

Global research: An evolving landscape

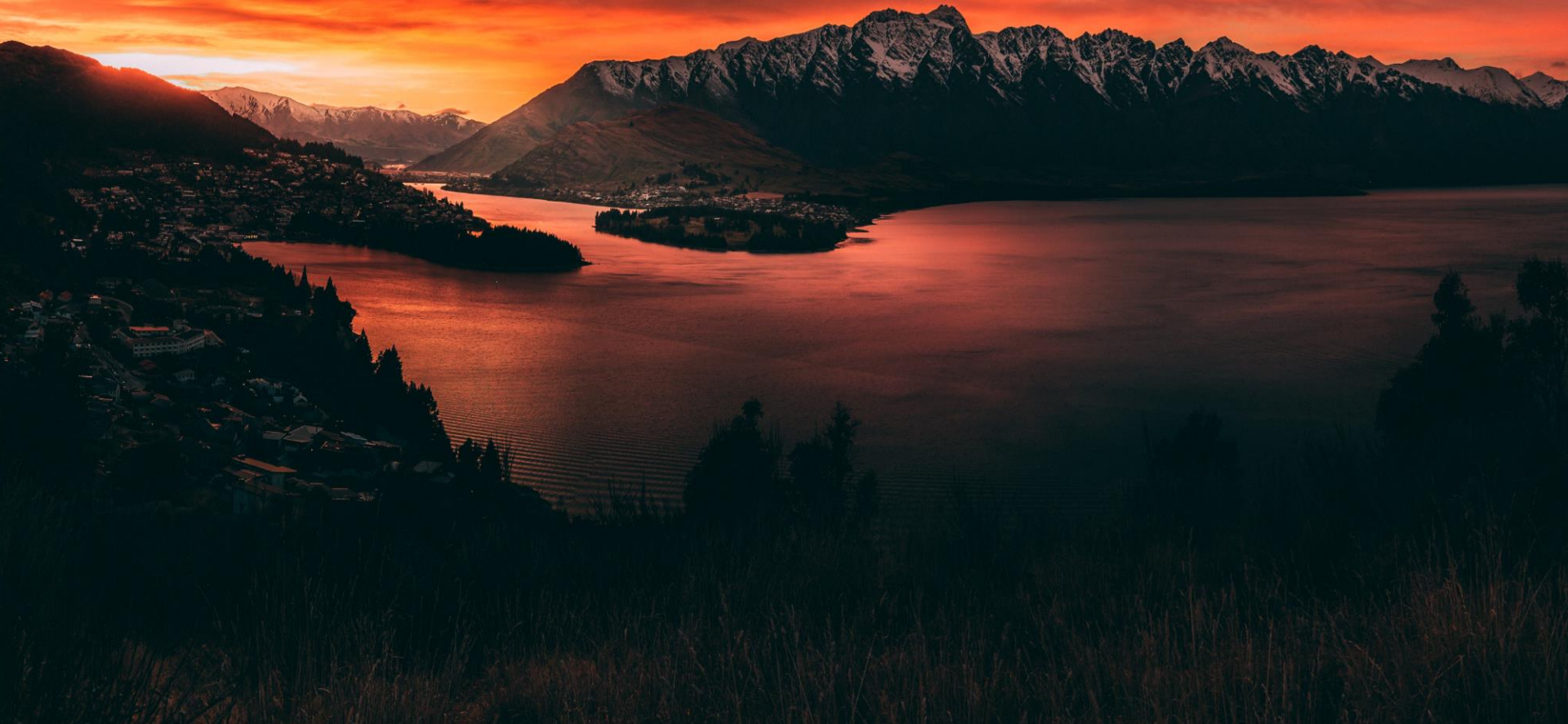
Wiley Editor Symposium, Beijing

Miriam Maus, Vice President, Editorial Management

October 30, 2018

**“The future’s already here.
It’s just not evenly distributed yet.”**

- William Gibson



Researcher workflow

Enabling research

- Ideation:** Set research strategy and develop methodology
- Funding & evaluation:** Identify funding sources, write grant proposals and evaluate research effectiveness
- Discovery:** Stay updated on most current research



Conducting research

- Reference management:** Track references to previous work
- Data analysis:** Manage analysis and collaboration
- Manuscript creation:** Create & manage content for publishing

