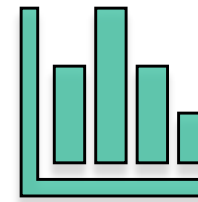
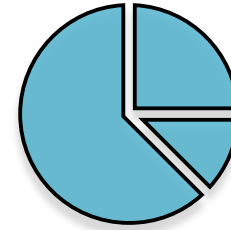
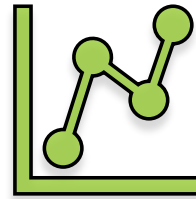


# ELGO Data Management: A Scoping Report

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Technical University of Munich (TUM)  
University of Exeter



European Research Council  
Established by the European Commission



# The Survey

**Opened:** November 20, 2023

**Closed:** December 27, 2023  
(4:30 PM EET)

## Published Report

### ELGO-DIMITRA Data Management Practices: Review and Recommendations

Tsiroukis, Fotis (Researcher)<sup>1</sup> ; Leonelli, Sabina (Researcher)<sup>1</sup> 

DOI [10.5281/zenodo.13999260](https://doi.org/10.5281/zenodo.13999260)

**Aim:** Foster investment in long-term data-related infrastructures and skills as well as awareness of the richness of Greek data practices within the international landscape.

## Published Dataset

### Dataset for ELGO-DIMITRA Data Management Practices & Requirements: A Scoping Report

Tsiroukis, Fotis (Researcher)<sup>1</sup> ; Leonelli, Sabina (Supervisor)<sup>1</sup> ; ELGO-DIMITRA (Distributor) 

DOI [10.5281/zenodo.14003418](https://doi.org/10.5281/zenodo.14003418)

#### Dataset Structure

This dataset contains 3 main categories of data types.

1. **graphs & visualizations** (\*\_Graphs\*)
2. **data spreadsheets** (\*\_Data\*)
3. **miscellaneous documentation** (\*\_Questions\*, \*\_Logs\*)

Comprehensive collection of survey data, analysis documents, visualizations and all material related to the report.

# Format & Methods

## Medium

**Online survey** (text form) with a variety of question types:

- multiple/ranked choice
- Likert scale
- yes/no
- free text

## Distribution

Anonymous Link & Mailing List  
(Directorate -> Institutes -> Researchers)

## Software

- *Qualtrics*  
(Survey Design, Data Gathering & Visualizations)
- *Excel*  
(Formatting, Coding, Open Data)
- *ChatGPT*  
(Free Text Thematic Analysis)

## Analysis

- *Quantitative* (Graphs & Plots, Keywords)
- *Qualitative* (Thematic Analysis)
- *Mixed* (Theme Frequency Analysis)

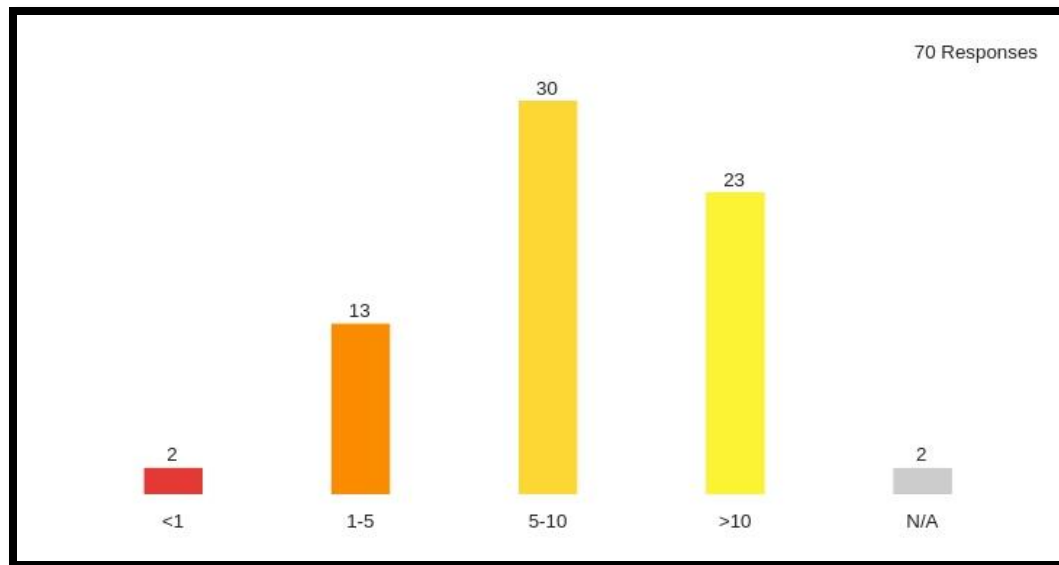
# Sample Characteristics

## Location (range)

- Greece (Athens, Northern, Central, Crete, Aegean)

## Respondents

- ELGO-DIMITRA Research Staff (permanent)
- All ELGO-DIMITRA Research Institutes



Q16. How many years have you been working at ELGO-DIMITRA?

