

Writing a good Data Management Plan: a workshop for research-active staff & PGRs

Organised by the Durham Research Methods Centre and the University Library

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<http://doi.org/ddn5>



Session plan

What is data
management
planning?
50:00 [1]

Try writing a
DMP
50:00 [2]

Feedback
25:00 [3]

Brief
summary
5:00 [4]

What is research data?

One definition: Anything which can be used to validate or replicate a research conclusion, or enrich understanding of the research process



How does the University classify information?



Information
Security
Classification
and
Handling
Standard

Public

Internal

Confidential - Personal

Confidential - Commercial

Secret



**General
Data
Protection
Regulation**

Ethics and
governance
toolkit

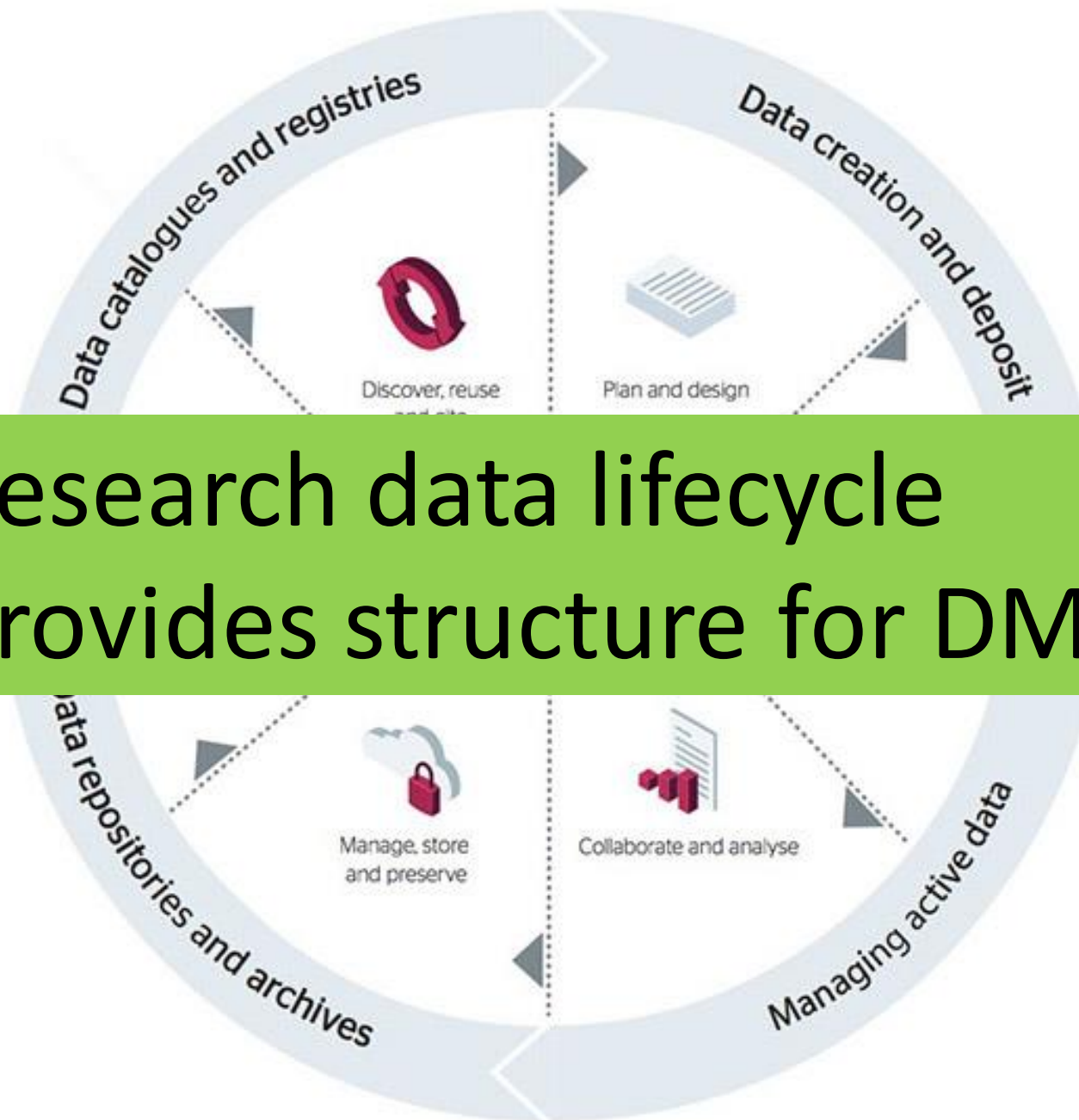


Working with
personal data

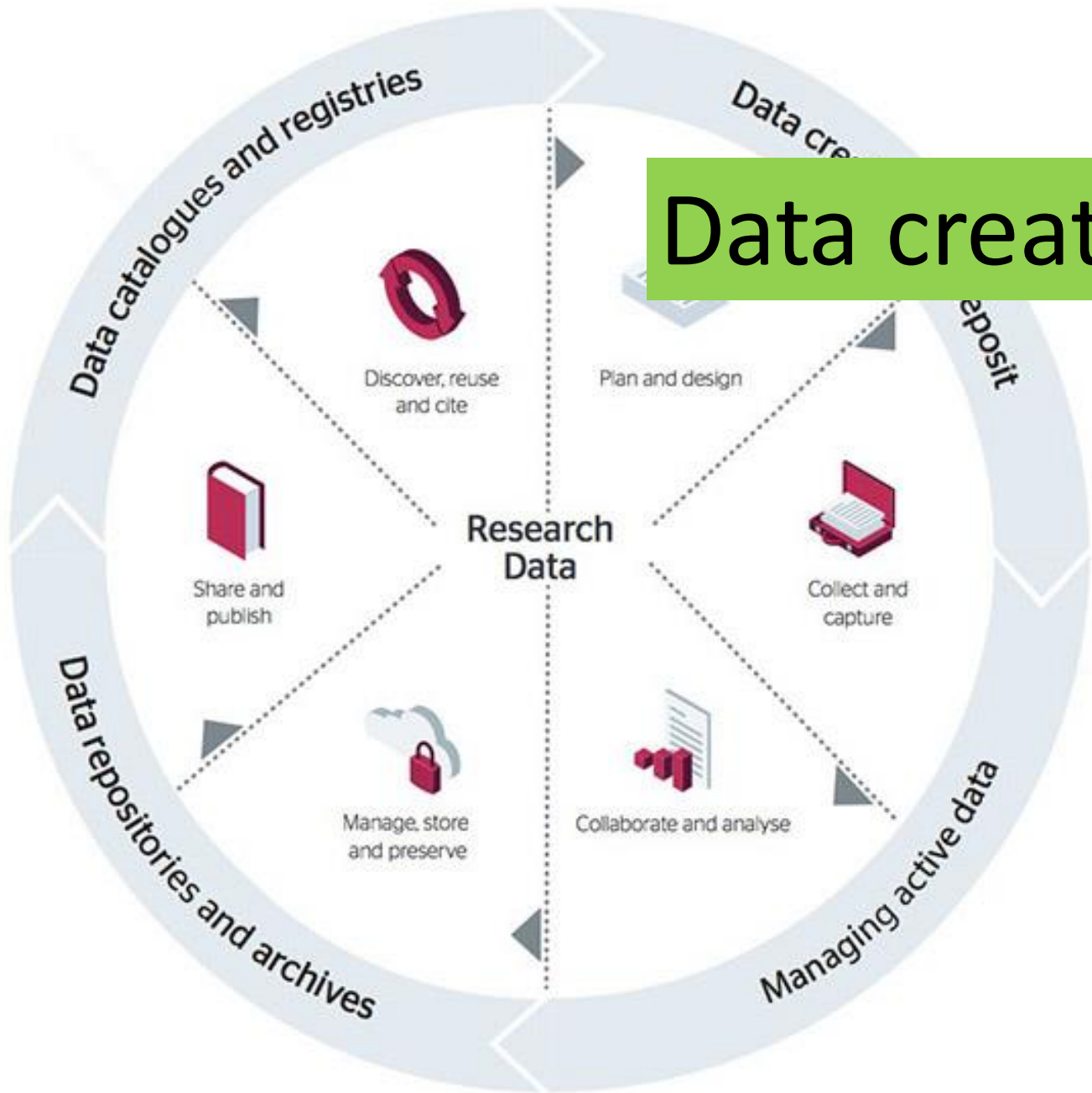
Part one:

