

Research Data at TU Delft

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4TU. CENTRE FOR
RESEARCH DATA

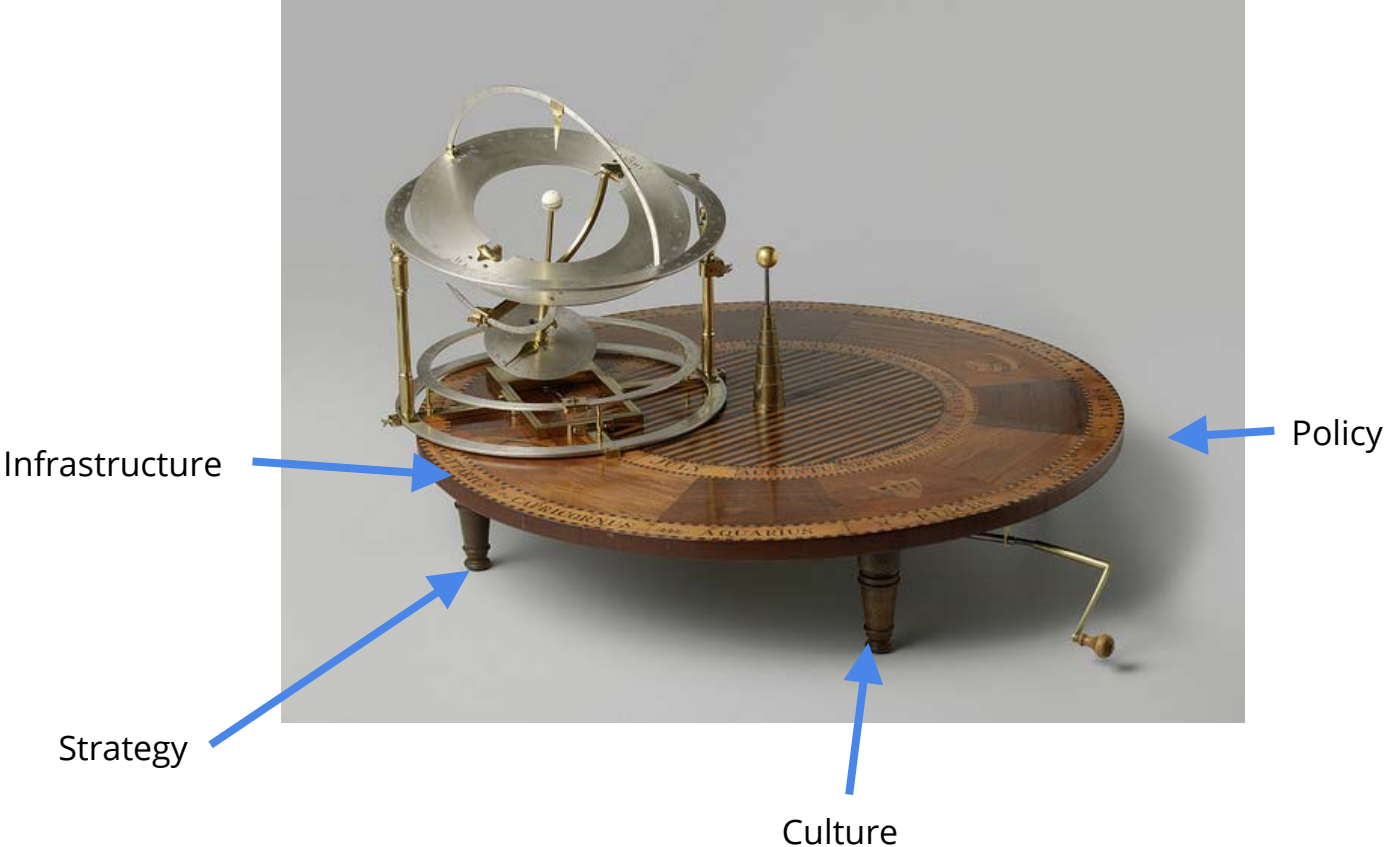


TU Delft



[Table orrery, Hartog van Laun, c. 1800 - c. 1808](#)

Successful Research Data Management requires



Policy

- Developing a TU Delft Research Data Framework Policy
- Defines general roles and responsibilities and issues such as ownership
- Each faculty will then develop its own policy, including
 - Data Management Plans
 - Phd Training
 - Obligatory Deposit

Avoids top-down approach

Culture of Data Stewardship

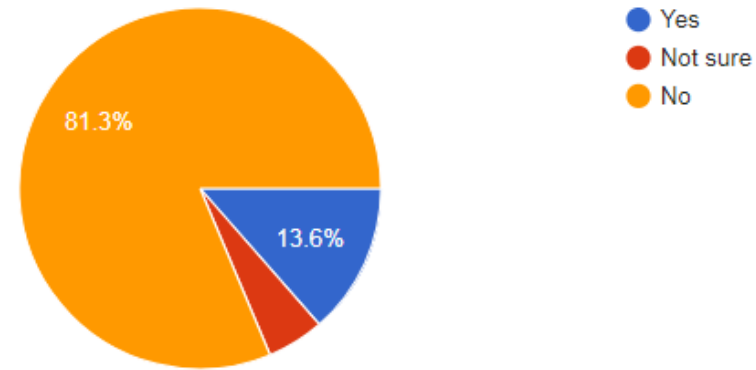
Some of the Issues

- How to build a culture of responsible Research Data Management (RDM)?
- Responding to strategic drivers from funders (esp EU)
 - EU / NWO (Dutch agency) Funding
 - European Open Science Cloud
 - Rewards and Recognitions for Open Science
- Ensuring transparency / reproducibility of research
- Not losing data !

