'From data management policy to implementation: opportunities and challenges for libraries'

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Helmholtz webinar series

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LIGUE DES BIBLIOTHÈQUES EUROPÉENNES DE RECHERCHE
ASSOCIATION OF EUROPEAN RESEARCH LIBRARIES

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❑ About LIBER

❑ Some context

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❑ Opportunities and challenges for libraries

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LIBER: reinventing the library of the future

❑ Largest network of European reseach libraries: over 400 in 40+ countries

Mission:

To provide an information infrastructure to enable research in LIBER institutions to be world class

LIBER & EU Projects
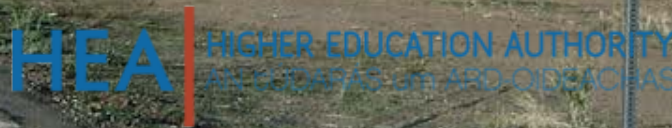
Barriers to success of open data policies
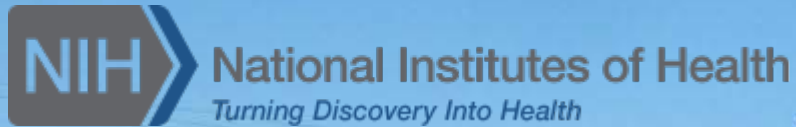
❑ Cultural differences

❑ Definition of research data

❑ Lack of skills/education

❑ Poorly defined roles and responsibilities

❑ Lack of infrastructure

❑ Lack of career incentives

Barriers to success of open data policies

- ❏ Cultural differences
- ❏ Definition of research data
- ❏ Lack of skills/education
- ❏ Poorly defined roles and responsib
- ❏ Lack of infrastructure
- ❏ Lack of career incentives