## Sample Size

### Target:

182 ELGO Research Staff

### Responses:

Total: 103 (57% rr)

Completed: 70 (~40% cr)

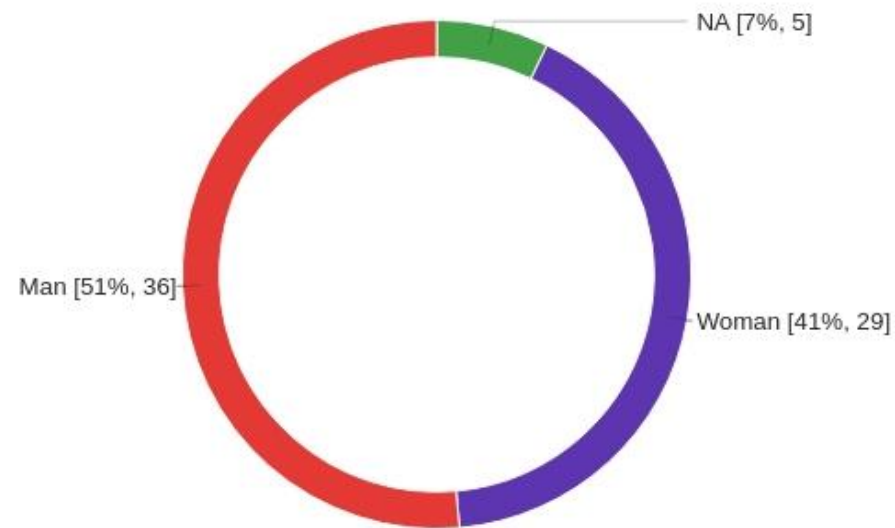
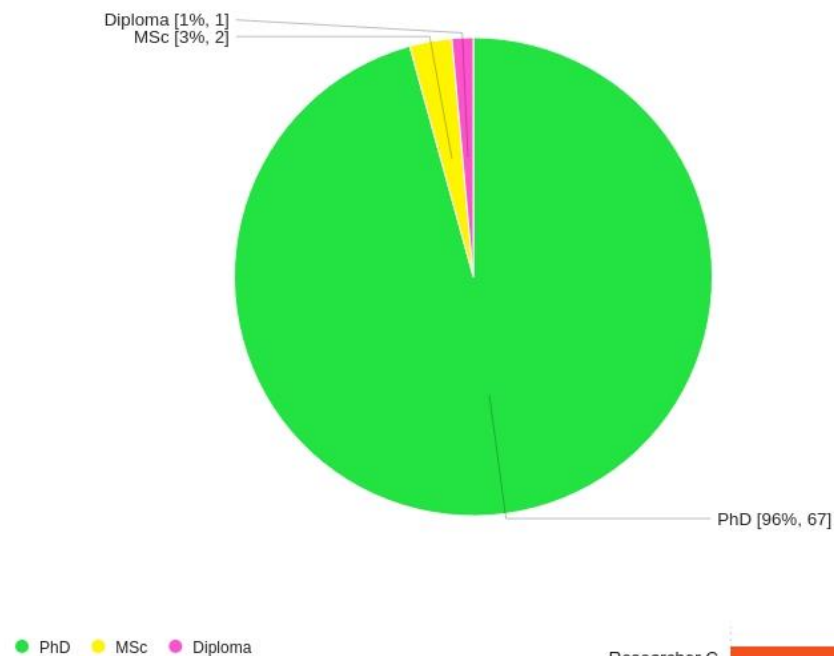
Results based on:  $\frac{n_{resp}}{q}$

Varies slightly depending on individual completion rate.

