DMPonline – Machine-actionable Plans

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DMPonline Development Priorities

- Interoperability
- Automation
- Alignment with RDA DMP Common Standard
- Alignment with FAIR principles
- Facilitate Open Science
- Measuring against 10 principles for machine-actionable data management plans (maDMPs)

Recent Releases

- Question Identifiers – enhancement to reporting capabilities for API V0
- Recently Released – Automated Completion of Project Details through integration with Research.fi API

Forthcoming Releases Summer 2024

- Automated Completion of Project Details through integration with Dutch Research Council NWOpen API, Swedish Research Council Swecris API, UKRI GtR API
- APIs for Research Outputs - Integration with OpenAIRE Graph Search API
- Research Organisation Registry ID for organisation, Integration with Research Organisation Registry API
- Integration with RSpace, Electronic Lab Notebook, www.researchspace.com

Machine-actionability Through Integration

- Standardised
- Structured
- Machine-readable
- Increased use of PIDs
- Controlled vocabularies
- A wider range of integrations
- Some integrations suggested by the DMPonline Community include: DataCite metadata standards FAIR Sharing API, RO-Crate, Galaxy, Esploro (CRIS), Pure (CRIS), Symplectic Elements (CRIS), euroCRIS, Exlibris, Figshare, Sherpa Juliet, DataverseNL, DANS Data Stations, User authentication with ORCID number

Machine-actionability Through Responsible AI

- Automatic meta-data extraction
- Automatic summarisation
- Machine-translation

How do Open, FAIR and RDM Intersect
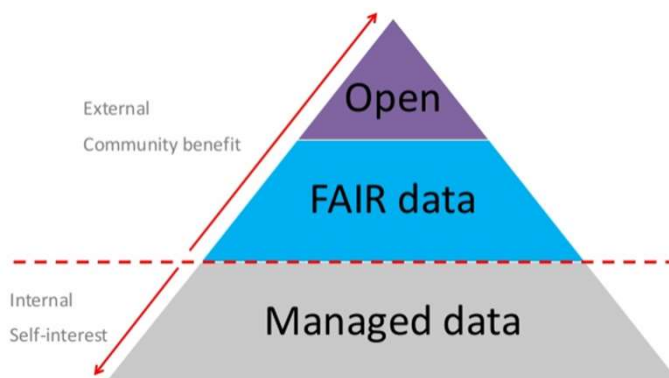
Source: picture taken from What it means to be FAIR', by Sarah Jones https://www.slideshare.net/sjDCC/what-it-means-to-be-fair?

Ten Principles for Machine-actionable Data Management Plans

1 Integrate DMPs with the workflows of all stakeholders in the research data ecosystem

2 Allow automated systems to act on behalf of stakeholders

3 Make policies (also) for machines, not just for people

4 Describe—for both machines and humans—the components of the data management ecosystem

5 Use PIDs and controlled vocabularies

6 Follow a common data model for maDMPs

7 Make DMPs available for human and machine consumption

8 Support data management evaluation and monitoring

9 Make DMPs updatable, living, versioned documents

10 Make DMPs publicly available

Source: 'Ten principles for machine-actionable data management plans',by Tomasz Miksa, Stephanie Simms, Daniel Mietchen, Sarah Jones, https://doi.org/10.1371/journal.pcbi.1006750

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