Articulate values for disciplines that you work w on ch

Help to define for

Develop and embed training programmes

Develop and connect

jage in policy evelopment

Altmetrics and citation
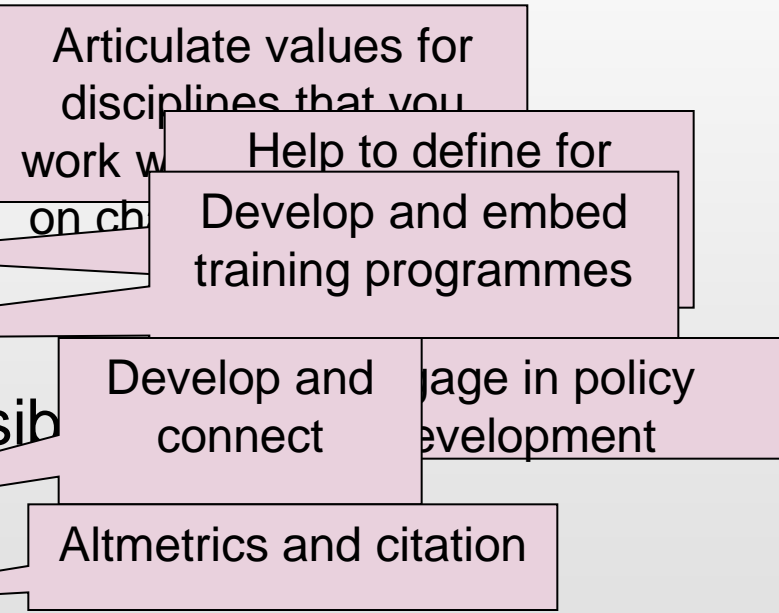
Hypotheses

"Without the infrastructure that helps scientists manage their data in a convenient and efficient way, no culture of data sharing will evolve."
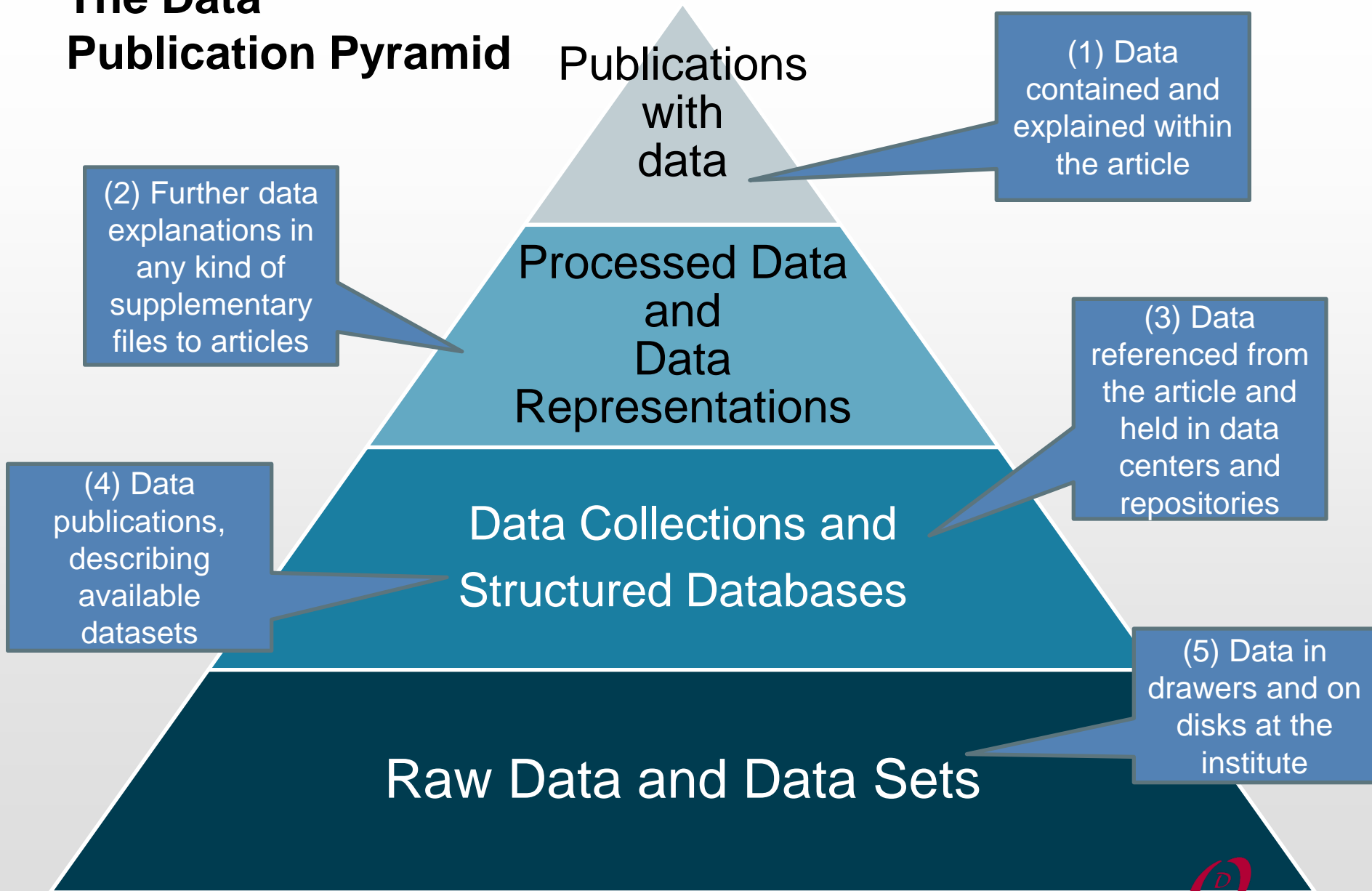
Stefan Winkler-Nees
(German Research Foundation, DFG)
www.odeproject.eu

