Research Data Management in practice - Documentation and metadata

NO-RDA Workshop - parallel sessions

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1. RITMO

Short summary

Systemic approach to metadata

Metadata is NOT one size fits all.

There are lots of information out there, easy to get overwhelmed.

Using researchers needs to drive a metadata solution

Background

who are the users?
what do they know?

User needs

List of needs and wants

- must have
- nice to have
- bonus

Standards/system

Match needs with standard or system
Are there current institutional or geographical regulations?

Examples general standards: DataCite and Dublin Core.

Implementation

- Train users
- test standard and system with user cases

Iterate

Use feedback to redesign
Are there new tools out there that can be usefull

Making metadata machine readable

- The goal is to make metadata machine readable
- There are tools that can make metadata machine readable. For example Dublin Core Generator.

2. ELIXIR/DIGITAL LIFE NORWAY

Metadata standards

Different schools of metadata standards might not "talk" to each other efficiently (this might be also a challenge for interdisciplinary research). We need standard vocabularies across data sources.

Amount of metadata

How much metadata should you add or allow? Large amounts of metadata might not be efficient or usable, but there is no gold standard for the amounts of metadata we need.

DSW demo

Demonstration of how Data Stewardship Wizard works in detail.

Investing in RDM

The importance of funding research data management in research projects.

Searching for databases

Where can we find databases for data reuse (specifically in physics/chemistry). Good resources are the google dataset search, the re3data.org (when looking for repositories).

Aggregating and reusing metadata elements

Wikidata

Reuse metadata elements/blocks

Stimulate to reusing blocks or elements of metadata across different projects, datasets, metadata tools. Reduce efforts by researchers to write metadata.

3. DDI Metadata standards

DDI Lifecycle (Benjamin)

DDI is family of metadata standards.
DDI Lifecycle, Identification & versioning, Variable cascades & lineaging. Examples from European Social Survey (ESS).

Is DDI intended to be used for all kinds of data?

Depends on the standard specification used. Lifecycle is more for SBE (social, behavioural, economic) sciences, can also be used for related data (e.g. Health). DDI-CDI is intended for cross-domain use.

Connectivity is a key feature of DDI-L. Is it therefore required to implement the metadata standard already during the study design?

Not all items are obligatory in DDI-L. First standard that is suited to detailed represent questionaires. For simpler study designs, e.g. DDI-Codebook could be more suited.

DDI-CDI - cross-domain use (Hilde)

Next generation, can be used in combination with DDI-Codebook, DDI-L or stand-alone. Description of processes and provenance. Applicable to new disciplines. — ANONYM

Model-based (UML > canonical XMI > portable to e.g. XML, thus tool-independent) — ANONYM

Variable cascade: understanding the roles played by variables is critical in integration of the data. Conceptual/... — ANONYM

DDI-CDI can currently describe 4 data structures: wide, long, key value, dimensional. Data points are tracked across structures. — ANONYM

Structure and content are separated. — ANONYM

Designed to work together with other standards, relationships to objects in other standards. Including ontologies (referencing instead of build-in). — ANONYM

3 modes of processes: procedural (step-wise, decision points), declarative (black-box, playbook and configurations = output defined by algorithms), hybrid — ANONYM

Data structures can be represented graphically — ANONYM

Rich provenance metadata - reproducability! — ANONYM

EOSC — ANONYM

How is the integration of DDI-CDI with different disciplinic metadata standards organized?

Collaboration with disciplines.

DDI-CDI Webinar series and presentations: https://codata.org/initiatives/strategic-programme/decadal-programme/ddi-cross-domain-integration/ddi-cross-domain-integration-review-webinar-series/

EOSC Project to Recommend Applications of DDI-CDI:- Report: https://doi.org/10.5281/zenodo.4707263- Workshop 11th June at 15:00 to 17:00, Registration: https://attendee.gotowebinar.com/register/1430439754098534924 • Release of first version of the DDI-CDI specification in summer of 2021 — ANONYM

Suggestions for future seminars, workshops and meetings?

What topics and themes, types of meetings?

Thank you for an interesting workshop. It worked very well with the short intro of each session first, followed by the breakout sessions and then the wrap up. Topic/theme for next meeting: data archiving

General feedback, comments and questions

Good job, Ingrid and the other presenters, thanks for your effort's today!

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