



Away From Print – Publisher's Business Models in the Future

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“Business Models”



- Customer Needs
- Publisher's Role
- Economic Models

- Customer Needs

- Publisher's Role

- Economic Models

What do Researchers Want as Authors?



- Register a discovery as theirs – assert ownership and achieve priority
- Get their research (and themselves) quality stamped by publication in a journal of known quality
- Let their peers know what they have done – recognition and collaboration
- Leave a permanent record of their research

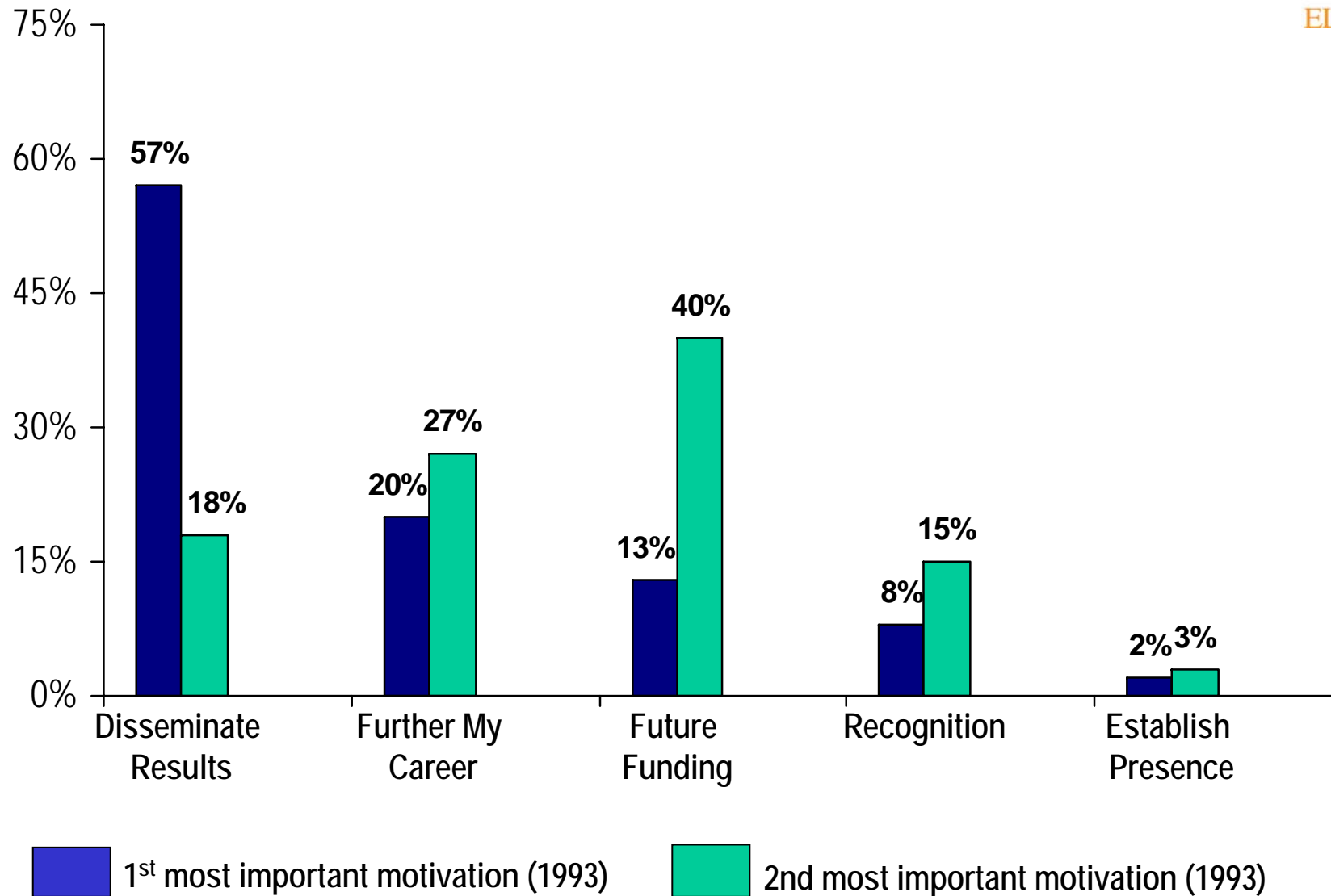
Registration

Certification

Dissemination

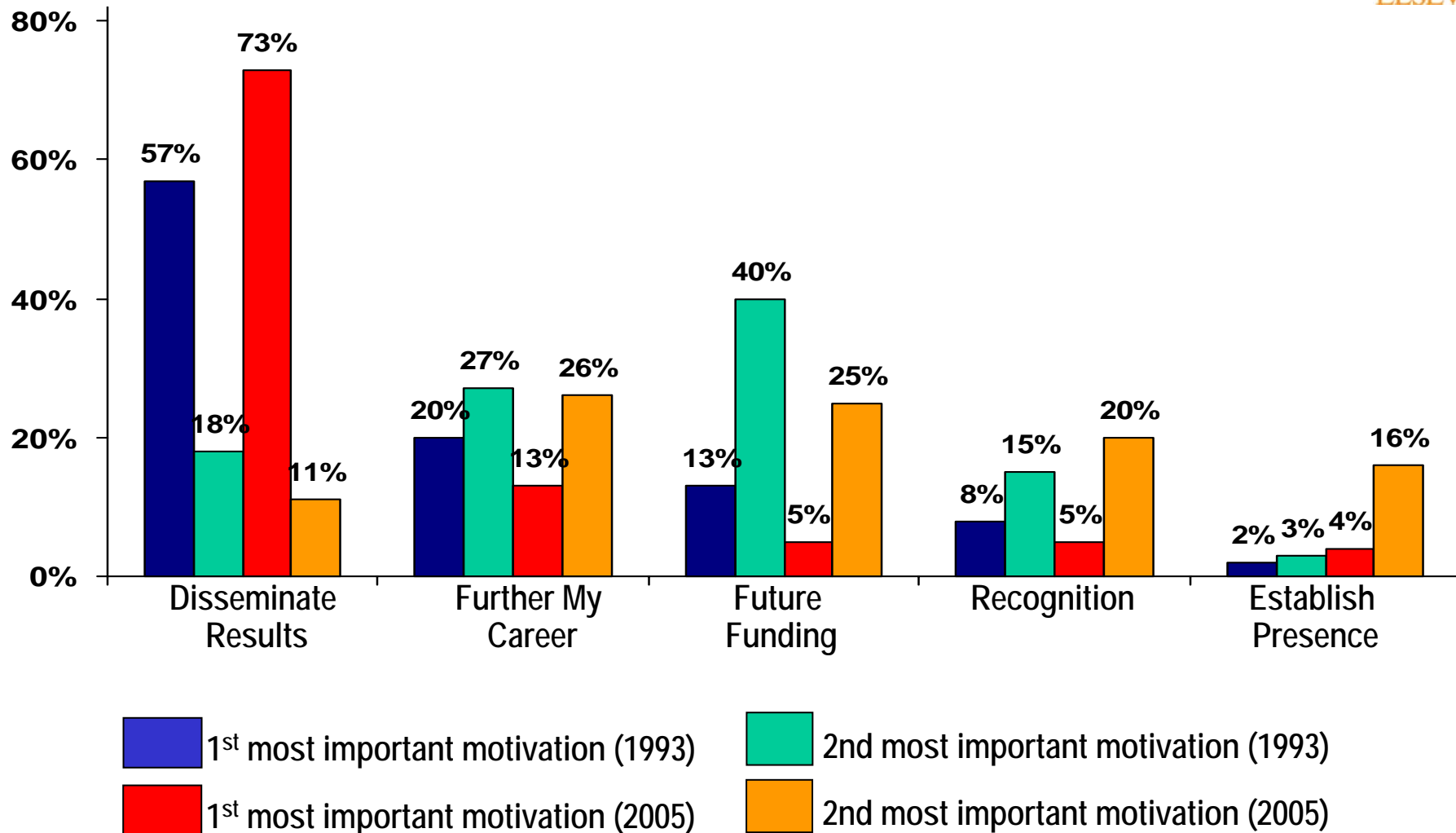
Archive

Motivations for Publishing – 1993



1993. B. R. Coles: "STM Information System in the UK". Royal Society / ALPSP/ British Lib.

Motivations for Publishing – 1993 / 2005



1993. B. R. Coles: "STM Information System in the UK". Royal Society/ ALPSP/ British Lib.
2005. Elsevier/NOP study

What do Researchers Want as Readers?