Opportunities for Data Exchange

The Data Publication Pyramid

Publications with data

(1) Data contained and explained within the article

(2) Further data explanations in any kind of supplementary files to articles

Processed Data and Data Representations

(3) Data referenced from the article and held in data centers and repositories

(4) Data publications, describing available datasets

Data Collections and Structured Databases

(5) Data in drawers and on disks at the institute

Raw Data and Data Sets

Opportunities for Data Exchange
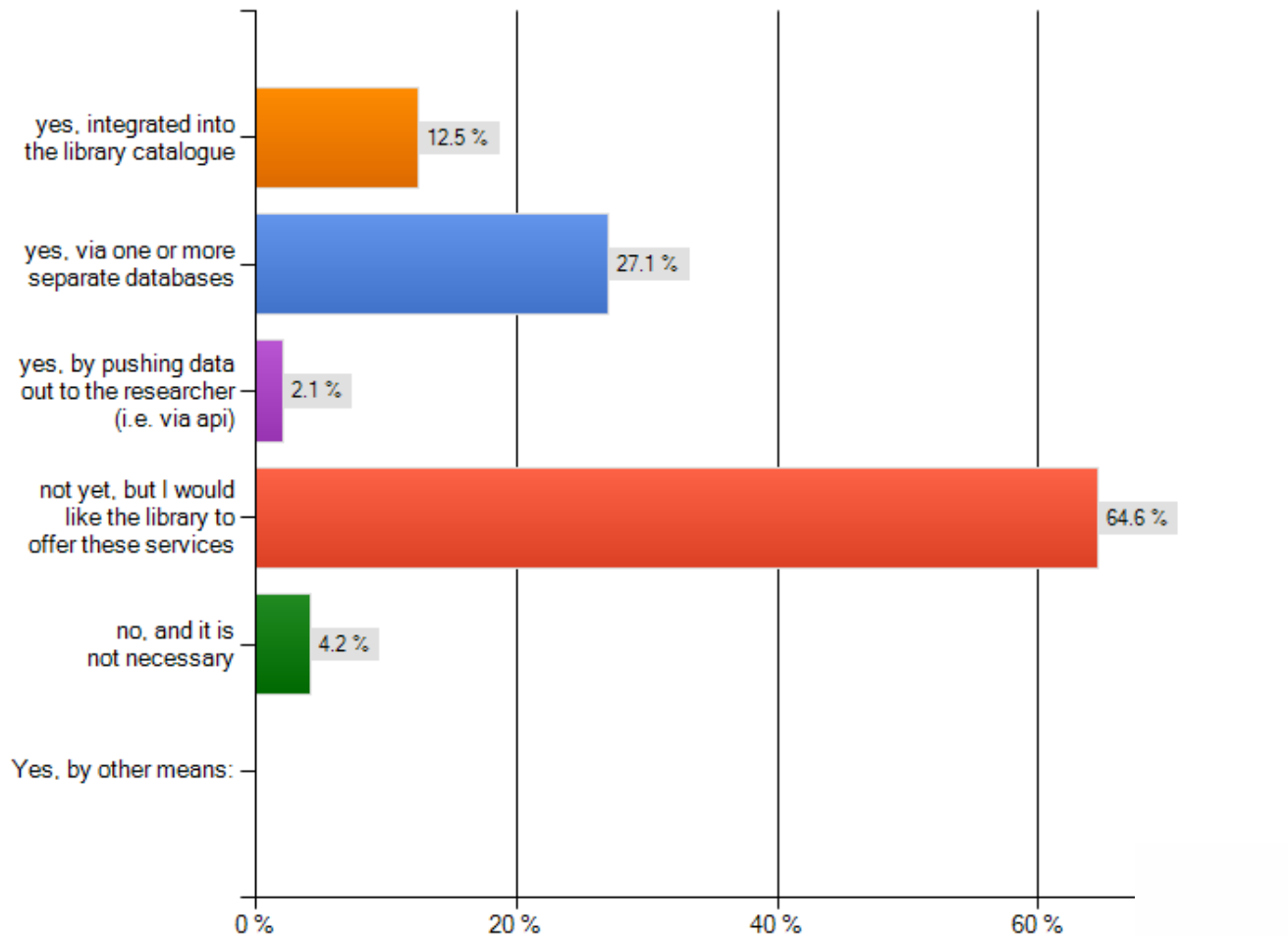
Libraries' Opportunities