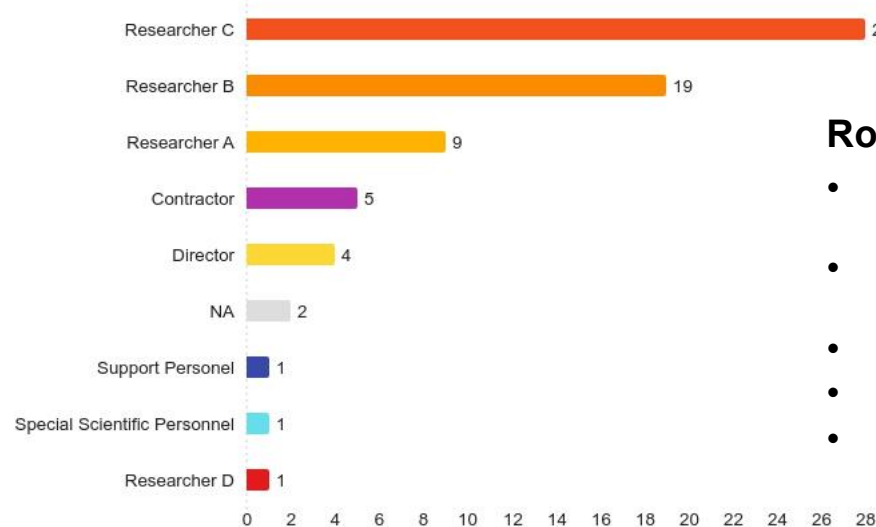
*No information about distribution within ELGO institutes*

# Demographic

## Gender Distribution: 51% male / 41% female



70 Responses



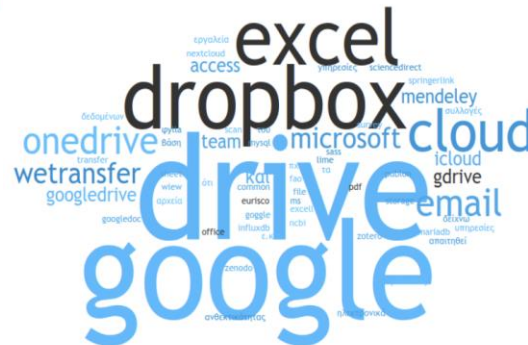
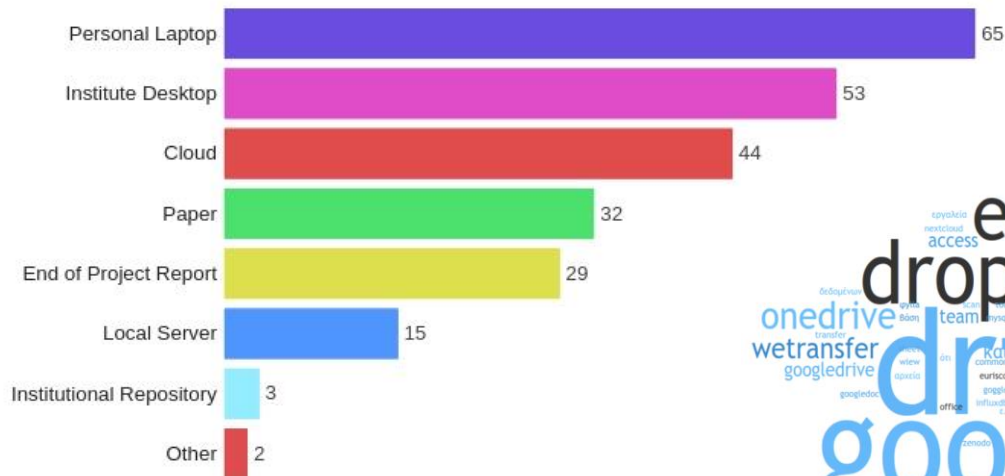
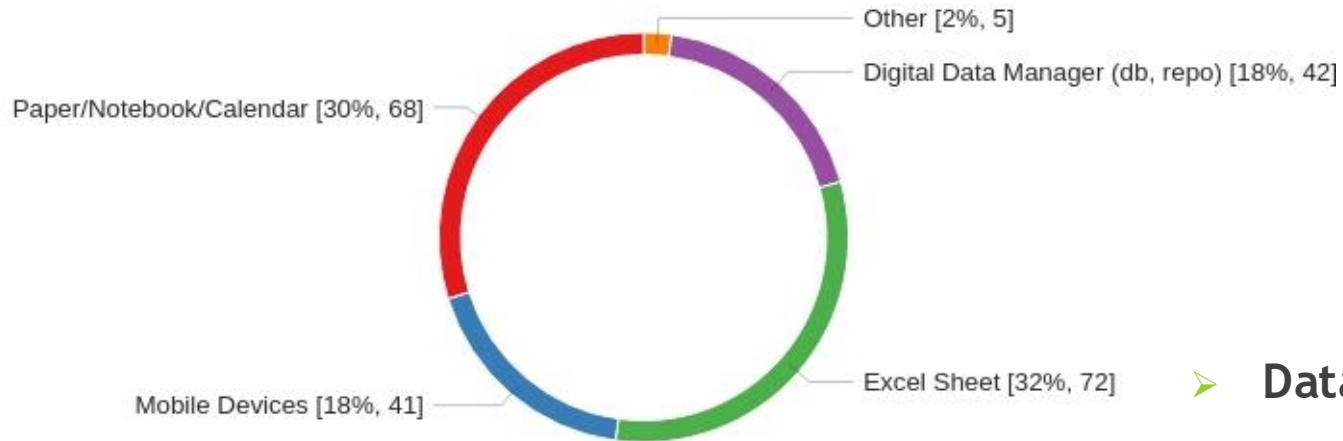
## Qualifications

