Towards Open Science: Developing Workflows for Archiving & Publishing Data

How to achieve: “as openly as possible, as closed as necessary”?

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This work is marked with CC0

New: Policy on Research Data Management

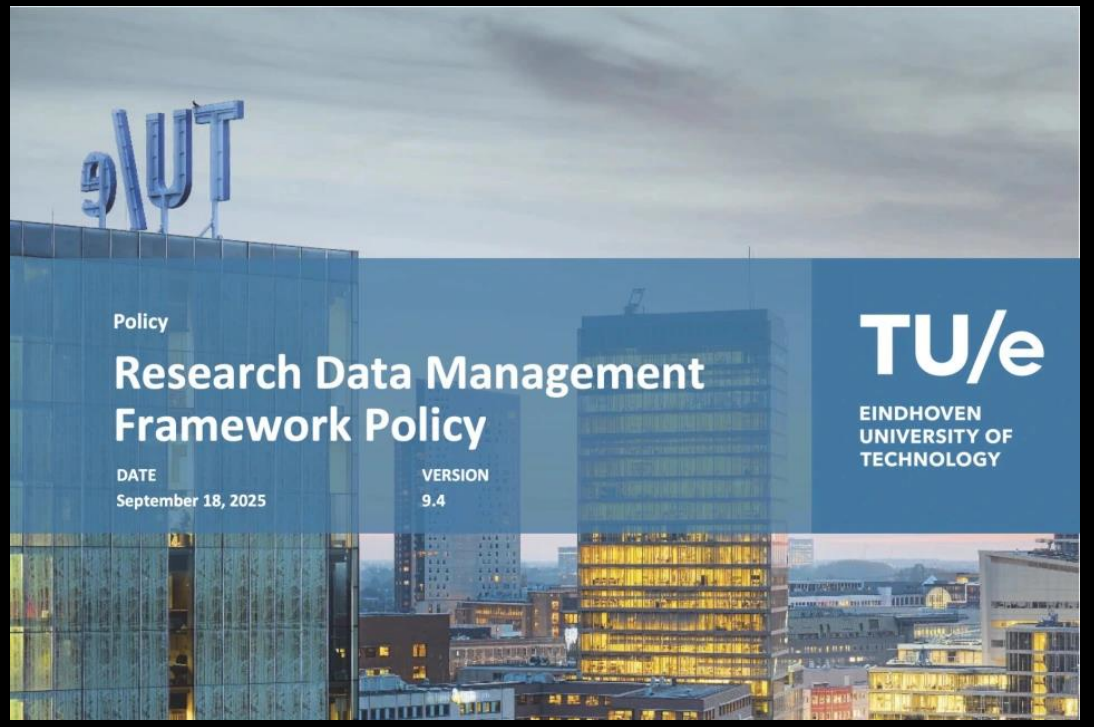
Most research projects need a Data Management Plan (DMP)

PhD candidates need to submit their DMP to Hora finita

More info:

TU/e Intranet: Research Data Management Framework Policy

The data stewards team offer presentations.
Contact: rdmsupport@tue.nl



Policy PDF: https://zenodo.org/records/15309047

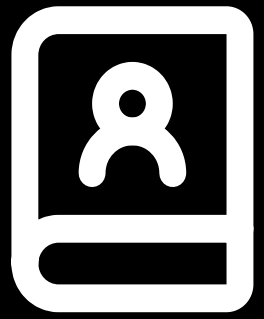
My story as a Data Steward does not make sense, except in the light of _____.

My story as a Data Steward does not make sense, except in the light of Open Science.

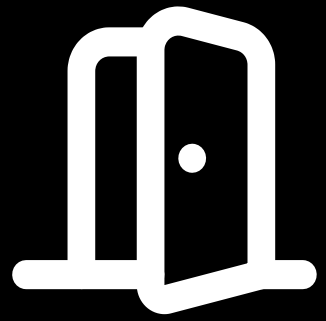
Open Science is not only about publications. It's also about data—making data FAIR.

What is FAIR data?