Data Issue:	Libraries and data centres opportunities (Chapter 4):
Availability	✓ Lower barriers to researchers to make their data available. ✓ Integrate data sets into retrieval services.
Findability	✓ Support of persistent identifiers. ✓ Engage in developing common metadescription schemas and common citation practices. ✓ Promote use of common standards and tools among researchers
Interpretability	✓ Support crosslinks between publications and datasets. ✓ Provide and help researchers understand metadescriptions of datasets. ✓ Establish and maintain knowledge base about data and their context.
Re-usability	✓ Curate and preserve datasets. ✓ Archive software needed for re-analysis of data. ✓ Be transparent about conditions under which data sets can be re-used (expert knowledge needed, software needed).
Citability	✓ Engage in establishing uniform data citation standards. ✓ Support and promote persistent identifiers.
Curation/Preservation	✓ Transparency about curation of submitted data. ✓ Promote good data management practice. ✓ Collaborate with data creators ✓ Instruct researchers on discipline specific best practices in data creation (preservation formats, documentation of experiment,…)

Demand for data management support

Demand vs. supply EU

■ Demand exists for libraries to provide support to researchers to:

■ My library provides support to researchers to:

	create data management plans	archive data	find data	cite data	interpret data
Demand	50,0%	79,9%	73,4%	59,4%	12,5%
My library	19,0%	41,3%	60,3%	39,7%	11,1%

Opportunities for Data Exchange
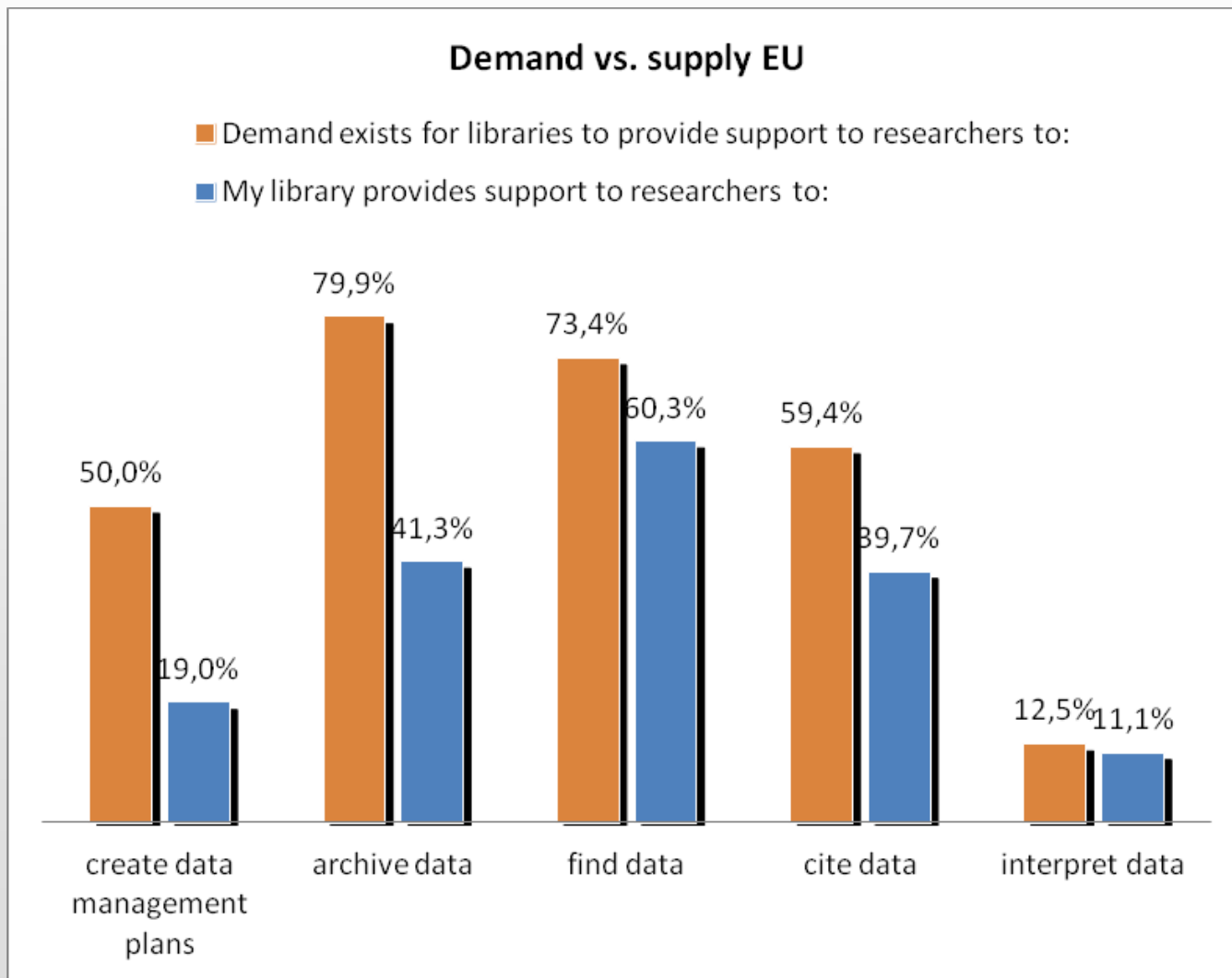
Findability