- 96% PhD
- 3% MSc
- 1% Diploma

## Role:

- Researchers (C, B)  
Middle-career
- Researcher (A)  
Senior
- Directors
- Lab Technicians
- Supportive Personnel

# Survey Results



## ➤ Data Collection

➤ *Mixed analog/digital means of data collection:*

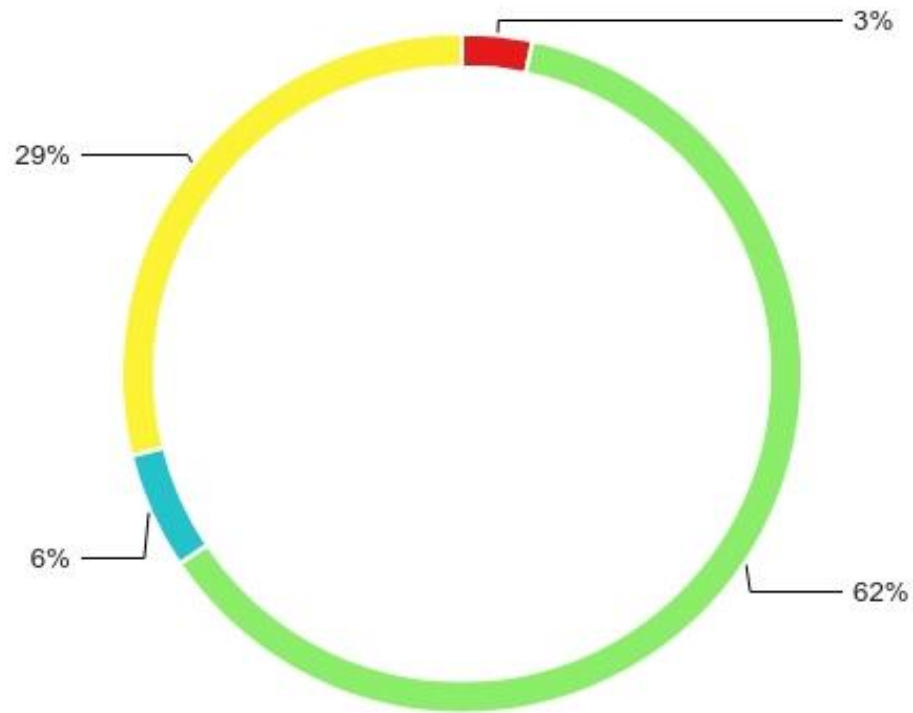
- Paper and Notebooks (30%)
- Digital Media (Excel Sheets, Mobile Devices, Software) (70%)

## ► Data Storage

- *Distributed/cloud storage over Local Storage (servers)*

- Cloud Services (Google Drive, Dropbox) (80%)
- Proprietary vs. Publicly Funded Alternatives (e.g., Zenodo)
- Freemium Models vs. Other Choices (e.g. Mendeley)

# Survey Results



## ➤ Data Sharing Patterns

- Overall number of sharing outside one's lab: **97% !!**
  - Sharing with national/international institutes: 62%
  - *Sharing within ELGO-DIMITRA departments: 6%*
  - No sharing: 3%

## ➤ Decision-Making Factors:

- Specificity of the Data Types
- Completion of the Project
- Control over Conditions for Sharing



