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## Challenges in Standardizing Terminologies for Data Management in Scientific Research

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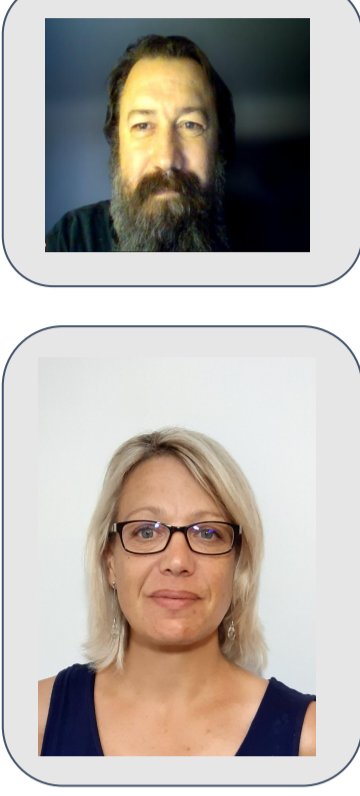
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## Challenges in Standardizing Terminologies for Data Management in Scientific Research

Romain David, Anne-Sophie Bage, Sophie Aubin, Pedro Correa, Françoise Genova, Anca Hienola, Yvan Le Bras, Liise Lehtsalu, Elisabeth Morand, Paul Millar, Melanie Nentwich, Alison Specht, Théophile Turboust, RDA Professionalising Data Stewardship IG / Sensitive Data IG) Contact: [romain.david@erinha.eu](mailto:romain.david@erinha.eu)



Effective data management within the scientific community hinges on the **use of standardized terminologies that align with the FAIR principles**. This poster addresses the **critical challenges in establishing these terminologies**, which play a vital role for data management professionals, in policy frameworks, project proposals, data management plans, data dictionaries, and repositories. One of the key obstacles is **polysemy**, where terms possess multiple meanings, resulting in **ambiguity and inconsistencies**. For instance, distinctions between roles like Data Owner, Data Steward, Data Custodian, and Data Manager are often unclear. Achieving standardization enhances clarity, minimizes errors, and elevates the quality of data management practices.

### Challenges

How to reuse and/or develop standardized terms for essential data management practices and tools ?

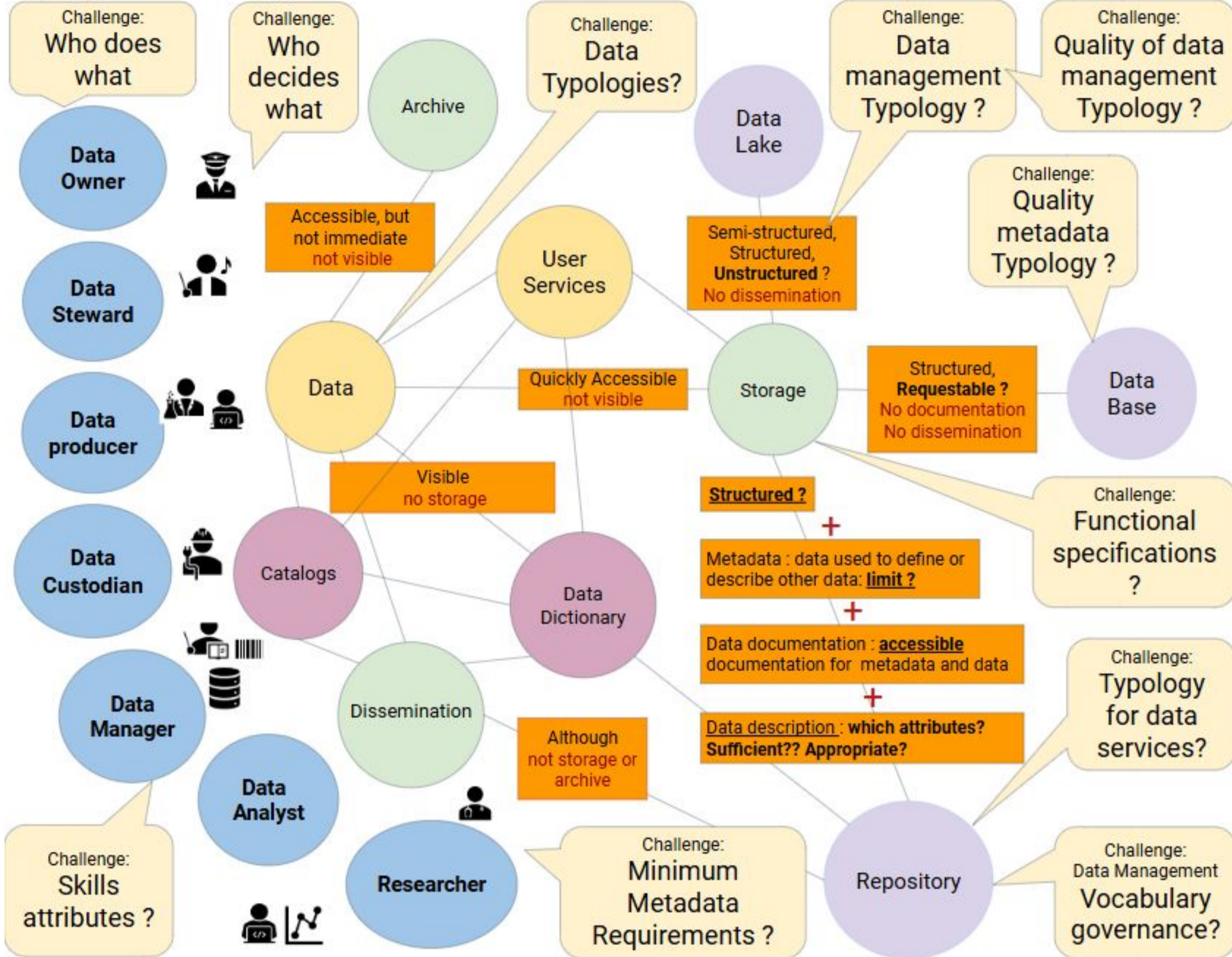
Address polysemy, provide clear examples to **avoid confusion among stakeholders**.

Identify gaps in **existing glossaries, particularly regarding data ownership and intellectual property**, and organize crosswalk processes.

Discuss governance mechanisms for **maintaining and updating terminologies** across projects and institutions.

Formulate **terminologies for cataloging services** and skills, improving clarity and communication.

Disseminate the usefulness of defining, maintaining and using terminologies transversally and in disciplinary communities.



**Enhance data management quality through better terminologies:**

- Promote, reuse and develop terminologies that **directly contribute to higher quality data management practices**.
- Ensure terminologies support the **FAIR principles** to **enhance data reliability, reproducibility, and usability**.

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**JOIN US FOR THE NEXT STEP!**

We will work within the Professionalising Data Stewardship interest group, reusing outcomes from **Research Data Alliance**, on a collaborative paper.

**Some ideas on how to resolve these challenges? Join the paper authors !**

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**JOIN THE RDA SESSION!**

Terminologies for Data Management & Quality of Data Management : Ensuring FAIR Principles

**Tuesday, 12 November 2024** 10:00 – 11:30 CST | 16:00 – 17:30 UTC | RDA 23rd Plenary Meeting **Breakout Session 1** | Venue: **Edificio de Ingeniería, Auditorium**



RDA 23rd Plenary Meeting – San José, Costa Rica (Hybrid) 12 – 14 November, 2024