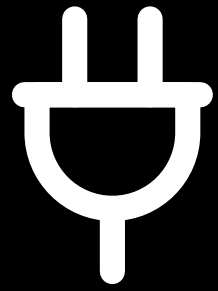
Findable



Accessible



Interoperable



Reusable

Open Data

FAIR Data

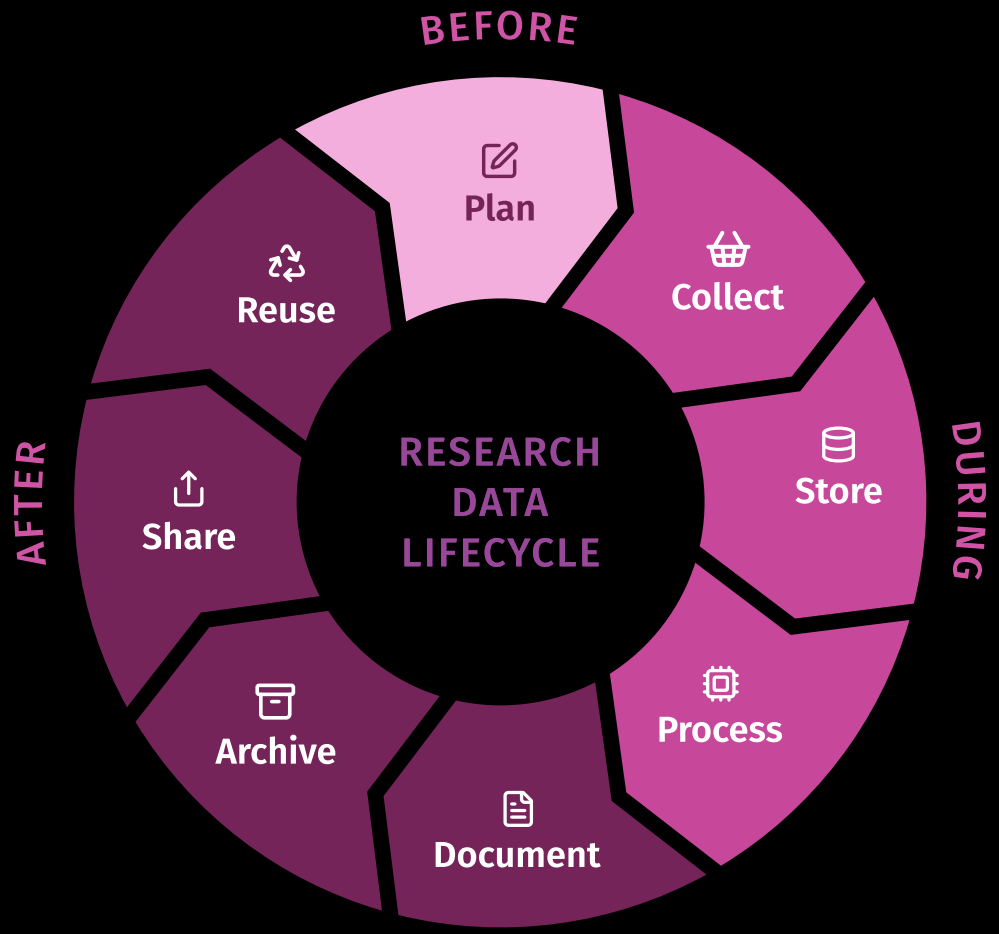
Research Data as a Public Good

OECD Principles and Guidelines for Access to Research Data from Public Funding (2007)

