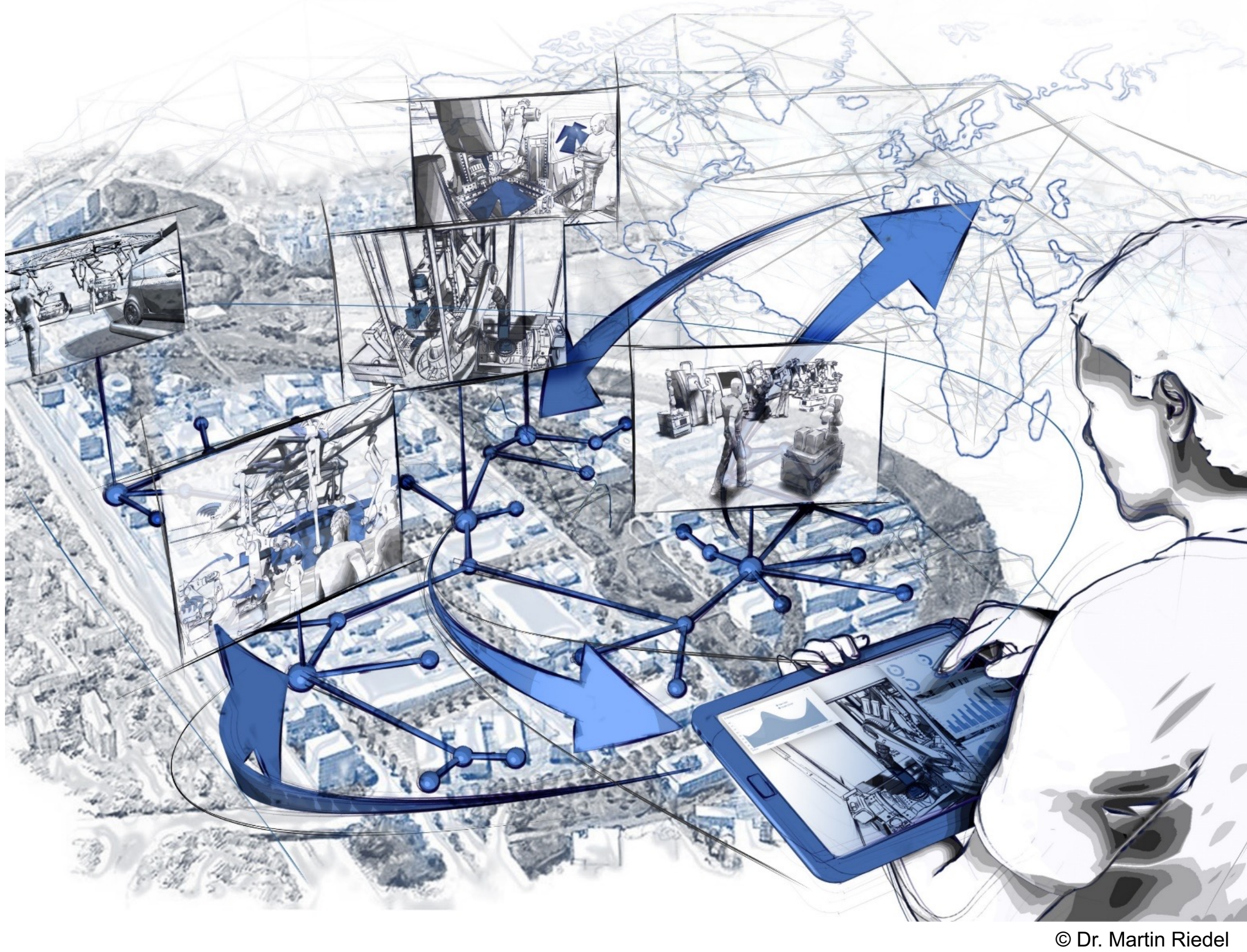


DMPs in Large-Scale Projects

Leveraging Data Management Plans
to Improve Data Discoverability in Large-Scale Research Projects

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Internet of Production



“The vision of the Internet of Production (IoP) is to enable a new level of **cross-domain** collaboration by providing **semantically adequate** and **contextual data** from production, development and usage **in real time** at an appropriate granularity.”

