

Innovation in Research and Education

The Role of the Publisher

在研究和教育方面的創新行動：出版商之角色探討

James Murphy, Publisher

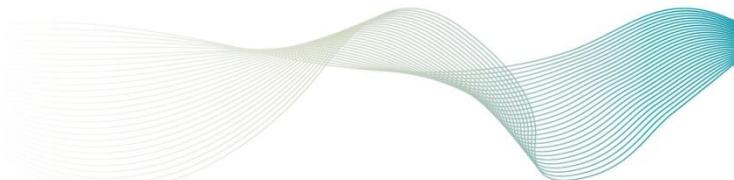
莫子傑，發行人

Roger Ming, Associate Director, Institutional Sales, Mainland China & Taiwan

明宗敬，副總監

John Wiley & Sons

November 10, 2011



Why do journal publishers exist?

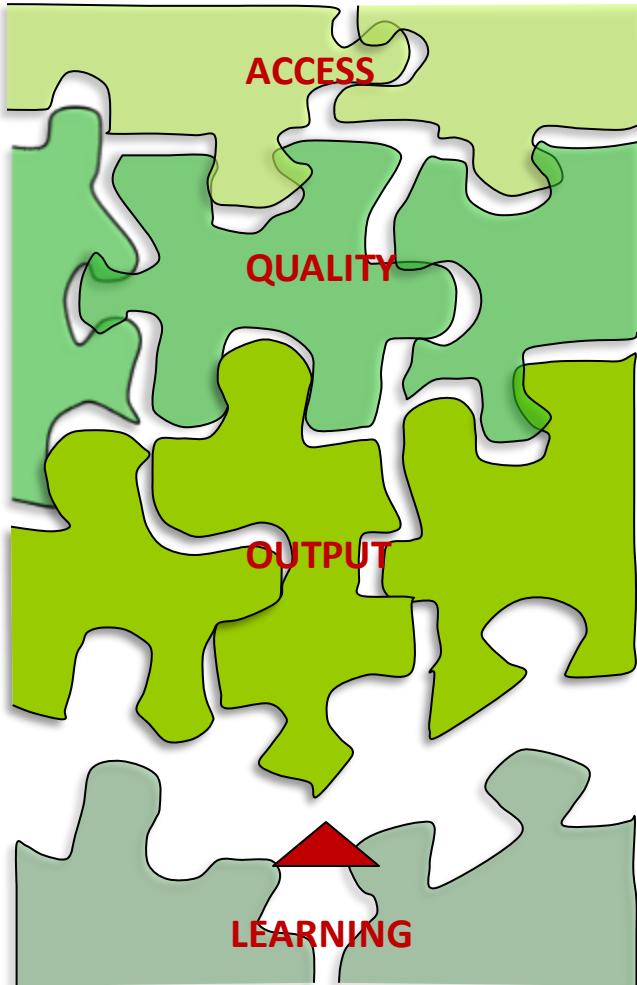


- First peer-reviewed journal founded in 1665 by Royal Society
- Journal publishing has evolved dramatically since, but its core functions remain:
 - **Registration** of new research findings
 - **Quality assurance** through peer review
 - **Dissemination** globally
 - **Archiving** in perpetuity

