



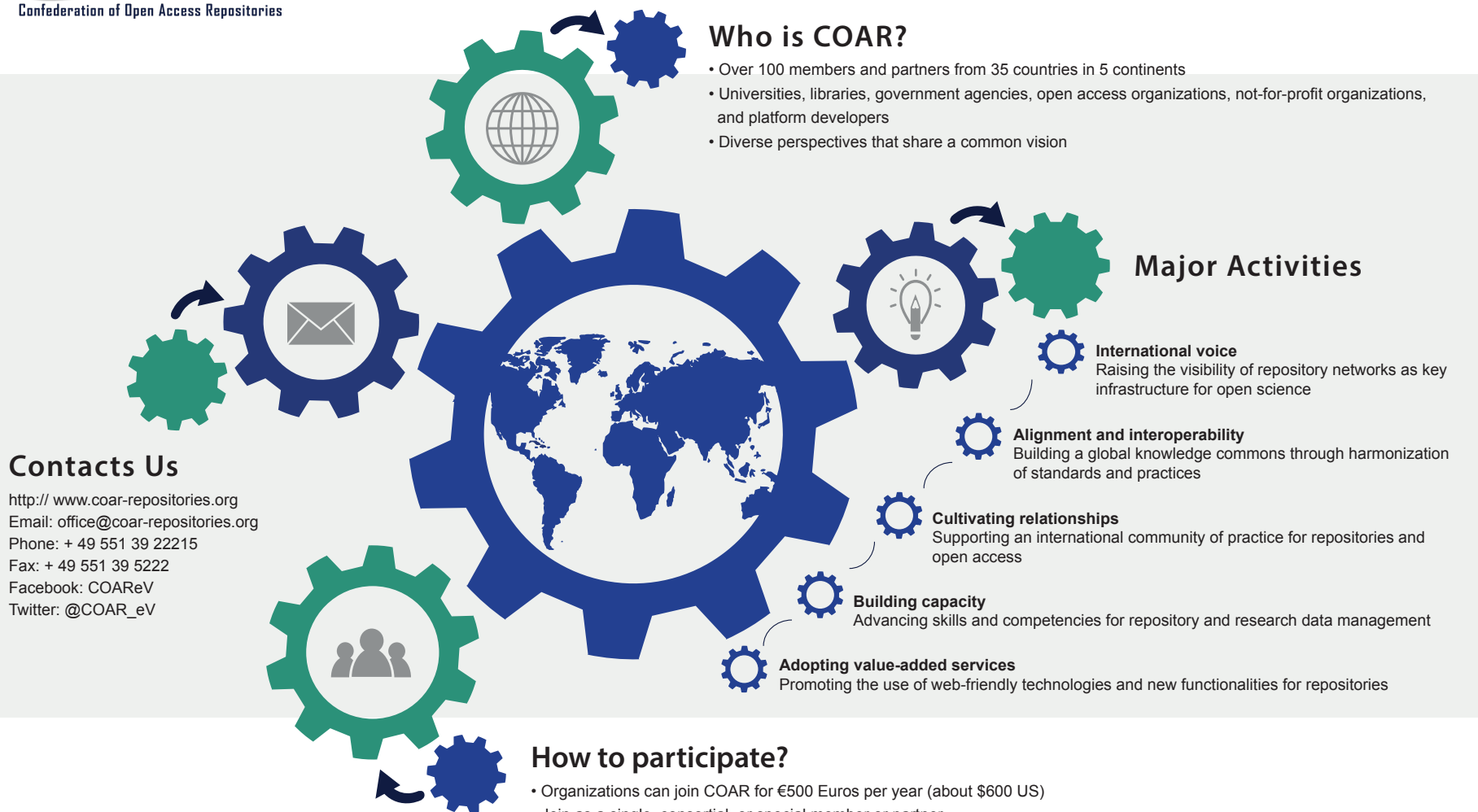
Source: <http://www.museum.com/ja/showdia/id=2685>

## **Next generation repositories – moving from the “fringe” to the foundation of scholarly communication**

Kathleen Shearer  
Executive Director, COAR  
Confederation of Open Access Repositories

Supporting sustainability, distribution, and innovation in scholarly communication at scale







# The international publishing system is broken!

unsustainable prices

big deal lock-in

publication biases

flawed quality and impact measures

publisher consolidation across the lifecycle



The long read

Is the staggeringly profitable  
business of scientific  
publishing bad for science?

