e-Infrastructures Austria
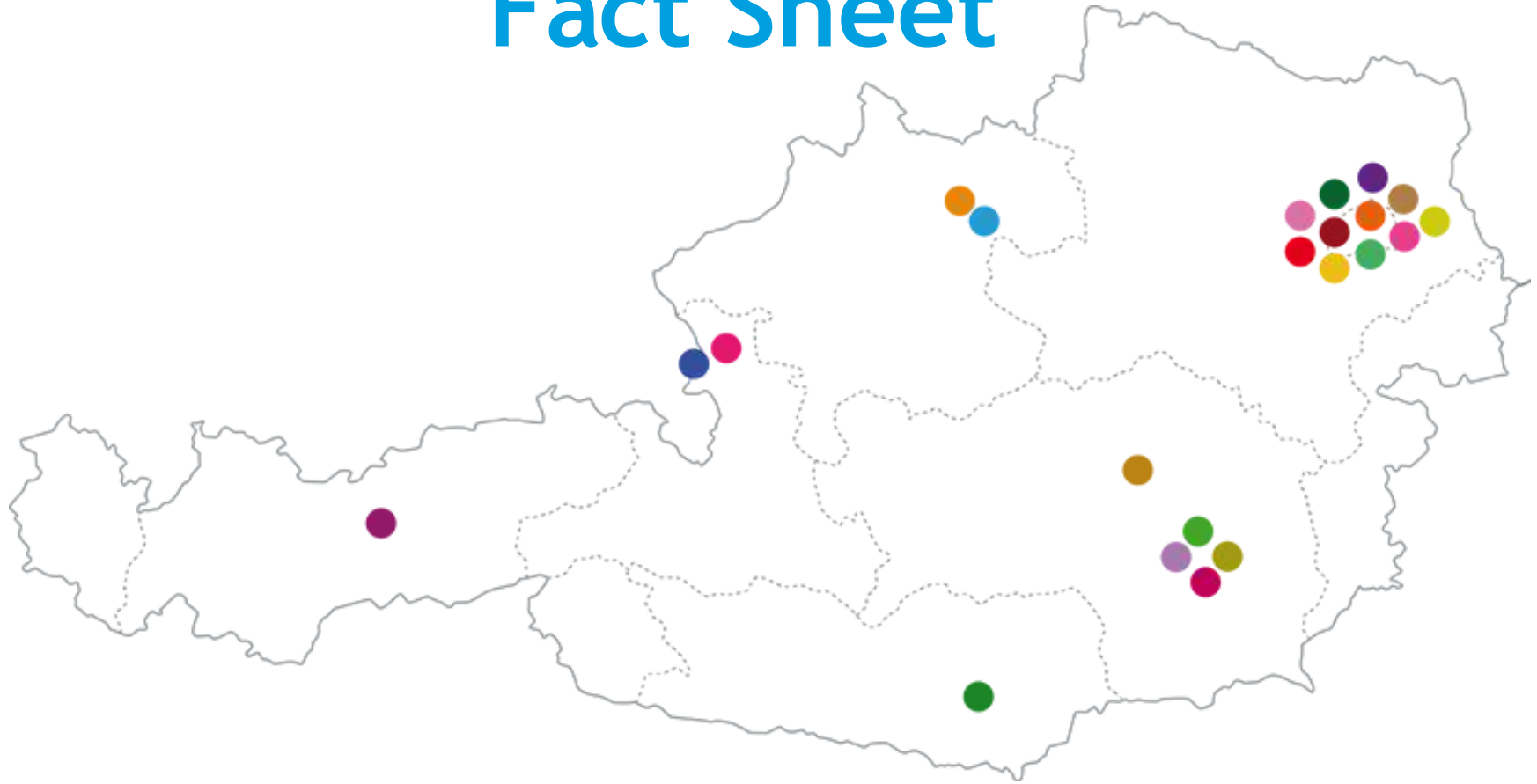
What is really needed?

Towards Open Science and Research Data Management
Results of a National Survey in Austria

Paolo Budroni - Rome, 30-31 May 2016

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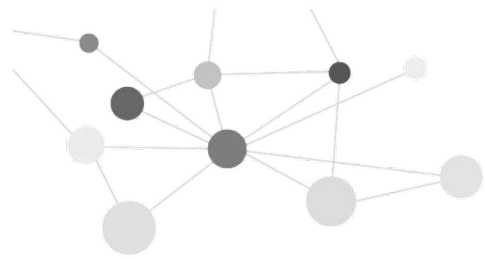
Fact Sheet