21st Century Mission

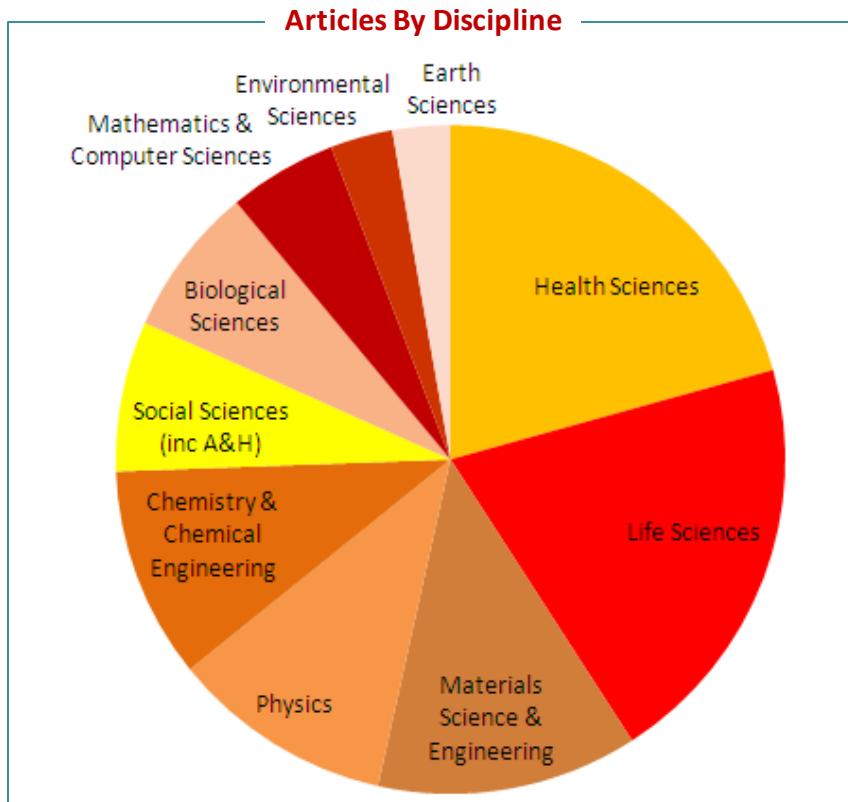
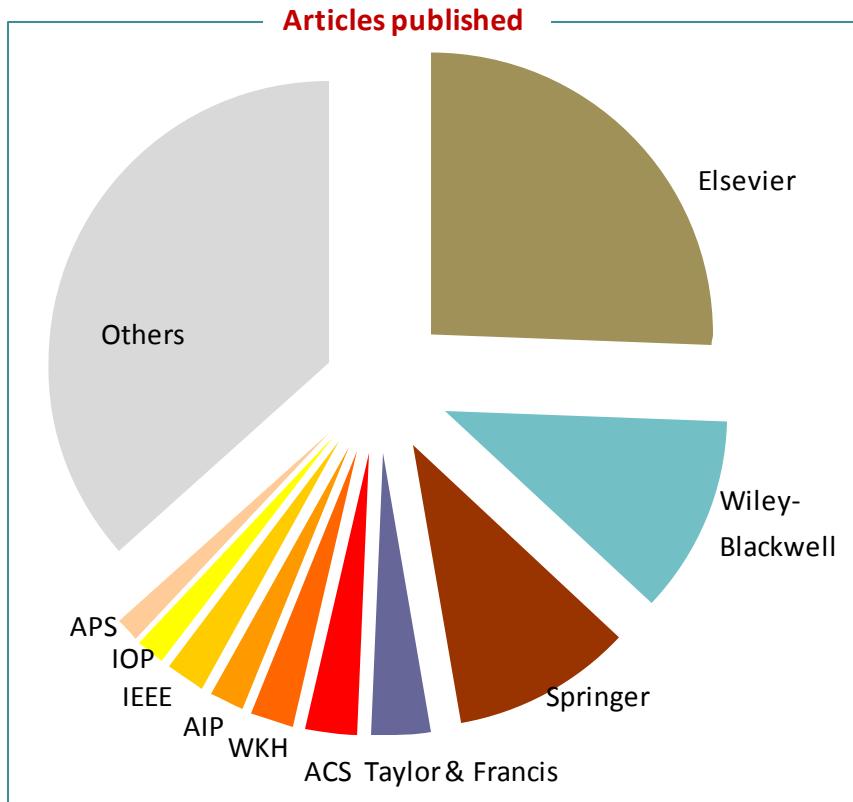
Research