# YES!

# Timothy Gowers “perverse incentives”



2016  
JOURNAL  
CITATION  
REPORTS  
THOMSON  
REUTERS



REVIEW ARTICLE

## How to publish a scientific manuscript in a high-impact journal

Emad M. El-Omar\*



## 10 simple strategies to increase the impact factor of your publication

by sven | Mar 5, 2015 | |

Impact factors are heavily criticized as measures of scientific quality. However, they still dominate every discussion about scientific excellence. They are still used to select candidates for positions as PhD student, postdoc and academic staff, to promote professors and to select grant proposals for funding. As a consequence, researchers tend to adapt their publication strategy to avoid negative impact on their careers. Until alternative methods to measure excellence are established, young researchers have to learn the “rules of the game”.



## Peer review and scientific publishing

# Nobel winner declares boycott of top science journals

Randy Schekman says his lab will no longer send papers to Nature, Cell and Science as they distort scientific process

Ian Sample, science correspondent

[@iansample](#)

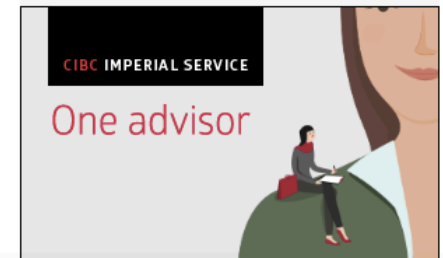
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*The pressure to publish in "luxury" journals encourages researchers to cut corners and pursue trendy fields of science instead of doing more important work.*



Leslie Chan,

“Openness is not simply about gaining access to knowledge, but about the right to participate in the knowledge production process, driven by issues that are of local relevance, rather than research agendas set elsewhere or from the top down”



# **Our solution**

To reposition the institution (and the library) as the centre of a scholarly communications and a global knowledge commons



# MIT Future of Libraries Report



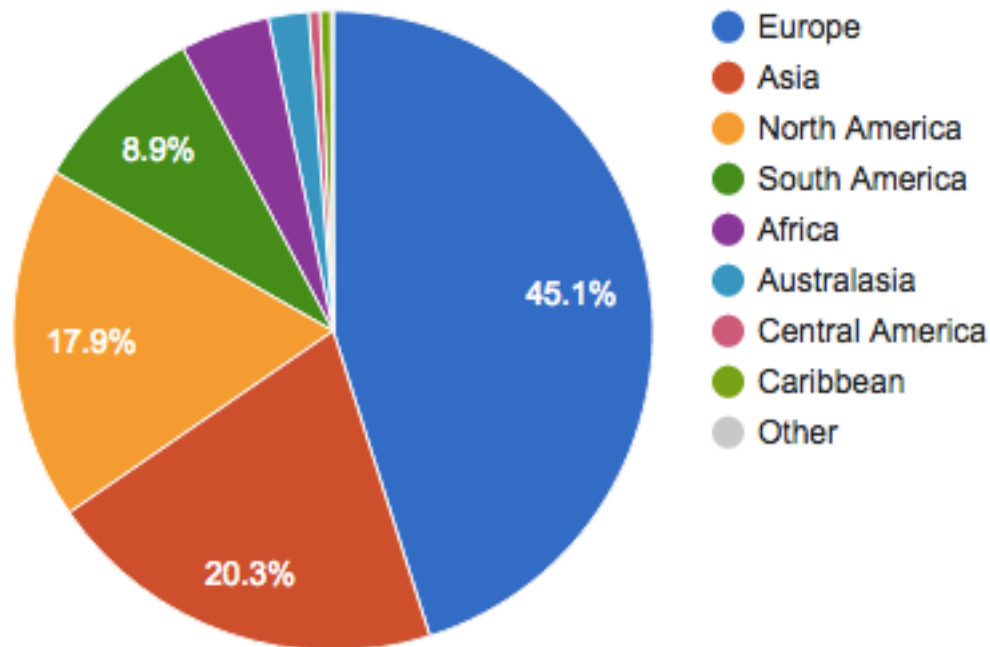
“... The MIT Libraries must operate as an **open, trusted, durable, interdisciplinary, interoperable content platform** that provides a foundation for the entire life cycle of information for collaborative global research and education.”