Project period: 1 January 2014 - 31 December 2016
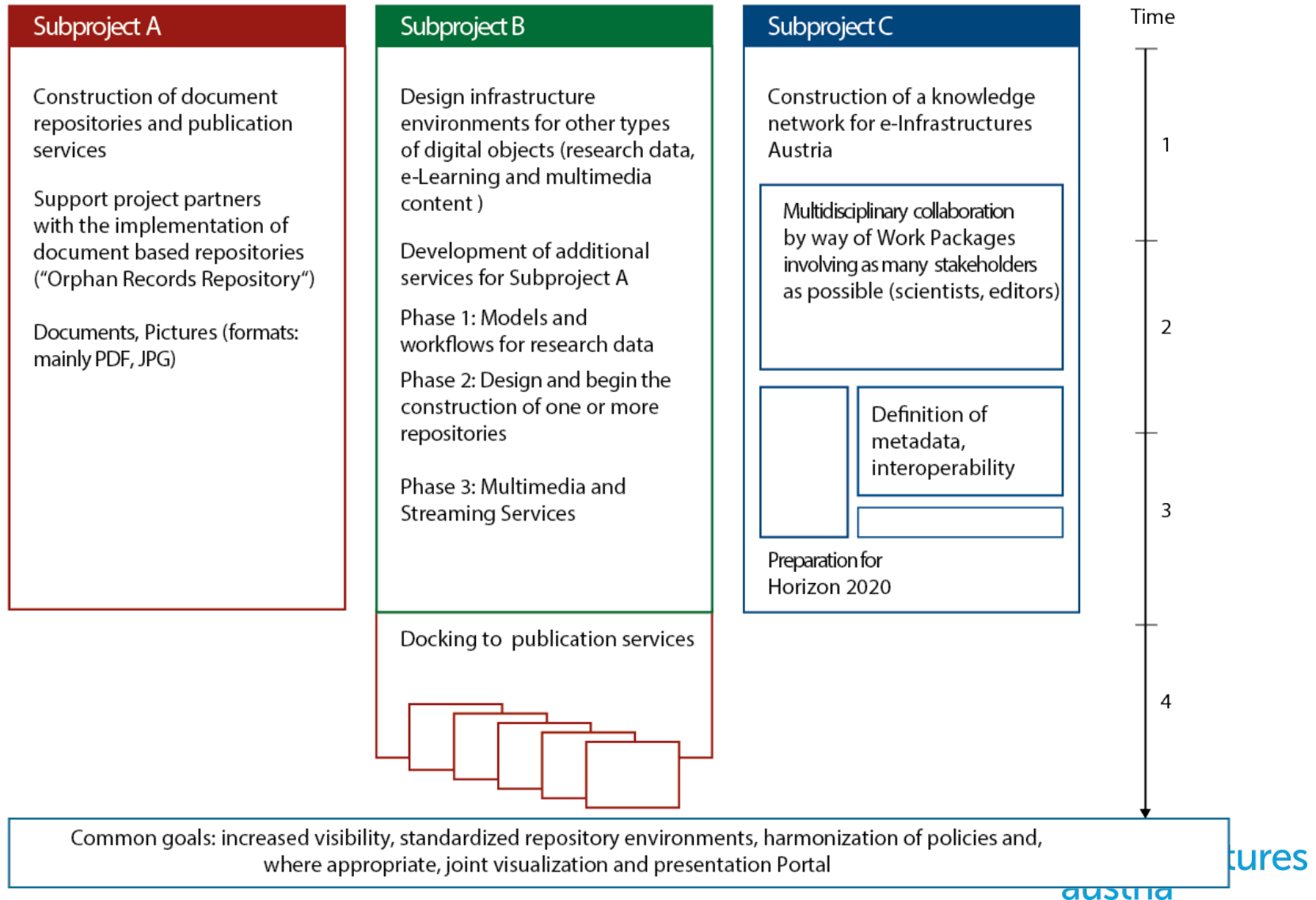Project coordinator: University of Vienna
Project partners: 26 Partner Institutions
Supported by: Federal Ministry of Science, Research and Economics

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- The landscape of digital resources is heterogenous

- The local situation (disciplines, infrastructure, policies, attitudes) is governed by „local traditions"

- Research data (multimedia, learnig objects) is exposed to structural changes through technological transformations (e.g. mobile devices) and by the appearance of new stakeholders (new generations of researchers) and new methods (e.g. revolution through institutional blogs or social media) requiring new
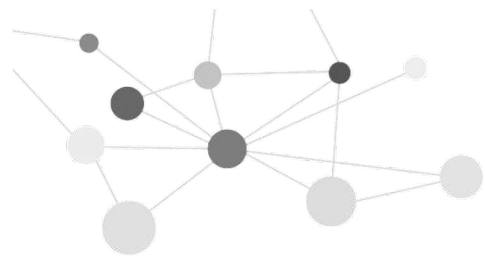
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Scope of the project

Subproject A	Subproject B	Subproject C	Time

Subproject A

Construction of document repositories and publication services

Support project partners with the implementation of document based repositories ("Orphan Records Repository")

Documents, Pictures (formats: mainly PDF, JPG)