Ongoing Survey
(Results as of Nov
2017)

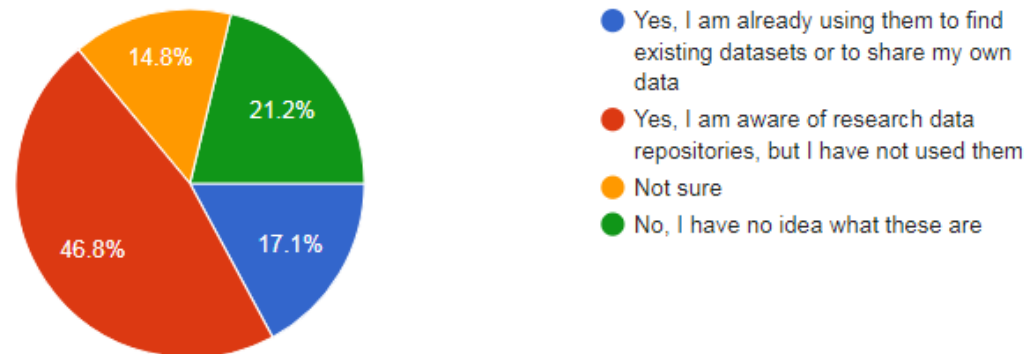
Did you lose any research data in the past year?

391 responses



Are you aware of research data repositories?

391 responses



Culture of Data Stewardship

- Data Stewardship project is embedding research data experts in each faculty
- Data Stewards is first point of contact in each faculty for RDM
- Extra support from data officers in the library
- Longer-term - training and embedding required to move to multiple Data Managers

More info: <https://openworking.wordpress.com/category/data-stewardship/>

Role of Data Stewardship

- Assisting in planning the collection, management and publication of data in new and ongoing projects
- Helping writing Data Management Plans (and Paragraphs)
- Linking to other sources of expertise in university (ICT, Legal, advice on Tools ...)
- Persuading researchers on the importance of data management