Sharing research

- Pre-publication:** Access to most current research & quick informal review
- Publication:** Formal 'peer-review', managed production
- Consumption:** Read, evaluate, & save peer-reviewed research
- Sharing:** Search, promote, collaborate & network
- Tracking:** Metrics and analytics to track research 'impact'
- Data preservation:** Store raw datasets and analyses in repository

Academic career enhancement is a driver of publishing behavior

Top three reasons to publish

Career

- Publishing to progress a researcher's career

Science

- Publishing to drive scientific information

Funding

- Publishing to acquire future funding

Academic journals fulfill a key role



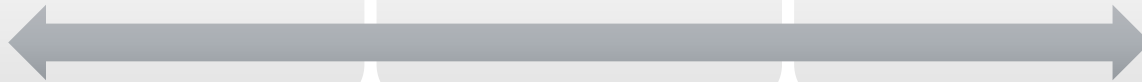
Quality assurance



Curation



Dissemination



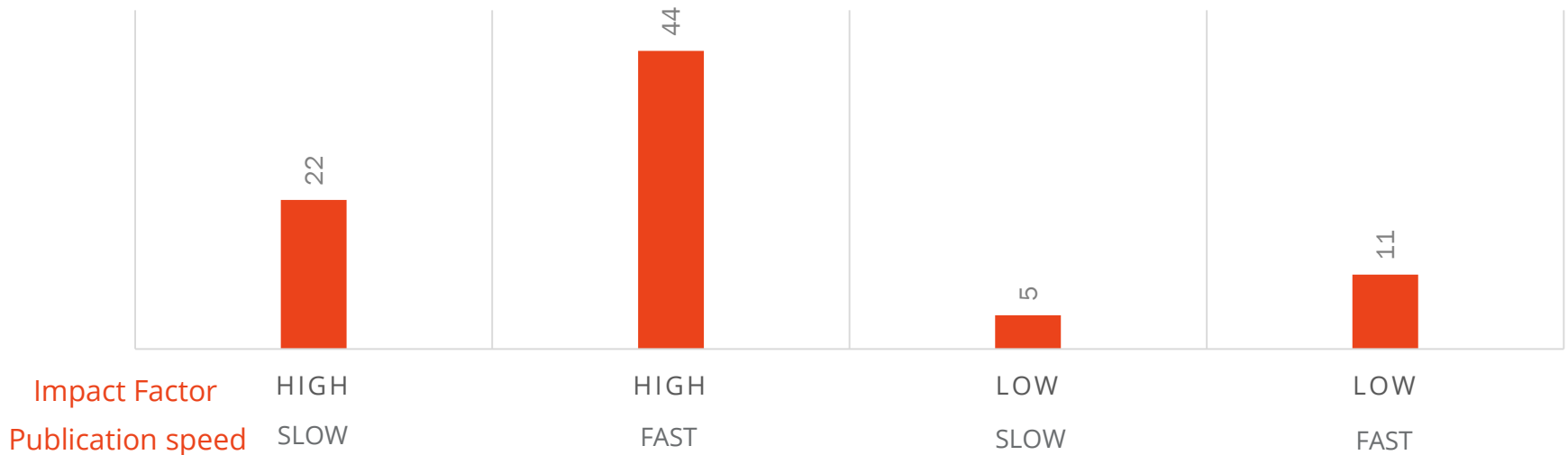
...and strive to meet author expectations

Which, if any, of the following influenced your decision to submit to the journal?	Scope of journal	70%
	Reputation of journal, society or publisher	66%
	Impact factor	54%
	Previous experience with journal	34%
	Expected speed of publication	28%
	Peer review/acceptance criteria	22%
	Peer/institutional recommendation	20%
	Perceived ease of publishing process	14%
	Experience as a peer reviewer	13%