Subproject B

Design infrastructure environments for other types of digital objects (research data, e-Learning and multimedia content)

Development of additional services for Subproject A

Phase 1: Models and workflows for research data

Phase 2: Design and begin the construction of one or more repositories

Phase 3: Multimedia and Streaming Services

Docking to publication services

Subproject C

Construction of a knowledge network for e-Infrastructures Austria

Multidisciplinary collaboration by way of Work Packages involving as many stakeholders as possible (scientists, editors)

Definition of metadata, interoperability

Preparation for Horizon 2020

Time: 1, 2, 3, 4

Common goals: increased visibility, standardized repository environments, harmonization of policies and, where appropriate, joint visualization and presentation Portal

WORK PACKAGes – 12 fields of action

Cluster A Monitoring and Assessment of Document Repositories within the Partner Network

Cluster B Planning and Implementation of a "National Survey" for Research Data

Cluster C Designing a Knowledge Network: Development of a reference structure for the construction of Repositories

Cluster D Infrastructure

Cluster E Legal and Ethical Issues

Cluster F Open Access

Cluster G Visual Data modeling

Cluster H Life Cycle Management

Cluster I Metadata

Cluster J Permanent backup of the data

Cluster K Data from scientific and artistic-scientific research processes

Cluster L Cross-project issues (technical and non-technical)
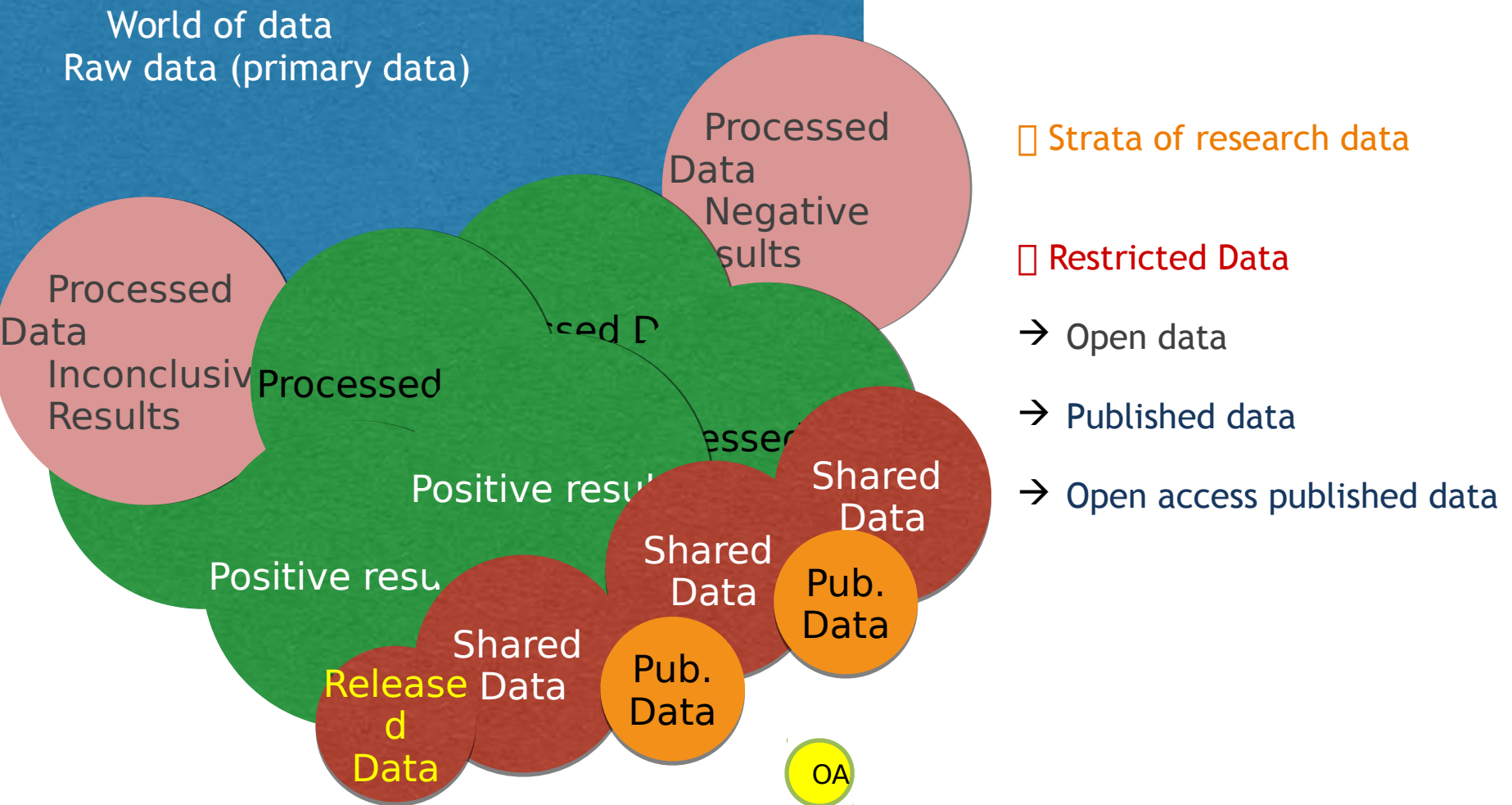
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WHO IS E-INFRASTRUCTURES AUSTRIA FOR?

