Welcome to the NFDI4Ing community survey. We appreciate your participation.

Data is the raw material of the future. FAIR data, data quality and research data management (FDM) are therefore experiencing a steady increase in importance. How we do research is changing. We would like to accompany you in this process of change and ideally support you in it. Therefore, with the help of this survey, we want to tailor our activities to your needs.

It will take approximately 10 to 15 minutes to complete.

The survey will run until the end of November.

Section A: Data Literacy Right from the Start

A1. Which statements regarding your competencies in the following areas of research data management are true?

<table>
<thead>
<tr>
<th>Competency</th>
<th>Never heard</th>
<th>Known by name</th>
<th>Sporadically applied by me</th>
<th>Systematically applied by me</th>
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<tbody>
<tr>
<td>FAIR principles</td>
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<td>Versioning of software &amp; documents (e.g. with Git)</td>
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<td>Documentation for re-use</td>
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<td>Collecting metadata</td>
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<td>Open data formats</td>
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<td>Licensing</td>
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<td>Policies</td>
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<td>Publication / Data repositories</td>
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<tr>
<td>Archiving</td>
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</tbody>
</table>

A2. How or where did you acquire your skills in the respective field? (Leave selection blank if not applicable) FAIR principles

Informal briefing
Self-study
Workshops / Lectures
A3. How or where did you acquire your skills in the respective field? (Leave selection blank if not applicable) Versioning of software & documents (e.g. with Git)

- Informal briefing
- Self-study
- Workshops / Lectures

A4. How or where did you acquire your skills in the respective field? (Leave selection blank if not applicable) Documentation for reuse

- Informal briefing
- Self-study
- Workshops / Lectures

A5. How or where did you acquire your skills in the respective field? (Leave selection blank if not applicable) Collecting metadata

- Informal briefing
- Self-study
- Workshops / Lectures

A6. How or where did you acquire your skills in the respective field? (Leave selection blank if not applicable) Open data formats

- Informal briefing
- Self-study
- Workshops / Lectures

A7. How or where did you acquire your skills in the respective field? (Leave selection blank if not applicable) Licensing

- Informal briefing
- Self-study
- Workshops / Lectures

A8. How or where did you acquire your skills in the respective field? (Leave selection blank if not applicable) Policies

- Informal briefing
- Self-study
- Workshops / Lectures
A9. How or where did you acquire your skills in the respective field? (Leave selection blank if not applicable)
Archiving

Informal briefing □
Self-study □
Workshops / Lectures □

A10. What training options are you aware of at your institution on the following topics in the area of research data management? (Leave selection blank if not applicable)
FAIR principles

Informal briefing □
Self-study □
Workshops / Lectures □

A11. What training options are you aware of at your institution on the following topics in the area of research data management? (Leave selection blank if not applicable)
Versioning of software & documents (e.g. with Git)

Informal briefing □
Self-study □
Workshops / Lectures □

A12. What training options are you aware of at your institution on the following topics in the area of research data management? (Leave selection blank if not applicable)
Documentation for re-use

Informal briefing □
Self-study □
Workshops / Lectures □

A13. What training options are you aware of at your institution on the following topics in the area of research data management? (Leave selection blank if not applicable)
Collecting metadata

Informal briefing □
Self-study □
Workshops / Lectures □

A14. What training options are you aware of at your institution on the following topics in the area of research data management? (Leave selection blank if not applicable)
Open data formats

Informal briefing □
A15. What training options are you aware of at your institution on the following topics in the area of research data management? (Leave selection blank if not applicable)

- Licensing
  - Informal briefing
  - Self-study
  - Workshops / Lectures

A16. What training options are you aware of at your institution on the following topics in the area of research data management? (Leave selection blank if not applicable)

- Policies
  - Informal briefing
  - Self-study
  - Workshops / Lectures

A17. What training options are you aware of at your institution on the following topics in the area of research data management? (Leave selection blank if not applicable)

- Archiving
  - Informal briefing
  - Self-study
  - Workshops / Lectures

A18. Do you yourself teach competencies from the field of research data management, for example, in workshops or lectures?

- Yes
- No

Section B: Governance Concept for FDM in Engineering

B1. Does your institution have recommendations or rules for handling research data?

- Yes
- No, but it's planned.
- I don't know.
B2. Does your institution offer you support and advice on how to handle research data.

Yes ☐
No, but it's planned. ☐
I don't know. ☐

B3. Does your institution have a role of a data steward?

The data steward is a person within an institution who is responsible for the quality of the data and data sources. In the context of data stewardship, he or she is responsible for the technical implementation of the strategic requirements of data governance with regard to data quality. Together with the Data Owner, the Data Steward assumes an important key position in the implementation of Data Governance. This person is the first point of contact for questions or problems relating to data quality.

Yes ☐
No, but it's planned. ☐
I don't know. ☐

B4. Does your institution offer you further training opportunities on the subject of FDM?

Yes ☐
No, but it's planned. ☐
I don't know. ☐

B5. Does your institution offer you any other support (not mentioned so far) in dealing with research data?

B6. In which way would you like to see more support from your institution?

Support from e.g. Data Stewards ☐
Formal policies for handling research data ☐
Education ☐
Software service for publications ☐
Software service for archiving ☐
Software service for versioning (e.g. Gitlab) ☐
Section C: Handling of Research Data

C1. Do you follow a data management plan (DMP) in your research projects?
   - No, I was not aware of this possibility.
   - No, I do not plan to do it in the near future.
   - No, but I intend to.
   - Yes

C2. Are you aware of any research data repositories?
   - No
   - Yes, multidisciplinary (e.g. Zenodo, Figshare)
   - Yes, subject specific

C3. Did you use data from research data repositories yourself, yet?
   - No, I was not aware of this possibility.
   - No, I do not plan to do it in the near future.
   - No, but I intend to do.
   - Yes

C4. In principle, would you be willing to publish your research data in a repository?
   - No, I do not plan to do it in the near future.
   - Yes
   - Other
C5. Did you already publish data yourself using a research data repository?