Does your library offer retrieval services for data sets? (Multiple answers possible)

yes, integrated into the library catalogue	12.5 %
yes, via one or more separate databases	27.1 %
yes, by pushing data out to the researcher (i.e. via api)	2.1 %
not yet, but I would like the library to offer these services	64.6 %
no, and it is not necessary	4.2 %
Yes, by other means:	

Opportunities for Data Exchange

Citability

Do you have strategies in place to ensure persistent identification and continued access to digital research data? (Multiple answers possible)
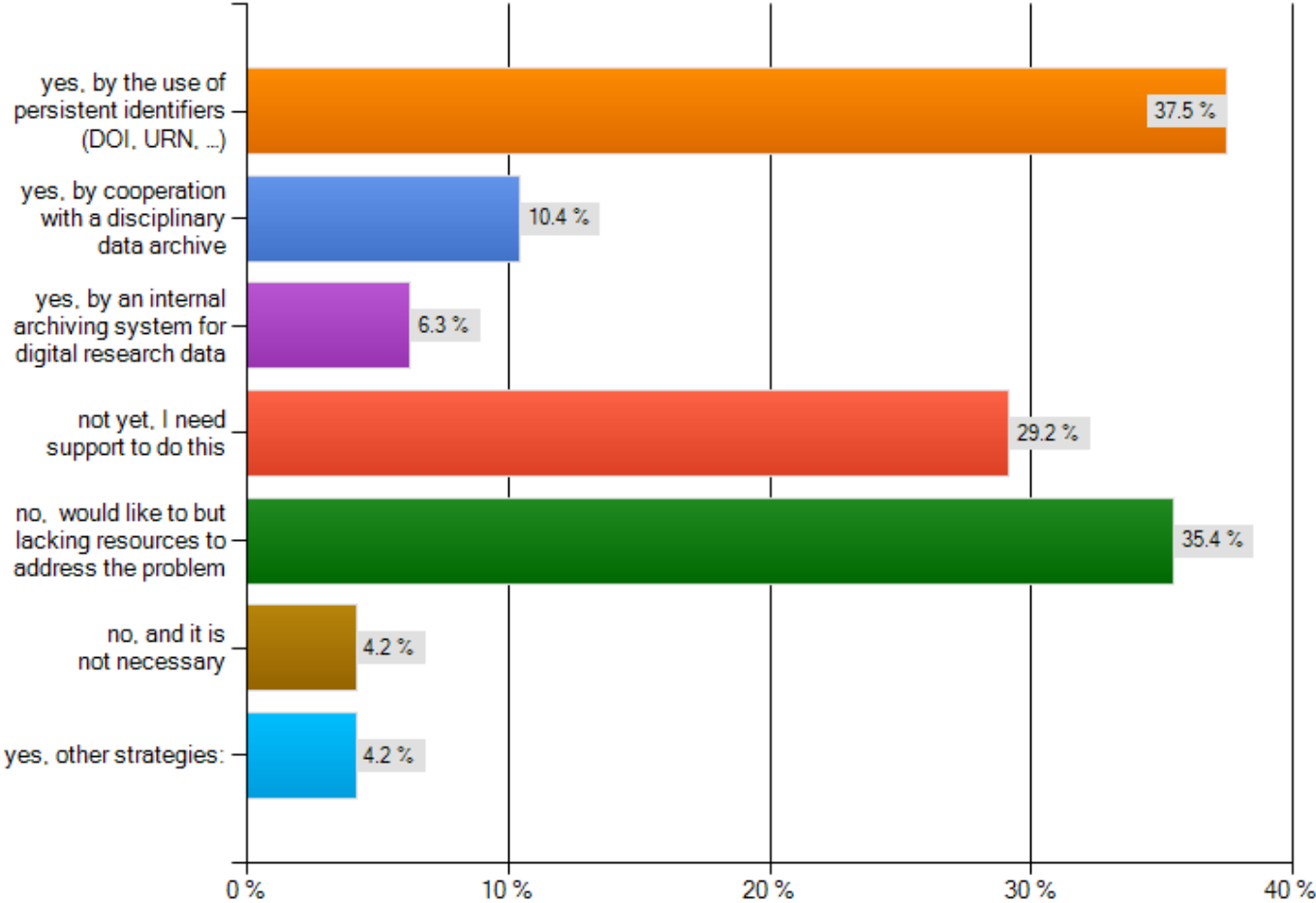
What should our priorities be?