- All Austrian universities
- Austrian non-university research institutions
- Austrian Research Communities
- Research-funding bodies
- The interested public

National Research Data Survey 2015

Different levels of processing of data
Model for digital archiving

World of data
Raw data (primary data)

Processed Data Negative results

Processed Data Inconclusive Results

Processed

Processed D

Positive resu

Positive res

Processed

Shared Data

Shared Data

Shared Data

Shared Data

Release d Data

Pub. Data

Pub. Data

OA

- Strata of research data

- Restricted Data

→ Open data

→ Published data

→ Open access published data

Ensuring legal and ethical compliance is key issue in this context

Towards Open Science - Challenges

A new ecosystem of services

Policies

High interest in support

60% Technical infrastructure
49% Specific support
42% Legal advice
41% Helpdesk
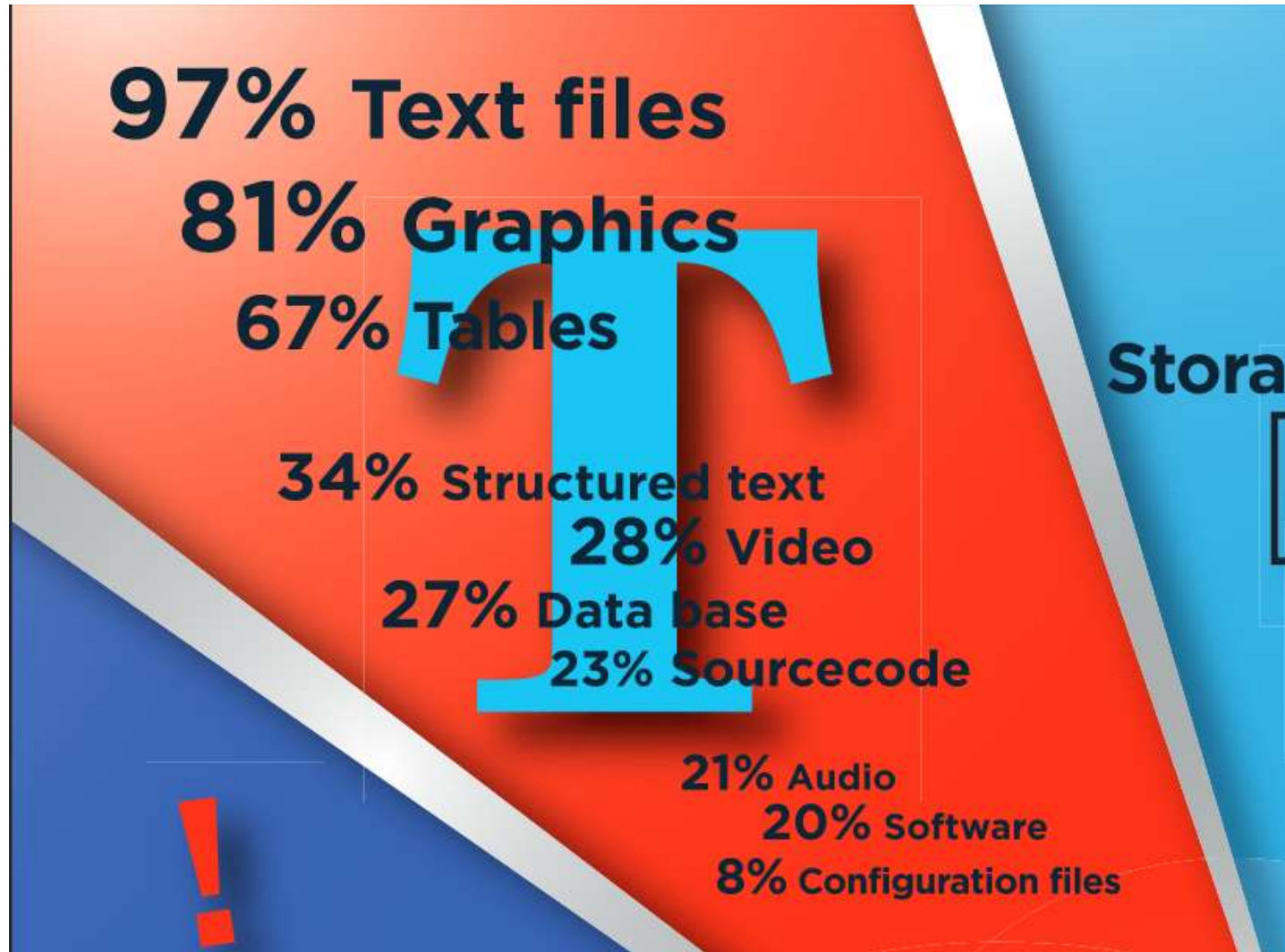37% Training courses