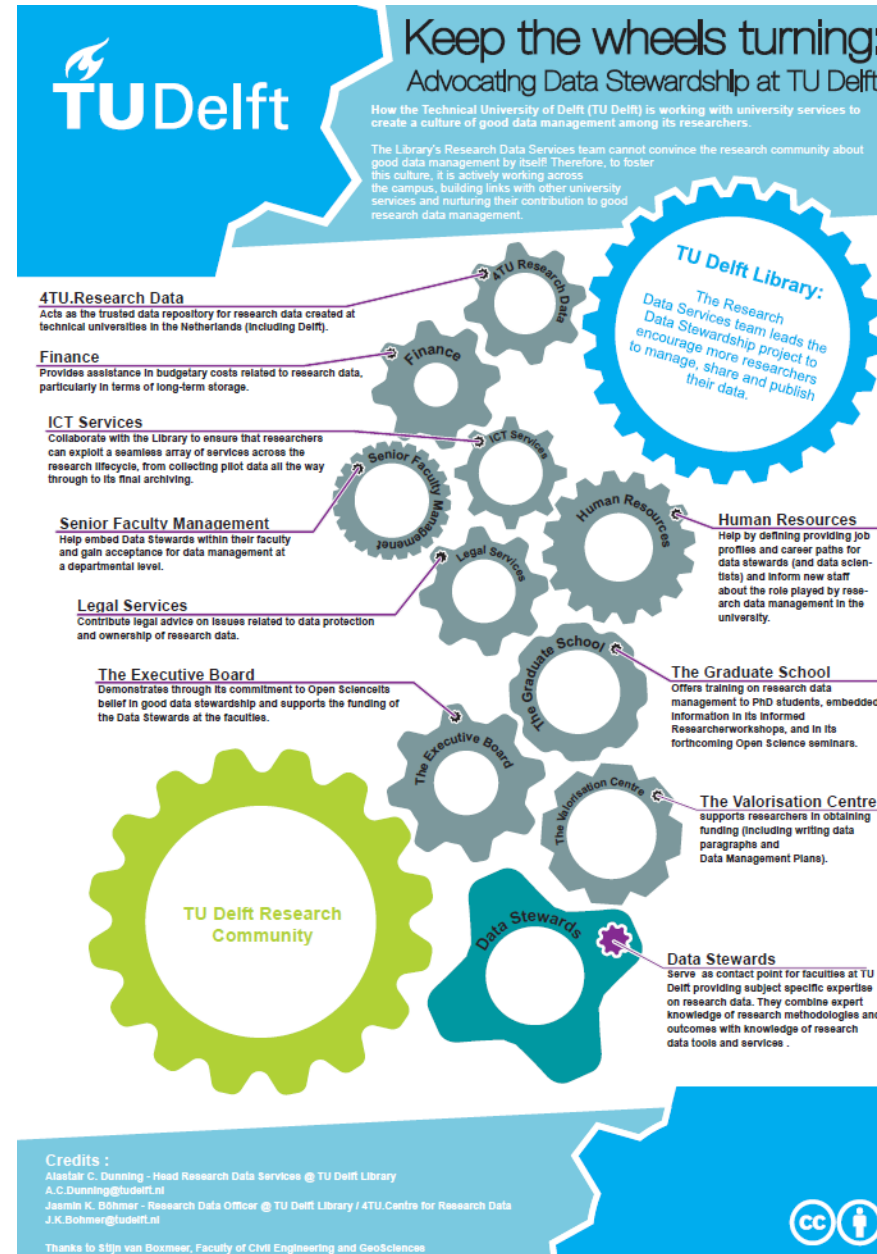
Role of Data Stewardship

- Understanding broader trends in research data management
- Running faculty or department specific training
- Providing advice on specific issues related to data and publication practices in faculty disciplines
- Gathering quantitative and qualitative metrics to assess the success of Data Stewardship

Strategic Work

Connecting to all university services

See [Full poster](#)



Infrastructure

Starting in 2008.
Supported by 3TU,
now 4TU Federation

[4TU.ResearchData](#)
has grown to
become one of the
largest university
data repositories

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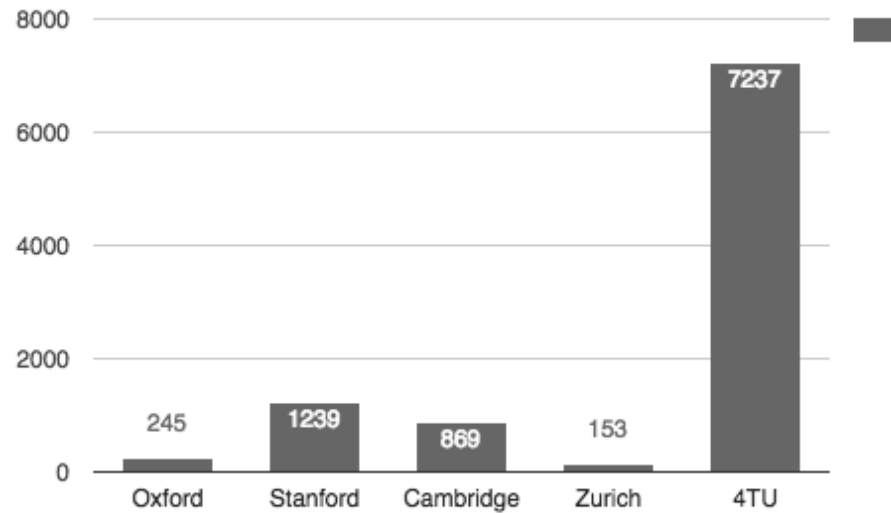
WAGENINGEN
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Research Data Repositories at selected universities

Number of datasets in each university's repository. (March 2017)



Providing a Data Archive

- We archive research data, guaranteed for 15 years
- Online form for do-it-yourself upload
- Each dataset is given a DOI
- Licencing - all data is currently open, via our own bespoke licence (similar to CC-BY-NC)
- Each dataset is reviewed
 - Metadata is checked and improved by us
 - Documentation is validated; but we do not assess the quality of the data
- Metadata schema is our own extended from DataCite scheme

Collections Policy

- Focus is on data from the technical sciences (DANS deals with social sciences and humanities)
- But we will accept anything from a bona fide researcher
- 4TU researchers can upload 100GB for free per year. 7000+ datasets, 30TB
- Other scientists - 10GB for free per year. Then one-off payment of 4.50 Euros per GB
- **EFPL scientists can use the archive today.**
- We have special interest in NetCDF

Staffing Model

4TU.Centre for Research Data

4TU Shared **Back Office**

- Development team (3.5)
- Data Engineers (1.5)
- Product Owner (1)
- Comms (1)
- Metadata Review (1.5)
- Head (1)
- Plus some Admin Support

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Each university has
**its own Front
Office** for Research
Data Support.

(Wageningen University is a
member of larger 4TU
Federation but does not
currently support the
archive)

Future Plans For archive

- Developing an API to allow programmatic access to archive
- Offering greater functionality for sharing data during project
- Wider range of publishing options, eg basic visualisation, restricted access
- Current technical architecture is unsustainable; need to work with third-party provider - conversations ongoing with suppliers

What Next ?

- Embedding Data Stewardship in faculties
- Systematic, discipline-based training
- Understanding broader roles required for good RDM
- Connecting to European Open Science Cloud and disciplinary infrastructures
- Understanding software usage
- Exploring re-use of data in depth - how close are we to Data Driven Scholarship?

Successful Research Data Management requires

