Research Data Management:
An introduction

Research data management covers all aspects of working with research data, including the planning and implementation of activities associated with data capture, processing, analysis, and sharing.

The School considers the management of research data to be an integral part of good research practice that protects the intellectual and financial investment made its creation and ensures that research findings can be validated and reproduced.

What resources should be managed?

All resources used during the research process require management, irrespective of whom collected them, how they were obtained, when they were acquired, and what form they take. These include:

- Qualitative material, including audio recordings and transcripts of interviews, focus groups, and oral histories;
- Quantitative data held in spreadsheets, databases and other structured forms;
- Models for simulations and experiments
- Questionnaires, interview guides and other research tools
- Field notes produced during ethnographic research
- Code such as source code, processing scripts, executable tools and similar resources

Priority should be given to resources that are needed to validate and reproduce your research.

Why plan data management?

Planning data management can benefit your research in several ways:

- Ensure quality: you can capture data necessary for your research and analyse it more easily

- Save time: you will have a better understanding of the tasks that must be performed, requirements to be met, and how much time they will require

- Manage risk: you can recognise problems in advance and take steps to avoid or reduce the likelihood that they will occur

- Make research easier to verify & reproduce: researchers will have greater confidence in your research if the data on which it is built can be checked and confirmed.

- Ensure ethical and legal compliance: study participants, collaborators, sponsors, funders and other needs can be recognised in advance and addressed accordingly

Failure to consider data management issues in advance may result in unexpected consequences; you may be unable to fulfil your research objectives or obligations, may encounter unexpected challenges, or may require more resources (staff time, funds) than anticipated.

Further information:
- Australian National Data Service: What is Research data? http://www.ands.org.au/guides/what-is-research-data
- Boston University Libraries: What is Research Data? http://www.bu.edu/datamanagement/background/whatisdata/
- EPSRC: Benefits of data management and sharing http://www.epsrc.ac.uk/about/standards/researchdata/scope/
- Beagrie & Pink, 2012: Benefits from Research Data Management in Universities for Industry and Not-for-Profit Research Partners http://opus.bath.ac.uk/32509/