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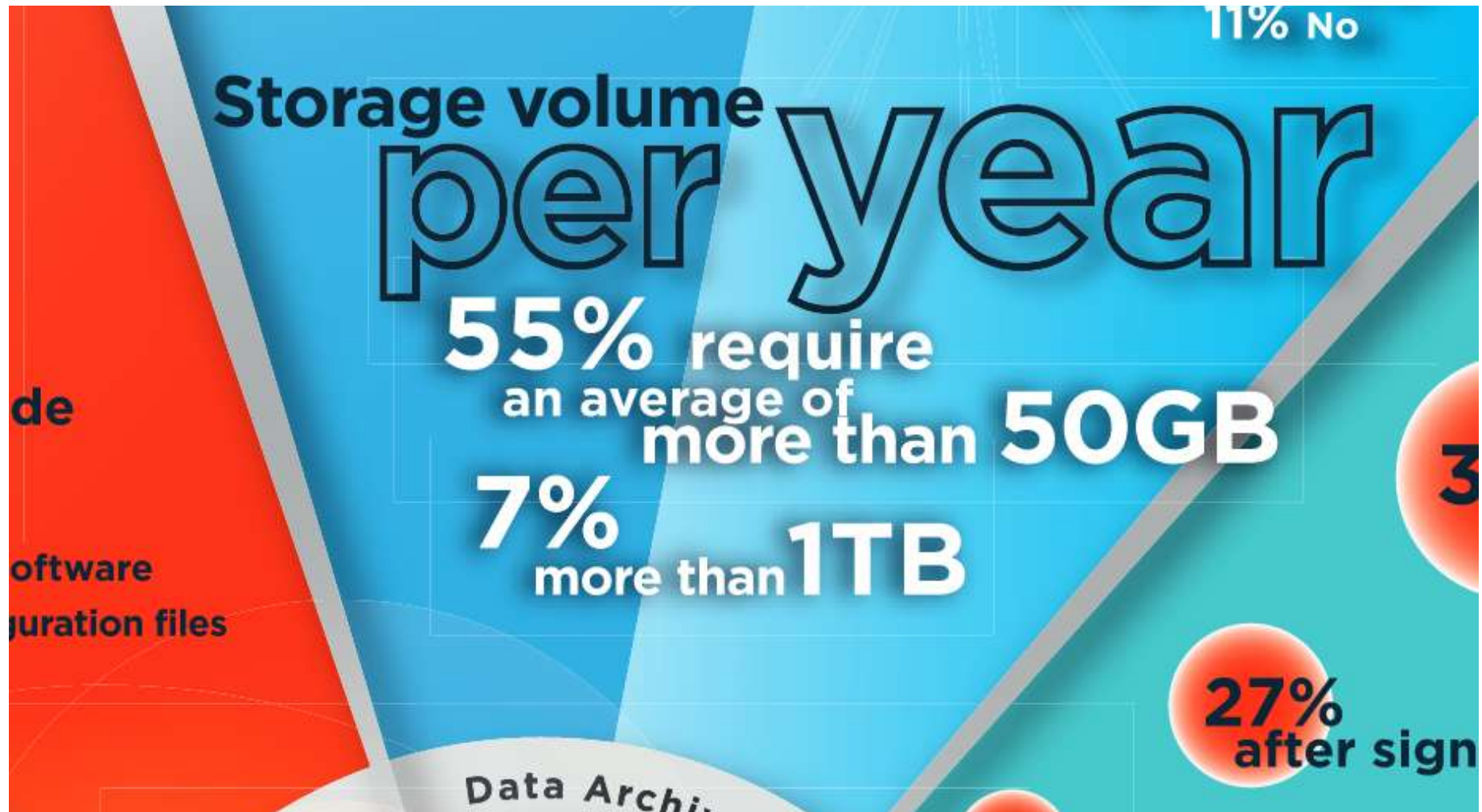
A common strategic vision

8% Configuration f

Expectations
on the institution:
Qualified personnel
Guidelines
Policies

High interest in

Infrastru

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Data types and formats

97% Text files
81% Graphics
67% Tables

34% Structured text
28% Video
27% Data base
23% Sourcecode

21% Audio
20% Software
8% Configuration files

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Collaborative data infrastructures

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Re-design of re-use scenarios

Are your research data **reusable** to others?

78% Yes or sometimes
22% No

Do you make user agreements?

