

Future Perspective of Metadata Topics



Feel free to add your point of view on the questions, discuss with participants as well as rate the most relevant topics from your perspective.

Please rate the most relevant topics from your perspective

What do you consider to be the **most relevant metadata topics** in the next 2 - 5 years?

- Provenance**
 - Identify commonalities of research data/metadata handling and ways (technical and organizational) on how to realize harmonized processes.
- Ontologies**
 - A harmonized representation of research data and metadata
 - Metadata for AI data sets and AI systems
 - Catching all available metadata / contextual information as early as possible and not losing them. Then, we can make things FAIR.
 - machine-understandability (machine-actionability)
 - User-friendly interfaces: e.g. Metadata editors
 - Dynamic enrichment of metadata collateral to the research process
 - Automating metadata handling as far as possible (collect, represent, store, curate, publish, ...) Because manual work costs time people want to use for research.
 - Citable PIDs for everything, not just publications landing pages.

Which **challenges** do you see in implementing these topics?

- Overcome the belief in special use cases which no standard applies to
- Clear formulation of advantages of harmonizing things (e.g. metadata handling) even beyond a single researcher's scope.
- Keeping track of existing metadata standards instead of developing novel ontologies
- "upper-level alignment is tricky at first, but worth it if you get it right"
- Scientists tend to develop new standards and new ontologies
- How to find an existing ontology
- Tools and User Interfaces which fit multiple disciplines with similar use cases
- reliable infrastructure services
- Agreement on common infrastructure components and/or interfaces
- Tools and services used have to be combinable to fulfill different use cases properly (Ideal: do one thing well).
- Even if something has a PID, a machine can not use it if this is not being considered in beforehand. We need machine-actionable PIDs.

What are the **biggest needs** within your community implementing FAIR?

- Deep provenance of the research workflows, and integrating this metadata with other fields
- Catalogs, Recommenders, Good Practices Collections for all aspects of metadata handling.
- Repositories geared more towards interaction with data rather than just archiving and publication
- Repository interoperability
- Good subject-specific training for researchers
- support and training
- broad availability and accessibility of research data management tools
- Easy-to-use tools for creating metadata
- Strong (scientific?) incentives or rewards for creating metadata and making it available. Overcome culture of "data ownership"
- Sensitive data and FAIR

Editorial Remark: All thumbs up have been translated into stars.