ARTS:
Research Data Management Cheatsheet

Research Data In Arts

In the arts, data is an evidence which is used or created to generate new knowledge and interpretations.[*]

Research data is extremely diverse and complex. They can be expanded at any time since there is no specified number of data required for research implementation. Collected data can be analyzed in various contexts and interpreted in different ways. Research data lasts for a long period of time both as reference and objects of study. Therefore, value of data tends not to depreciate over time!

Test: Are You a Data Management Expert?

A. Check Your Practices: yes

- I choose and collect my data. ☐
- I consider legal/ethical issues regarding my data. ☐
- I organize my research materials well so I can easily access and find them. ☐
- I choose the best way to store my data. ☐
- I systematically back up my research materials. ☐
- I archive my research materials well for future uses. ☐
- I license and share my data with the world. ☐
- I publish my data and get the citation from them! ☐

B. Would you be able to …   yes

- reconstruct the process of your research in five years? ☐
- prove the credibility of your research in five years? ☐

C. Have you ever …   yes

- lost your research materials because of system error? ☐
- lost an access to your materials because of outdated tools? ☐
- struggled to open materials incompatible with your devices? ☐
- received the warning: "There is not enough memory or disk space"? ☐

Count your score: A + B – C = **result**

Test result:

9-10 points:	A true data expert!
6-8 points:	Good data management.
4-5 points:	Just a little more effort needed.
3 or less points:	Learn more, turn the page to start!

Steps Towards Great Data Management

1 Plan
how you manage your data

Funders usually ask for a data management plan but it is also useful to your work.

Remember, that data managing costs can usually be included in the funding application

Data Protection and ethics
Be extra careful with personal data. Follow the legislation and ethical guidelines. Informed consent must be obtained for all types of human subjects research.

End-of-life
Not all data is needed forever. Plan to separate important from replaceable.

DMP (Data management plan)
is required by most of the main funders. Use DMPTuuli or benefit from its instructions.

Documenting data
Tools that document the creation process of your digital work transparently in the background (e.g. Artivity and WebRecorder)

2 Organise
your research data

```
dep
   archive
      research_group
         old_project
            project_deliverables
   project
      research_group
         username
            RDM-project
               background_material
               guides_drafts
               guides_final_versions
               interview_videos
               source_code
```

2017-08-22_RDM_Guides_University_A.zip
2017-10-24_Storage_Services_Comparison_Chart.csv
2017-11-07_ACRIS_import_dataset_screenshot.jpg
2018-01-08_Steps_For_Good_RDM_Sheet_v4.odp
2017-11-15_RDM_Presentation_Video.avi
README.txt

Use standard file formats*

Separate data in folders by type; final results vs. drafts, videos vs. images, etc…

Name data files short and relevant; about 25 characters, no special characters (& * % $] @), use underscores instead of spaces

Prepare metadata, a list of information you expect will be needed for your data to be understandable in the future. A readme file is a good start.

* Recommended file formats for archival: tinyurl.com/formatlist

3 Store and Share
your research data in a proper way

Service	Pros (+)	Cons (-)
Aalto Storage Space	Has automatic backups, good for confidential data. Supports internal sharing.	Sharing outside Aalto is not supported. Not suitable for high performance computing
Cloud (Google, OneDrive, Dropbox, iCloud)	Easy access and sharing	Not suitable for confidential data, no service guarantee
CSC IDA service	Large quotas available Reliable long-term storage	Slow for daily working
Own computer	Convenient for daily work	Risky for important information; may be stolen, broken, lost. Manual backups needed.
External disks, USB, etc.	Convenient for short-term storage	High risk for data loss (lost, broken). Manual backups needed.

More information in Inside: tinyurl.com/aaltostoragespace

4 Publish
make sure others can use your research data too

The research group leader (PI) makes the decisions on opening, taking into account the agreements, commercial interests, and law.

Remember, you get citation of shared data.

Repositories and archives
Choose a repository: Zenodo (EU-funded long-term repository for any data), FSD (Tietoarkisto), EUDAT B2SHARE, Figshare, etc. Consider one that gives DOI or other permanent identifier.

Licence
Choose a suitable licence, e.g. Creative Commons CC BY 4.0, for your data.

ACRIS (Aalto Research Information System)
A place to store small data sets, in addition to your CV, list of publications, and open access versions of your publications.

Anonymise personal data
Before publishing, personal data should be anonymised.