Education



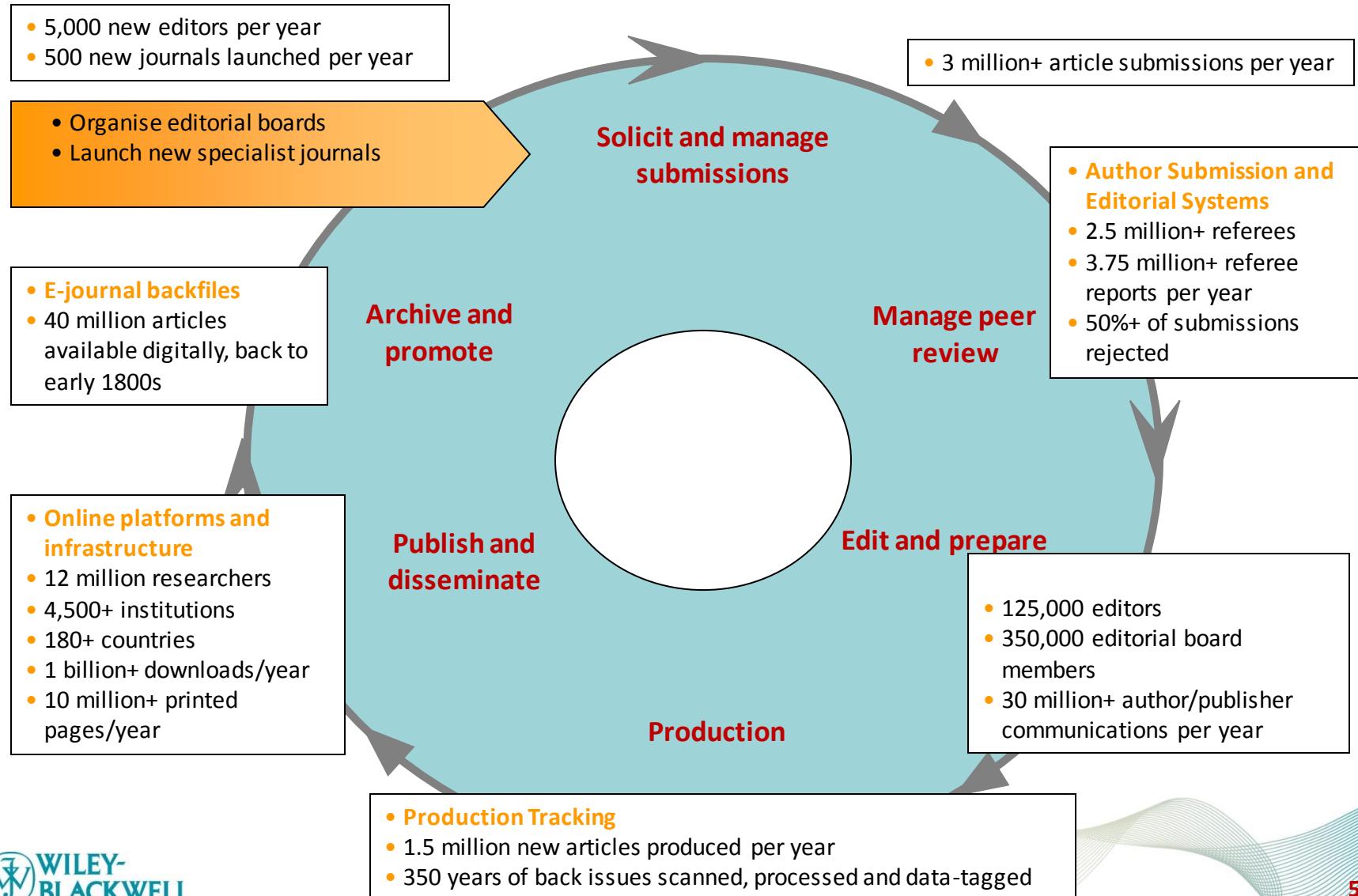
- Facilitating access across disciplines and across borders
- Acting as stewards of published research to ensure quality and integrity of science
- Managing output to keep pace with R&D growth
- Reshaping classroom and student engagement