Data stewardship: Taking care of data well

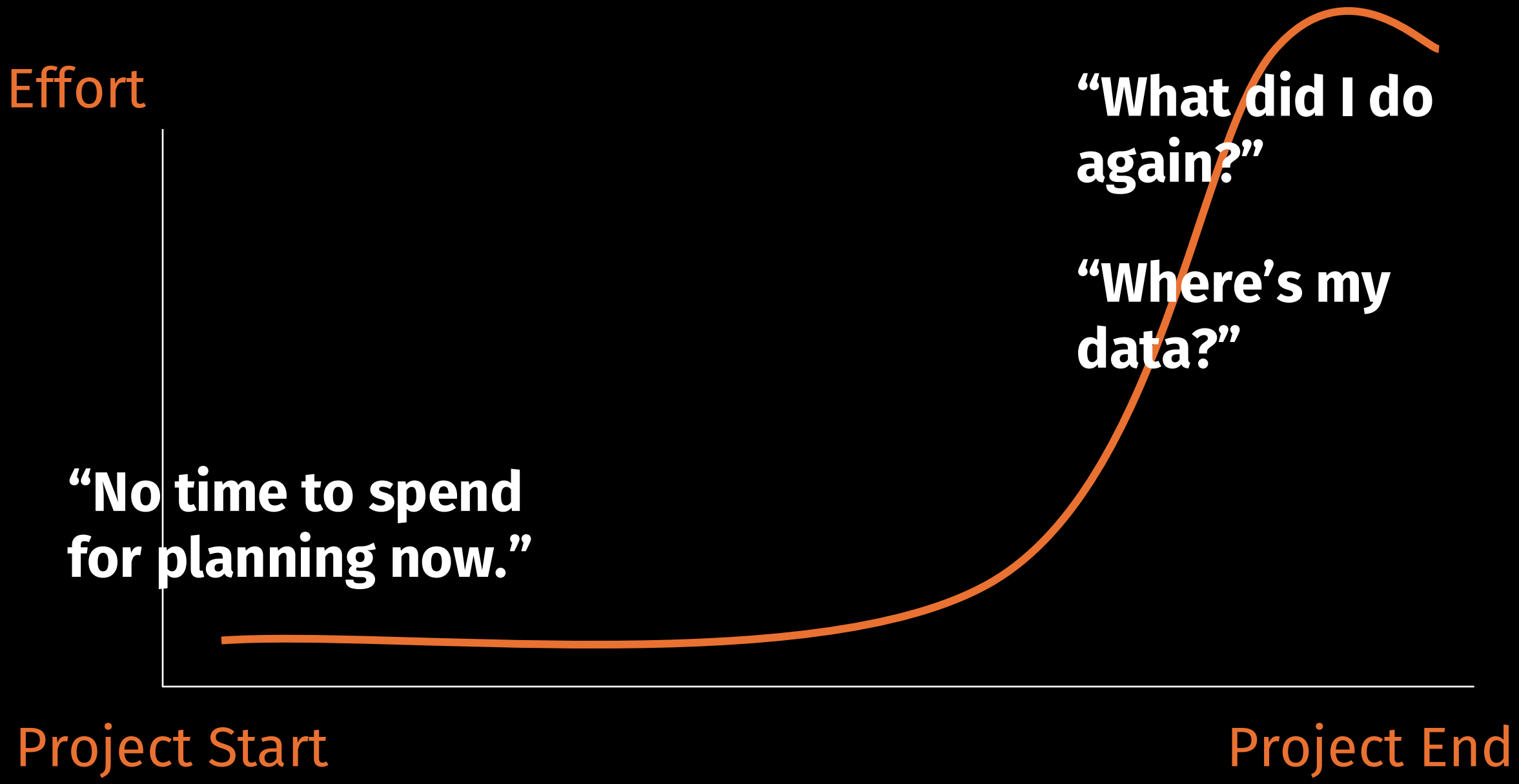
We used to mistreat research data

We can take care of data better in a lifecycle

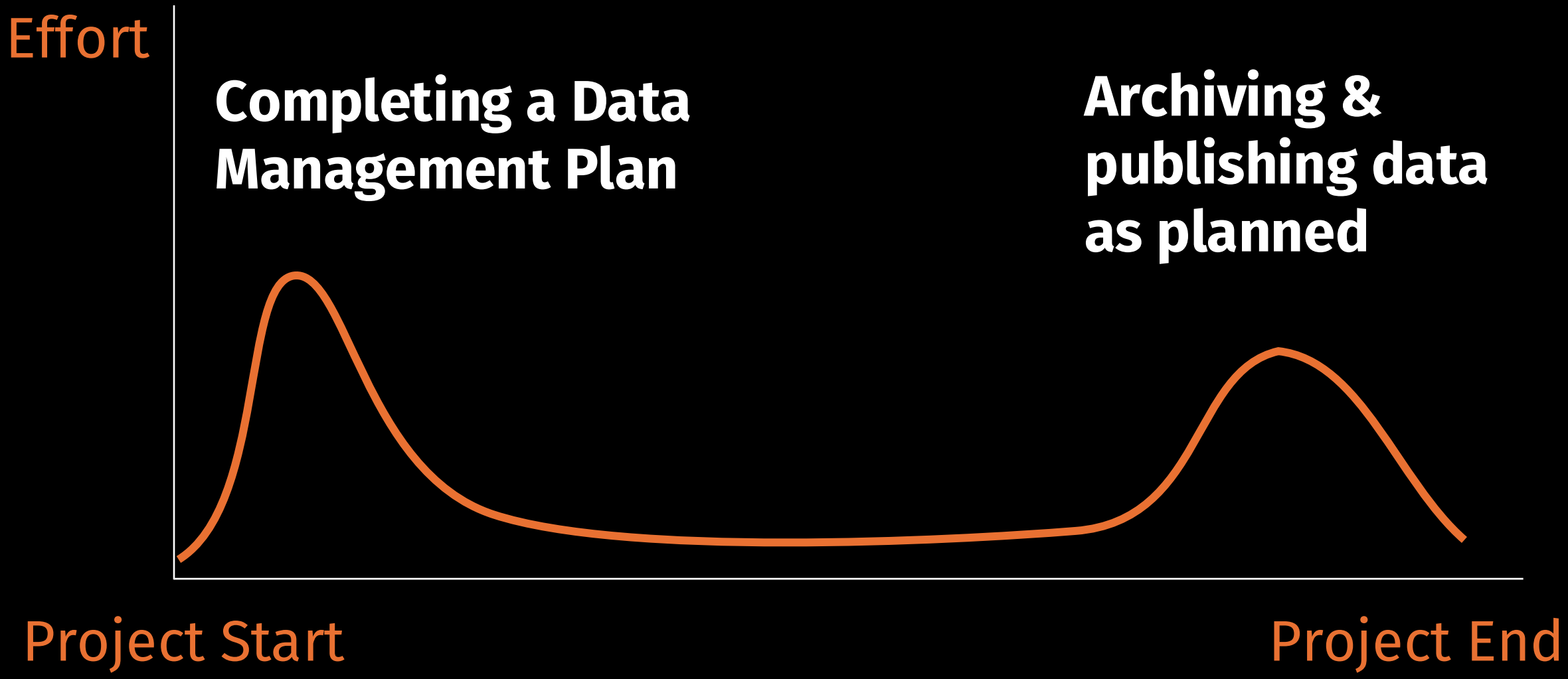


From TU/e Research Data Management Handbook: https://rdm.tue.nl/docs/intro

Plan ahead to avoid hassle at the end


Effort
“What did I do again?”
“Where’s my data?”
“No time to spend for planning now.”
Project Start
Project End

Ideal:
Start with the end in mind


Effort
Completing a Data Management Plan
Archiving & publishing data as planned
Project Start
Project End

What is archiving and publishing data?

Archiving:
To demonstrate the integrity of research

Each publication requires an archival package

Archival package is usually kept internal

TU/e Archival Solution is under development (RAPS)