36% No
45% Yes:
Cooperation agreements
Open content licenses
Individual agreements

Towards an open science ecosystem

Incentives to **share** data

Increased visibility
New contacts/collaborations
Recognition
Relevance for evaluatio

What's stopping you from **sharing**?
Effort
Data abuse
Privacy violations
Misinterpretation, Falsification
Other legal restrictions
Commercial use
Increased competitive pressure

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Identification of target groups

Whom do you grant access to your research data?

Category	Relative response rate (%)
By request	57
Selected institutional members	53
Scientific community	28
Whole institution	18
Public	11
No one	9
Other	3

Upon request 57%

Open Access 11%
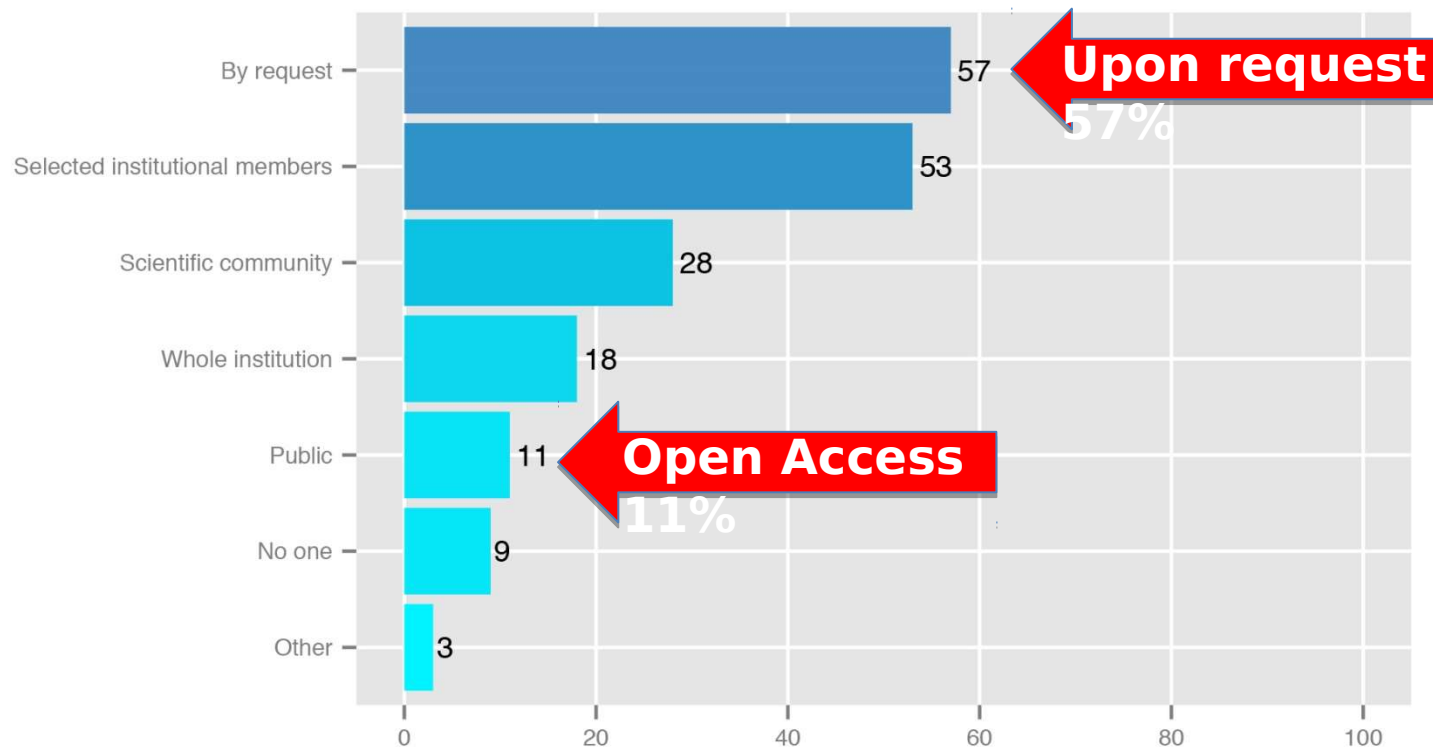
Relative response rate (%)