Snapshot: Publishing Activity

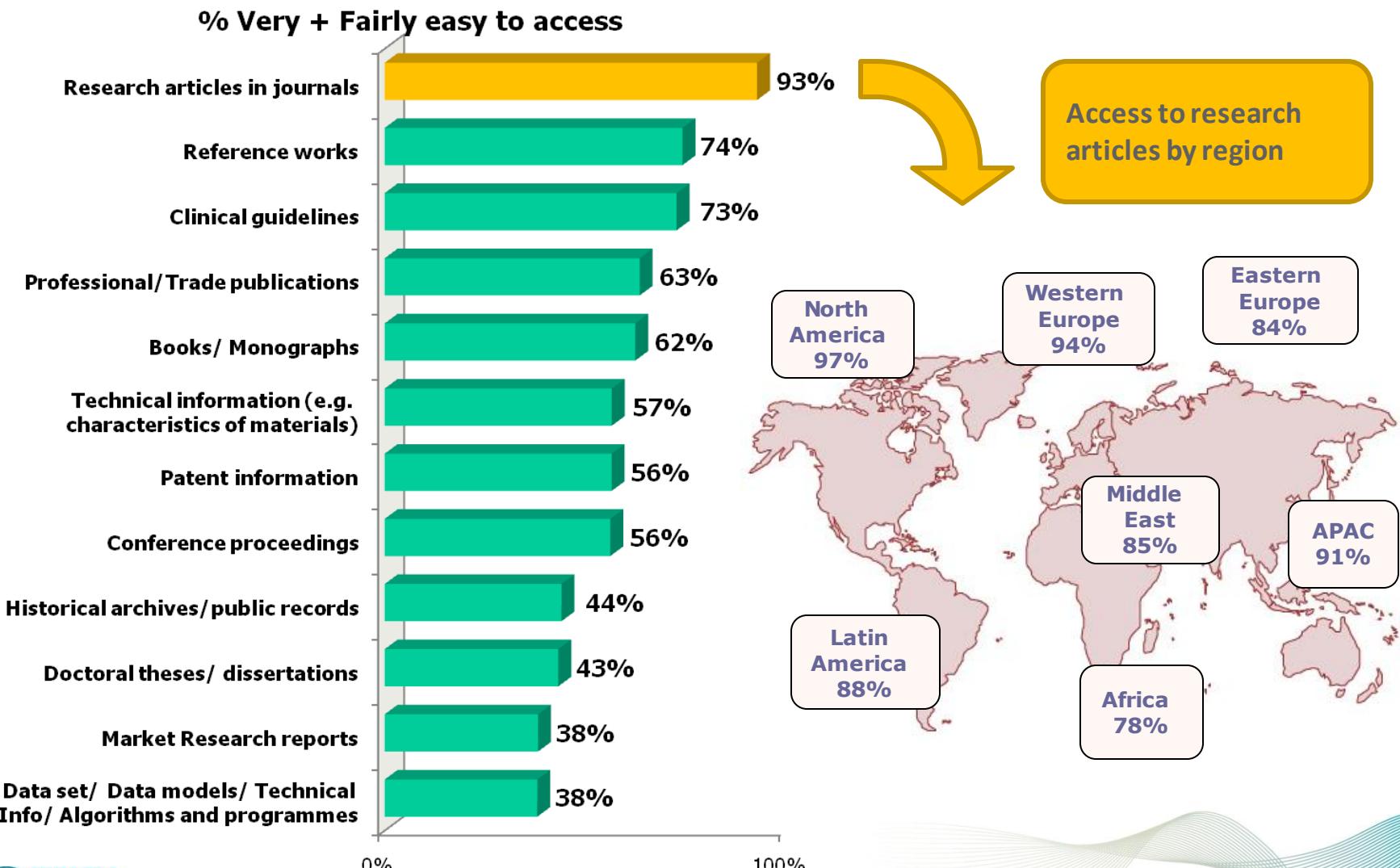


- 2,000 publishers publish around 1.5 million peer reviewed articles per year in 23,000 journals

21st Century Mission: Access, Quality, Output (Online)

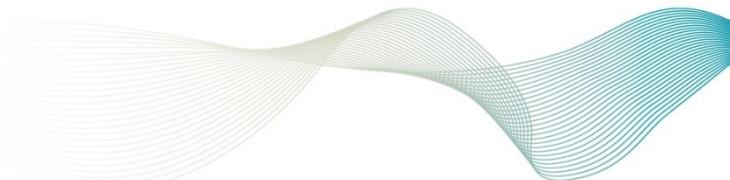


Access: Across Borders and Across Disciplines



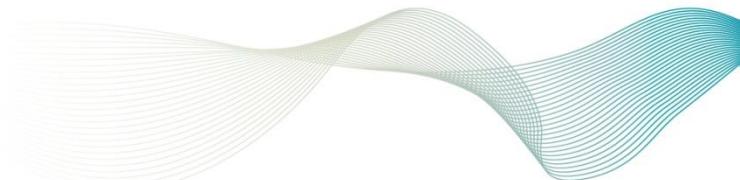
Wiley Online Library

- **1500 Journals & 10,000+ Books, References and Databases**
- **9.9 million unique visitors per month**
- From over **12,000 Institutions**
- Delivering **15 million article downloads per month**
- China ranked **#2** in overall usage

