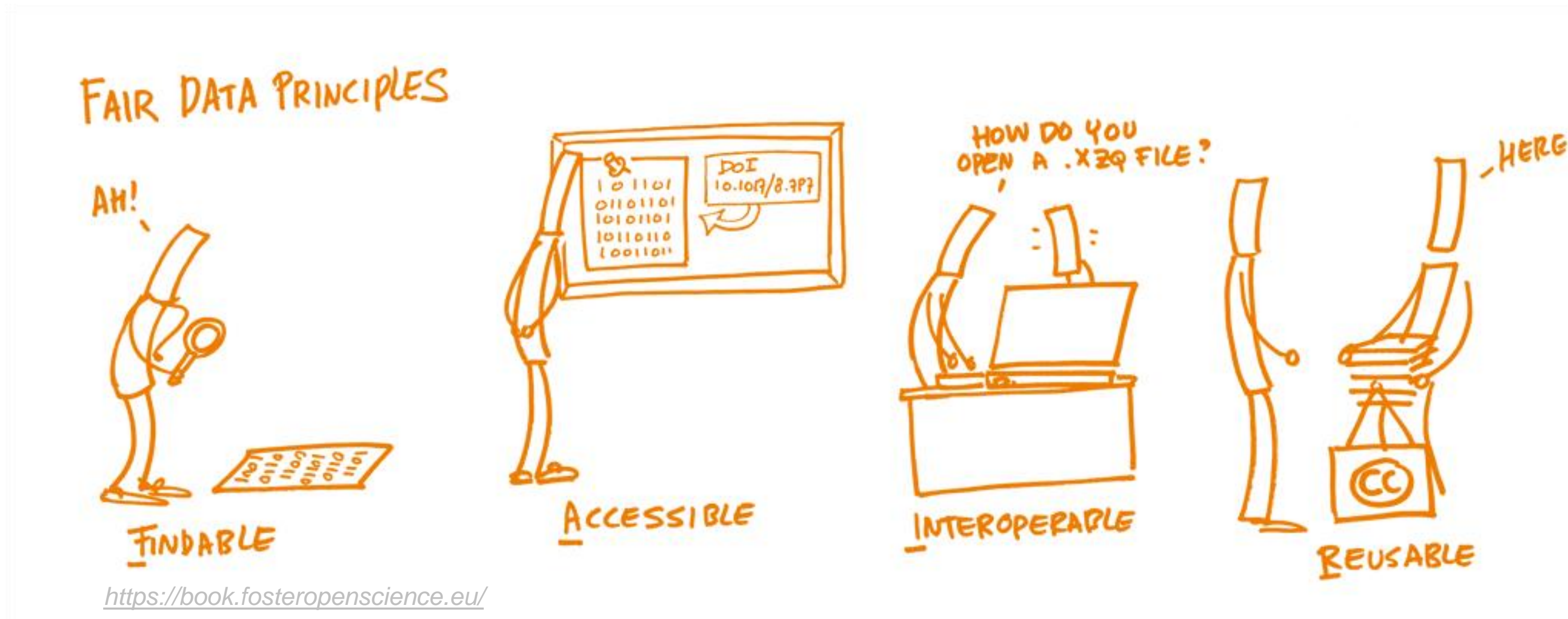


INTRODUCTION TO FAIR

EUREF - 27.05.2021

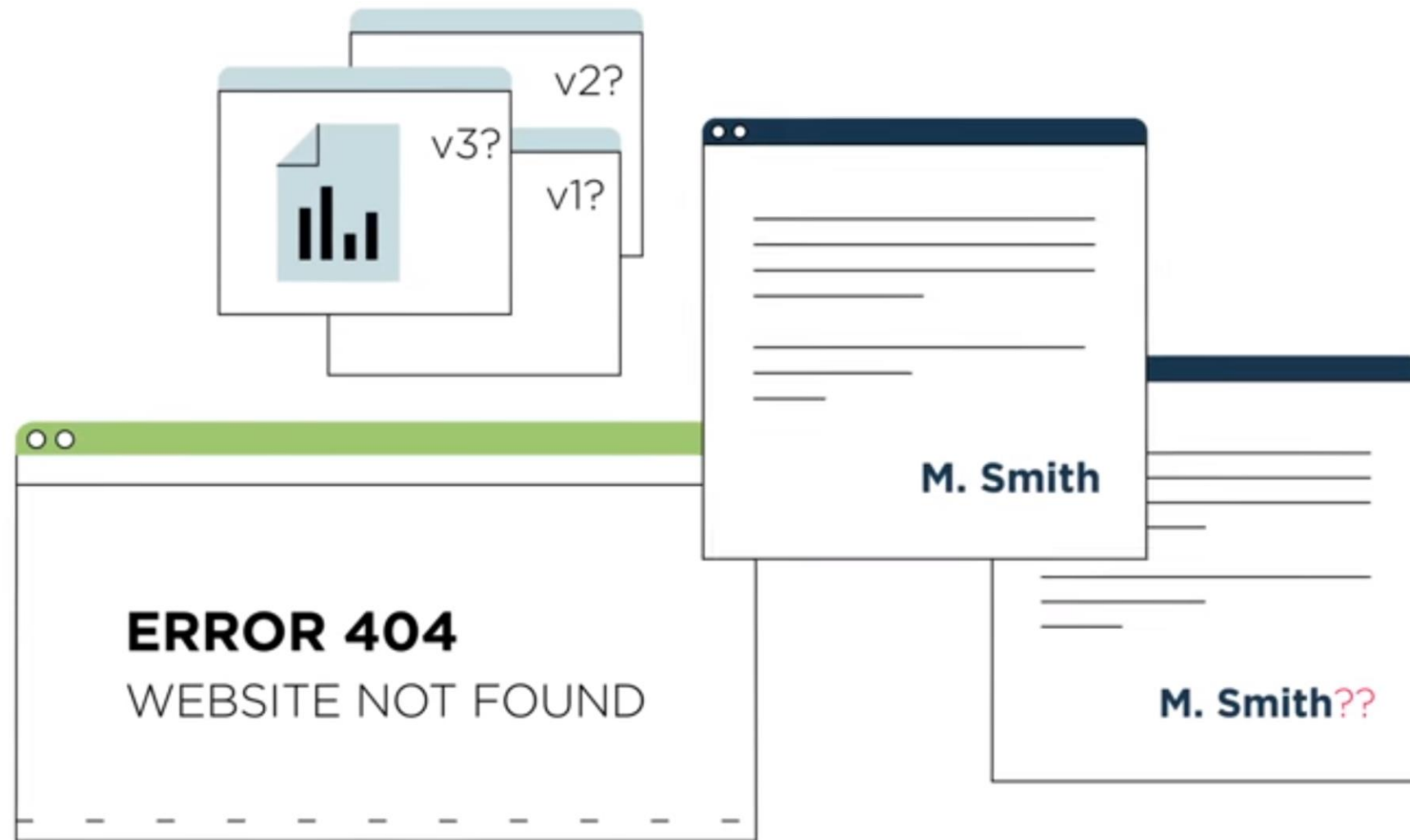
UGent Data Stewards - Stefanie De Bodt

FAIR DATA



COMMON FINDABILITY ISSUES

BROKEN LINKS, CONFUSING ABOUT VERSIONS AND TERMS