“In this report, we describe a bold new vision for the library as an **open global platform** rooted in our shared values and mission.”

Similar to Lorcan Dempsey’s “Inside-out library” concept - , institutions are generating new forms of data—research data, learning materials, preprints, videos, expertise profiles, etc.—which they wish to share with others.

# Leverage the repository network

Proportion of Repositories by Continent - Worldwide



Total = 3431 repositories

OpenDOAR - 05-Sep-2017

In their current form, repositories only perpetuate the existing system



“What if we don’t change at all ...  
and something magical just happens?”



# Next generation repositories



To position repositories as the foundation for a distributed, globally networked infrastructure for scholarly communication

\_on top of which layers of value added services will be deployed,

\_thereby transforming the system, making it more research-centric, open to and supportive of innovation,

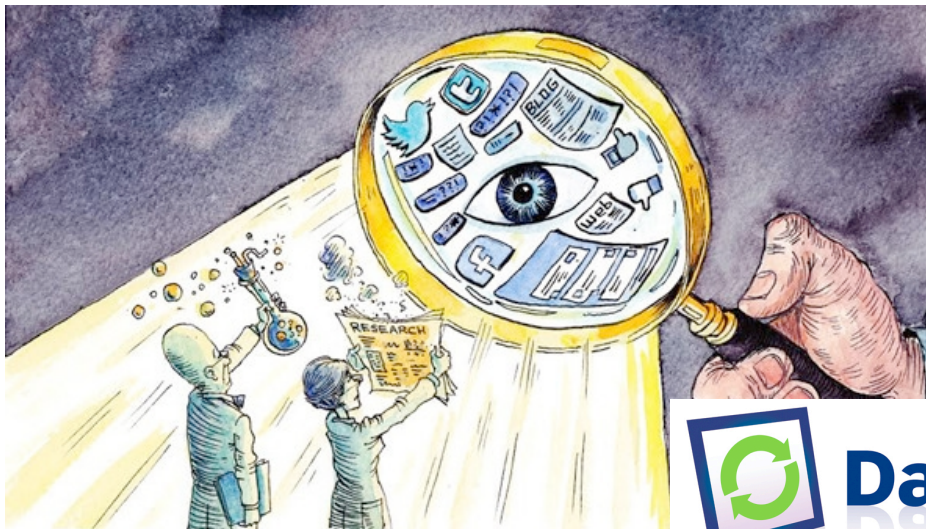
\_while also collectively managed by the scholarly community.

# COAR Working Group, Next Generation Repositories

Eloy Rodrigues, chair (COAR, Portugal)  
Andrea Bollini (CINECA, Italy)  
Alberto Cabezas (LA Referencia, Chile)  
Donatella Castelli (OpenAIRE/CNR, Italy)  
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Pandelis Perakakis (Open Scholar, Spain)  
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Paul Walk (EDINA, UK)  
David Wilcox (Duraspace/Fedora, Canada)  
Kazu Yamaji (National Institute of Informatics, Japan)