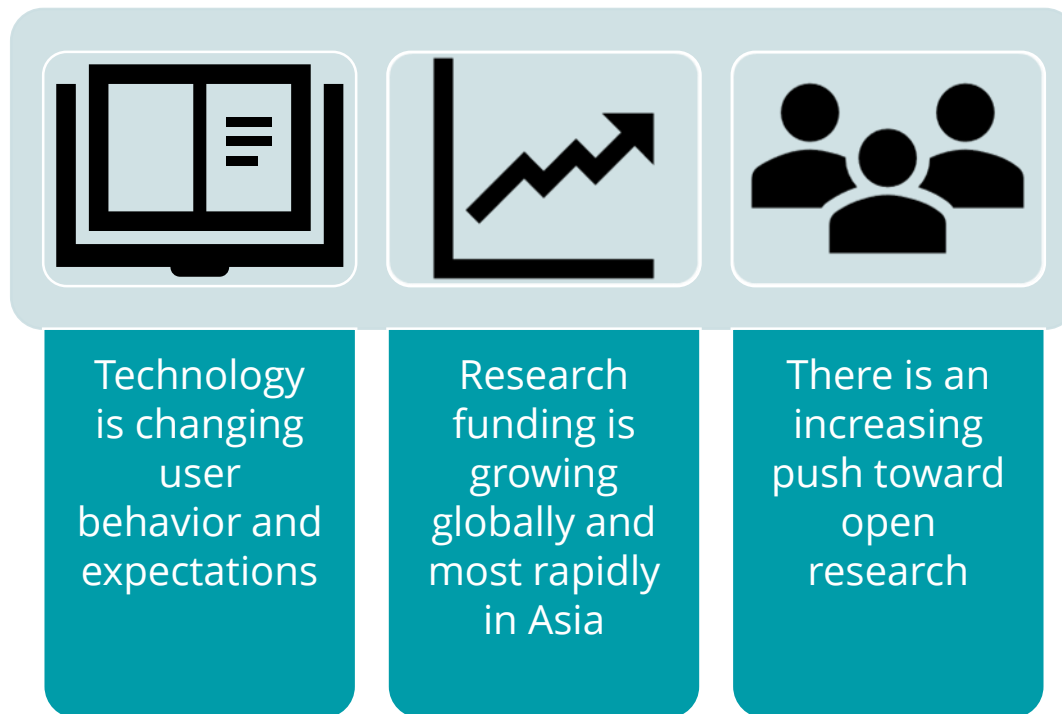
Wiley author survey 2017

Impact Factor and publication times influence author choice

% of authors "very likely" to submit to a journal with...



Scholarly communication is changing in many ways



Technology is changing user behavior and expectations

Internet Access

3.3 billion people

47.8% in APAC

Asia, Latin America, Middle East, and Africa fastest growing regions

Mobile Phone Use

High global adoption rate

Growing support infrastructure

China, US, India: top three countries by users

Digital communication is creating a smaller, more connected world



Technology gives people only what they are asking for



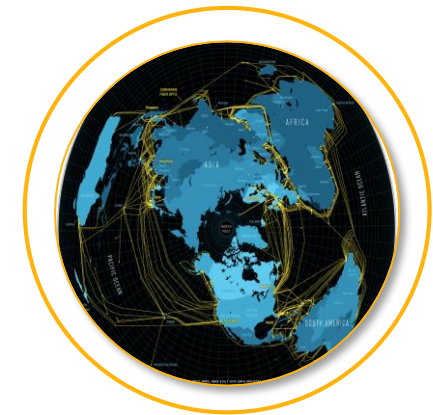
1900-1960

Age of
Manufacturing



1960-1990

Age of
Distribution



1990-2010

Age of
Information

2010+ The Age of the Customer

But publishing is not always keeping pace

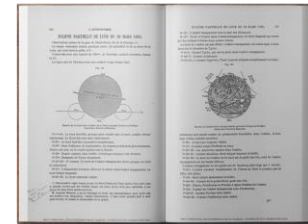
Researchers produce 21st century research



