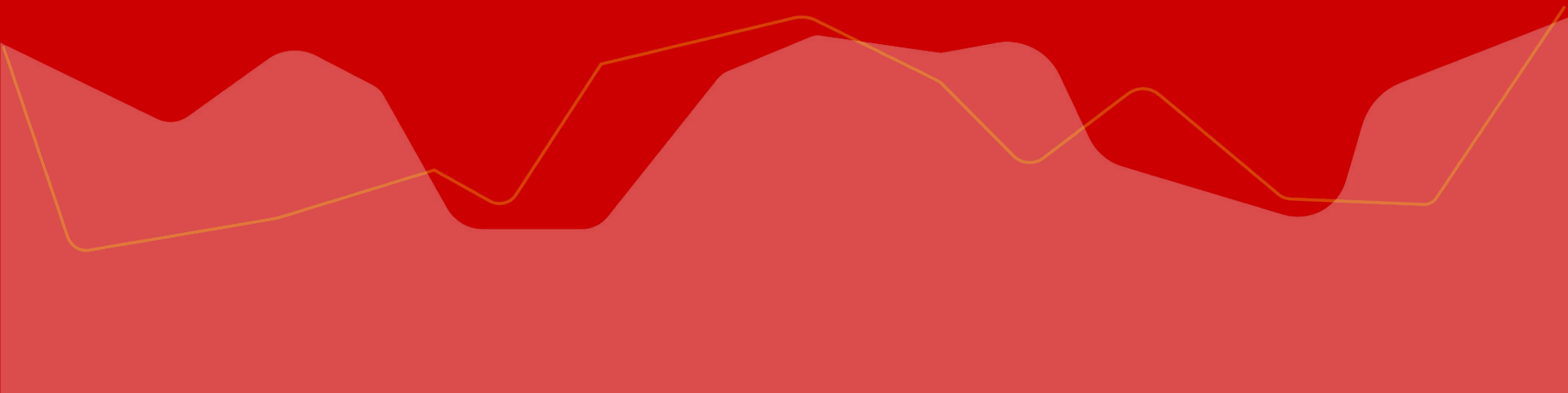
The Project aims to:

- Assess the archaeological potential of the area ahead of development
- Preserve the documents and records generated through archaeological fieldwork and post-excavation analysis.
- Submit this document as part of the archive deposited with the ADS

Break



Practical considerations



Things to consider before you begin your Data Management Plan

- Understand your project requirements
- Consult, collaborate and seek advice from appropriate stakeholders
- Understand your existing support and infrastructure provision
- Be able to clearly define the roles and responsibilities within your project
- Be prepared to implement your plan



Practical considerations

- Collaborative process (between team and institutional IT/Research teams)
- Link into existing policies (funding requirements, IPR policies, IT security and storage information)
- Funding applications provide limited space – be concise!
- DMP requirements vary between organisation and funder – be flexible!
- Tools for data management planning!



"I'm gonna be honest with you; I have no idea what the hell is happening here."

AHRC Guidance

- Different schemes have different requirements – Old funding portal (Joint Electronic Submissions – Je-S) being phased out
- New portal – ‘UKRI Funding Service’
- No requirement for a Data Management Plan to be uploaded – replaced by RRI
- **Ethics and responsible research and innovation** (RRI) – 500 words
- “If the applicant is collecting or using data, then this section must be completed”.
- [AHRC Research Funding Guide](#) (in process of being updated)
- UKRI has streamlined application process but not all applications are the same – each can set up their application using different question sets.

What the assessors are looking for in your response

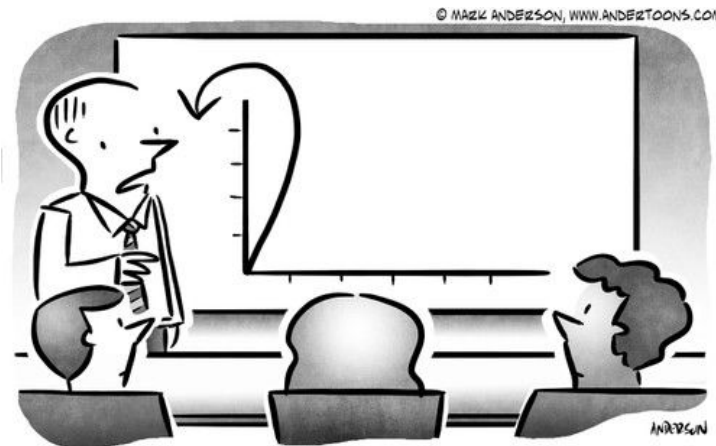
If you are collecting or using data, identify:

- any legal and ethical considerations of collecting, releasing or storing the data including consent, confidentiality, anonymisation, security and other ethical considerations and, in particular, strategies to not preclude further reuse of data
- formal information standards with which your study will comply

“Within this section you can also demonstrate elements of your responses in visual form if relevant. Use images sparingly and only to convey important information that cannot easily be put into words”

Practical considerations

- Collaborative process (between team and institutional IT/Research teams)
- Link into existing policies (funding requirements, IPR policies, IT security and storage information)
- Funding applications provide limited space – be concise!
- DMP requirements vary between organisation and funder – be flexible!
- Tools for data management planning!



"I'm gonna be honest with you; I have no idea what the hell is happening here."

- DMP creation tool
- Templates to suit funder and institutional requirements
- Share plans with collaborators
- Publically accessible exemplars
- Useful resource list <https://dmponline.dcc.ac.uk/help#PlanningHelp>

DMP ONLINE Home Public DMPs Funder requirements Help Language

Plan to make data work for you

Data Management Plans that meet institutional funder requirements.

DMPonline helps you to create, review, and share data management plans that meet institutional and funder requirements. It is provided by the Digital Curation Centre (DCC).

114 899 Users 323 Organisations 126 558 Plans 89 Countries

<https://dmponline.dcc.ac.uk/>

- DMP creation tool
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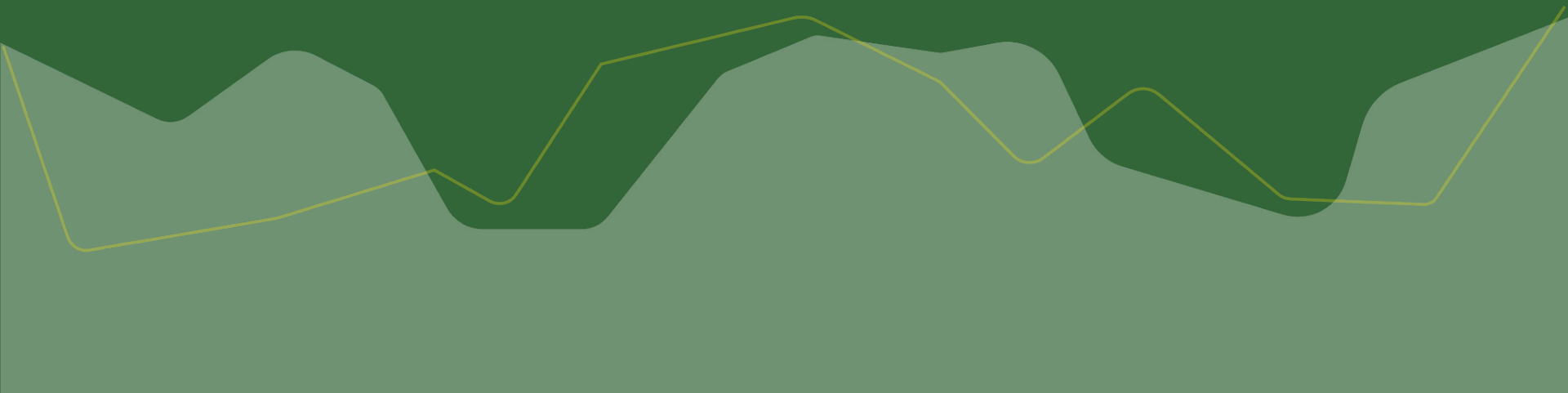
The screenshot shows the DMPonline website interface. At the top, there is a navigation bar with the logo 'DMPONLINE' and links for 'Home', 'Public DMPs', 'Funder requirements', and 'Help'. A 'Language' dropdown menu is visible in the top right corner. The main content area features the heading 'Plan to make data work for you' and a sub-heading 'Data Management Plans that meet institutional funder requirements.' Below this is a central diagram illustrating the workflow of creating, reviewing, and sharing data management plans. The diagram shows a central computer monitor connected to various icons representing users, documents, and data storage. To the right of the main content is a sign-in form with fields for 'Email' and 'Password', a 'Remember email' checkbox, and buttons for 'Sign in' and 'Sign in with your institutional credentials'. Below the main content, a statistics bar displays four icons and their corresponding values: 114 899 Users, 323 Organisations, 126 558 Plans, and 89 Countries.

