

DMPs: Aligning use to motivations and intended outcomes

Kathryn Unsworth¹, Dan Barr², Nick Smale², Chris Erdmann³, Sue Cook⁴, Libbie Blanchard⁵

¹Australian National Data Service, Melbourne, Vic. kathryn.unsworth@ands.org.au

²University of Melbourne, Melbourne, Vic. dpbarr@unimelb.edu.au

²University of Melbourne, Melbourne, Vic. nicholas.smale@unimelb.edu.au

³North Carolina State University (NCSU), Raleigh NC, USA. cerdmann@

⁴CSIRO, Perth, WA. suecooklibrarian@gmail.com

⁵CQUniversity, Rockhampton, Qld. e.blanchard@cqu.edu.au

ABSTRACT

Significant advocacy and technical enterprise have been directed towards the development and use of data management plans (DMPs) for research. As such, DMPs are increasingly seen as a key component of data infrastructure. Fundamentally, DMPs are a mechanism for researchers to state their intentions on how they plan to manage their data across the data lifecycle. However, the agents and motivations driving DMP use differ, providing us with a number of use cases to examine and interrogate. DMP use is now driven by multiple agents: funding bodies to encourage data sharing, researchers themselves as a project management tool, and institutions to increase researcher efficiency, for business intelligence or as a connection point for systems integration. The purpose of this BoF meeting is to bring together institutional representatives who have implemented DMPs, or who are currently involved in discussions to implement them, and to provide a forum for exploring some of the motivations and use cases. Questions posed to presenters and the audience include: Why implement a DMP tool? Does DMP use align with an agent's motivations and more importantly with intended outcomes? What are the expected outcomes? Enterprise-level DMP tools (one-size-fits-all) – what is their place in the landscape? Is 'best practice' for researchers the aim or a hoped for by-product?

INTRODUCTION

In recent years, significant advocacy and technical enterprise have been directed towards the development and use of data management plans (DMPs) for research. Considerable IT and library resources have been dedicated to the construction of data infrastructure and policy. Increasingly, this infrastructure supports the implementation of DMPs.

A 'data management plan' is a document that provides researchers with a mechanism for stating how they intend to manage the data associated with a research project, either holistically or targeted at particular stages of the data lifecycle. Multiple agents have driven DMP use: funding bodies to encourage data sharing, researchers themselves as a project management tool, and institutions to increase researcher efficiency, for business intelligence or as a connection point for systems integration. The motivations of these agents have become blurred, leading to the representation that DMPs are simply 'best practice' for researchers, and that superior DMPs are those that cover the minutiae of the entire data lifecycle.

Little work has gone into delineating the different use cases of DMPs, identifying the differing motivations of those that mandate them. The creation and maintenance of DMPs necessarily imposes administrative load on already time-poor researchers and resource-strapped institutions and funding bodies. As we work with researchers within the research ecosystem, where rigour and empirical evidence are central to research method, it raises the question, should there not be an evidence-based inquiry into the effectiveness of DMPs in relation to the motivations of those that implement them?

In the absence of such evidence, we can nevertheless interrogate current DMP implementations (potential and established), to determine the various use cases and approaches taken. In doing so, the presenters and audience will discuss the various approaches taken by Australian institutions, and how these compare with international efforts. Why implement a DMP tool? Does DMP use align with an agent's motivations and more importantly with intended outcomes? What are these expected outcomes? Enterprise-level DMP tools (one-size-fits-all), and their place in the landscape. Is 'best practice' for researchers the aim or a hoped for by-product? What might the next generation of DMPs look like? What voice should researchers have in their development?

OUTLINE FOR BOF MEETING

The purpose of this BoF meeting is to bring together institutional representatives who have implemented DMPs, or who are currently involved in discussions to implement them, and to provide a forum for exploring some of the motivations and use cases as follows:

1. Change management mechanism, to achieve researcher 'best practice' in data management
2. Institutional business intelligence tool
3. Project management tool used organically and created by researchers to capture their data management methodologies and methods during data collection, processing, interpretation and analysis
4. Response to funding bodies' requirements for data management and sharing
5. Integration point for research systems' connectivity, for example with ethics, risk management, storage allocations, research reporting, research promotion and archiving

The BoF meeting will consist of short presentations on approaches to institutional DMP implementation, including a look at US perspectives on DMPs by our guest presenter from the Harvard-Smithsonian Center for Astrophysics, followed by discussions with presenters and the audience.

- Convenor – 3 minutes. Brief introduction to the presenters and the topic
- Presentations – 16 minutes. 3 up to four minute lightning talks by each institution and a four minute talk by guest presenter
- Discussion – 35mins. Open discussion related to DMP implementations, the use cases, approaches being taken by institutions, intended outcomes and where to next.

STREAM: MANAGING, PUBLISHING AND FINDING DATA.

ABOUT THE SPEAKERS

Kathryn Unsworth is a Data Librarian with the Australian National Data Service (ANDS) based in Melbourne at Monash University's Caulfield campus. Kathryn engages with a number of Australian universities, providing research data management related advice, support and training. Additionally, Kathryn works in partnership with institutions to deliver ANDS-funded projects. She has many RDM-related interests including, DMP implementations and their value in changing researcher behaviours and practices, IP and licensing issues for data, ethics and informed consent, and up-skilling data librarians for transition into data science roles.

Daniel Barr is the Acting Director of the Office for Research Ethics and Integrity at the University of Melbourne. Dan was awarded an Honours degree in Science and a PhD in Immunology from the University of Melbourne. After completing post-doctorate research in proteomics, Dan obtained a role in research management at Melbourne where he has made key contributions to policy, oversight and education in research ethics and integrity.

Nick Smale is a Project Officer at the Office for Research Ethics and Integrity at the University of Melbourne. Nick received an honours degree in evolutionary biology from the University of Adelaide, and a Master of Biomedical Science from the University of Melbourne for research at the Bionics Institute into developing an objective method of programming cochlear implants. Nick's present work at Melbourne focuses on the promotion of research integrity.

Christopher Erdmann is an author, developer and experimenter in the areas of digital libraries, social networking, library UX, interactive technologies, bibliometrics and data services in libraries. He has previously worked for organizations such as the European Southern Observatory, Supreme Court of the US, United Nations, University of Washington, Smithsonian (NMAH) and CNET. Chris holds an MLIS from the University of Washington iSchool and a BA from the University of California, Davis.

Sue Cook is a Data Librarian with the Research Data Support team of CSIRO Information Management and Technology. Formally from a science background before becoming a librarian, she has been with CSIRO since 2006. She has interests in new models of science scholarly communication, data management and using social media for professional development.

Libbie Blanchard is Library Leader – Research at CQUniversity Australia based at their North Rockhampton Campus. Libbie has been with CQUniversity since 2006 and previously worked as a Research Liaison Librarian before taking on her current role in late 2014.