Write it up using 20th century technology



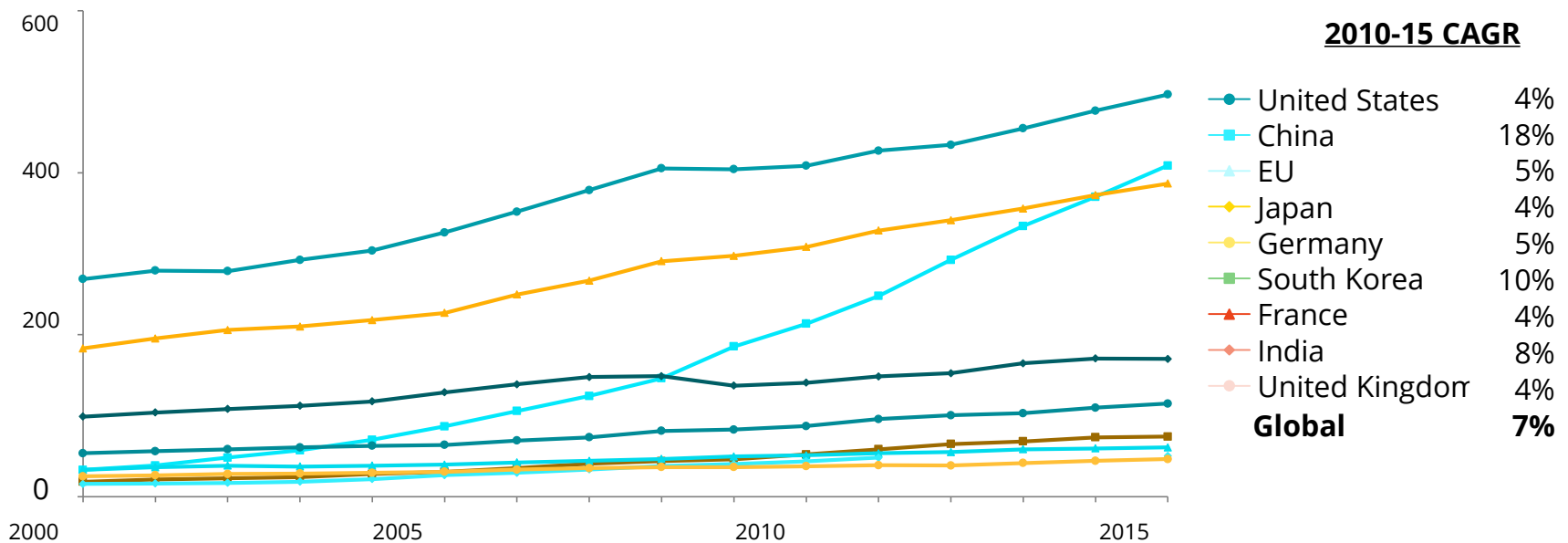
And publish it in a 17th century format



Research funding is growing globally and most rapidly in Asia

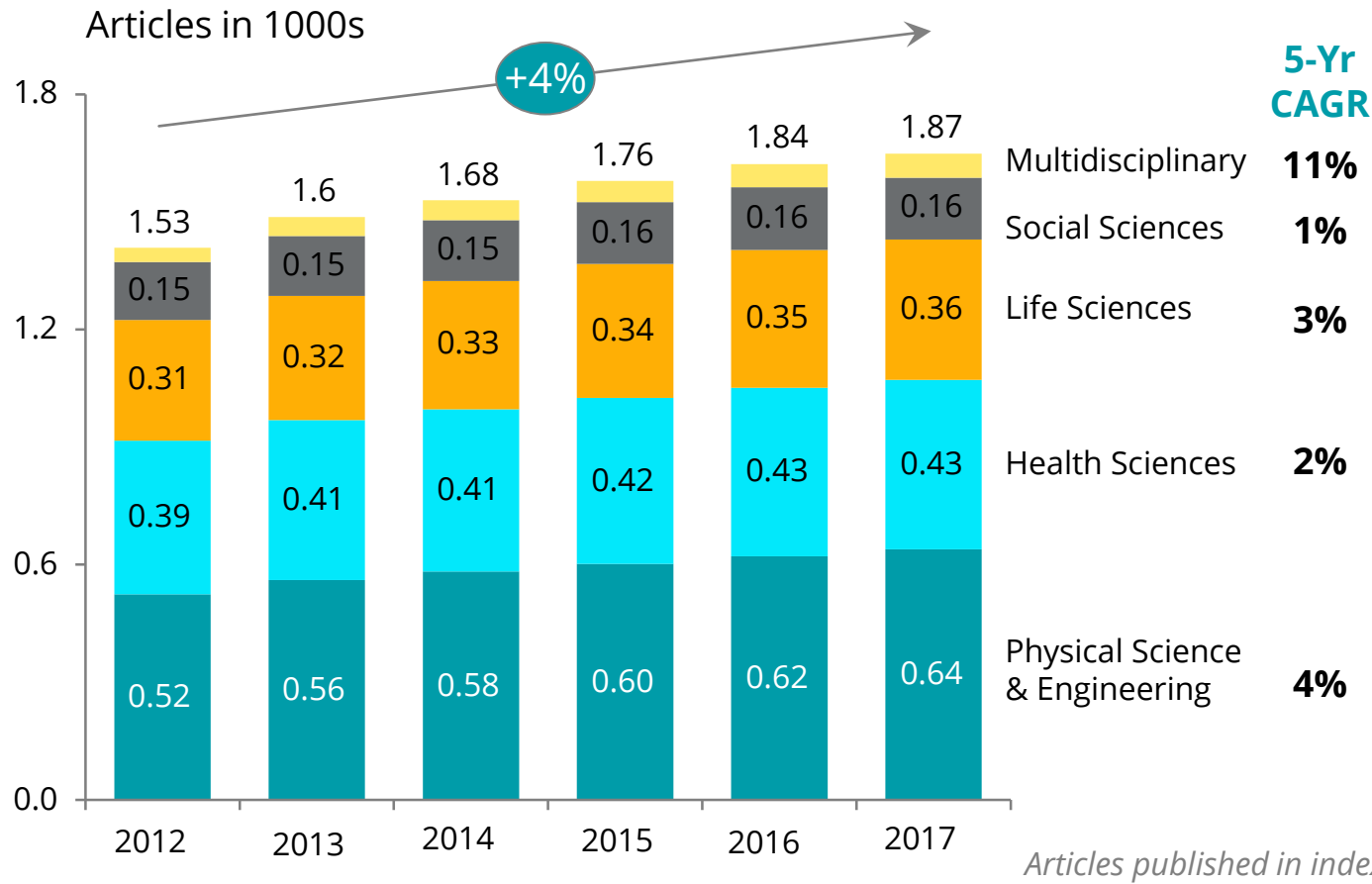
Global R&D spend has doubled in the past 15 years

