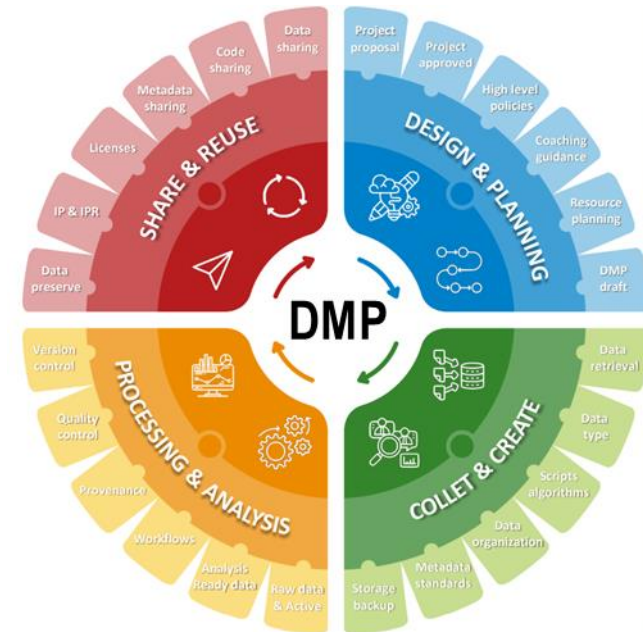


Module 4 – Data Management Plan

- DMP Rationale
- DMP Examples
- DMP Templates
- DMP Web-Tools
- DMP & SWOT analysis
- DMP/RMD Guidance



<https://doi.org/10.5281/zenodo.6482340>

RDM support community is growing

Service Center Research Data
is currently open to all DRESDEN-concept
partners *(Planned until 2025)*

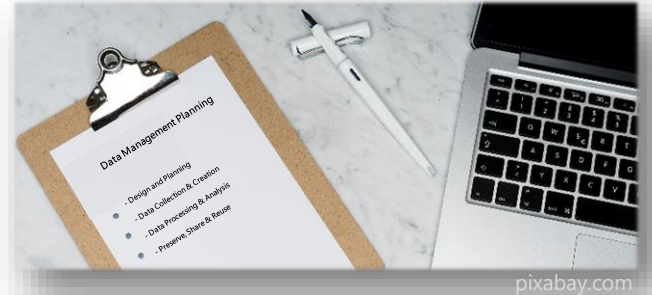


<https://tu-dresden.de/forschung-transfer/services-fuer-forschende/kontaktstelle-forschungsdaten/kontakt>

RDM vs DMP

RDM is knowledge management. It encompasses all the **knowledge bricks** to properly manage all the research outputs.

DMP is an **operative formal deliverable, project and funding specific**. It addresses all the specific data management requirements for your project.



Data Management Planning It Matters

“For data to be effectively managed it is necessary to consider **how the data will be managed long before** any data has been collected”.

“One **formal and effective way** to do this is the preparation of a Data Management Plan (DMP)”.

“DMPs as **projects deliverable** is often required by funders and institutions, especially for publicly funded research”.

“Living document” update regularly (6 months)



The screenshot shows a digital article page from Digital Discovery, a journal of the Royal Society of Chemistry. The article is titled "Data management matters" and is authored by Cerys Willoughby and Jeremy Graham Frey. The page includes a "REVIEW" label, a "Check for updates" button, and a "View Article Online" link. The article's DOI is 10.1039/d1dd00046b. The abstract discusses the challenges of data management in research and the importance of good data management practices for reproducibility and discovery.

Digital Discovery ROYAL SOCIETY OF CHEMISTRY

REVIEW View Article Online View Journal

Check for updates

Data management matters

Cerys Willoughby* and Jeremy Graham Frey

Cite this: DOI: 10.1039/d1dd00046b

Received 3rd December 2021
Accepted 3rd March 2022
DOI: 10.1039/d1dd00046b
rsc.li/digitaldiscovery

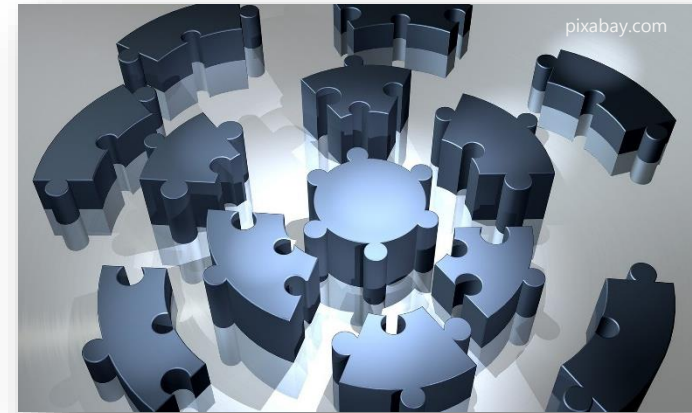
There are a number of issues that inhibit the replication and reproduction of research, and make it hard to utilise existing scientific data to make new discoveries. These include poor data management, competing standards, a lack of consideration of the usability of data, and a disconnect between the publication of science and the data and methods behind it. In this paper, we examine the benefits of good data management for not only ensuring that data are well organised, easy to find, and preserved for the future, but also for facilitating reproducibility and new discoveries in science. We consider the importance of documenting data and making them usable by both humans and machines, and consider the development of tools to support these processes in the future.