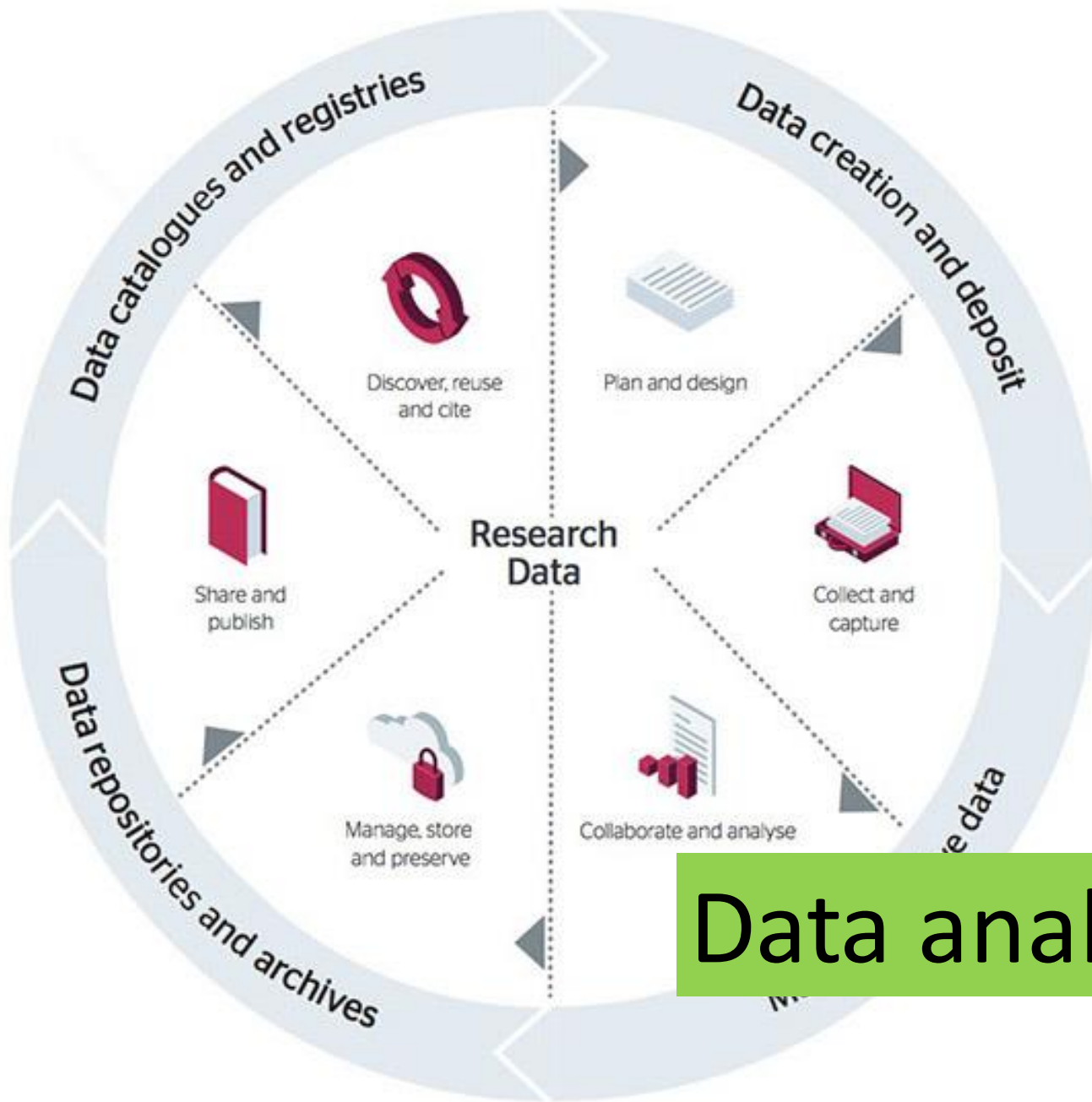
WHAT IS DATA MANAGEMENT PLANNING?