Gross domestic expenditures on R&D by country/region 2000-2015 (in \$B)



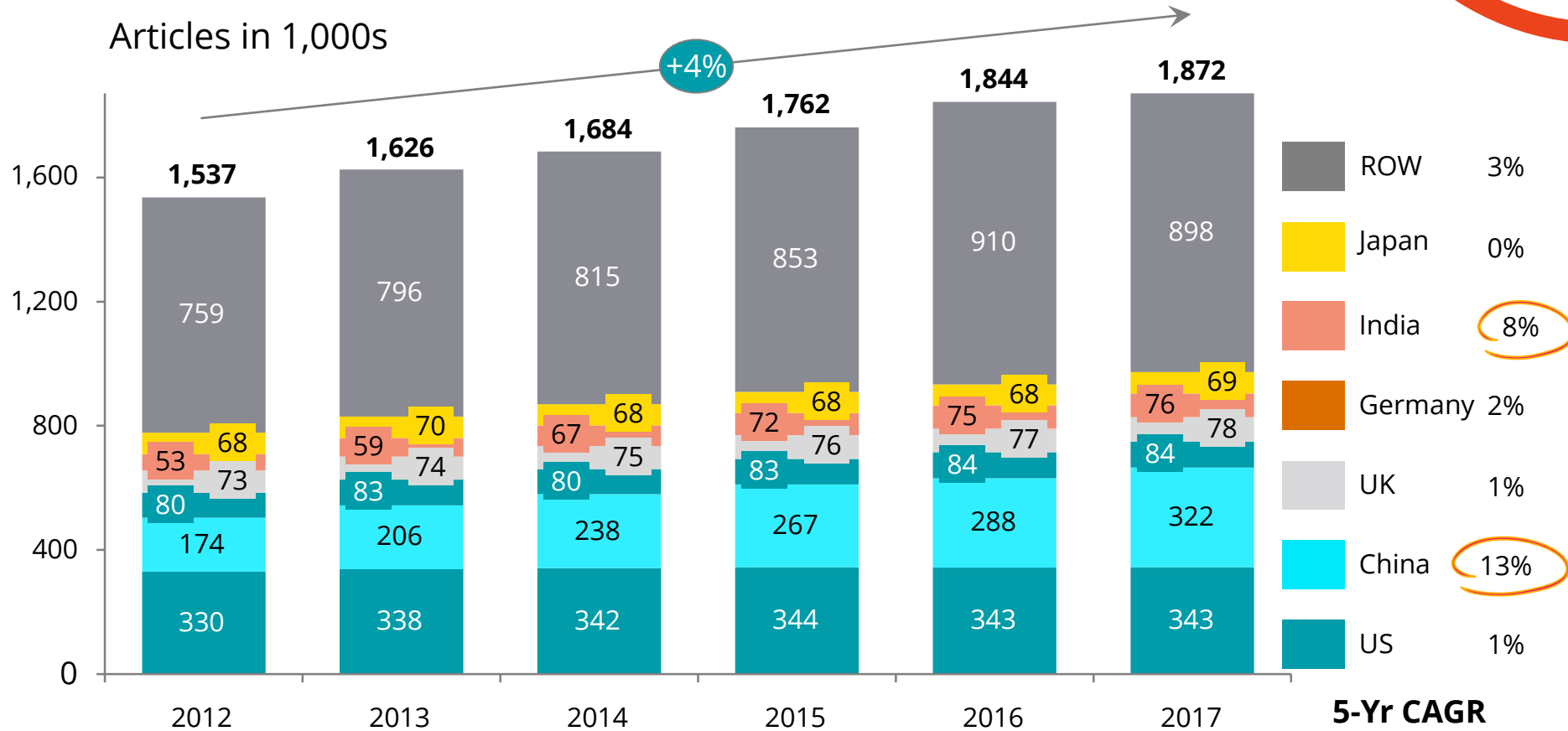
Source: Science & Engineering Indicators 2018