- No, I was not aware of this possibility.
- No, I do not plan to do it in the near future.
- No, but I intend to.
- Yes

C6. Did you yourself already submit or provide research data in combination with the manuscript to a journal?

- No, I was not aware of this possibility.
- No, I do not plan to do it in the near future.
- No, but I intend to.
- Yes

C7. Did you cite any research data yourself, yet?

- No, I was not aware of this possibility.
- No, I do not plan to do it in the near future.
- No, but I intend to.
- Yes

C8. For what reasons did you not publish research data in repositories yet?

- Data not relevant
- Too much effort for data preparation
- Not allowed by my facility
- Not allowed by the client/customer
- Publication is not required
- Publication has no additional value
- Other
Section D: General Questions about Research Data

D1. Do you know and use software (online or offline) to support research data management?

- I am not aware of any of such software.
- I am aware of such software, but I do not use it.
- I use such software.

D2. What software (online or offline) do you use to support research data management?

[No response provided]

D3. What software (online or offline) do you use to support research data management?

[No response provided]

D4. Where do you store your research data?

- Private computer
- Office/Work computer
- Server in the institute (or equivalent)
- Server of the university (parent institution)
- External at a scientific institution (cloud)
- Externally with a commercial provider (cloud)

D5. Where do you store your data in addition to the previously mentioned?

- External hard disk
- Flash drive
- DVD, CD, Blu-Ray
Section E: Need for Services in RDM
We would be very pleased if you would contact us at Task S-7-1 (e-mail: jens.freund@tu-darmstadt.de). By describing your use case and possible literature needs, you would help us a lot.

E1. In what areas of the research data management (RDM) would you like to get support?

- Entire FDM process
- Plan RDM in context of a research project
- Collect data
- Organize data
- Standardize data
- Collect meaningful metadata
- Process and analyze data
- Sharing and publishing data
- Archive data
- Reuse data
- Other

Other
E2. Do you know of NFDI4Ing?

- No
- Yes, I have heard of it before.
- Yes, NFDI4Ing is a term I am familiar with.
- Yes, I am a user.
- Yes, I am actively involved in NFDI4Ing (collaboration).
- Other

E3. Did you already receive support from NFDI4Ing in dealing with research data or did you use offers of NFDI4Ing?

- Yes
- No

E4. What type of support did you receive or what type of service did you use?

- Technological
- Organizational
- Events
- Education
- Other

E5. What services would you like to see from NFDI4Ing?

- Advice on general questions regarding the handling of research data
- Advice on publishing and citing research data
- Advice on technical issues (e.g., metadata, standards, long-term archiving)
Advice on legal issues (e.g. limitations on access, handling of sensitive data, use of licenses)

Assistance with specific matters (e.g., submitting a manuscript to a journal that specifies publication of research data).

Assistance in the creation of a data management plan, if one is requested by the funding agency

A secure and reliable storage space for my research data

I do not need any services

Other - in the next step you have the opportunity to specify your needs more precisely

E6. What other services would you like to see from NFDI4Ing?

E7. In the context of Task S-7-1, a service will be developed to enable text and data mining (TDM) in engineering literature. TDM refers to the automated, computer-assisted analysis of large amounts of text using a variety of techniques, such as identifying topics in a collection of texts through topic modeling. One difficulty with TDM analyses is often the lack of access to the desired machine-readable text material. Task S-7-1 addresses this issue and aims to facilitate this access by building a digital corpus of engineering literature. In this context, we would like to ask whether you see a need for computer-assisted, automated analysis of literature (e.g., journal articles, conference proceedings, research articles) in your research and whether you may already have concrete literature needs?

Yes

No
Section F: General Information

F1. What field do you belong to?

- DFG 41 (Maschinenbau und Produktionstechnik / Mechanical engineering and production technology)
- DFG 42 (Wärme- und Verfahrenstechnik / Heat and process engineering)
- DFG 43 (Materialwissenschaft und Werkstofftechnik / Materials science and materials engineering)
- DFG 44 (Informatik, System- und Elektrotechnik / Computer science, system and electrical engineering)
- DFG 45 (Bauwesen und Architektur / Civil engineering and architecture)
- Other

F2. In which fields of activity do you mainly work?

- Research
- Teaching / Further Education
- Administration
- Libraries / Infrastructure Operators
- Economy
- Other

F3. Which statement is most likely to be true for you?

- I mainly do scientific work.
- My activities are mainly in the NON-scientific field.
F4. Which category of professionals do you belong to?

- Professor
- Junior Professor
- Associate Professor (Privatdozent*in)
- PostDoc
- PhD student / Research Assistant
- Other

F5. How many years have you been working in research?

- < 3 years
- 3 to 6 years
- 6 to 10 years
- > 10 years

F6. What age group do you belong to?

- < 30 years
- 30 to 45 years
- 46 to 60 years
- > 60 years
Section G: End of the Survey

G1. Thank you for your participation in the survey! You have answered all the questions. Is there anything else you would like to tell us?

Thank you very much for your participation in our community survey. We will publish the results of the survey on the NFDI4Ing website.

In case you want to get notified about the results, please consider subscribing for our newsletter.