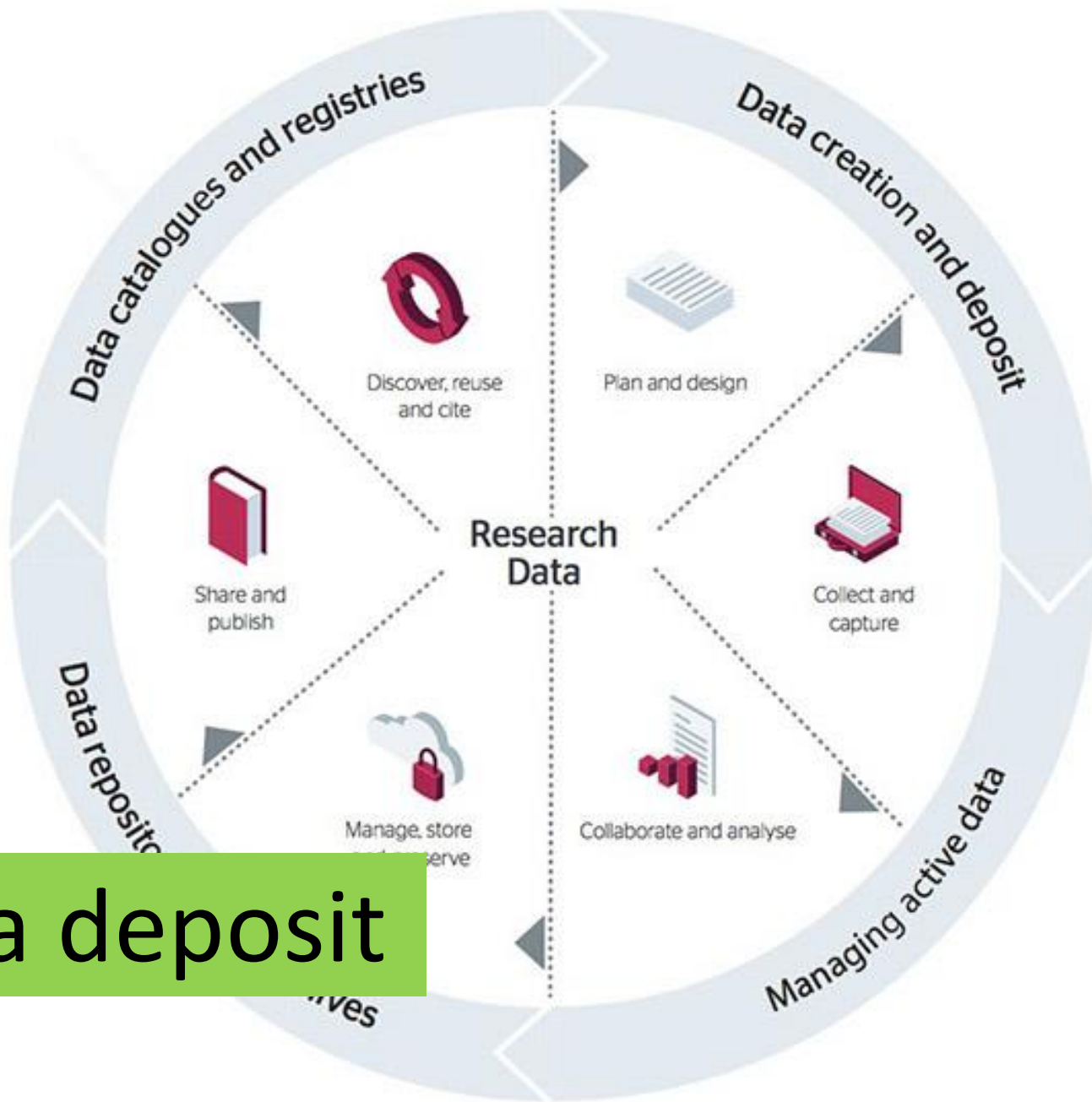
Research data lifecycle provides structure for DMP