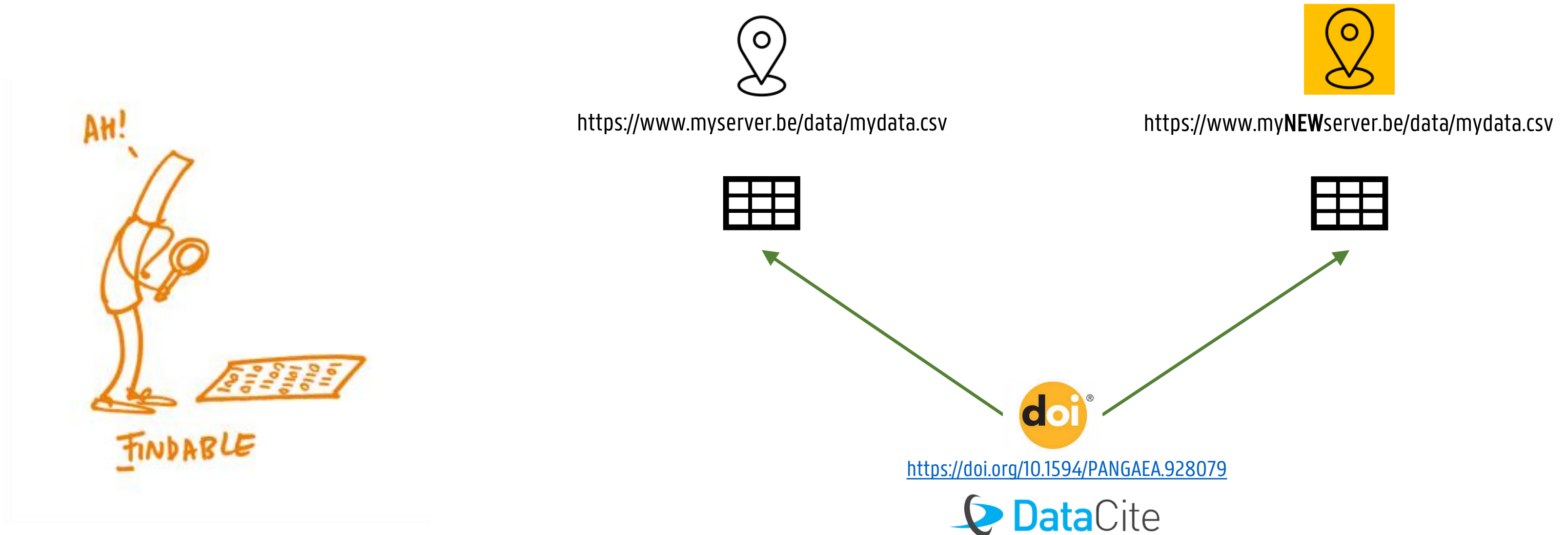


Braukmann, Ricarda, Dohna, Tina, Bernal-Llinares, Manuel, Bunakov, Vasily, & Lambert, Simon. (2020). FREYA - The power of PIDs. Zenodo. [doi:10.5281/zenodo.3977942](https://doi.org/10.5281/zenodo.3977942)