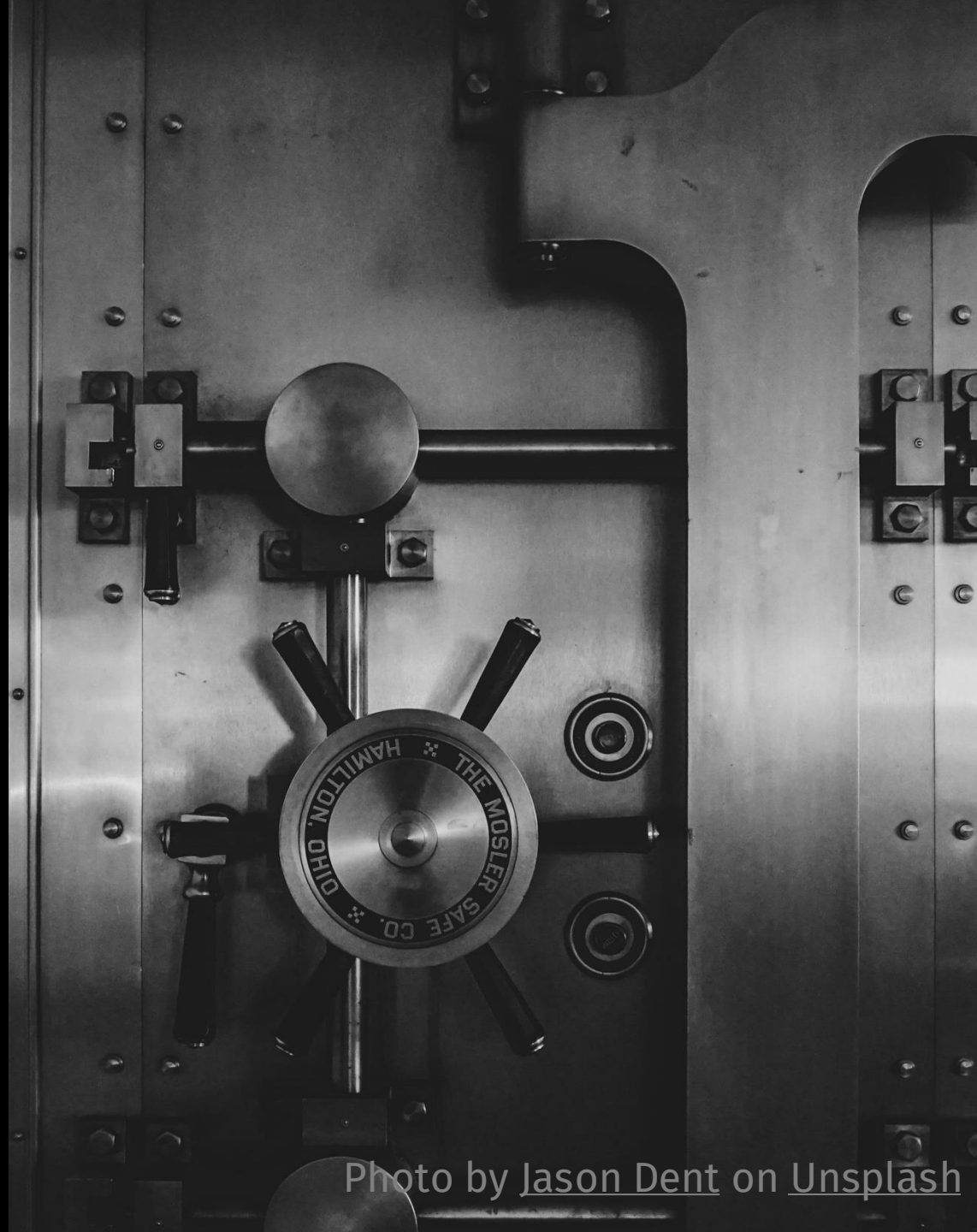


Photo by Jason Dent on Unsplash

Publication package: To share your data

The goal is to share data with future data users (including you in the future)

Snapwire, CC0, via Wikimedia Commons

	Publication	Archival
Goal	To share	To demonstrate integrity
Access	Public By default	Can be restricted

How can we archive and publish?

My suggestions for the workflow

(Note: Please chime in if they don’t work for you!)