Data creation

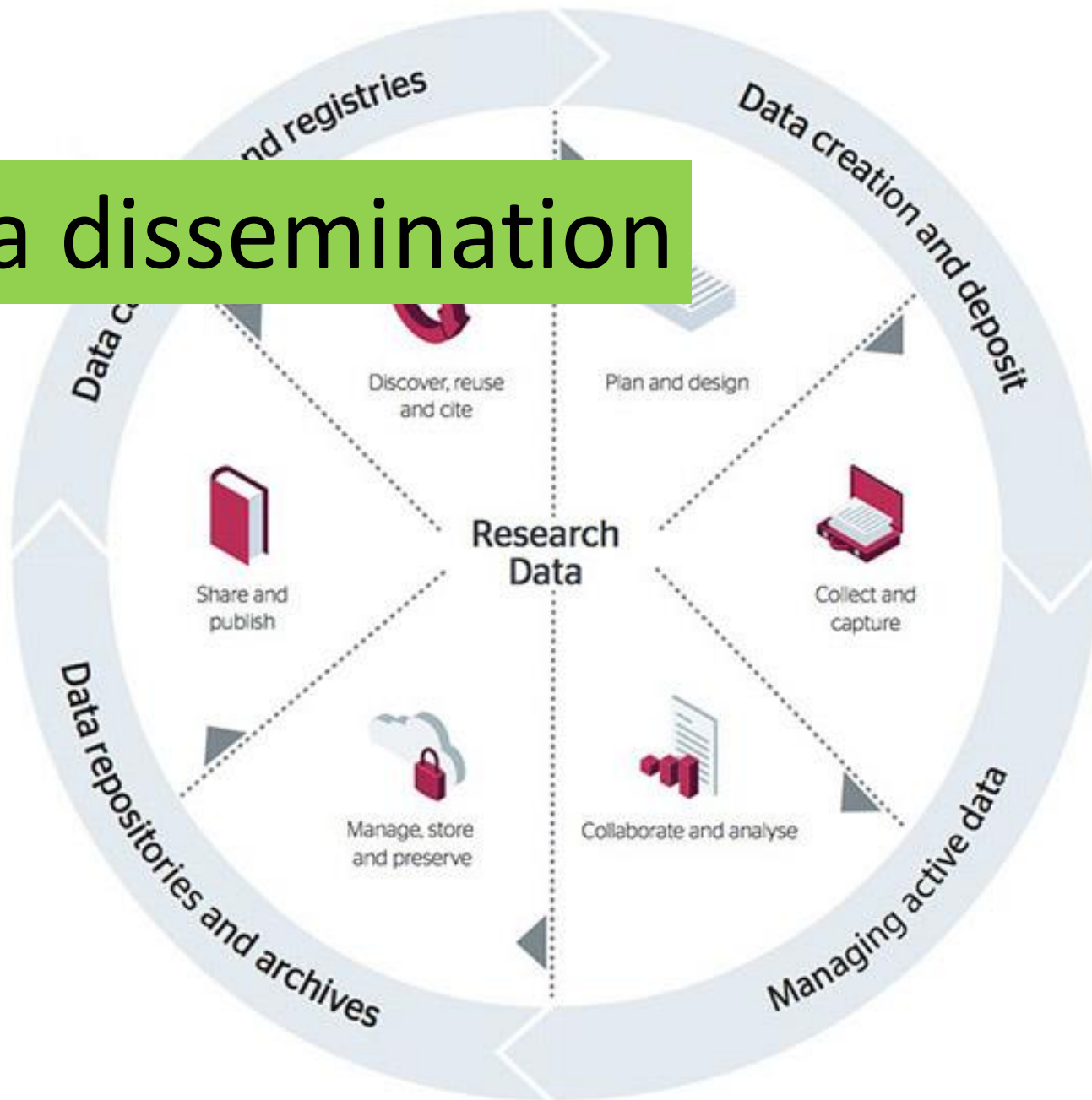






Data deposit

Data dissemination





DMP document: a communication tool

A close-up photograph of a dartboard. A single dart with a red and white striped flight is embedded in the bullseye. The dartboard features a central red bullseye surrounded by a blue ring, and various scoring zones in tan, blue, and red. The numbers '15' and '2' are visible on the right side of the board. A black rectangular box is superimposed over the center of the image, containing the word "Objectives" in white, bold, sans-serif font.