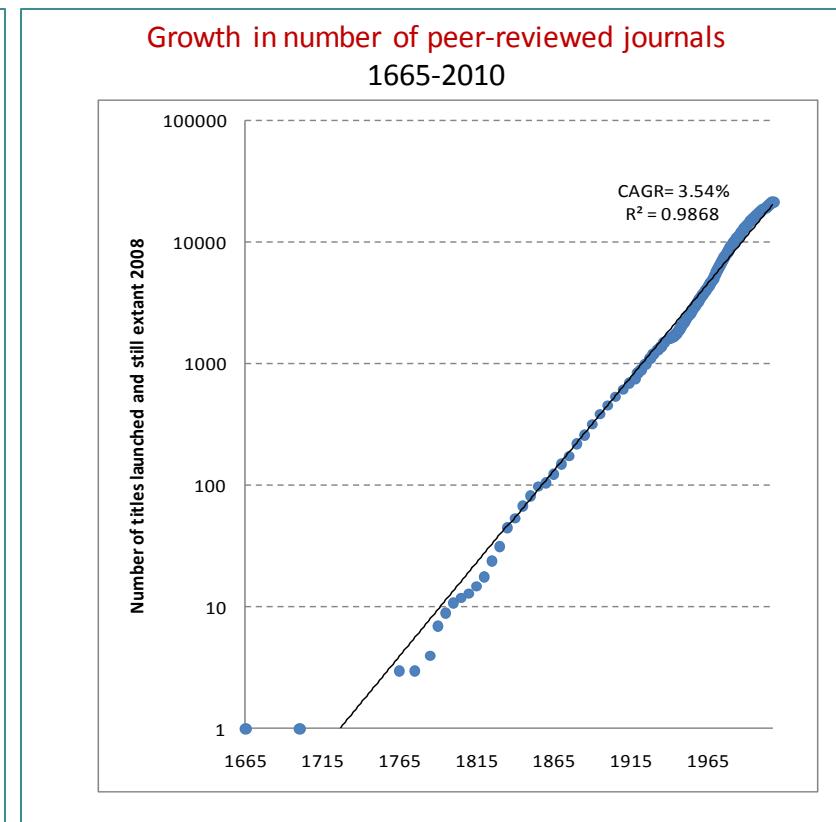
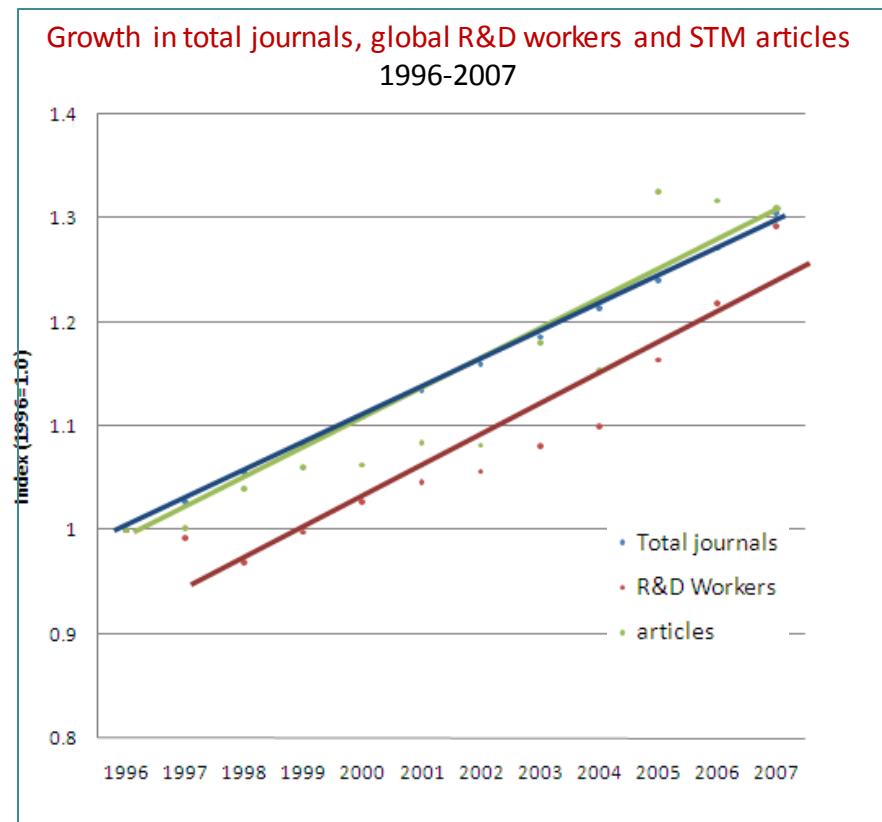


Access Initiatives

- **PatientINFORM (PI)** online service developed by publishers and patient groups.
- **Research4Life** makes health, agricultural and environmental research from over 8000 journals available to institutions in the developing world.
- **The Emergency Access Initiative (EAI)** provides free access to major biomedical titles affected by disasters.



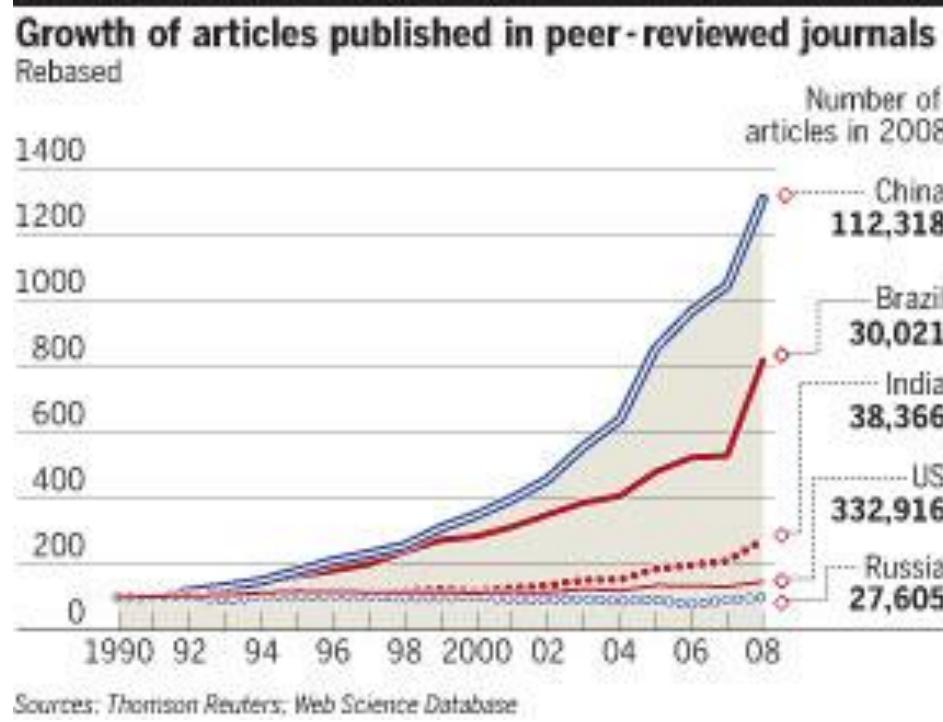
Output: Matching the pace of R&D and Innovation