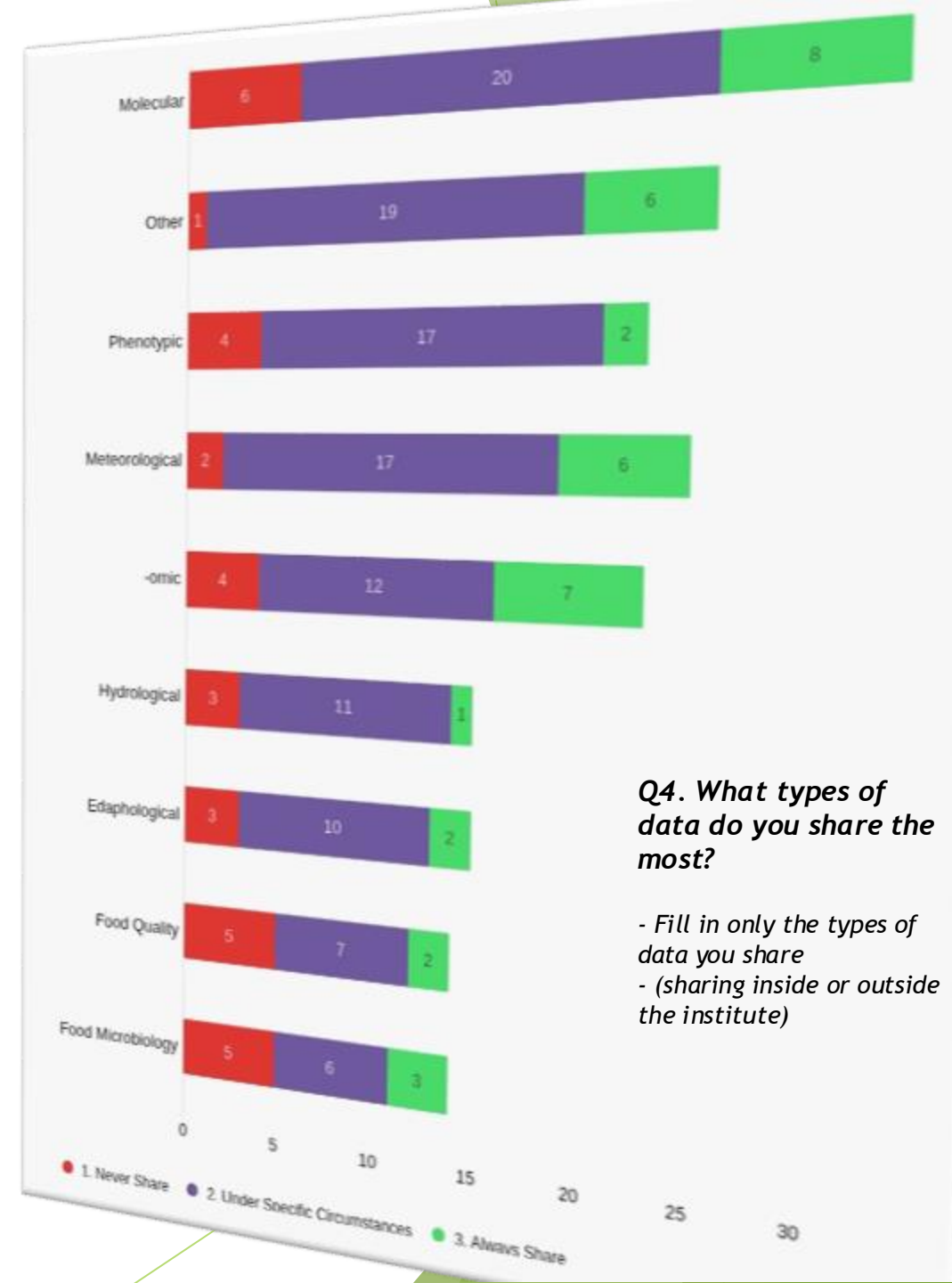
# Survey Results

- Data Types & Sharing Decisions
  - Great Variety of specialized data types
    - Emphasis on the dominance of the “Other” category - shows unexpected diversity



Q4/Q5. Other (free text)