1. Get Started!

http://www.libereurope.eu/news/ten-recommendations-for-libraries-to-get-started-with-research-data-management

Ten recommendations for libraries to get started with research data management

1. Offer research data management support, including data management plans for grant applications, intellectual property rights advice and information materials. Assist faculty with data management plans and the integration of data management into the curriculum.

2. Engage in the development of metadata and data standards and provide metadata services for research data.

3. Create Data Librarian posts and develop professional staff skills for data librarianship.

4. Actively participate in institutional research data policy development, including resource plans. Encourage and adopt open data policies where appropriate in the research data life cycle.

5. Liaise and partner with researchers, research groups, data archives and data centers to foster an interoperable infrastructure for data access, discovery and data sharing.

6. Support the lifecycle for research data by providing services for storage, discovery and permanent access.
7. Promote research data citation by applying persistent identifiers to research data.
8. Provide an institutional Data Catalogue or Data Repository, depending on available infrastructure.
9. Get involved in subject specific data management practice.
10. Offer or mediate secure storage for dynamic and static research data in co-operation with institutional IT units and/or seek exploitation of appropriate cloud services.
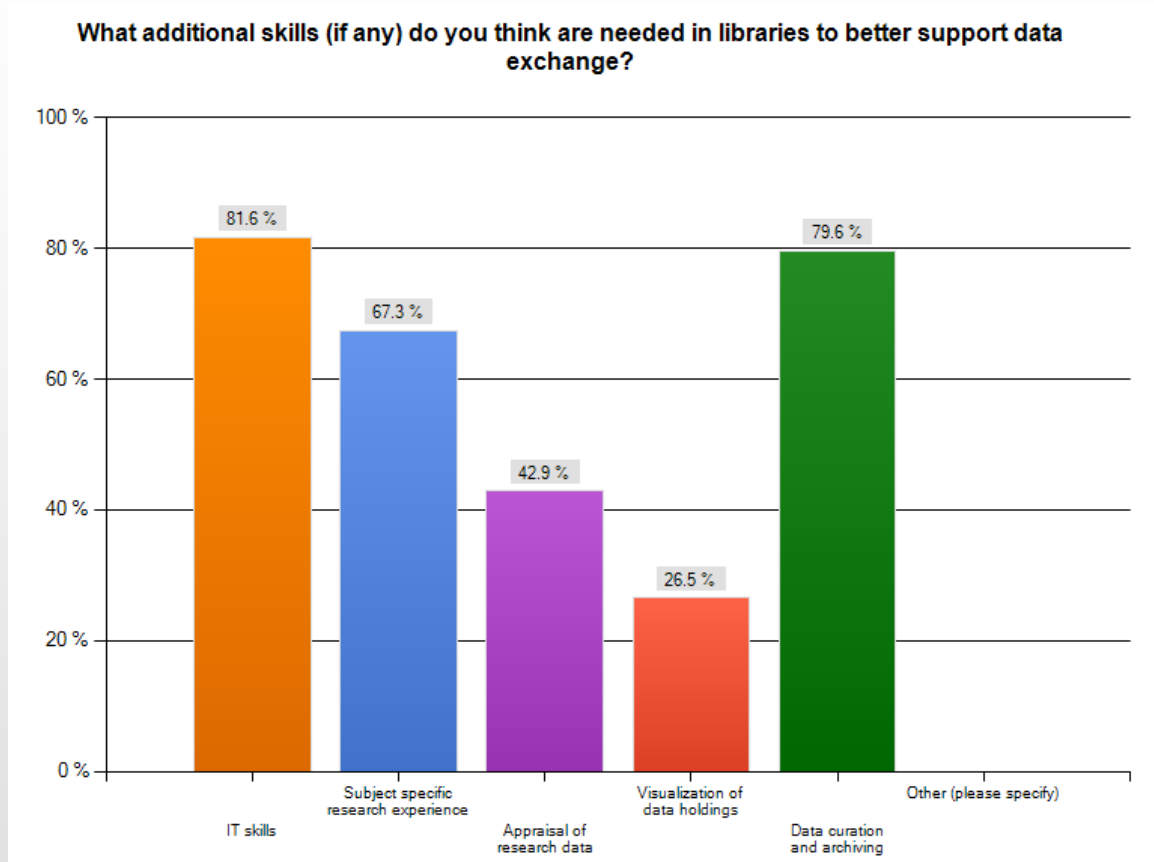
2. Identify & develop skills