- **3-4% annual growth in R&D funding** annually drives...
- **3-4% annual growth in number of R&D workers** drives...
- **3-4% growth in number of articles and journals published**

Source: Ulrich's, UNESCO, ThomsonReuters, SCONUL data [Charts updated from: Mabe & Amin(1991) *Scientometrics*, **51**, 147-162; and Mabe (2003), *Serials*, **16**, 191-197]

Output: Bringing Chinese science to the world

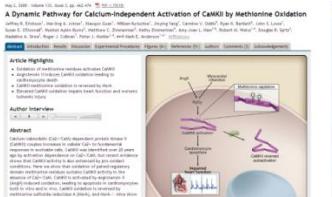


Chinese scholarly output has increased by six-fold in the past 10 years, and China is now the world's second-largest source of research articles after the U.S.

China could overtake the United States as the world's dominant publisher of scientific research by 2013

Innovation: Across Borders and Across Disciplines

Article Enhancement (e.g. Article of the Future)



- Graphical abstracts with main message of the paper.
- Hierarchical presentation of text and figures.
- Alternate views to hide or show experiment details.
- Real-time reference analyses for citation exploration.
- Interactive to assist in navigating the article

Visualisation

A screenshot of a video journal entry from 'VIDEOUROLOGY'. The header includes the journal title and a video camera icon. The main content area has a thumbnail image of a robotic surgery setup, a video play button, and a brief description of the study comparing robot-assisted vasovasostomy to pure microscopic vasovasostomy.

- Peer-reviewed video journals
- Searchable image databases using semantic linking
- In-line video to enhance article content (techniques and demonstrations)
- Multiple platform support

Social Networking



- Online community sites facilitating discussion and sharing research findings, techniques and methods
- Linked in journal and book content into community
- Supports continuous learning, CME and virtual conferences