SOLUTION: ASSIGN A GLOBALLY UNIQUE AND PERSISTENT IDENTIFIER (PID)

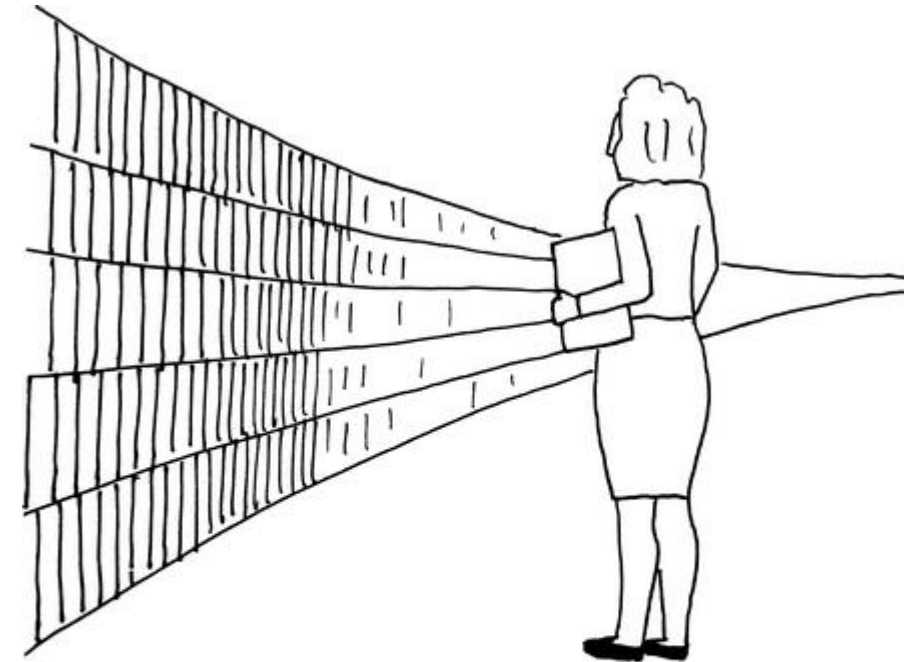
Globally unique: an unambiguous reference for humans or machines, an identifier associated with only one resource at any time

