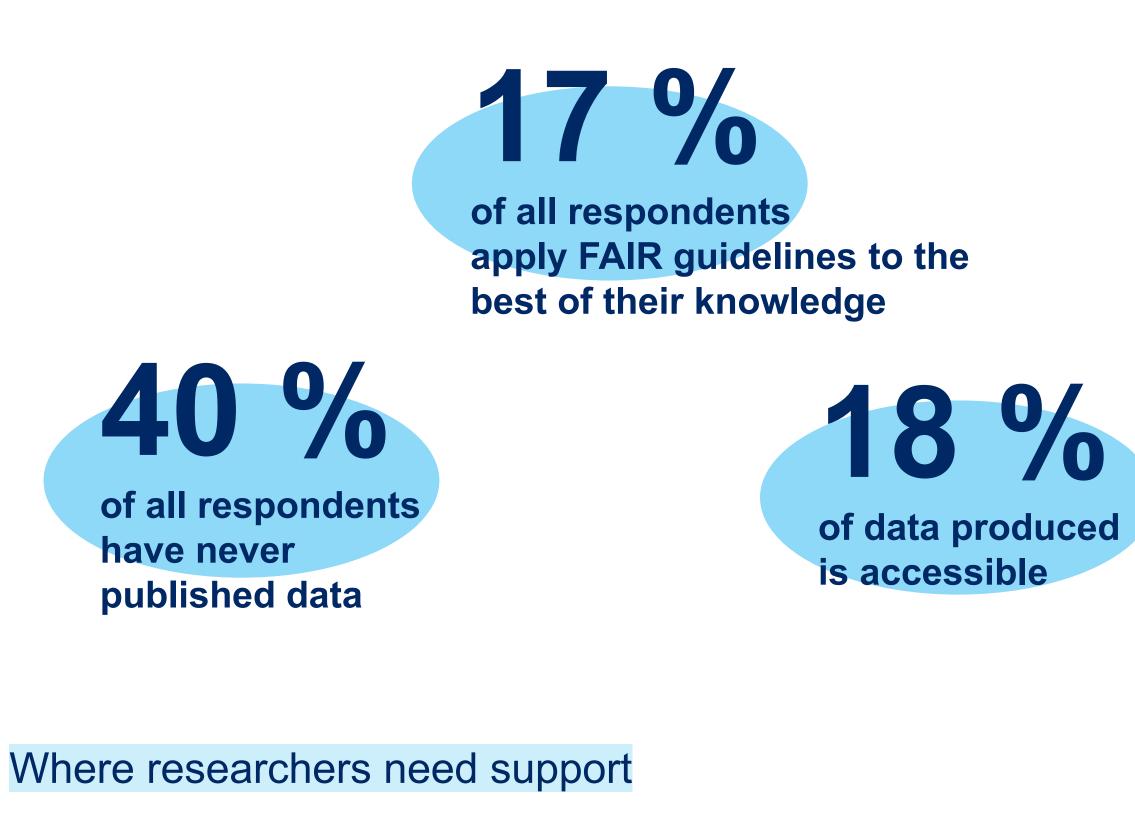


Human-Centric Understanding of the FAIR Data Landscape: HMC Community Surveys

Silke C. Gerlich¹, Markus Kubin², Lucas Kulla³, Christine Lemster⁴, Jan Schweikert⁵, Sangeetha Shankar⁶, Emanuel Söding⁴

Institute Materials Data Science and Informatics (IAS-9), Forschungszentrum Jülich, ² Helmholtz-Zentrum Berlin für Materialien und Energie, ³ German Cancer Research Center Heidelberg, ⁴ GEOMAR Helmholtz Centre for Ocean Research Kiel, ⁵ Karlsruhe Institute of Technology, ⁶ Institute of Transportation Systems, German Aerospace Center (DLR)



RDM software and tools Best practise Metadata enrichment Technical aspects of RDM 44,5% Legal aspects 43,7% Metadata use & analysis Research data reuse 28,5% No need for support 7,5%

NEEDS

Need for technical systems supporting data annotation, handling, provision and publication

ACTION

Metadata annotation and management during and close to the research process

Closing the gap in a bottom-up direction: enable and incentivize the research community

• HMC develops, runs and analyses community surveys across the Helmholtz Association to assess human-centered factors in FAIR data practices across Helmholtz. • In the HMC Community Survey 2021, we addressed researchers all across Helmholtz to understand the status quo, gaps, and needs of research data management practices across the Helmholtz Association. • In the upcoming HMC Survey 2023, we will address technical staff in Helmholtz to establish a community network and identify the status quo, gaps, and needs of FAIR data practices across Helmholtz.