- Sharing under specific circumstances: **63%**



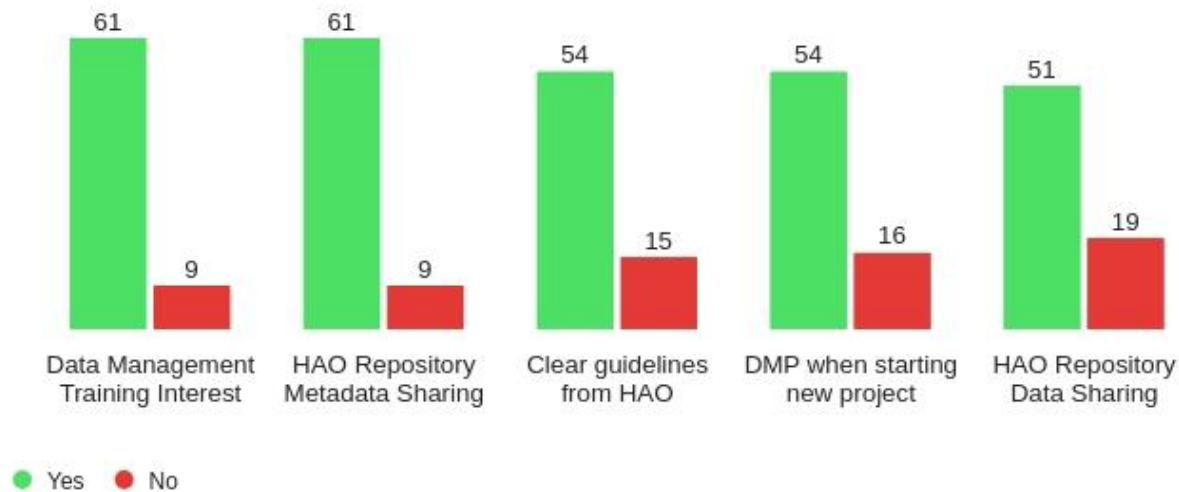
**Q4. What types of data do you share the most?**

- Fill in only the types of data you share  
- (sharing inside or outside the institute)



# Survey Results

Comparison:  
70 Responses



## ► Data Management Challenges (free text)

### ► *Infrastructural limitation:*

- volume
- speed
- lack of robust backup mechanisms

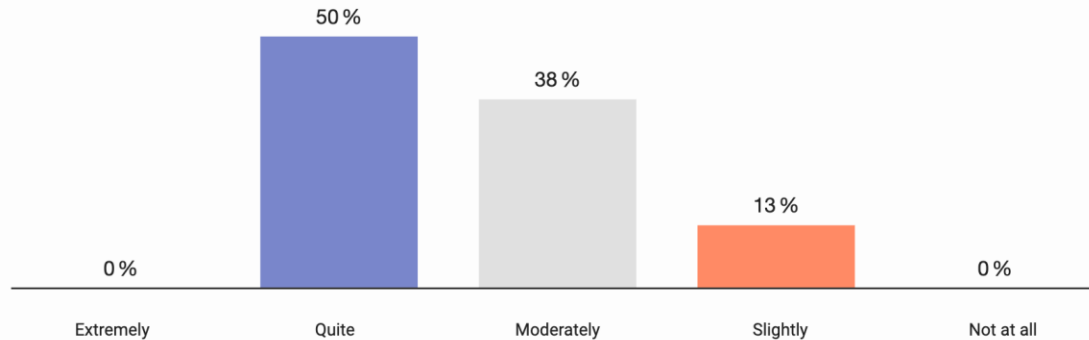
### ► *Issues related to handling specialized data types*

## ► Trends & Preferences

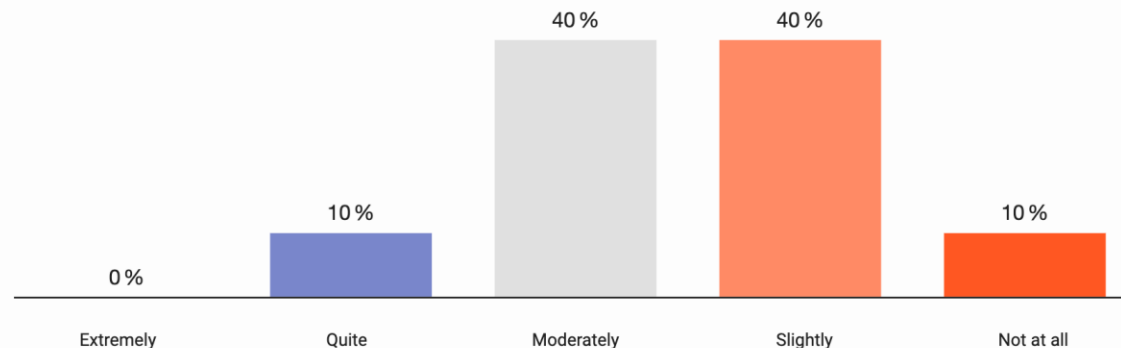
- *Openness to Support:* Interest in Data Management Training: 87%
- More willingness to share under a system of permissioned access: 87%

# Interactive Webinar on the Survey Results - Participify

Did it make you reflect on your own data management practices?