Persistent: stable and resolvable identifier for the long term



COMMON FINDABILITY ISSUES

FIND THE NEEDLE IN THE HAYSTACK



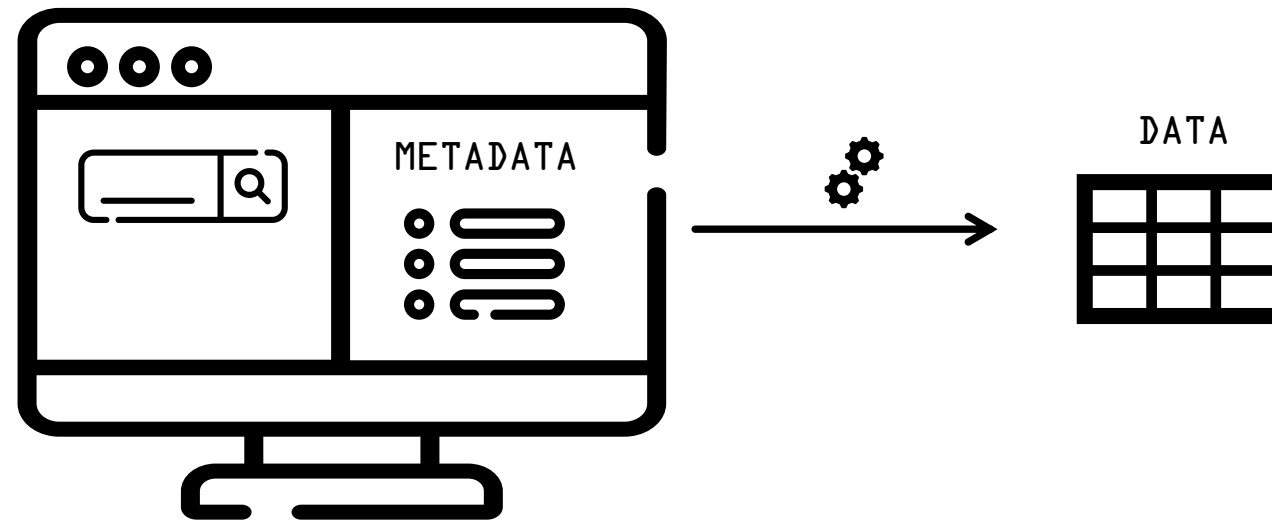
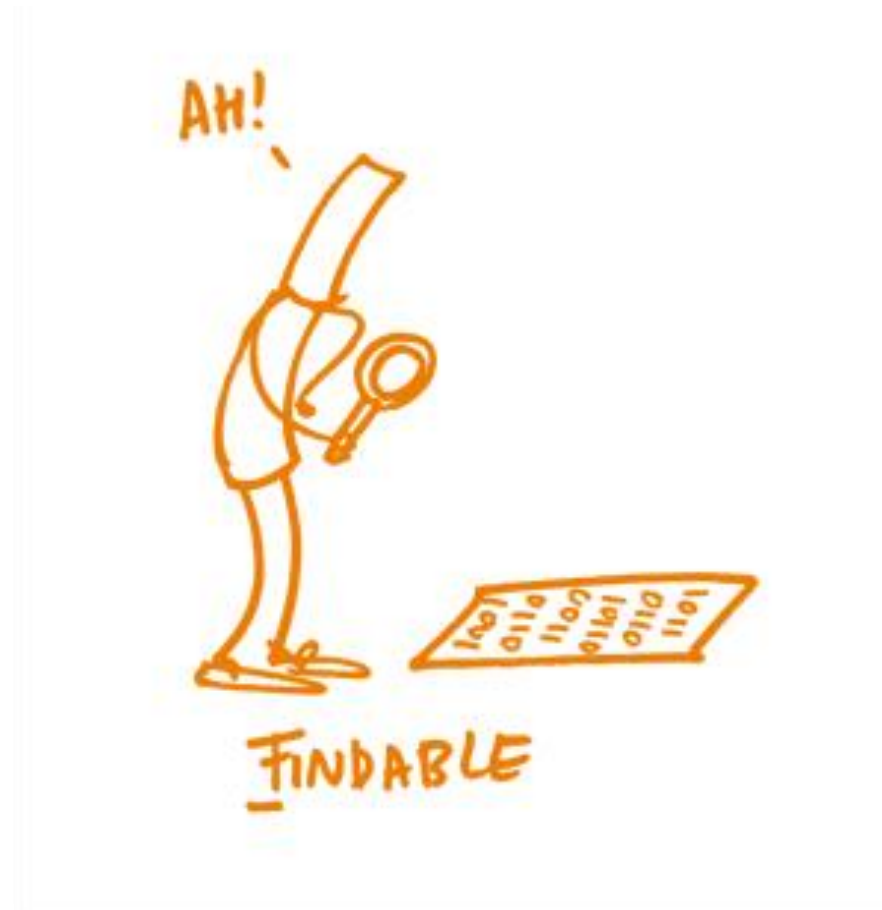
WE SHOULD HAVE LABELED THEM

 Dataedo /cartoon

Prof. @Dataedo

SOLUTION: DESCRIBE DATA WITH RICH METADATA

Metadata: data about data, a machine-readable and structured form of documentation