## Enable peer review



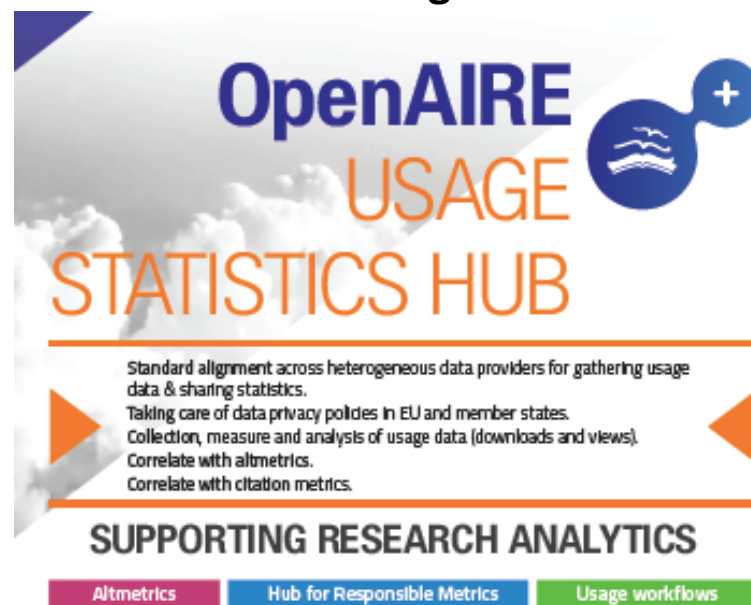
## Improved discoverability



## Social functionalities



## Standard usage metrics



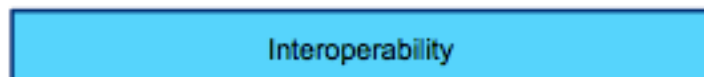
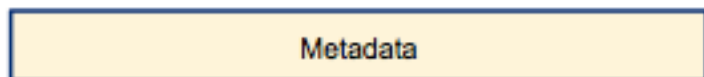
Picture from to Petr Knoth

# By Petr Knoth, Open University, UK

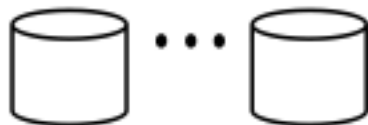
## Current repositories

Services we can develop with repositories today

Conceptual layer



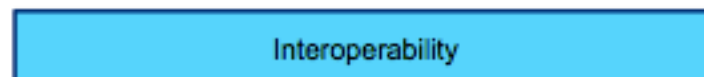
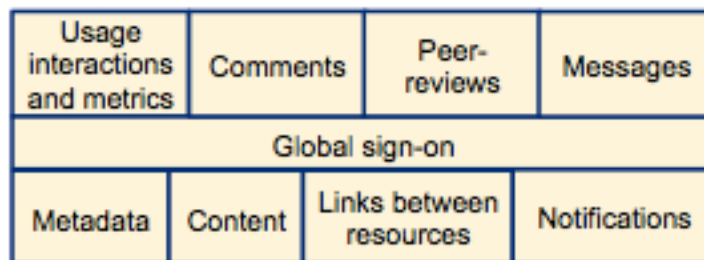
Persistence layer