Suggestion 1

Use Research Cockpit to register projects as soon as possible

https://cockpit.research.tue.nl

- Getting an ID for your project
- Completing a Data Management Plan

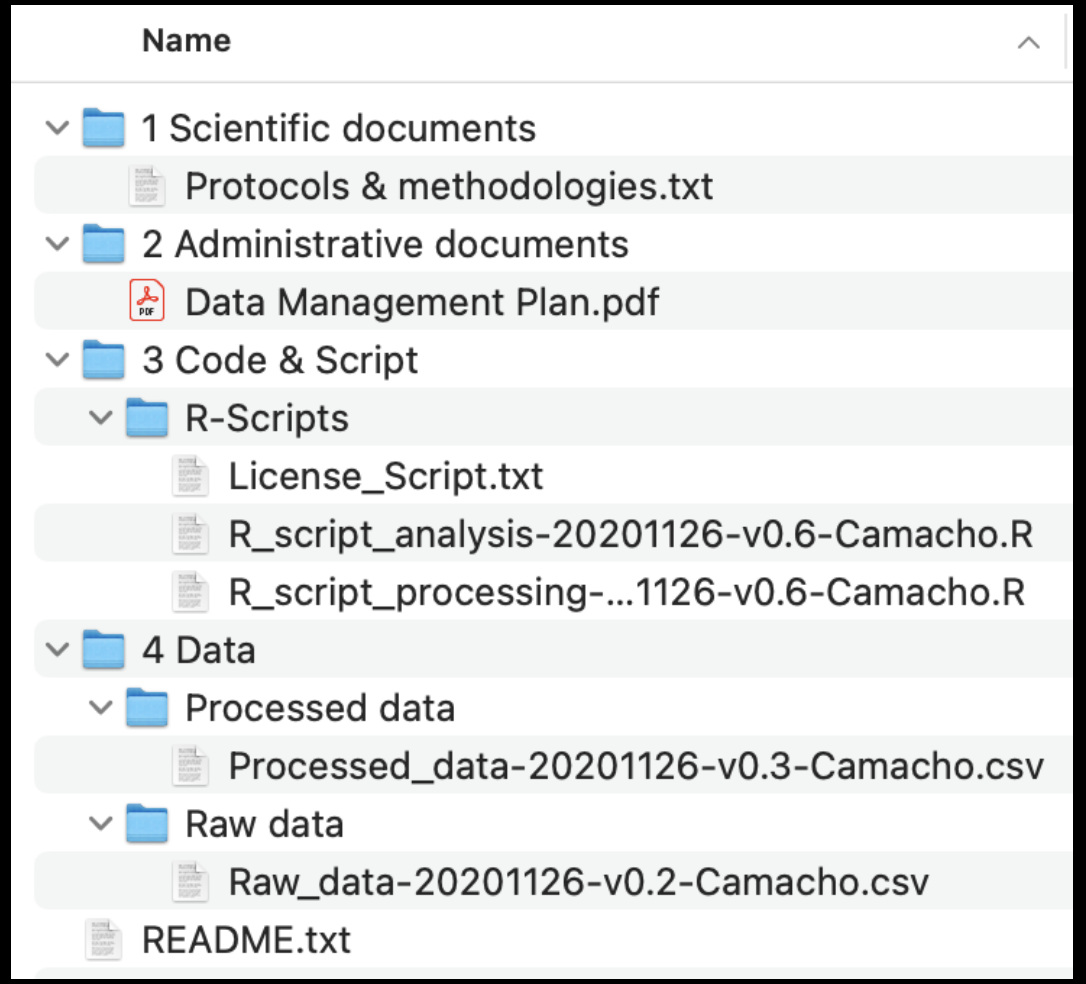
Suggestion 2

Reserve a DOI for the project beforehand

You can put the DOI when creating a Data Management Plan

Suggestion 3

Store data in a packaged way during research



TU/e Research Cockpit: Step-by-step guide to create an archival package

Suggestion 4

Decide on a default license for data that can be shared publicly

Data stewards' suggestion: CC BY 4.0 for data & MIT for code

Suggestion 5

Share early with metadata-only record without uploading data

(especially relevant for data that cannot be shared publicly)

Timeline	To Do	Resource
Project Start	Project Registered & DMP Created	Research Cockpit
	DOI Reserved	4TU.ResearchData / Zenodo
	Data Stored in a Packaged way	Data packaging guideline
Publication submitted	Metadata-only record published	4TU.ResearchData / Zenodo
Publication accepted	Data published	4TU.ResearchData / Zenodo
Project End	Data archived	TU/e RAPS (coming soon)

Suggestion 6

Reach out to the data stewards team for questions

rdmsupport@tue.nl

rdm.tue.nl

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CE&C, APSE
n.sunami@tue.nl

We all already do data stewardship

Further resources

More info on RDM

Data Stewards | Intranet

TU/e Research Data Management Handbook

Search Storage | Storage Searcher

Create a DMP/ ERB

Research Cockpit

Contact Data Steward

rdmsupport@tue.nl

TU/e RDM Policy

Policy PDF:
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