- Reassurance regarding authority and quality of information
- Material that is relevant to their research interest
- Tools that allow the material to be located and browsed
- Availability of sources over time

Certification

Dissemination

Archive

The Function of Publishing



Author Needs

Ownership / Speed

Registration

Reputation / Quality

Certification

Recognition / Audience

Dissemination

Renown / Permanence

Archive

Reader Needs

Authority / Quality

Relevance / Navigation

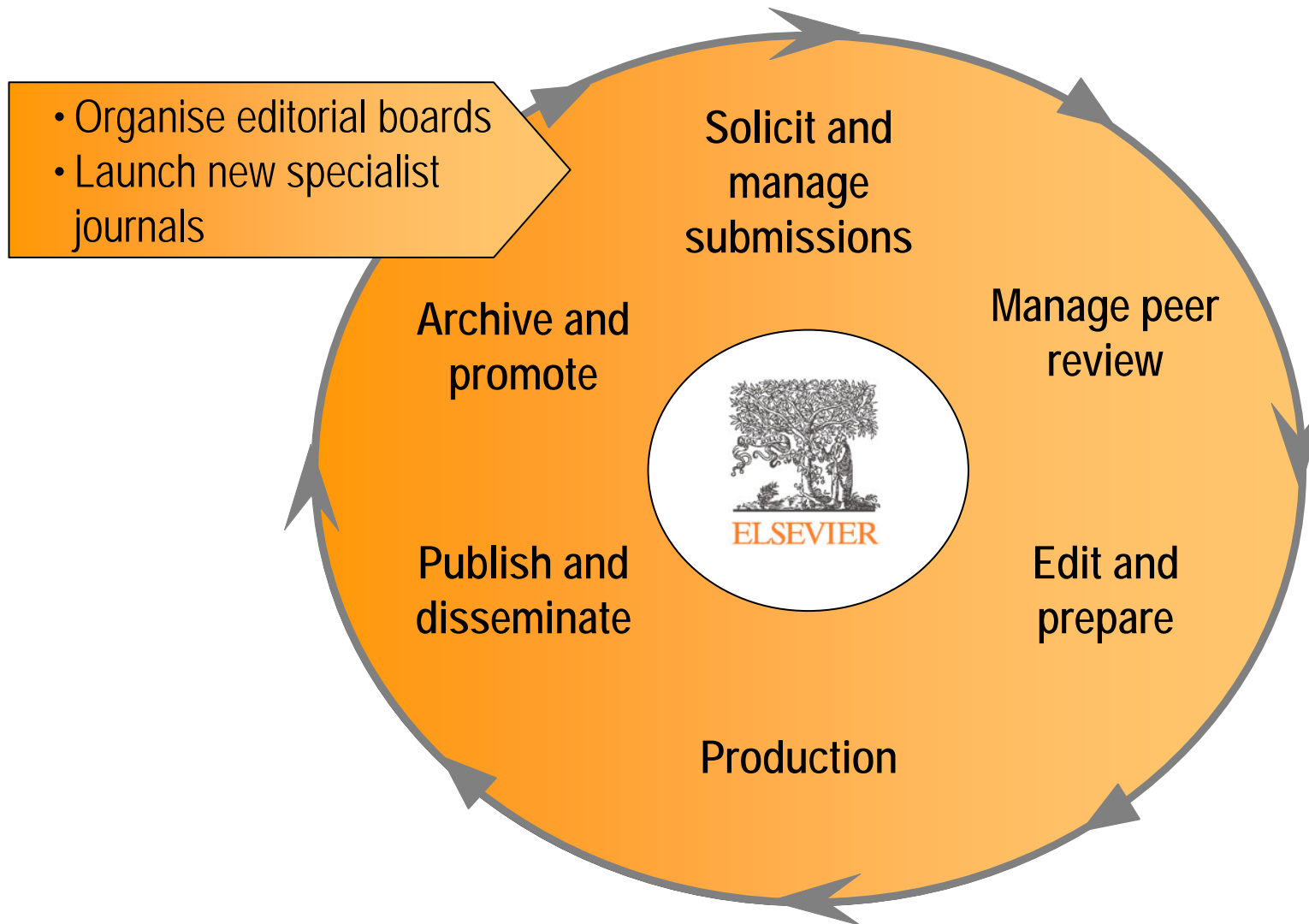
Continuity / Permanence

- Customer Needs

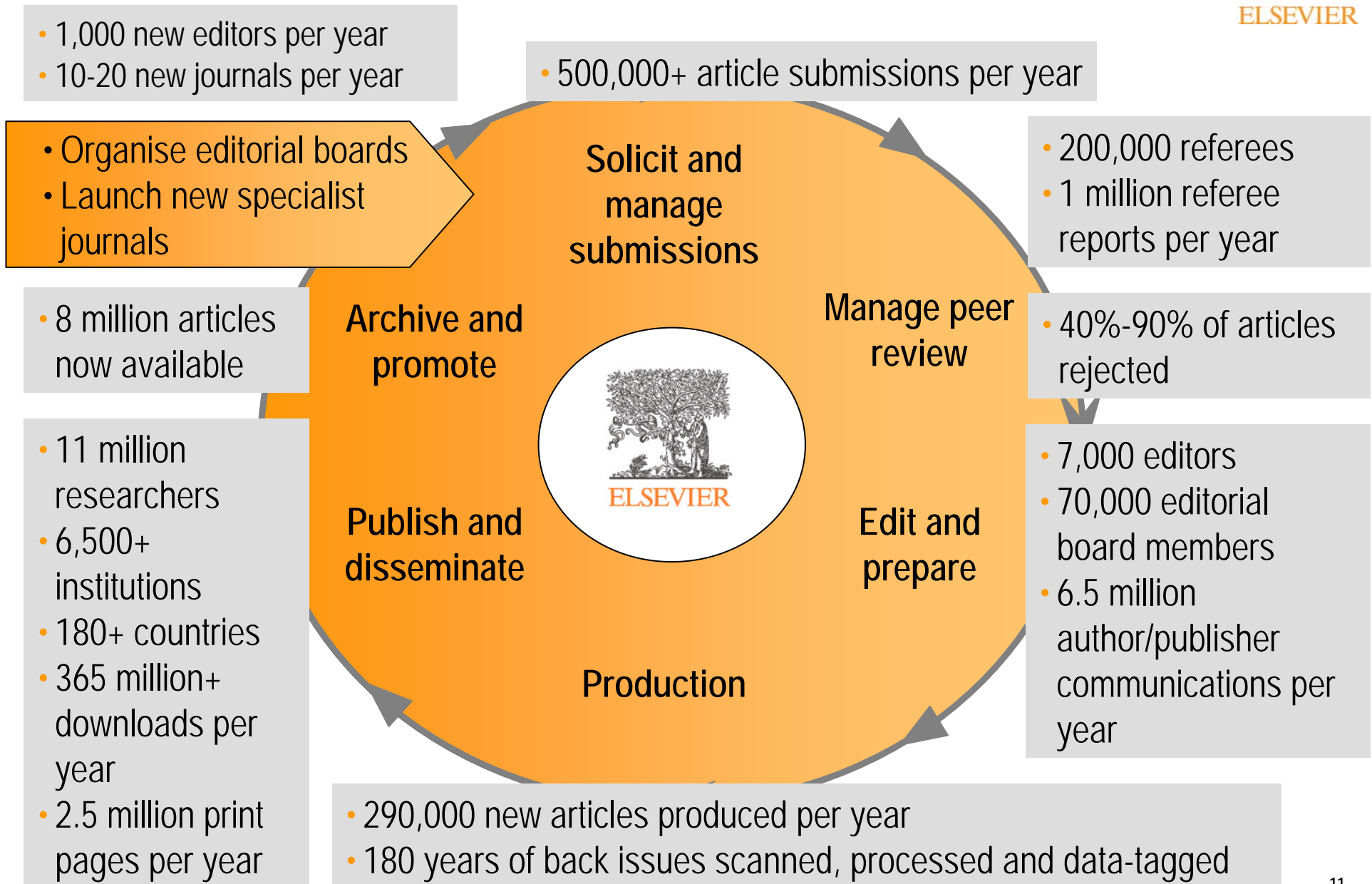
- **Publisher's Role**

- Economic Models

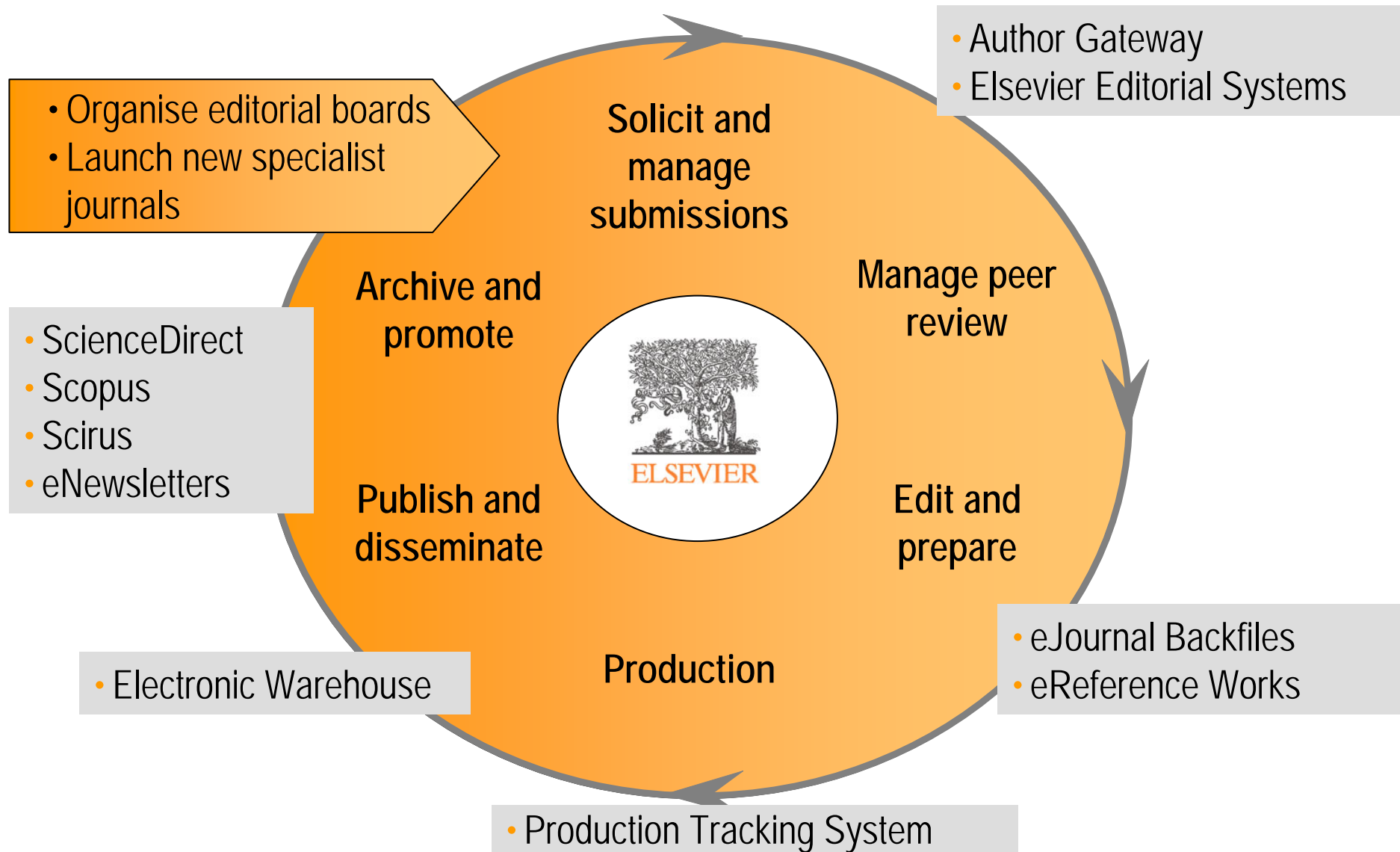
The Journal Publishing Cycle



The Journal Publishing Cycle: Elsevier's role