Re-thinking of scientific workflows
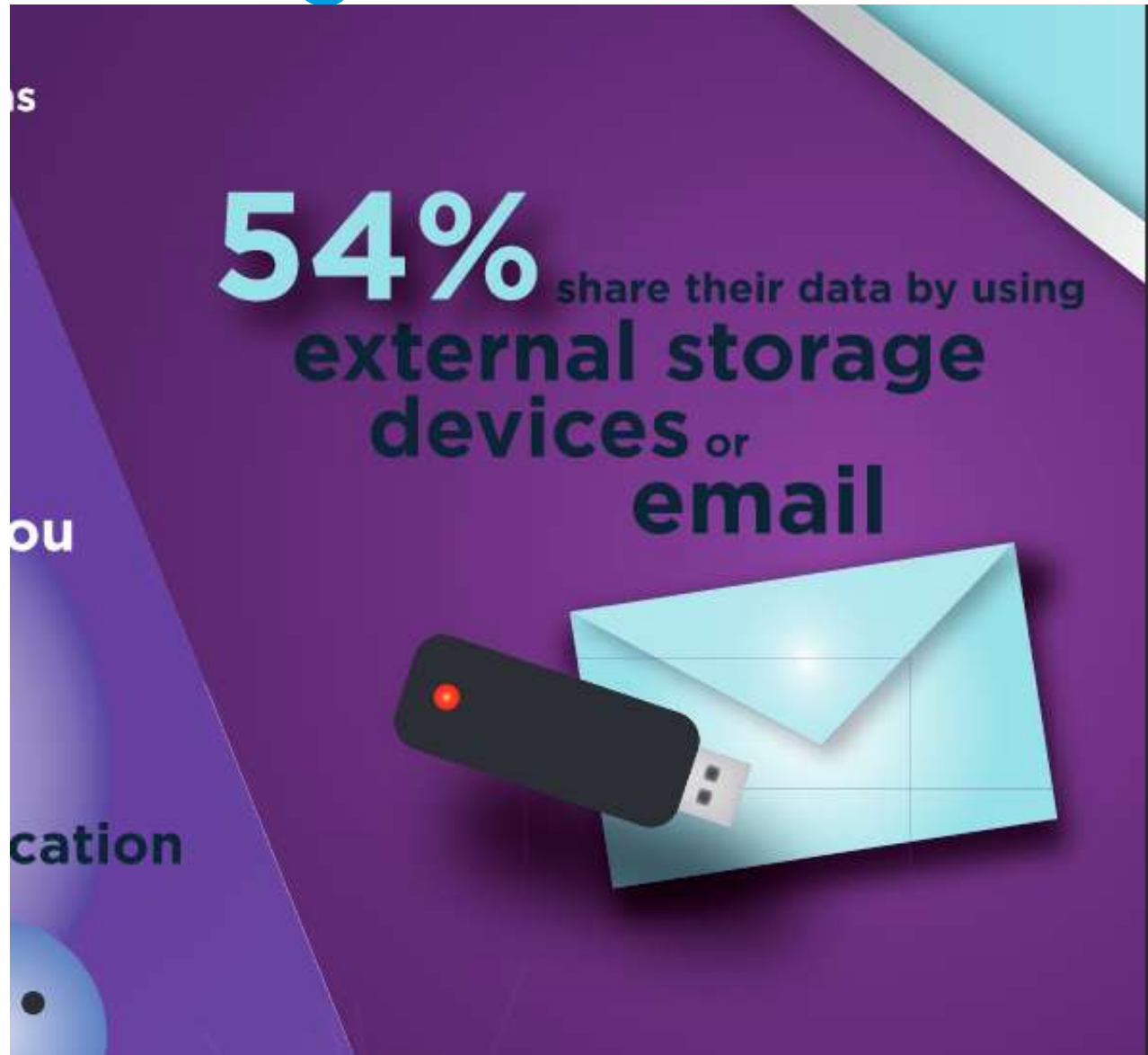
Coordination between various e-infrastructure components

How can others access your research data?

Repositories 14%

Relative response rate (%)