Objectives



Maximise
RE-USE
potential of
data



Keep personal,
sensitive
& confidential
data **SAFE**



PRESERVE

research data for longer

UKRI COMMON PRINCIPLES
ON DATA POLICY

6,25

6,00



Principle 1.

Publicly funded research data are a public good, produced in the public interest, which should be made **openly available** with as few restrictions as possible in a timely and responsible manner.

Principle 2.

Institutional and project specific data management policies and **plans** should be in accordance with relevant standards and community **best practice**. Data with acknowledged **long-term value** should be **preserved** and remain **accessible** and **usable** for future research.

Principle 3.

To enable research data to be **discoverable** and effectively **re-used** by others, sufficient **metadata** should be recorded and made openly available to enable other researchers to **understand** the research and **re-use** potential of the data. Published results should always include information on how to **access** the supporting data.

Principle 4:

UKRI recognises that there are **legal, ethical and commercial constraints** on release of research data. To ensure that the research process is not damaged by inappropriate release of data, research organisation policies and practices should ensure that these are considered at all stages in the research process.

Principle 5.

To ensure that research teams get appropriate **recognition** for the effort involved in collecting and analysing data, those who undertake Research Council funded work may be entitled to a **limited period of privileged use** of the data they have collected to enable them to publish the results of their research. The length of this period varies by research discipline and, where appropriate, is discussed further in the published policies of individual Research Councils.

Principle 6.

In order to recognise the intellectual contributions of researchers who generate, preserve and share key research datasets, all users of research data should **acknowledge the sources of their data** and abide by the terms and conditions under which they are accessed.

Principle 7

It is **appropriate to use public funds** to support the management and sharing of publicly funded research data. To maximise the research benefit which can be gained from limited budgets, the mechanisms for these activities should be both efficient and cost-effective in the use of public funds.



TEN RULES
FOR A GOOD
DMP



1. Determine
FUNDER
requirements



2. IDENTIFY

the data to
be collected

Types of data

Methods of data collection

Volume of data in bytes

File formats: open preferred

3. State how data will be

ORGANISED





4. Explain how data will be

DOCUMENTED

A graphic featuring a blue ribbon with gold dashed lines, a blue circular seal with a serrated edge, and the text "High Quality" in a gold script font.

*High
Quality*

5. Describe how
data **QUALITY**
will be assured



6. Provide a solid **STRATEGY** for short-term data storage and long-term data preservation

7. Define the project's

data POLICIES

Data (and software) licencing

Plans for sharing. Embargo?

Management of personal data



8. Describe how data will be
DISSEMINATED



9. Assign ROLES and RESPONSIBILITIES

10. Prepare a realistic B U D G E T





Public DMPs

Public DMPs are plans created using funder guidelines.

1. Choose funder template
2. Write detailed plan
3. Share plan

| Project Title | Template | Organisation | Owner | Download |
|---|---|---|----------------|---|
| Measuring understanding of biological data models. | University of Manchester Generic Template | University of Manchester | Yo Yehudi |  |
| Charters for Better Work Better Lives: An Indian Partner Network | University of Manchester Generic Template | University of Manchester | Wendy Olsen |  |
| Pentoxifylline for sepsis in preterm infants | Data management ZonMw-template 2019 | Other | sinno simons |  |
| Identifying Mechanisms of Failure of Cartilage Repair Surgery | University of Manchester Generic Template | University of Manchester | Gwenllian Tawy |  |
| Simulating tourism water consumption with stakeholders (SIMTWIST) | Data Management Plan NWO (English) | Wageningen University and Research Centre (Netherlands) | Bas Amelung |  |