Global article output is growing



... but fastest in Asia

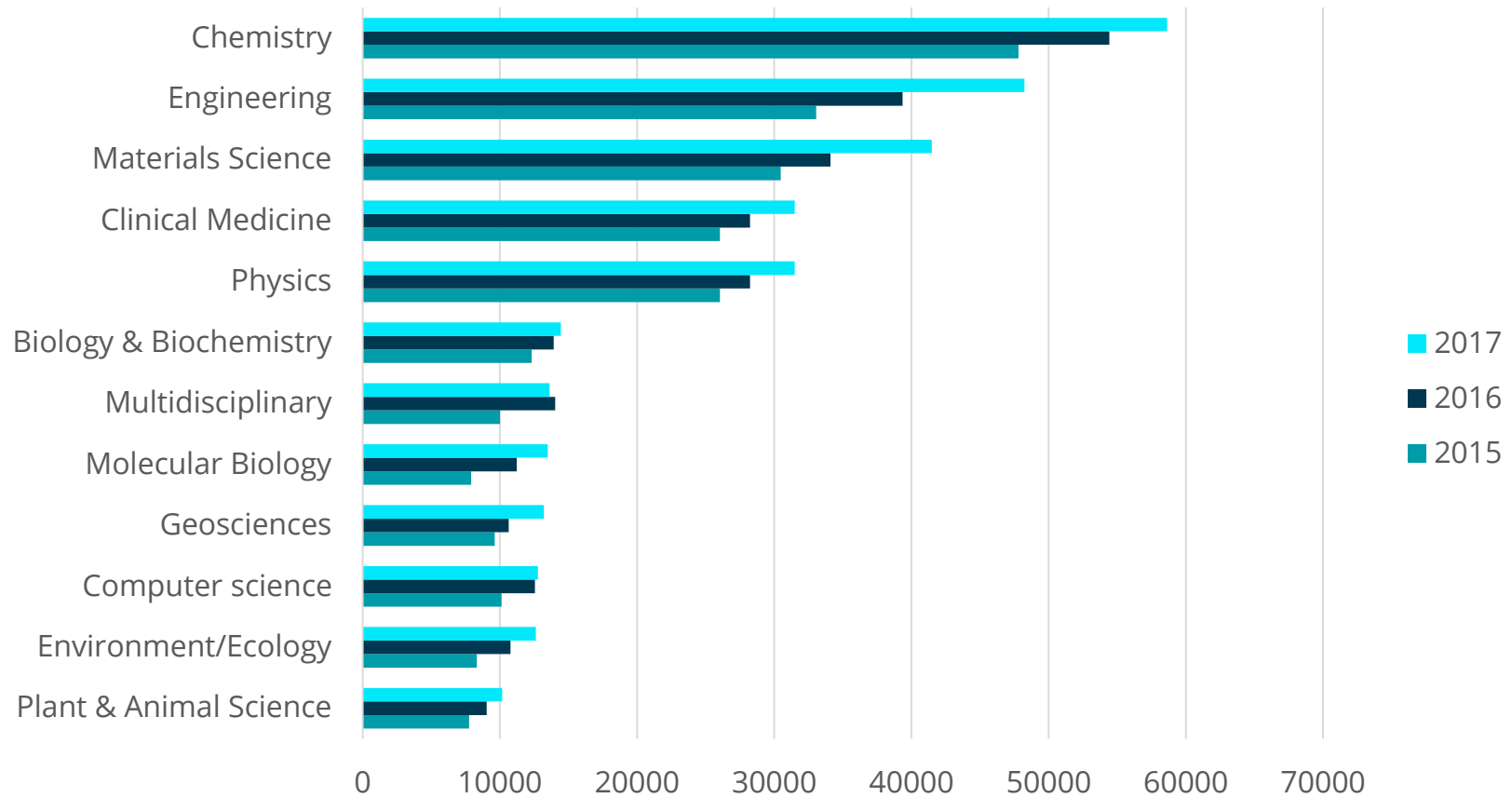
Articles in 1,000s



Source: Clarivate (based on author country of origin)

Top 12 highest output fields in China

Articles by authors based in China, published in indexed journals



