

Why do I need Research Data Management?

Short Answer

Research Data Management (RDM) comprises all processes of transforming, selecting and storing research data for long-term accessibility, availability, verifiability and re-usability.

Detailed Answer

Research Data Management is the care and maintenance of the data that is produced during the course of a research cycle. It is an integral part of the research process and helps to ensure that your data is properly organized, described, preserved, and shared. It accompanies the data along each steps in the [Data Life Cycle](#) ^[1]

The good scientific practice requires data to be made publicly available in order to meet the following aspects

- comprehensive documentation of research, processes and results for reproducibility,
- increased visibility and transparency (see also **F** in [FAIR principles](#) ^[2]),
- long-term access and permanent availability (see also **A** in FAIR principles ^[3]),
- standardization for interoperability and re-usability (see also **I** and **R** in FAIR principles ^[4]),
- trustworthiness and authenticity of science as foundation for further research, innovation, decision-making etc.

Thus, RDM ideally ...

- ... preserves all data & metadata,
- ... documents all processes comprehensively,
- ... does not restrict data re-use,
- ... uses open standards and formats,
- ... is agnostic about interpretation and implicit knowledge.

In general RDM comprises aspects of...

- ... information science,
- ... good scientific practice,
- ... specific domains,
- ... sustainability,
- ... finances,
- ... legislation & ethics.

See also:

- [FAQ: What are research data?](#)
- [FAQ: What is the data life cycle?](#)
- [FAQ: Where do I find information & best practices about data management?](#)