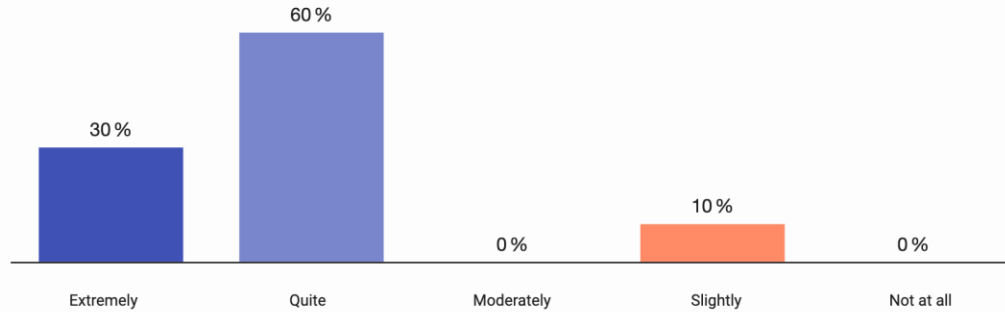
Are you satisfied with your *data management practices*?



## Insights:

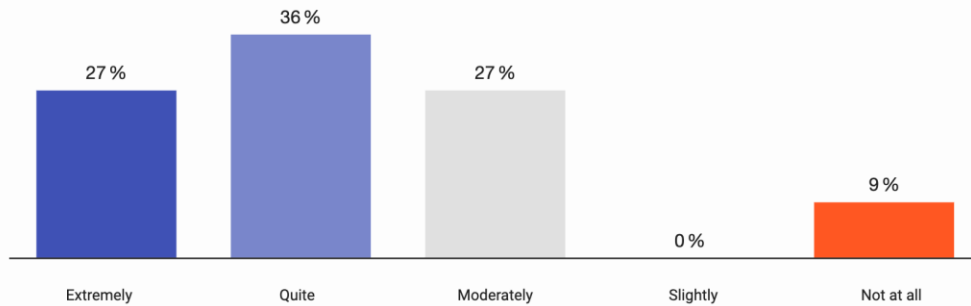
1. The Survey was helpful in bringing awareness to the importance of data management.
2. It is clear that there needs to be concerted effort on improving data management in ELGO.

Have you worried about the **accessibility** of your data before?



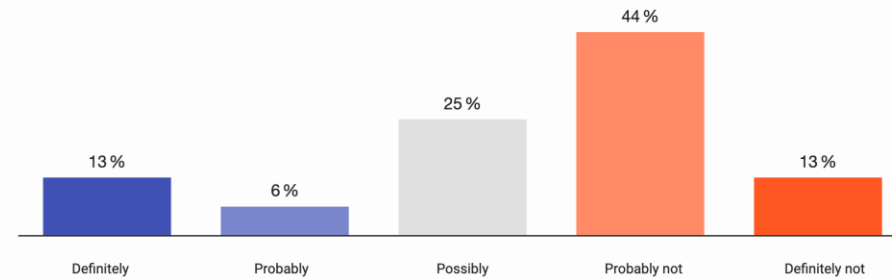
### 3. Data-related concerns are on people's minds.

Have you worried about **interoperability** of your data before?

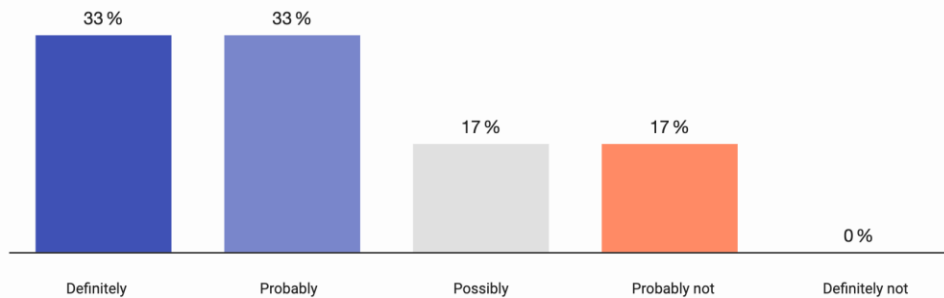


Would you like the opportunity to present *your own* data management practices to ELGO-DIMITRA leadership?