## Next generation repositories

Services we can develop with the next generation of repositories

Conceptual layer



Persistence layer





# Next Generation Repositories

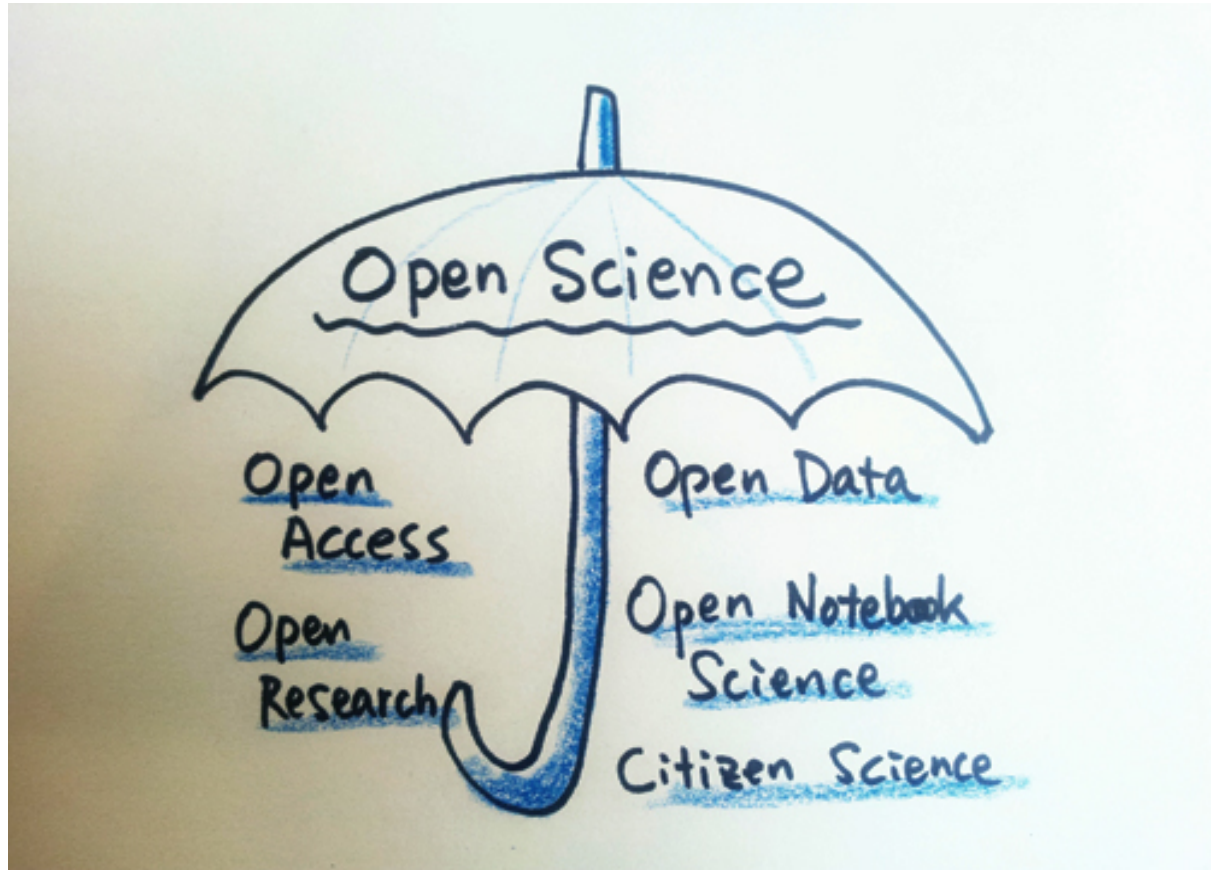


To support these services, we need to improve the functionality of repositories

- To be of, not just on the web
- Global interoperability (exposing content in a standardized way)
- Pro-active repositories
- A networked approach is crucial to avoid silos and support global, disciplinary and regional services***

# Our vision includes more than just papers

All the valuable products of research should be shared!



Critical to the success of this our vision is the widespread adoption of the behaviours and functionalities by repositories around the world



## Home » News & Publications » International Accord strengthens ties between repository networks worldwide

Statements,  
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Save the date ! COAR2018  
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« Survey about the value and benefits of COAR

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## International Accord strengthens ties between repository networks worldwide



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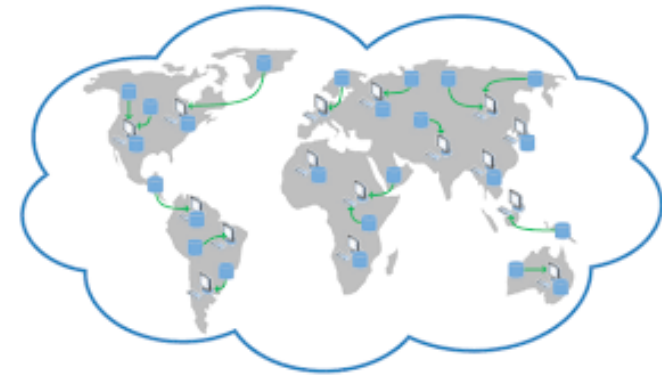
COAR on Twitter

COAR member-only webinar:  
DSpace-CRIS: How to Bring

**Australasia, Canada, China, Europe, Japan, Latin America, South Africa, United States**



# The case for a distributed, community-managed infrastructure



- Better supports the needs of diverse regions, disciplines and languages
- Redundancy will safeguard against failure
- Less risk of commercial buy-out
- Places the library, and their values, at the centre

**But... a distributed approach is more challenging in terms of a common vision, coordination and branding**

# Wrapping-up



- Repositories are a technology, and technologies change...
- What we are really promoting is a vision whereby institutions, universities, and their libraries are the foundational nodes in a global scholarly communication system
- This is a solution that will scale and can support open science, not just open access



Thank you!