Post-Print – Electronic Investments Since 1999



Where are we in 2007?



Certification

- Extremely high standards of quality control and integrity
 - 88% of researchers regard Peer Review as important
 - Elsevier: 500k submissions, 200k reviewers, 70k editorial board members

Dissemination

- Dramatic increases in access levels since 1999
 - EU libraries: 3x-10x more journals via ScienceDirect
 - 40%+ *annual* growth in ScienceDirect downloads ('01-'06: from 14M to 81M)
 - Researchers list access to journals as 12th among their concerns

Archive

- Definitively published research is preserved in perpetuity

Efficiency

- Significant increases in researcher productivity since 1999

Cost Effectiveness

- Continuing improvements in value for money
 - Moderating price increases: Elsevier 5.5% for last few years (lowest quartile) absorbing inflation (3%), growth in articles published (3-4%), usage (20%/yr)
 - Effective price paid per Elsevier article downloaded: from €12 to €2 and still falling (45% annual decrease)

Post-Print: Improvement of Review Process



- EES - online submission, peer-review and editorial system
- Web system enabling simple submission to journals
- Unique to Elsevier, integrated with Scopus
- Highly customisable
- Referee selection for editors
- Optional on-line refereeing
- Managing workflow
- Automatic transfer to production system

Impact of EES on peer-review process

- International submissions have increased by 20-30%
- Peer review is faster than ever before
- More reviewers per manuscript – means more consistent quality.