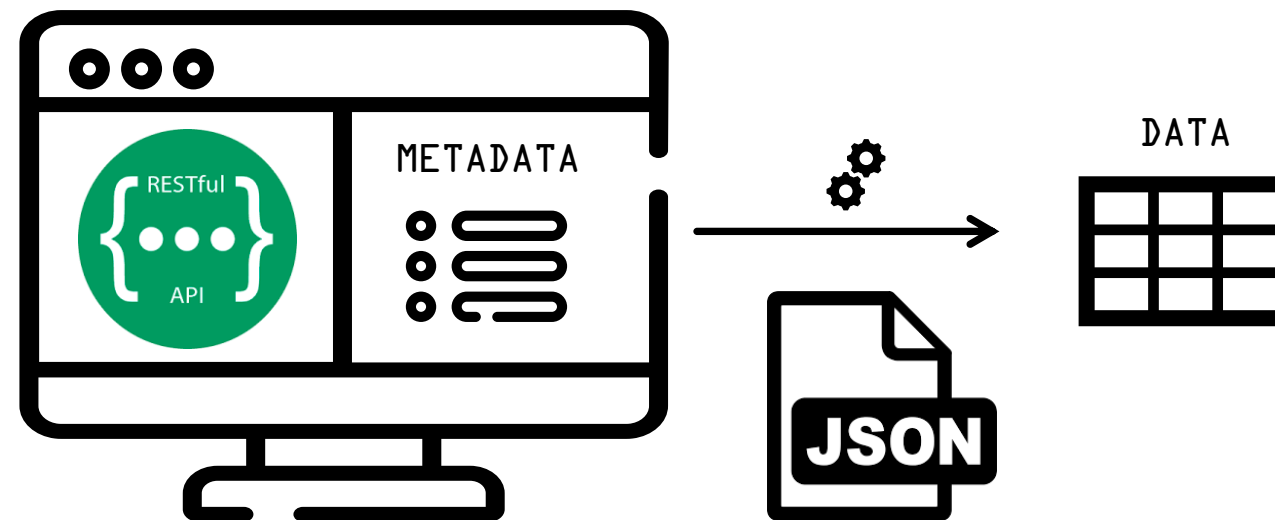
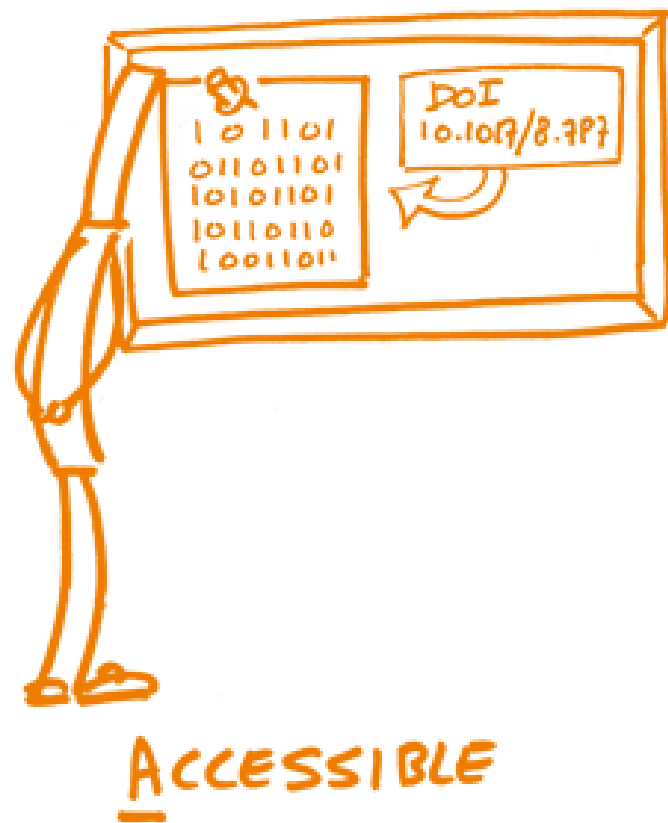


- | | | |
|-------|----------|-----------|
| ? | PERSON | LIGHTBULB |
| WHAT | WHO | WHY |
| MAP | CALENDAR | GEAR |
| WHERE | WHEN | HOW |

STANDARD COMMUNICATIONS PROTOCOL TO RETRIEVE (META)DATA

Communications protocol: describing how (which rules, syntax, etc) to transmit the data. e.g. HTTPS, FTP