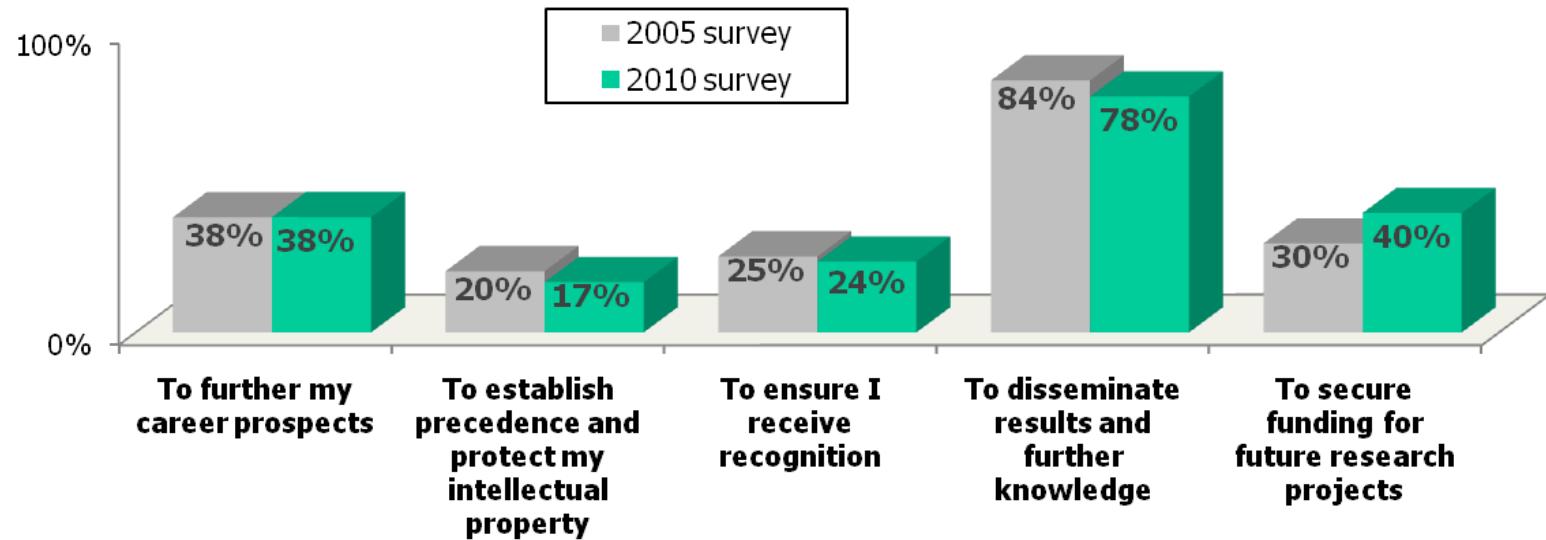
Mobile Technology



- Journal, book and database content on mobile devices
- Search and browse articles
- Create alerts and citation analysis
- Save favourite articles information and add notes
- Share result information via Email or Twitter
- News feeds and RSS technology

Output: Serving the research community

Researchers: which publishing objectives are most important to you?



Sources: NOP/Elsevier surveys 2005 and 2010

Publishers exist to provide highly valued services to researchers

Innovation: Protecting Quality and Integrity of Science



- Cross-publisher initiative with CrossRef to detect instances of plagiarism in scientific articles
- Annual investment from publishers of membership and article processing fees



- Provides online forum for publishers or journal editors to discuss issues regarding scientific and peer review integrity

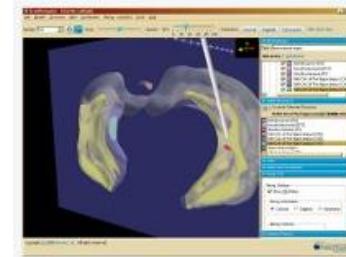
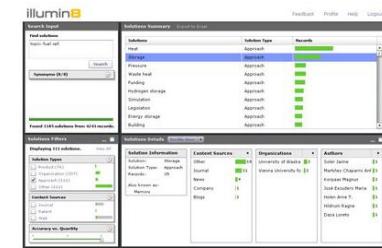


- Publishers have introduced the Rightslink reprints and permission system to enable authors to have permissions for content use to be enabled online and receive instant permissions.

Innovation: Tools to Enrich the Output

Text Mining Tools

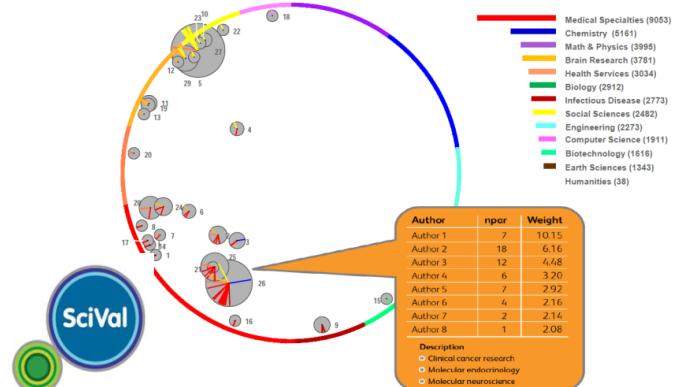
- Publishers are developing data and text mining tools with partners to extract semantic connections within journal and book content
- Working with partner to link to datasets, e.g. EMBL, Pangaea
- Researchers want to save time searching and spend more time analysing and experimenting
- Solutions help to discover ideas and new uses for technologies



