EOSC Future

RDA RESEARCH DATA ALLIANCE

🏷 **Keywords:**

: #metadata #datacuration #datamanagement #LiDA #framework #datatypes #servicecatalogue#researchdata #datarepositories #controlledvocabularies, #EOSCinPractice

Enabling Interdisciplinary Research in the European Science Cloud through Metadata Standards.

EOSC in Practice: Framework for increased discoverability of SSD Objects in the EOSC Portal Service Catalogue

The EOSCFuture.eu/RDA open calls

The open calls managed by the Research Data Alliance (RDA) with funding from EOSCFuture.eu aim to bring data initiatives closer to EOSC and provide EOSC with expertise, tools, best practices, and standards from the global research data community, with a total budget of one million Euro reserved to fund over 65 grantees over 12 open calls.

The project involved

Retained for funding under the open call entitled "Optimising Frameworks and Guidelines in EOSC" and linked to work within the RDA Research Metadata Schemas Working Group, this project developed a framework for harvesting and delivering rich metadata of social science data objects for the EOSC Portal Service Catalogue.

LiDA
https://lida.dataverse.lt

The Challenge

Developing a use case was most definitely the greatest challenge. To implement the intended framework, existing metadata standards had to be modified in a way that would remain compliant with current standards and enable interoperability. On the other hand, the recommendations needed to be formulated in a manner that would serve as a reference for enhancing metadata standards utilized by numerous researchers, while also being adaptable to other scientific fields.

The solution

The Lithuanian Data Archive for Social Sciences and Humanities (LiDA) developed a framework for harvesting and delivering rich metadata of social science data (SSD) objects for the EOSC Portal Service Catalogue, with the aim of meeting the FAIR F2 principle of providing rich metadata in a machine-readable format. The project identified and recommended the vocabulary for standardized description of major data types for SSD objects, which allows for more detailed descriptions of data and increases possibilities for secondary analysis on generic data portals. The framework is extensible to other disciplines, which benefits developers of software, infrastructures, and data curation standards in other

"The development of this framework for harvesting and delivering rich metadata of social science data objects is a step forward in enhancing the discoverability and accessibility of research data in the EOSC. The extensibility of the framework to other disciplines further highlights the potential for interdisciplinary collaboration to advance scientific knowledge"

Vaidas Morkevicius, Coordinator of the Lithuanian Data Archive for Social Sciences and Humanities

communities. Scientists and government bodies could benefit from the resources produced during the project, such as the recommendations and milestones, which may help them develop their own data curation software, data repositories, and controlled vocabularies. The project's impact lies in benefiting the wider research community by enabling better data discovery, reuse, and interoperability in the EOSC Portal Service Catalogue.

The Users

This EOSC in practice story targets three main types of users:

(1) Firstly, the social science community who can benefit from more detailed descriptions of data, which increases possibilities for secondary analysis on generic data portals

(2) developers of software, infrastructures, and data curation standards in other communities, as the framework can be extended to other disciplines,

(3) researchers and government bodies in developing their own data curation software, repositories, and vocabularies.

The service provider

The Lithuanian Data Archive for Social Sciences and Humanities (LiDA, lida.dataverse.lt) is a virtual digital infrastructure for data acquisition, long-term preservation and dissemination. All the international and national data resources are documented in both Lithuanian and English. Access to the data is provided via the Dataverse repository. LiDA curates most of the data collected conducting the most important international

social surveys in Lithuania – the European Social Survey, European Values Studies, European Election Studies and the International Social Research Program. LiDA is hosted by the Centre for Data Analysis and Archiving of Kaunas University of Technology (data.ktu.edu).

Why do I need EOSC?

LiDA gains the following benefits thanks to its presence on the EOSC Portal Catalogue and Marketplace:

» Promotion through the EOSC Catalogue and Marketplace and adoption from outside their traditional user groups, reaching a wider user base.
» Statistics on access requests and customer feedback.
» A free online platform to manage service requests, interact with users and provide support to them, and agree the most suitable service levels
» Making its services more useful by linking with compatible services or products through the EOSC Interoperability Framework.
» Allow users to authenticate with their own credentials to access your services and resources and get support to enable this.
» Contribute to the definition and maintenance of EOSC service provisioning policies and the portfolio road

The impact on society

Overall, the process of enhancing metadata can have significant implications on society, ranging from improving data-driven decision making to promoting transparency and accountability in various domains. For example, in the realm of data-driven decision making, metadata plays a crucial role in enabling accurate and effective analysis. By enhancing metadata standards and making them more interoperable, researchers and decision-makers can more easily access, share, and integrate data from diverse sources, leading to more informed and impactful decision making in fields such as healthcare, finance, environmental science, and beyond.

Across disciplines

This EOSC in practice story showcases cross-disciplinarity, given that the framework developed for Social Science Data can be extended to other domains.

Sustainability for an EOSC in practice

The technical solution proposed in the use case demonstrates how the framework can be implemented in a specific scenario and showcases how increased compliance with FAIR principles can be achieved in the EOSC, making it easier for users to locate and reuse data. By improving the discoverability of research data and enhancing metadata, the solution proposed has the potential to improve the efficiency and sustainability of research by enabling more effective data sharing and reuse.

Future funding model scenarios

The work could be further supported in the future research by funding agencies or other types of organisations that provide support for projects related to data management, metadata standards, and data sharing, that provide grants and other forms of support for projects that align with their mission and goals or from industry partners with an interest in data management and data sharing that may be willing to fund or collaborate on a project that can benefit their business. Also, collaborating with other research groups can provide access to additional funding sources and expertise.

Useful material related to this story

» You can find more articles and information on RDA here in Zenodo and at www.rda-alliance.org
» The blueprint for the framework produced during the project is freely available for consultation and reuse on the dedicated Zenodo community page
» You can Access LiDA here

Want to learn more about the other services being developed by **LIDA**? Read here
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