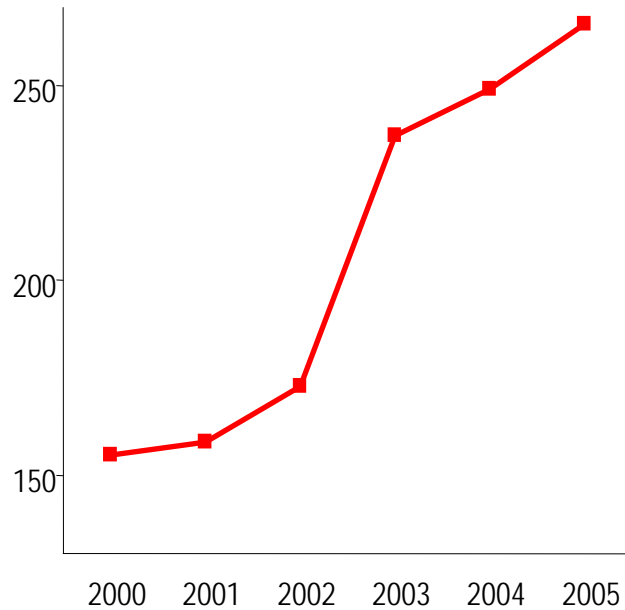
Feedback

- 89% of Editors think EES is better or similar than other systems.
- Uptake by authors of EES >90%.
- 1310 journals are live on EES, handling app. 1400 submissions daily