Research Performance Measurement Tools

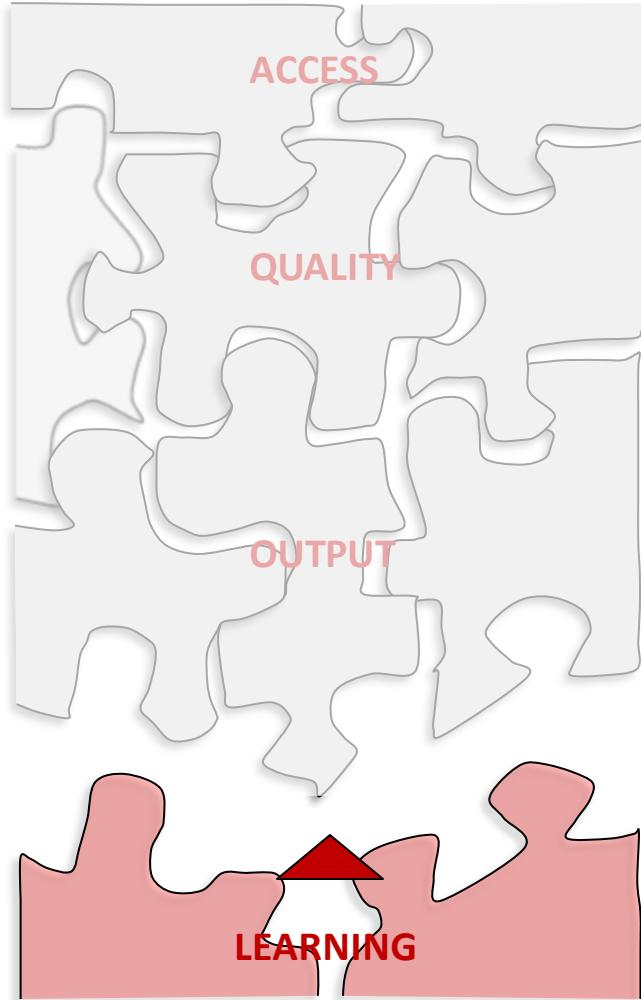
- Products that help decision makers in institutions and governments analyse research performance and emerging areas of science
- Identifies drivers of competitive research positions and strengths.
- Data derived from publication and citation analysis
- Matching of output by authors and institutions
- Intuitive application of article-level classification and bibliometrics, through partnership with industry researchers

A UNIVERSITY'S "DISTINCTIVE COMPETENCIES"



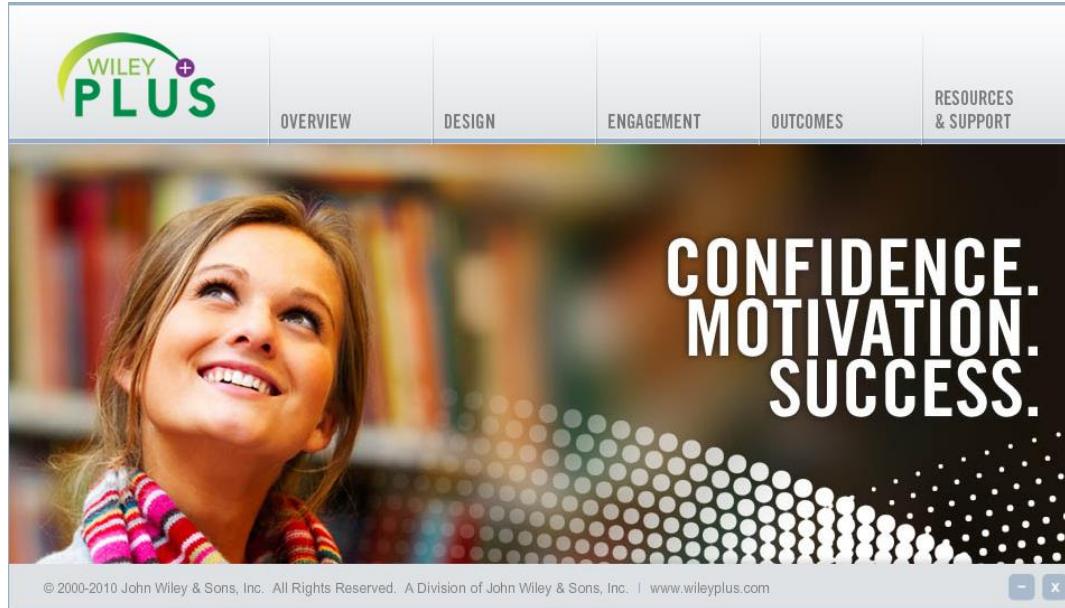
21st Century Mission

Research



- Facilitating access across disciplines and across borders
- Acting as stewards of research to ensure quality and integrity of science
- Driving output to keep pace with R&D growth
- Reshaping classroom and student engagement

21st Century Mission: Reshaping Education Systems



21st Century Mission: Reshaping Education Systems

Designing online learning systems to support teaching and learning workflows through a collection of tools and resources:

Tools:

- Online Assessment/Activities
- Grading/Gradebooks
- Diagnostics
- Reporting
- Course Planning
- Learning Objectives

Resources:

- Digital book – Concept Modules
- Multimedia resources
- Instructor/Student support
- Assessment questions/activities

21st Century Mission: Reshaping Education Systems

RESEARCH

WILEY PLUS

KNOW WHAT TO DO
DESIGN

KNOW HOW TO DO IT
ENGAGEMENT

KNOW YOU DID IT RIGHT
OUTCOMES

Applying **ACCESS**, **QUALITY** and **OUTPUT** principles to shaping foundation of research: **EDUCATION**

Critical Component: Global Collaboration



Thank you!

感謝聆聽

jmurphy@wiley.com

rming@wiley.com