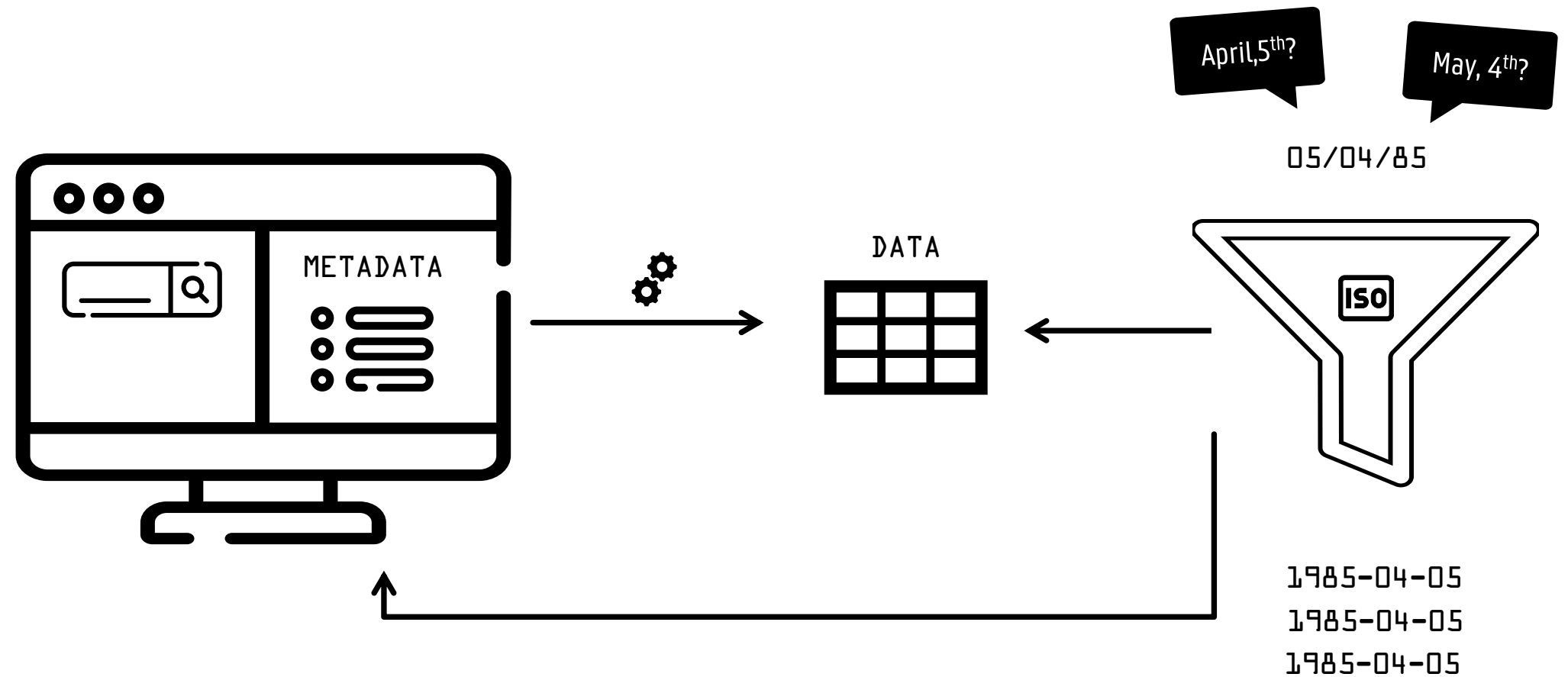
APIs (Application Programming Interface): a set of functions and procedures to allow applications to access repository data



STANDARDS FOR (META)DATA

Metadata schema or standard: a community consensus on the relevant metadata for a specific purpose or domain

Controlled vocabularies, taxonomies or ontologies:



LICENSE AS METADATA

License: grants permission for data re-use under certain conditions

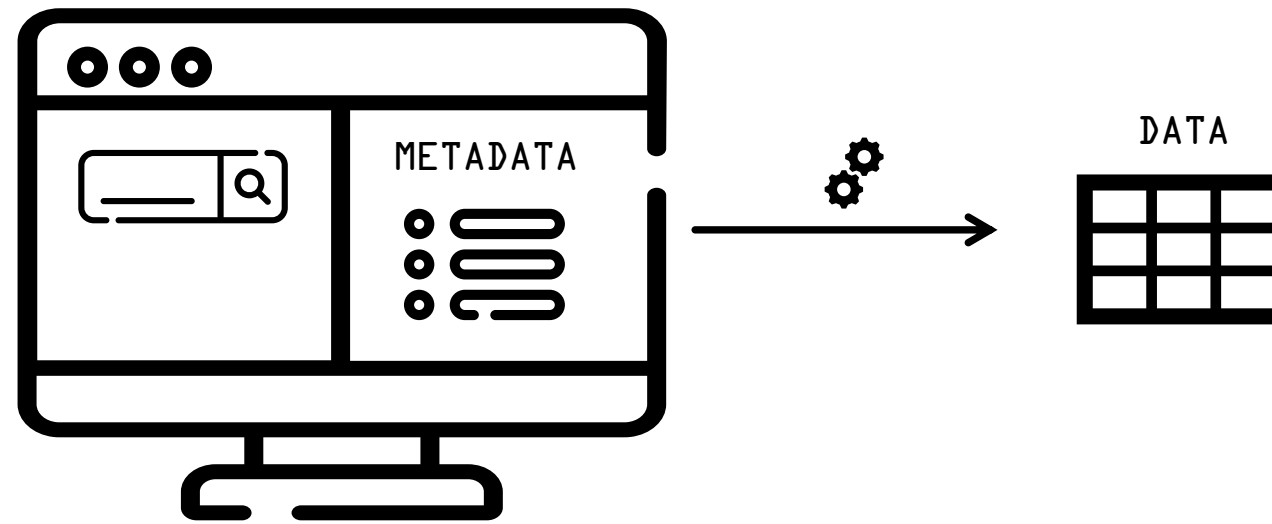
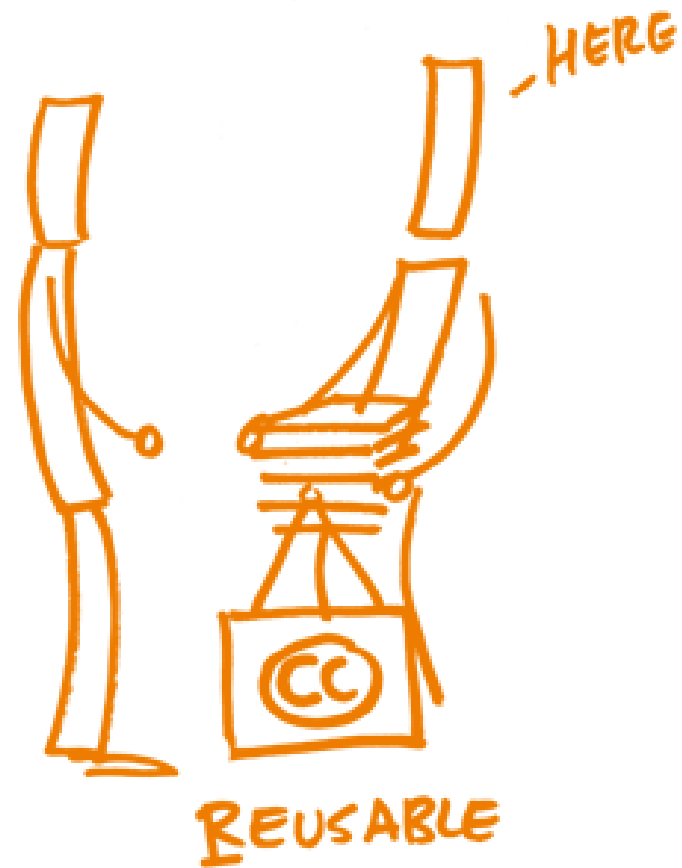
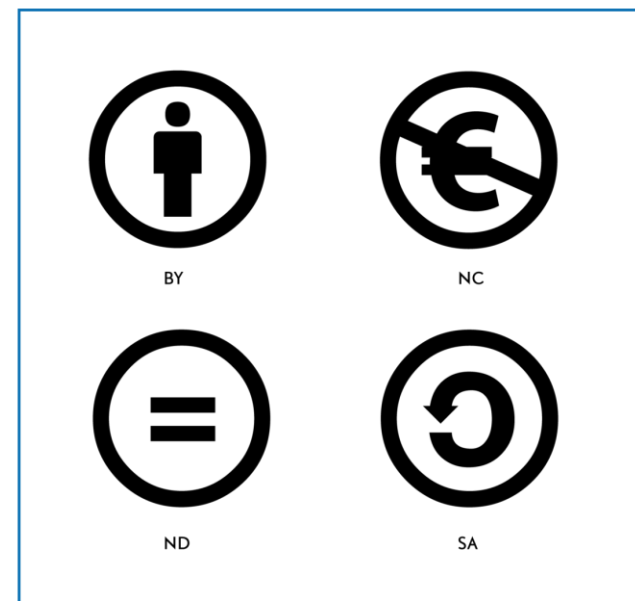


FIGURE 1: PICTOGRAMS OF THE CC LICENSE FEATURE



TOWARDS...