The IoP in Numbers:

- More than **35 institutes** collaborating in Aachen
- Over **200 active researchers**

➤ A large-scale research project

1) AZL	9) Cluster Smart Logistik	17) Fraunhofer ILT	25) „Bogenhalle“, WZL
2) Ramp-Up Factory	10) Smart Automation Lab	18) DPP	26) Cybernetics Lab, IMA
3) M.A.R.S, WZL	11) MWH, WZL	19) IKV Labs	27) Rotter Bruch, WZL
4) IRT Labs	12) ITA Labs & DCC	20) ZMB	28) IBF Labs
5) CNC3, WZL-WM	13) Fraunhofer IPT	21) IOT Labs	29) GI Labs
6) IEHK Labs	14) ISF Labs	22) Cluster Photonics	30) Fraunhofer FIT
7) IMSE Labs	15) IWM Labs	23) IT Center	
8) IAW Labs	16) IGMR Labs	24) Computer Sci.Center	

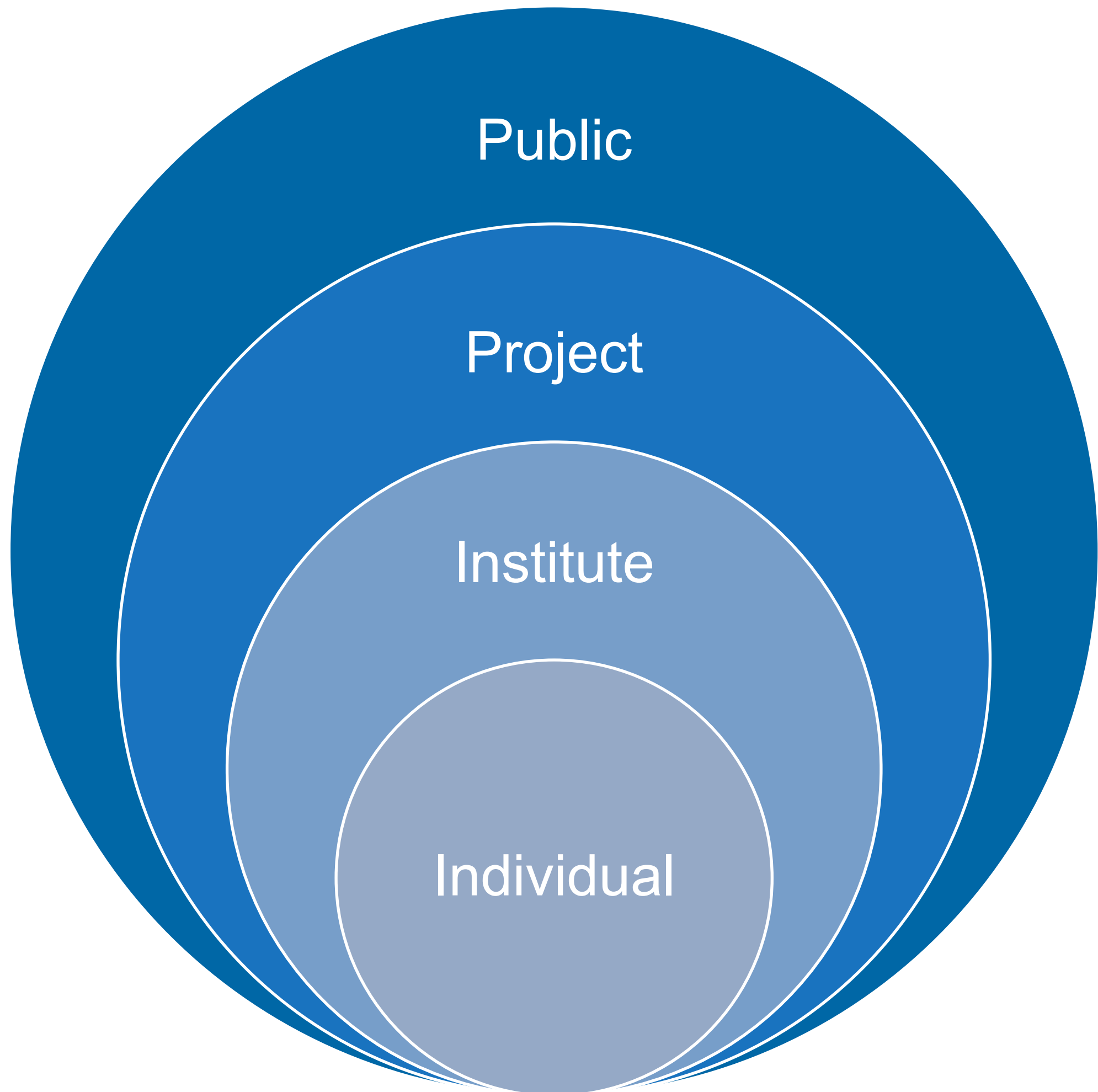
Managing Research Data Across Institutes