<https://doi.org/10.1039/D1DD00046B>

DMPs involve/get support - Stakeholders!

DMP is about collaboration and teamwork!

- Organization Data Governance
- RDM Support Service
- Funder Policy (DFG, BMBF, Horizon,...)
- Researchers (all roles), Data Managers
- IT infrastructure



DMP = Best Practice

- DMP is a Good Practice
- It benefits you!
- Planning save time/resources in the long run
- Shape the DMP to fits your Project

Not only Funder requirements)



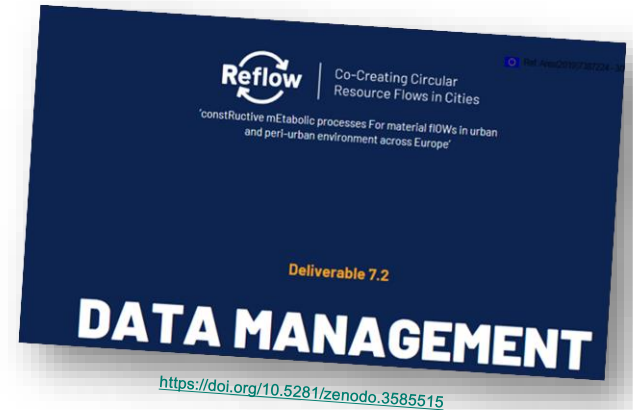
DMP examples

[DMP for heterogeneous data](#) (Surveys, Simulations, Observations, Experimental data)

[DMP for social science data](#) (E.g. Interviews)

[DMP for Ecological and Geoscience data](#)
(Geodata, models, time series, etc.)

More example [here](#)



Funders DMP Templates



erc

[European Research Council \(E.g. Horizon Europe\)](#)



[Deutsche Forschungsgemeinschaft \(DFG\)](#)



[Bundesministerium für Bildung und Forschung \(BMBWF\)](#)



[Science Europe DMP Guidance](#)



DMP Web-tools

 **DMPTool**
Build your Data Management Plan

UQ RDM

 **DMP ONLINE**

RDMO

easy.DMP
Create data management plans

argos

 **DSW**

DataWiz

 **ezDMP**
Data Management Plans Made Easy



DMP, Backward thinking

Think to those users not familiar with your data

- What the community would expect?
- Formats?
- Naming convention?
- Documentation?
- License?
- Etc...



DMP as SWOT analysis for SMART research outputs

Specific

Measurable

Achievable

Relevant

Time-Bound

To develop **strategic**
and
SMART goals



DMP as SWOT analysis for your research outputs



- DMP as research Quality Assurance tool (prevent/avoid/adapt)
- Maximize FAIRness research outputs
- Setting SMART goals
- Policy alignment



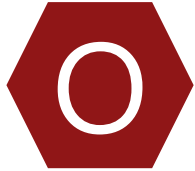
DMP as SWOT analysis for your research outputs



- Lack resources, Infrastructure
- Lack skills data producers
- Missing incentives
- More work load (at the beginning)



DMP as SWOT analysis for your research outputs



- Build Open Science skills
- Data culture change
- Impact, Research outreach and dissemination
- Capacity planning, service network
- Apply for eligible costs

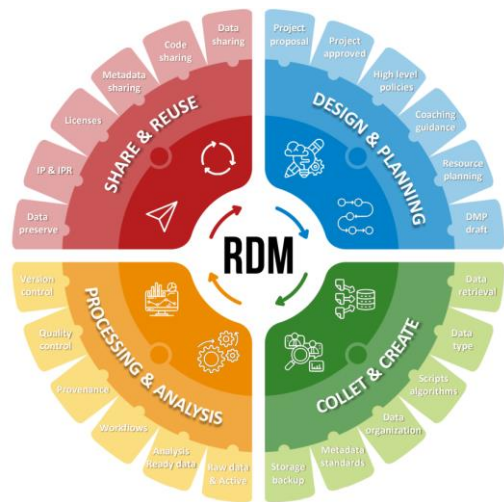


DMP as SWOT analysis for your research outputs



- Burden - DMP for the funders (not for you)
- Heterogeneous policies, Templates, funder requirements
- Data privacy





<https://doi.org/10.5281/zenodo.6482340>

DMP → Guidance

Let's Practice



<https://doi.org/10.5281/zenodo.6504928>



Leibniz Institute of Ecological Urban and Regional Development

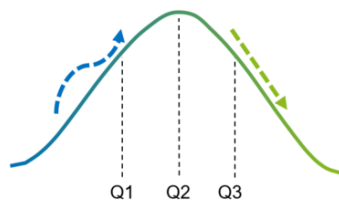
Raw data



Analysis ready data



RDM Best Practices



FAIR data story