- Trusted repositories
 - FAIR assessment
 - Core Trust Seal certification

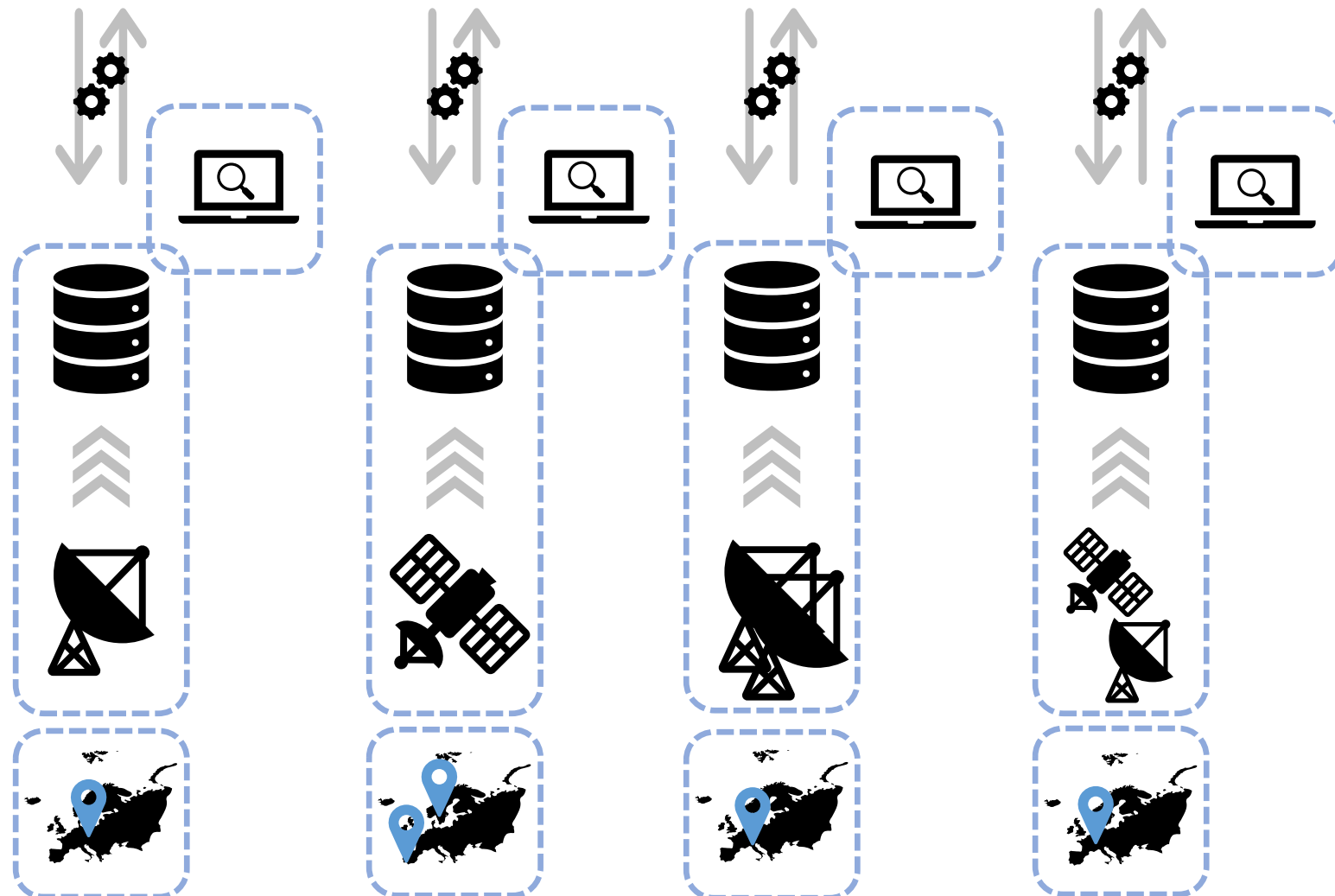
- Federated repositories
 - Integration with EOSC



DATA PORTAL FOR ACCESS TO DISTRIBUTED DATA



- One-stop shop to query multiple, diverse data sources increasing visibility and re-use of data
- Uniform and stable data access
- Increased interoperability between datasets



- Distributed efforts for data import and curation
- Local, regional or data type specificities possible, avoiding one-fits-all compromises
- Data standardization and interoperability enabled by domain experts
- Distributed investment and operating cost

Stefanie De Bodt - UGent Data Stewards

RESEARCH DEPARTMENT - UNIVERSITY LIBRARY



stefanie.debodt@ugent.be, rdm.support@ugent.be



@UGentRDM



ugent.be/en/research/datamanagement



[Knowledge clip on YouTube: FAIR data principles](https://www.youtube.com/watch?v=2uZxFu9SFi8)

<https://www.youtube.com/watch?v=2uZxFu9SFi8>

FAIR DATA PRINCIPLES



ARDC 2018