HMC Community Survey 2021

Target group: Researchers

Motivation – Collecting metadata

Improved findability Improved reproducibility Providing context Administritive guidelines

52.0%

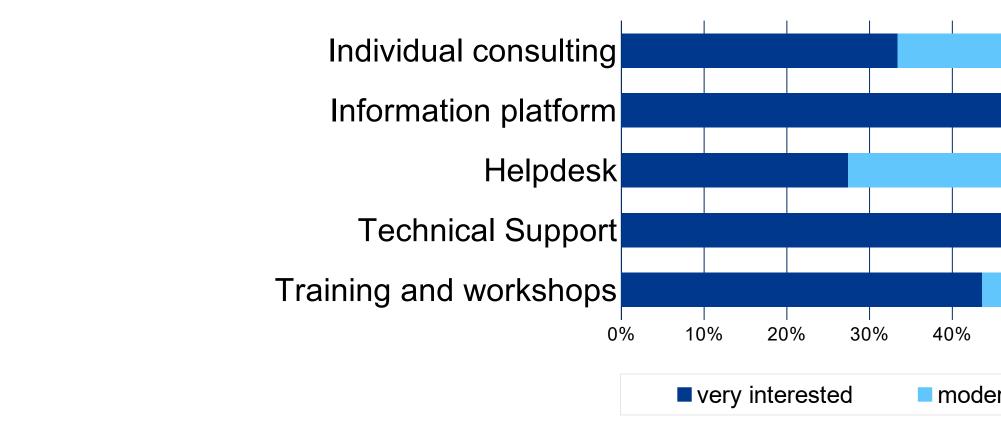
Challenges – Handling metadata

Lack of resources Lack of technical solutions Lack of incentives No difficulties No apparent benefits 3,2%

11,3%

17,7%

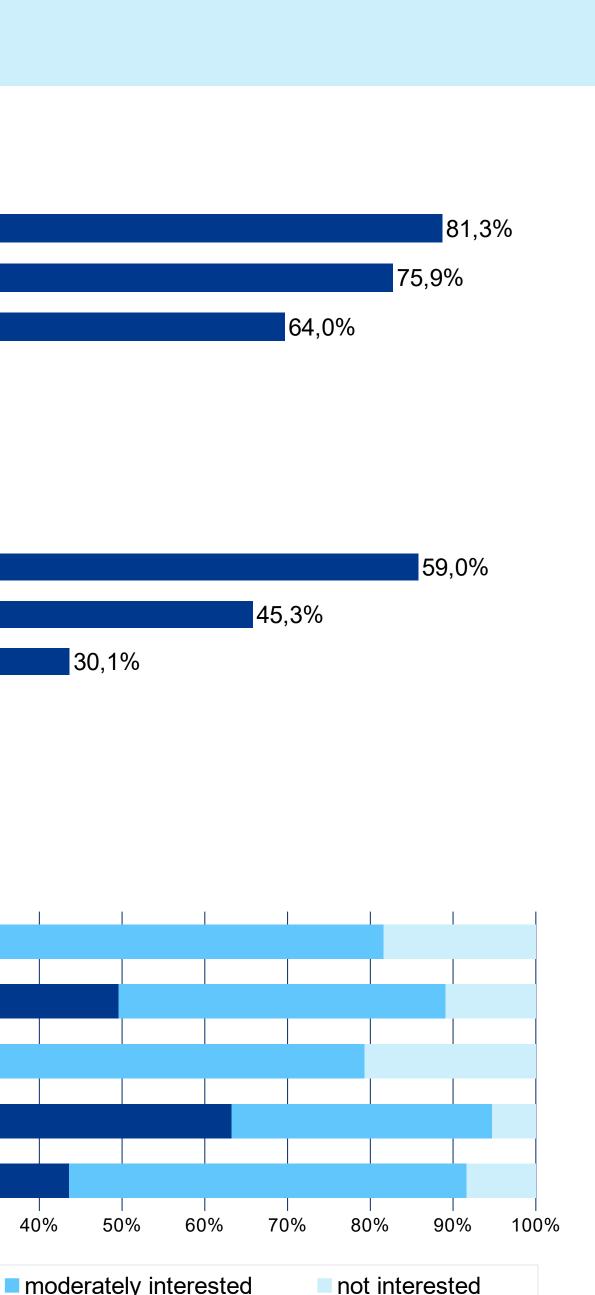
Interest in service formats



Need for training, individual consulting and advice

concerns

direction: bringing



Lack of incentives, legal and ethical



Coming soon!

Connect: Establish a network of technical / RDM staff in Helmholtz. Assess: Status quo, gaps and needs of FAIR data practices in Helmholtz from the perspective of technical staff in Helmholtz. Including self-assessment questions adopted from FAIR Aware. When? Planning to run survey in November 2023.

Please support us in distributing the survey!

Monitoring: Combine survey approaches to recurring survey for monitoring human factors regarding FAIR data practices over time. **Data reuse:** Include questions on data reuse practices, gaps and needs. Please support us: Planning to run survey in 2024.

Ready for reuse

Reusable: Report and survey data published. - Report: <u>https://doi.org/10.3289/HMC_publ_05</u> - Data set: https://doi.org/10.7802/2433 Interactive: <u>HMC Survey data explorer</u> (dashboard). Ready for adoption: Questionnaires, tools and workflows

available on a public <u>GitLab repository</u>.



HMC Survey 2023 Target group: Technical staff with RDM-related tasks

Outlook





HELMHOLTZ