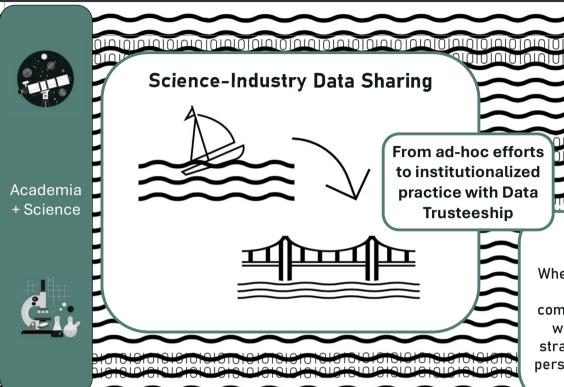


Building Bridges Through Trust



Data Trusteeship as a Key Enabler for Science-Industry Data Sharing

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The Starting Point \Longrightarrow

Collaborations between academia and industry are widely seen as essential for addressing complex societal challenges. Within academia, data sharing is increasingly supported by infrastructures, governance frameworks, and the emerging role of data stewards, who ensure quality, consistency, and usability of research data.

The Challenge

When it comes to sharing across institutional boundaries, however, trust remains fragile. Researchers hesitate to share with commercial actors, fearing misuse, loss of control, or legal liability, while companies are likewise reluctant to disclose sensitive or strategically valuable information. This mutual hesitation creates a persistent barrier that undermines the potential of science-industry collaborations.



Data Trusteeship

Envisioned in the EU's Data Governance Act, data trustees serve as neutral intermediaries, mediating data access or analysis without pursuing their own interests [1]. Their functions include matchmaking, supporting transactions, building trust, and preventing monopolies, while ensuring that conditions of use respect the intentions of all parties [2]. By handling tasks such as pseudonymization, access rights management, and metadata creation, they make sensitive data more shareable across institutional boundaries and uphold autonomy, compliance, and research integrity. In this ecosystem, data stewards complement trustees by safeguarding data quality and usability within organizations [3].

The Potential of the Data Trustee Concept for RDM

1) Supporting trust: Data trustees act as neutral intermediaries, establishing a trustworthy authority, that enables sensitive industrial data to be shared for research while maintaining company control, ensuring legal compliance, and enhancing transparency and traceability.



2) Supporting the role of data stewards: While the FAIR principles guide research data management, data trustees add a focus on trust, ethics, fairness, and stakeholder protection, enabling stewards to move beyond purely technical tasks and ensure data remains accurate, consistent, and usable.

Industry

3) Supporting technical issues in handling research data: Data trustees make the work of data stewards easier. They can enforce standard formats and ontologies to enable data harmonization. Furthermore, data stewards benefit from having uniform rules on metadata, provenance, and data quality. Data trustees promote interoperability by ensuring that data formats are compatible, and by regulating user access and management.

Examples of Successful Collaboration Between RDM and Data Trustees

- > **DDtrust**: Developing and implementing a comprehensive concept including a sustainable operating model for a data trusteeship that manages research data from diverse sources and establishes suitable processes for data provision [4].
- > InGeoDTM: 'InGeoForum' acts as a data trustee, expanding existing approaches to data sharing and fostering cross-sector exchange of geodata. The initiative is intended to serve as a blueprint for other geodata spaces, with specific application scenarios in wind energy and forestry [5, 6].
- > TreuMoDa: Developing a concept for establishing a trust center for mobility data that enables the provision and use of such data by science, industry, and society in line with data protection regulations and transparent criteria [7].

[1] https://digital-strategy.ec.europa.eu/en/policies/data-governance-act, [2] https://datnet.eu/, [3] https://datnet.eu/forschungsdatenmanagement-und-qualitaetsmanagement/,[4] https://dd-trust.zih.tu-dresden.de/, [5] https://www.ingeoforum.de/, [7] https://www.treumoda.de/