<https://dmponline.dcc.ac.uk/>

“The single most useful thing you can do to ensure the long-term preservation of your data is to plan for it to be reused. Imagining it being re-used by someone else who has never met you and who never will meet you, will cause you to approach the creation and design of your data in a new light.”

Prof. Julian Richards, Director Archaeology Data Service

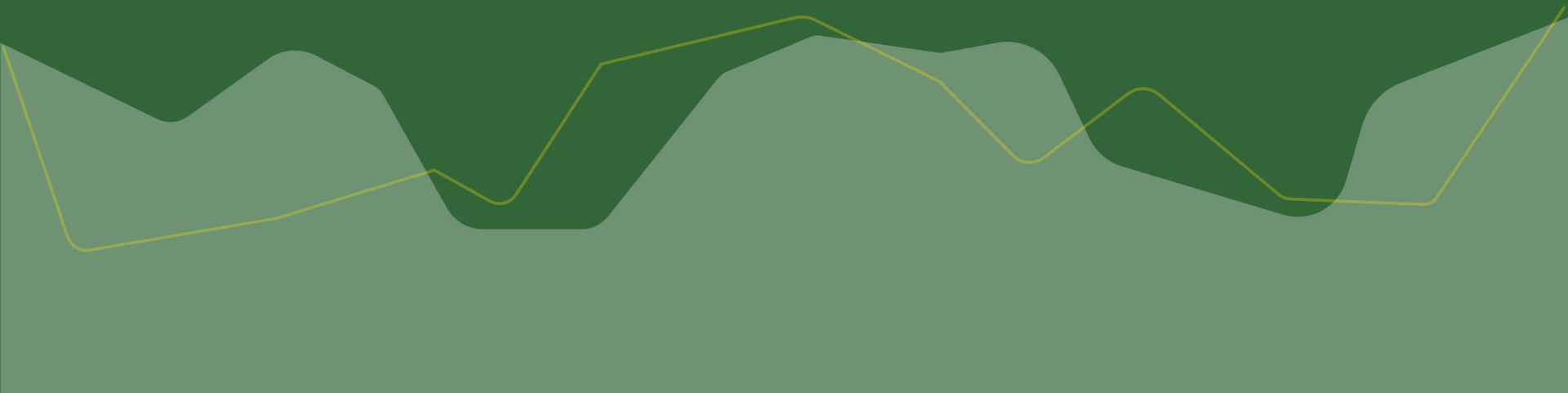
Break



Exercise: Create (part of) a data management plan for a fictitious research project

1. Review the project outline (coming up.....)
2. In your groups come up with a series of points that relate to your section of the data management plan
3. Complete that section in DMPTools
4. Report back to the group

Exercise



Project title: "Medieval Mysteries: Excavating the Ruins of Tintagel Castle"

Description:

Investigating the legendary Tintagel Castle, this project delves into medieval history and Arthurian legends. Archaeologists aim to uncover clues about the inhabitants' daily lives, trade connections, and the castle's role in the context of Arthurian lore.



"[Camelot Castle Hotel plus remains of monastery and castle - Tintagel aerial view](#)" by [John D Fielding](#) is licensed under [CC BY 2.0](#).

Project title:

“Medieval Mysteries: Excavating the Ruins of Tintagel Castle”

Methods

Tracing Trade Connections: The project focuses on Tintagel's role as a medieval trade hub, utilizing artefact examination to trace economic networks and connections with other regions.

Contextualizing Arthurian Lore: Archaeologists will scrutinize castle structures and artefacts to identify elements aligning with Arthurian legends, seeking to uncover tangible links to the mythical narrative.

Architectural Insights: A detailed analysis of Tintagel's architecture aims to reconstruct the castle's historical layout and functionality, providing insights into its evolving role in medieval society.

Public Engagement and Outreach: Recognizing public interest, the project emphasizes outreach activities and digital media to share discoveries, fostering a broader appreciation for Tintagel's medieval heritage.

“Medieval Mysteries: Excavating the Ruins of Tintagel Castle”



DMP Tool

<https://dmptool.org/>

Collaborate using DMPTool

Feedback



Q & A Session