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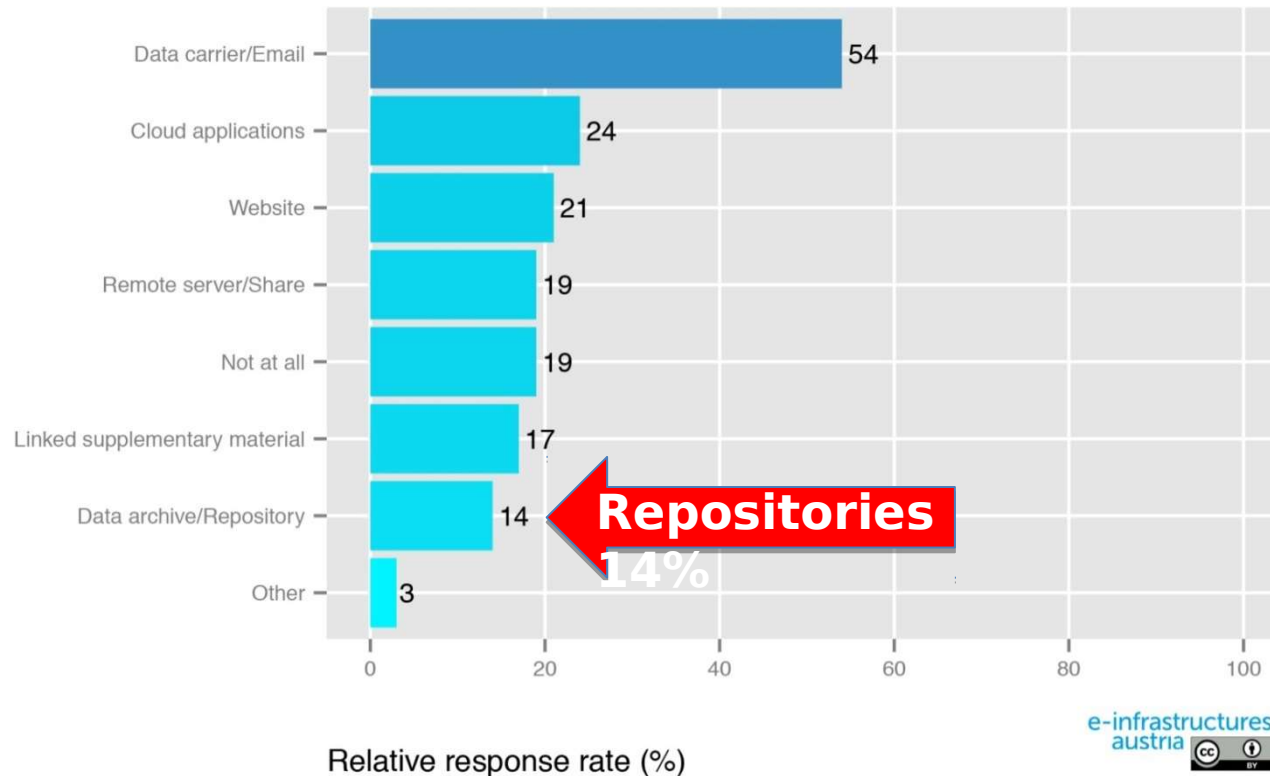
Enhancing sustainability

A common e-infrastructure umbrella

Conclusions

- Results conform with international reviews
- Challenges for enabling Open Science Vision
- Embedding in transnational e-infrastructures initiatives

- Need of **know-how transfer** of e-infrastructure **essentials** (project seminar: http://e-seminar.univie.ac.at/)
- Release of **RDM policies**

- **Reference points at local level**
- **Shared "vertical" services**
- **Transversal services**

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Downloads

Download full report:

Zenodo:
DOI 10.5281/zenodo.34005

Phaidra (e-book format):
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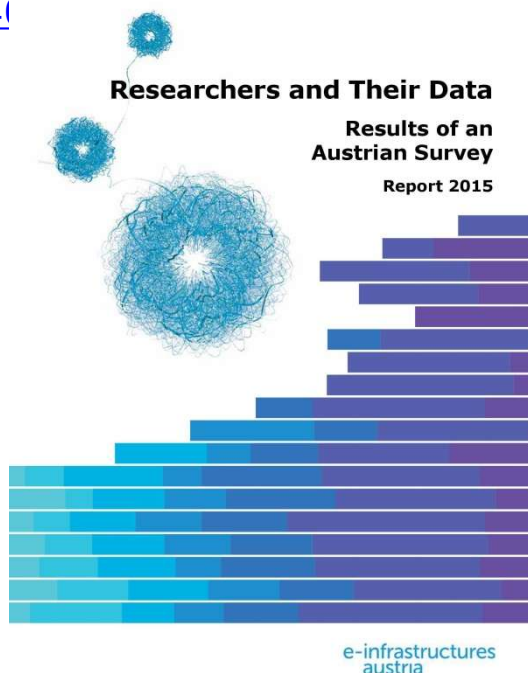
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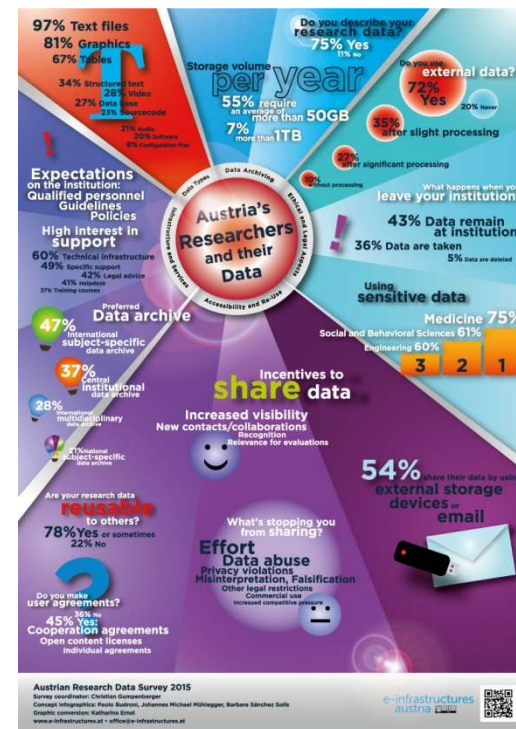
Thank you

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