THE LEIBNIZ DATA MANAGER

SUPPORTING RESEARCHERS IN THE LIFECYCLE OF RESEARCH DATA

Try the Leibniz Data Manager!

MOTIVATION

Research data management (RDM)

- Involves the systematic organization, storage, preservation, and sharing of data
- Requires effective handling, maintenance, and accessibility

OBJECTIVES

Develop an **RDM tool to**

- Support reproducibility, transparency, and integrity of research outcomes
- Improve reliability and trustworthiness of scientific research

METHODS

Leibniz Data Manager (LDM)

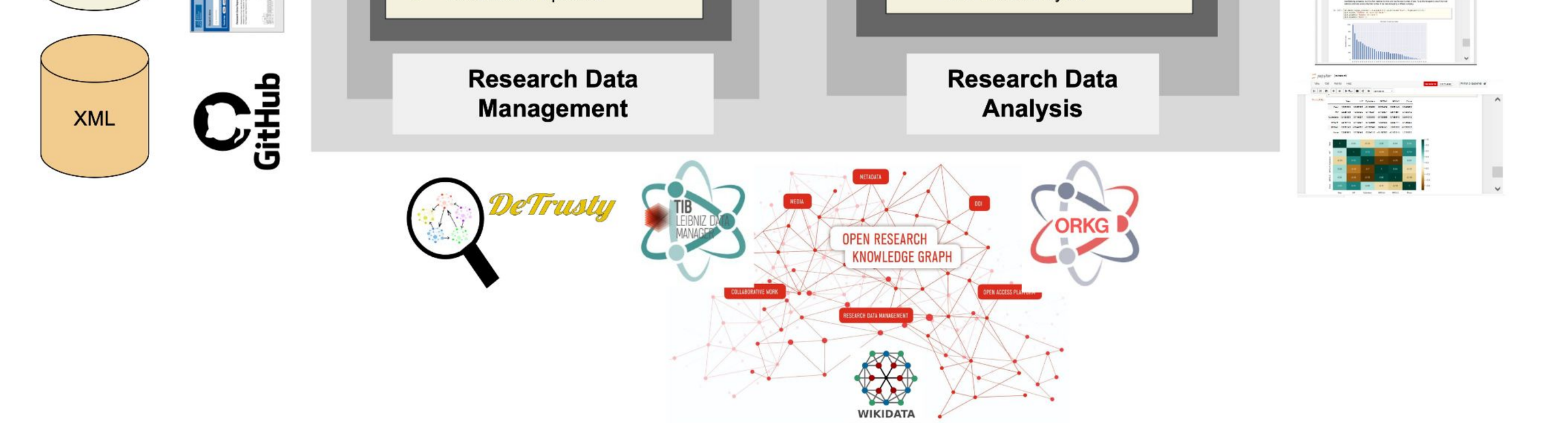
- Support the RDM lifecycle
- Based on the logical model of knowledge-driven ecosystems, FAIR data principles, and knowledge graphs
- Extends CKAN capabilities

FUNCTIONALITIES

- Integration of **RDM repositories** (e.g., LUH, RADAR, PANGAEA)
- Management of **research digital objects** (RDOs) in different formats
- Visualizations of **RDOs**
- Live **code demonstration of RDOs** (e.g., via Jupyter Notebooks)
- **LDM knowledge graph** (KG) with RDOs' fine-grained representations
- Integration of the **LDM KG** into a federation of Open Research Knowledge Graphs (**ORKGs**)

FUTURE WORK

- Improve the metadata collected to describe **RDOs**
- Data **quality assessment** and **curation** processes
- **Hybrid AI** methods for knowledge **extraction and linking** in the federation of ORKGs
- Create **fine-grained representation** of RDOs and their corresponding scholarly resources



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LDM DEMO | CODE | Survey

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