(with the possibility of earning title as Data Management Champion)



Would you like to *be involved* in developing data management *training*?



### 4. Non-negligible demand for DM training.

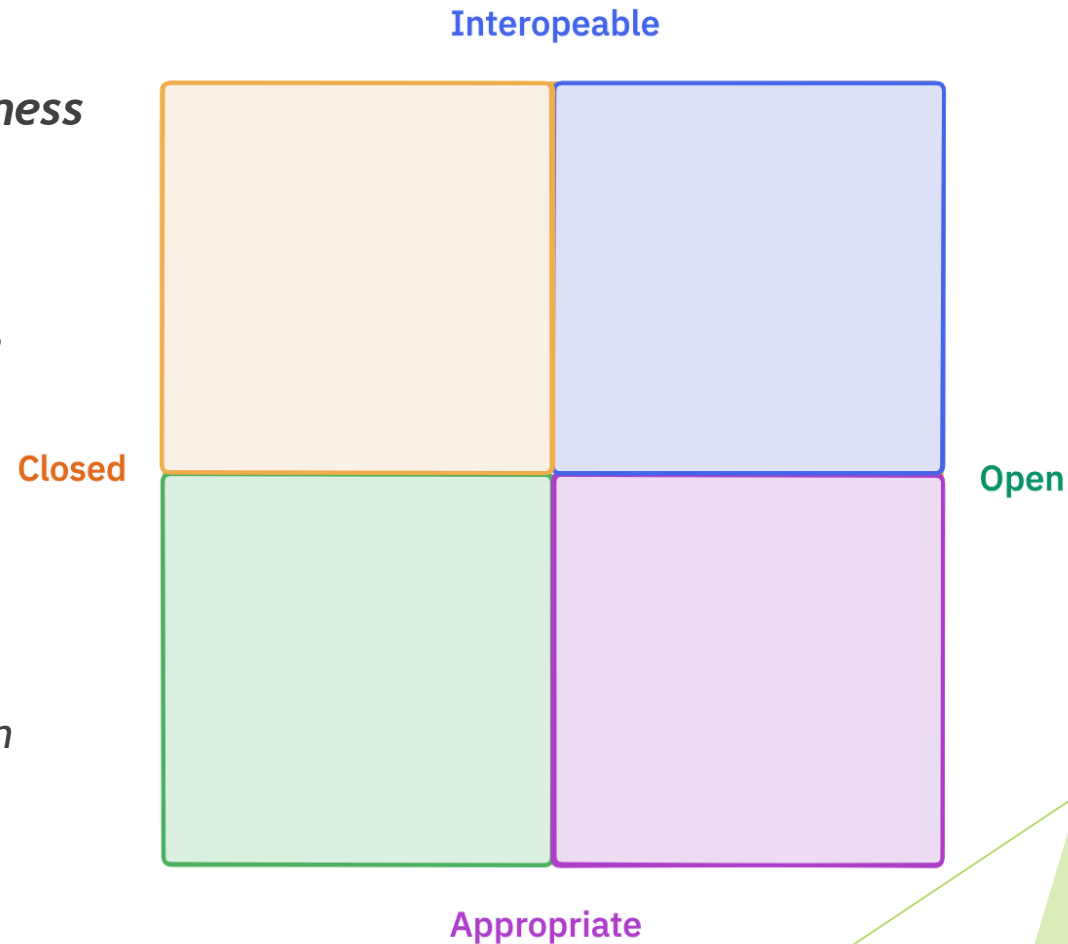
# Data-Related Challenges & Framing

## Trade-offs

- ▶ *Interoperability ~ Appropriateness*
- ▶ *Access: Open ~ Closed*
- ▶ *Storage: Local ~ Cloud*
- ▶ *Tools: Proprietary ~ Open Source*

## Issues

- ▶ *Maintenance Work*
- ▶ *Technical Expertise*
- ▶ *Interdisciplinary Interaction between Plant Scientist ~ Data Scientists*
- ▶ *Data Integration*



# Results and Interactive Board



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