Do you feel that your library has the right skills to be prepared for such activities?
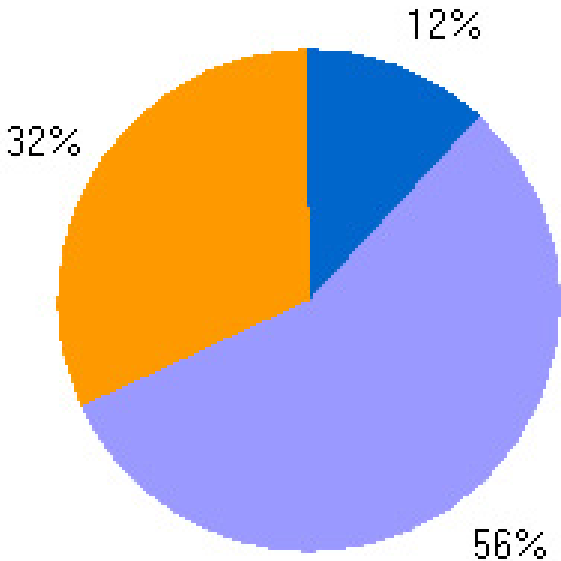
- Yes — 12%
- Not yet, but the library is investing in developing data managers, data curators, or similar skills — 56%
- No, and my library hasn't begun to develop such skills — 32%

Opportunities for Data Exchange

What Skills ?

What additional skills (if any) do you think are needed in libraries to better support data exchange?

3. Advocate

"Many researchers do not appear to see the value and benefits of data citation. There is a gap, which could be filled by libraries, in advocacy for data sharing, the use of subject specific repositories, and best practice in data citation. These, if filled, would increase the number of researchers sharing and reusing data."

http://www.alliancepermanentaccess.org/wp-content/plugins/download-monitor/download.php?id=Report+on+Best+Practices+for+Citability+of+Data+and+on+Evolving+Roles+in+Scholarly+Communication

4. Get involved!

❑ Research Data Alliance interest group on the long tail of data

❑ RECODE project on policies for open access to research data (workshop at LIBER 2014, Latvia, July 2) www.recodeproject.eu

❑ LIBER working group on research data

❑ LIBER, ARL, COAR working group on competencies in scholarly commuications for libraries www.libereurope.eu

Thank you!

❑ Any questions?