There is an increasing push toward open research



Openness reinforces science and research as a societal good

Open access

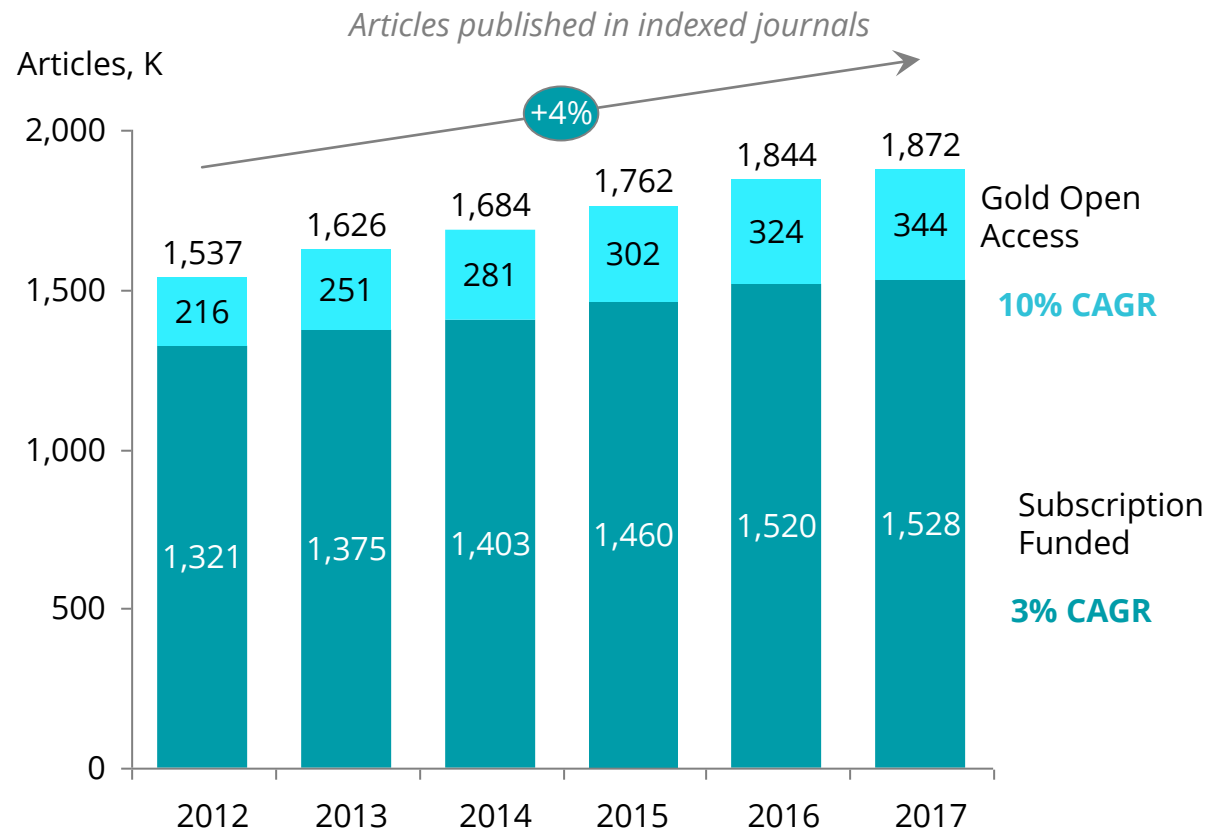
- Gold: more journals, more papers
- Green: institutional and subject-based repositories