Challenges

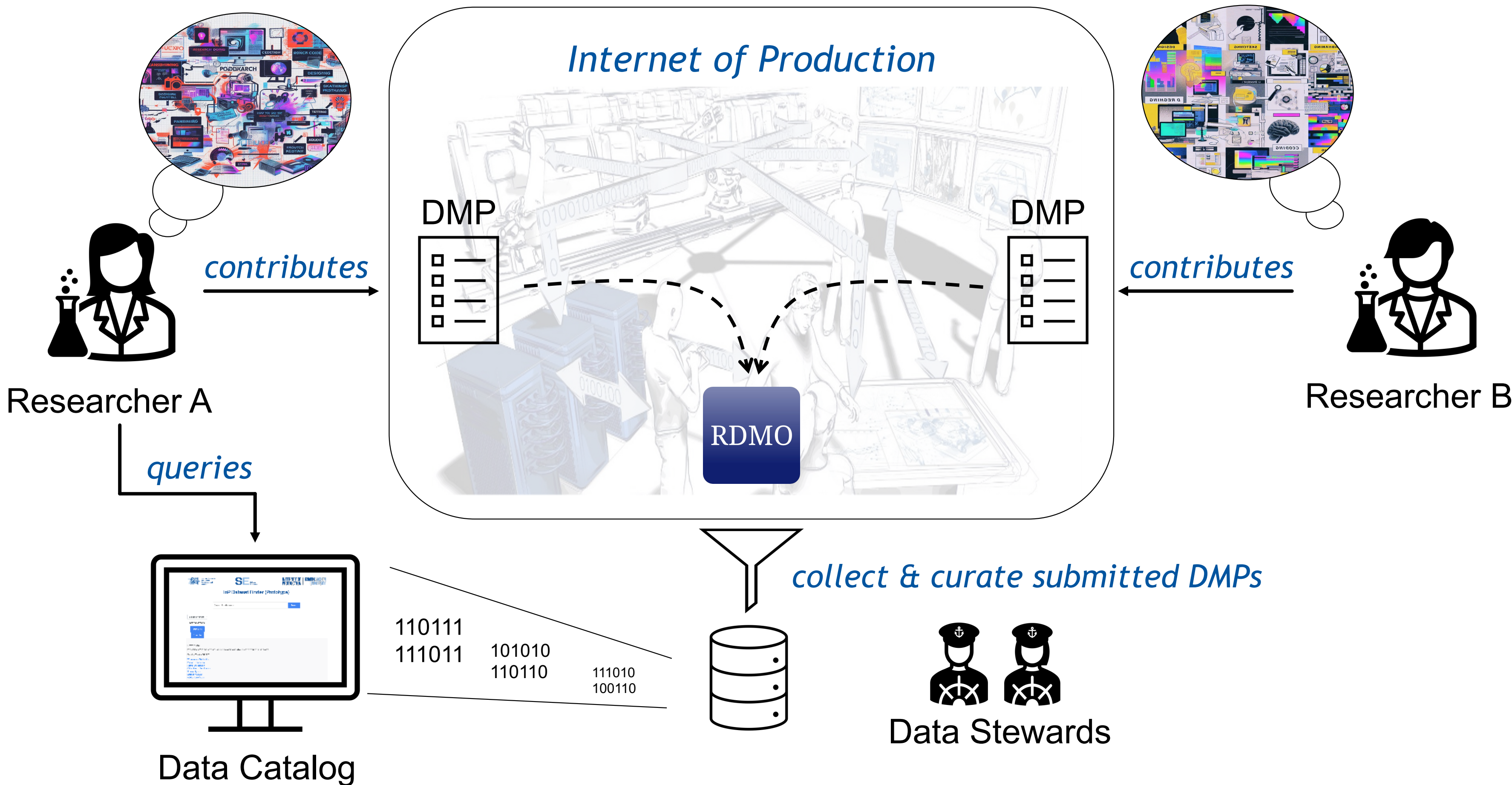
- Commitment incentives
- Highly **interdisciplinary** research
- High **variety of existing processes** and infrastructure
- **Variance in RDM experience**, knowledge, and mindset
- Often tight RDM resources

Potentials

- Wealth of knowledge and research assets
- Spread-out, yet personable
- Chances for collaboration and data reuse



Maximizing DMP Impact



Summary

Grabbing DMPs from RDMO

- Development of **IoP-specific DMP template**
- DMP submissions by all IoP projects
- **Retrieve DMPs via API**
- Mapping question items and underlying data model
- Creation of **semi-structured, machine-readable documents**

Building Web App Data Catalog

- Create a **data catalog** for the backend
- **Simple search bar** in the frontend
- Minimal function: **fuzzy key word search**
- Returns short **dataset "profiles"** (metadata)
- Ranges over all IoP datasets