Business for Peace: Conflict Prevention and the Private Sector in South and Central Asia

Project Details

Plan overview

Write Plan

Share

Download

expand all | collapse all

16/16 answered

Data Summary (1 / 1)

Data Collection (1 / 1)

Short-term Data Storage (2 / 2)

Guidance

3. How will the data be stored in the short term?

B *I*    

Data collected by commissioned projects will be stored in secure locations - paper datasets will be stored in locked filing cabinets in secure offices, and electronic data on encrypted harddrives. Electronic data will also be backed up to Durham University's GDPR-compliant Box cloud.

Save

Answered 1 month ago by nicholas.syrotiuk@durham.ac.uk

Guidance

Comments

AHRC

DCC

DU

Storage & security

Please familiarise yourself with the University's [information security](#) web pages. In particular you should become familiar with Durham's [Information Security Classification and Handling Standard](#).

If you are planning to use **Shared Research Storage (SRS)**, please include an estimate for research data storage costs in your grant



Public DMPs

Public DMPs are plans created using the DMPTool service and shared publicly by their owners. They are not vetted for quality, completeness, or adherence to funder guidelines.

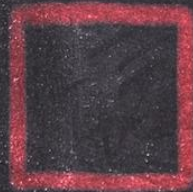


| Project Title | Template | Organization | Owner | Download |
|---|--|--|-----------------|----------|
| USGS CDR/ECV DMP | NSF-AGS: Atmospheric and Geospace Sciences | Non Partner Institution | Calli Jenkerson | |
| A unified approach to preserving cultural software objects and their development histories | NEH-ODH: Office of | University of | DMP | |
| Atmospheric CO2 Concentration | | | | |
| Daymet Follow-On: Surface Weather Data with Uncertainty Quantification for Terrestrial Ecosystem Process Models | NSF-AGS: Atmospheric and Geospace Sciences | University of California, Office of the President (UCOP) | DMP dmpcurator | |
| Multimedia Text Annotation for Students | NEH-ODH: Office of Digital Humanities | University of California, Office of the President (UCOP) | DMP dmpcurator | |
| CAREER: Parietal Cortex and the Transformation of Spatial Cognition into Action | NSF-BIO: Biological Sciences (2013-2015) OBSOLETE | University of California, Office of the President (UCOP) | DMP dmpcurator | |

<https://dmptool.org>

D M P

R E V I E W




Live Demonstration



Part two:

TRY WRITING A DMP

 Nick Syrotiuk · 1m

Feedback on trying to write a DMP

Please provide some reflections on your efforts to write a good DMP.

Feedback



<https://padlet.com/sefnyn/dmp>

Tool:


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

Feedback:

<https://padlet.com/sefnyn/dmp>

Part three:

**FEEDBACK: WHAT
WERE THE
CHALLENGES?**

 Nick Syrotiuk · 1m

Feedback on trying to write a DMP

Please provide some reflections on your efforts to write a good DMP.

Feedback



<https://padlet.com/sefnyn/dmp>

Part four:

BRIEF SUMMARY

Summary

Durham guidance, policies & support

UKRI common principles

Ten rules for writing good DMPs

Guidance within DMPonline



Thank you

Nicholas Syrotiuk



@DurhamRdm



<http://doi.org/ddn5>

References:

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Vines, T. H., et al. (2013): "The availability of research data declines rapidly with article age." Dryad Digital Repository. (dataset). DOI: <https://doi.org/10.5061/dryad.q3g37>

UK Research and Innovation (2018): "Guidance on best practice in the management of research data." UKRI web site.

Michener, W. K. (2015): "Ten simple rules for creating a good data management plan," *PLoS Computational Biology* 11(10): e1004525.

DOI: <https://doi.org/10.1371/journal.pcbi.1004525>

Piwowar, H. A., Day, R. S., & Fridsma, D. B. (2007): "Sharing detailed research data is associated with increased citation rate," *PLoS ONE* 2(3): e308.

DOI: <https://doi.org/10.1371/journal.pone.0000308>