

Changing the Culture of Data Management Plans: making DMPs machine-actionable and FAIR

Sarah Jones (1), Stephanie Simms (2), Daniel Mietchen (3), John Chodacki (2), and Tomasz Miksa (4)

(1) Digital Curation Centre, (2) California Digital Library, (3) Data Science Institute, University of Virginia, (4) SBA Research, Vienna

This proposal is for an interactive session to define 10 Simple Rules for Active DMPs. We will introduce participants to the concepts of FAIR and machine-actionable DMPs and then brainstorm the key principles to adhere to. The final part of the session will involve reaching consensus.

The current form of DMPs fails to recognise the value of the information they contain or put this to good use. Moreover, the predominance of free text responses makes it difficult to extract meaningful, structured information. The exercise of developing a DMP often becomes administrative and undermines the benefits to be gained from managing data. We envisage a different future for DMPs, where information is exchanged across research systems, and the plans are regularly updated, living documents. By making DMPs active and supportive of the research process, we will derive new value and meaning for researchers.

We've started to address the question of how we develop this new workflow but want to bring the challenge to the FORCE11 community to consult with a diverse range of stakeholders on how we can change the culture of DMPs so they become machine-actionable and FAIR.

In February 2017, we ran a workshop at IDCC to gather use cases for machine-actionable DMPs. The outcome was a white paper where we identify eight priority areas. Since then, Working Groups have formed through the Research Data Alliance to develop common standards for DMPs and frameworks for publishing or exposing DMPs. We have also started to define high-level principles from our white paper and are collaborating with the FAIR DMP working group to propose 10 Simple Rules for Active DMPs.

Suggested agenda:

- Introduction to FAIR, machine-actionable DMPs (10 mins)
- Group brainstorming to identify key principles (40 mins)
- Presentation of draft principles and identification of gaps (25 mins)
- Consensus building (15 mins)