Transparency and reproducibility

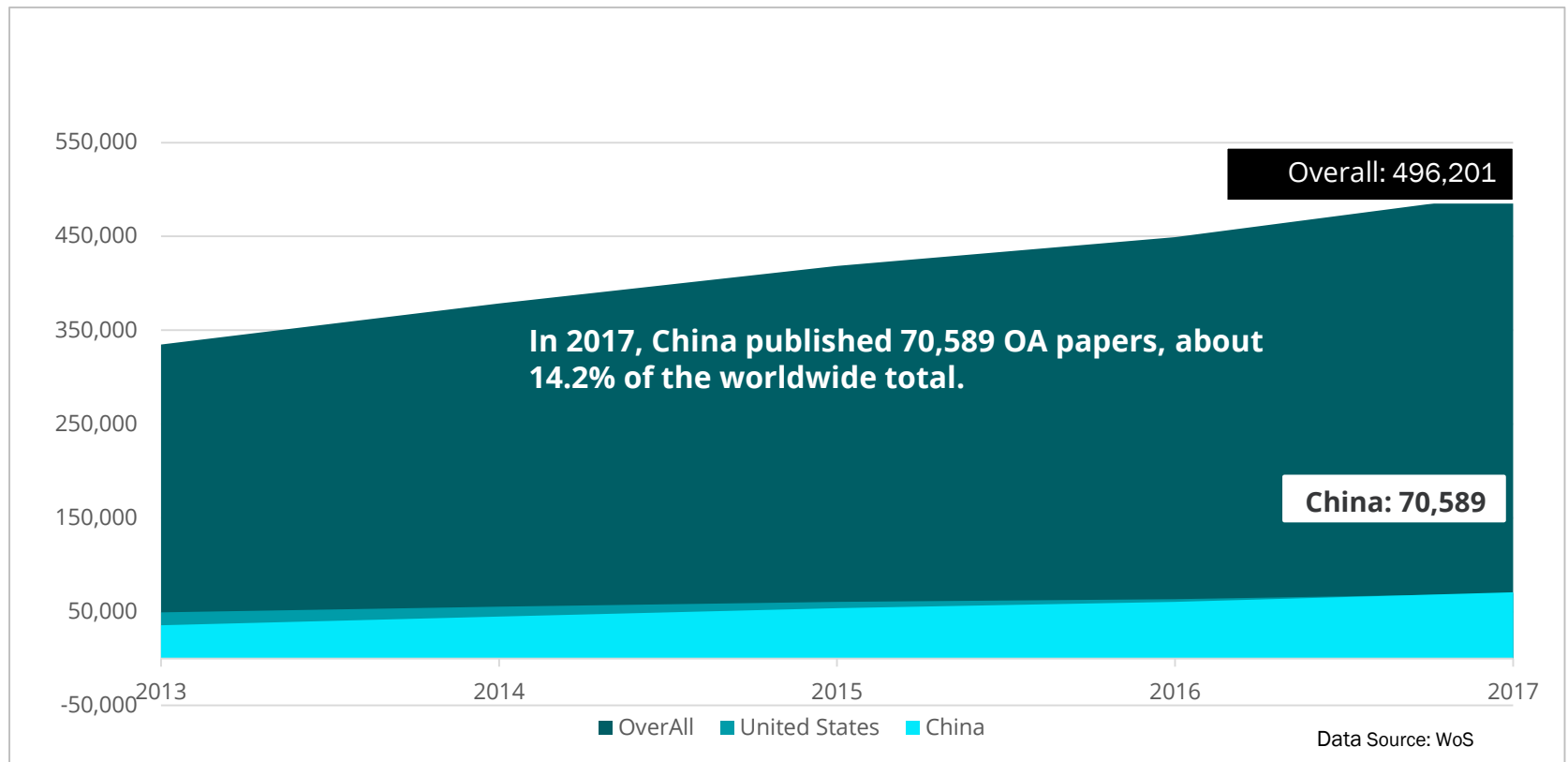
- Data sharing and citation
- Preprints and Registered Reports
- Open/transparent peer review

The move towards openness is changing publishing models

Open access articles in indexed journals are growing at 10% pa, and OA is now 17% of output



Authors from China produced 14% of all open access papers in 2017



Open research policy landscape is evolving

Science Europe
“Plan S” calls for full
transition to OA by
2020



Research Excellence
Framework (REF)
2021 in UK requires
public access to
research



Private funders in
North America and
Europe are
mandating
openness and
sharing





Thank you.

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