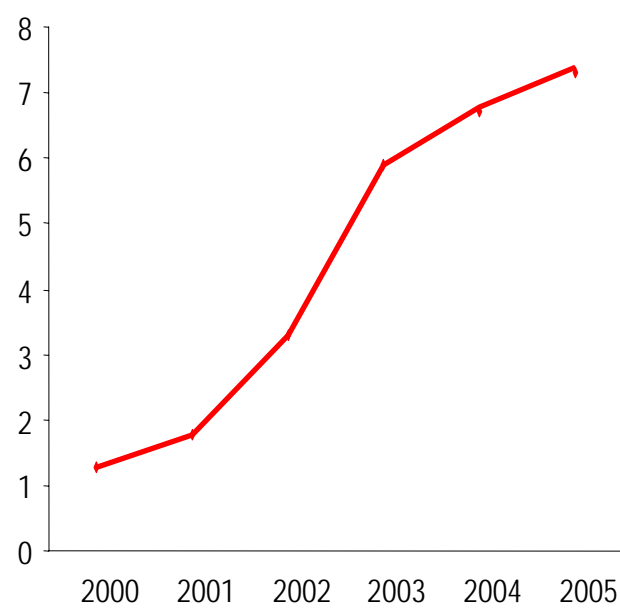
Post-Print: Content Growth



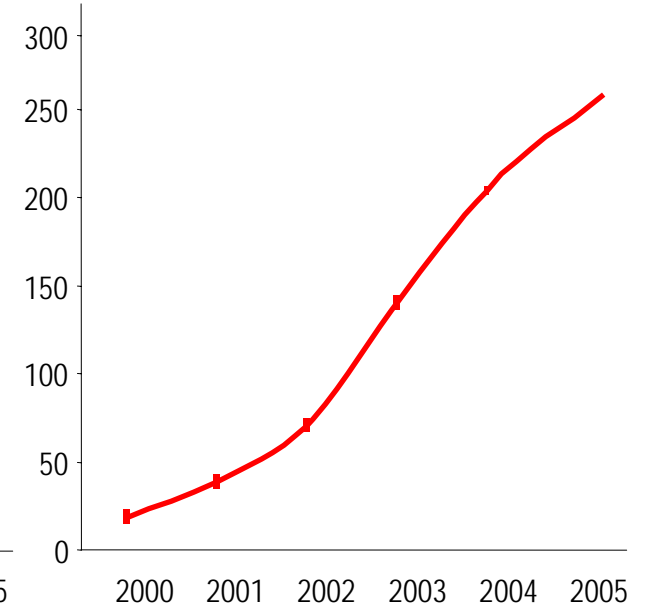
Elsevier Articles Published
Thousands



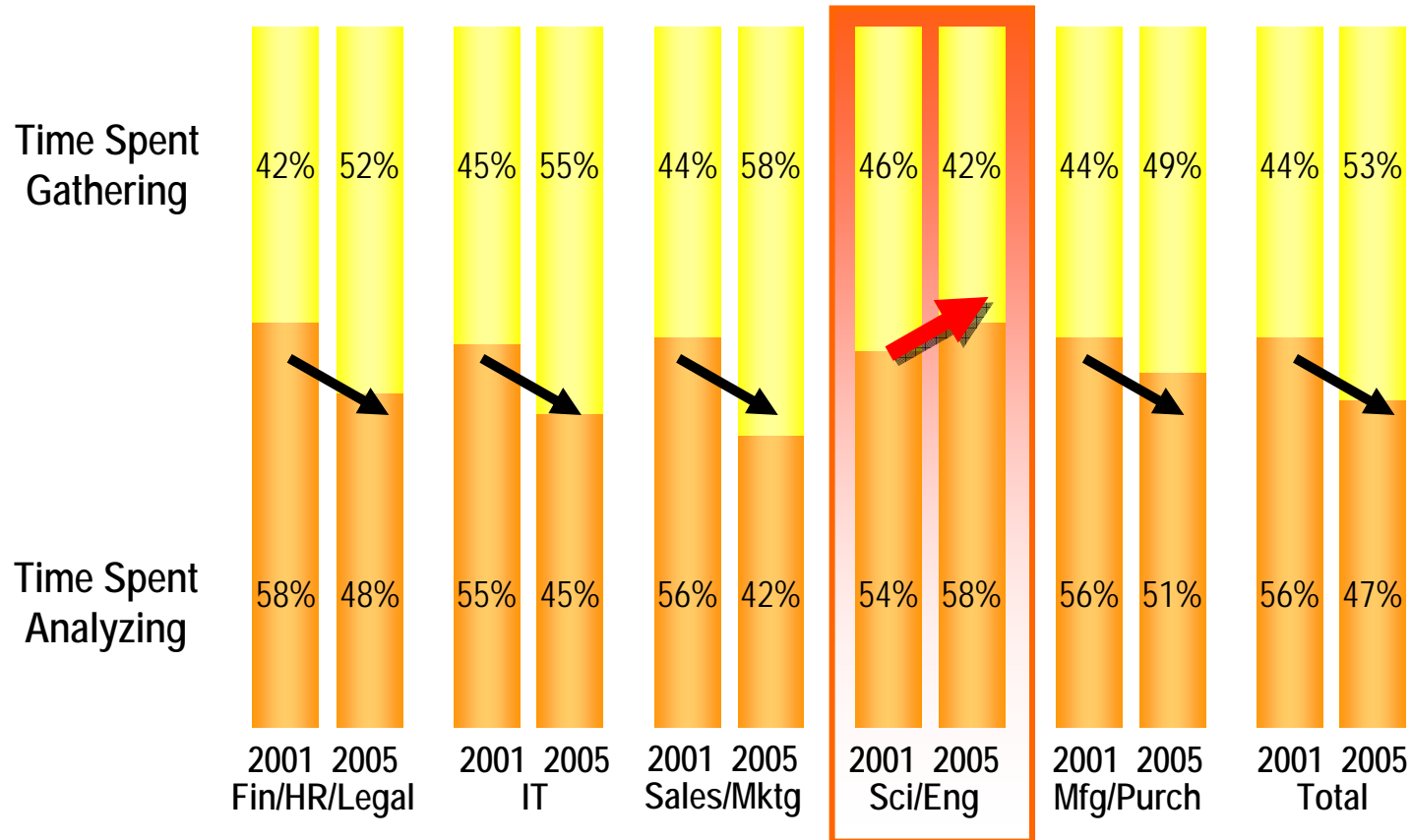
Articles on ScienceDirect
Millions



ScienceDirect Downloads
Millions



Post-Print: Increasing Productivity



Compared to print-only era

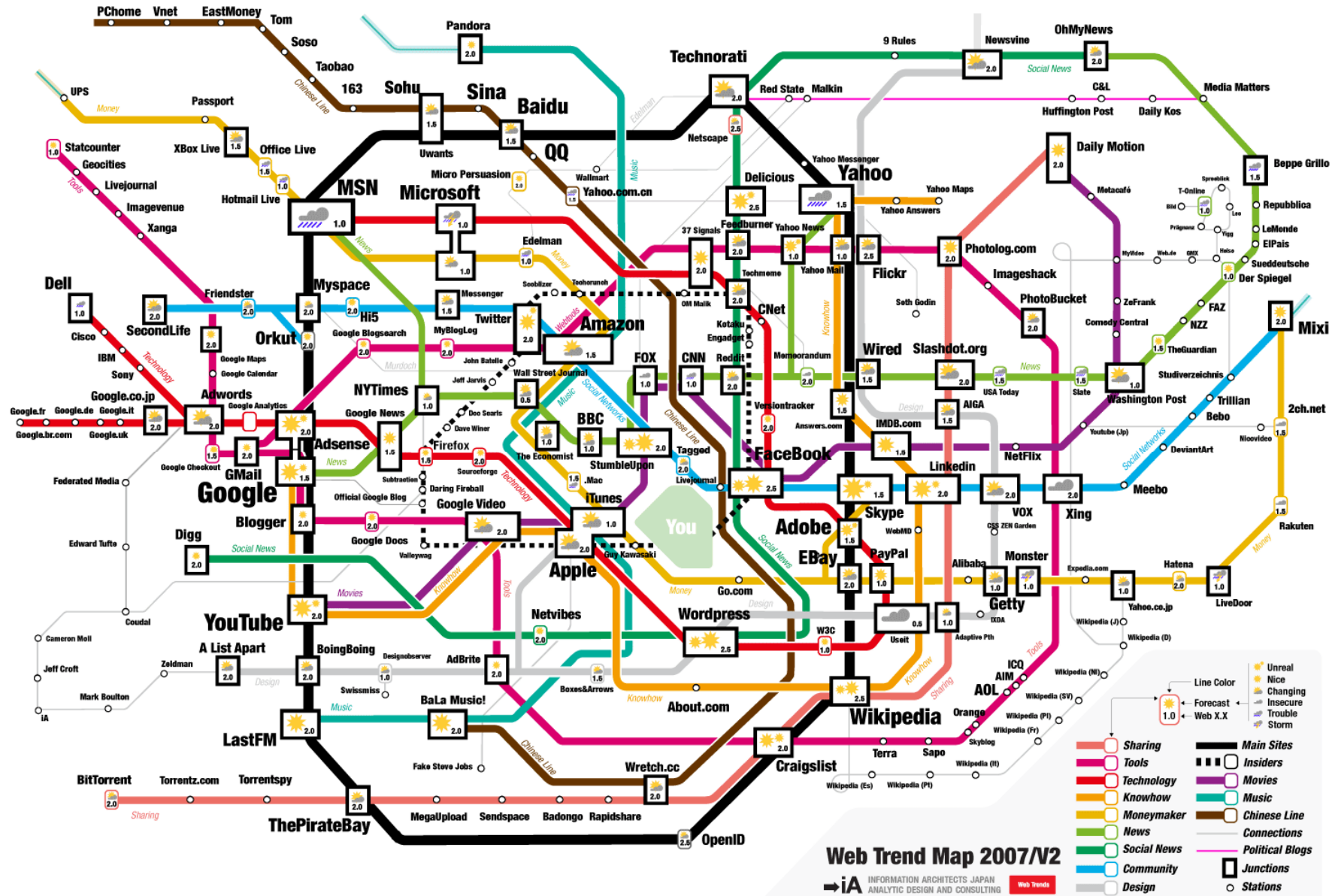
- Scientists read 25%+ more articles per year
- Scientists read from almost twice as many journals

Scientists can now spend more time analyzing information than gathering it

Looking Forward – More Change, Faster Change



ELSEVIER



Changes in Registration

Registration

Certification

Dissemination

Archive



- Latest, up-to-date content is of high value – increasing number of free services allow users to store and disseminate their latest information.
- Researchers eager to share findings early e.g., 20% Physics, Math & Computer Science articles available on pre-prints, some journals close to 100%

flickr^{BETA}

- Users can store and annotate pictures in Web environment which allows for controlled sharing with trusted network

Google[™]
Base BETA

- Users can store and categorise content in public Web environment and are guaranteed visibility on Google

foldera[™]
your work organized instantly. really.

- Online tool with focus on sharing

Changes in Certification

Registration

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- New forms of peer review and quality measurement emerging – comments, voting and usage included in quality assessment, review and dissemination processes are integrated
 - Distinction between published and non-published content is blurring. Both are equally visible to the user
 - Review and validation through self-organising web supported social networks and feedback systems
 - Interests and comments from and ratings by peers are captured to add value to the content under review



- Allows users to update their personal information, interests and relationships, enables formation of social and collaborative networks



- Users submit stories for review, readers decide which stories go on the homepage



- Free and universal online reputation management tool based on the evaluation of web contributions like blog posts, pictures or videos by the community

Changes in Dissemination

Registration

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Dissemination

Archive



- Relevance ranking and social networks (e.g., peers linked to, tagged, or used this information) are becoming more important in dissemination
 - Allows users to ring fence trusted parts of the web and create specialised search engine
 - Search is further enhanced by analysis of user behaviour and user preferences.
- Recommendation sites leverage users' profiles to make personalised recommendations, and connect users who share similar tastes



- Allows to build specific searches tailored to personal and community interests – uses the wisdom of crowds to improve search results



- Allows scientists to organise and tag references and share them with others



- Keeps track of what music you listen to, and produces a large number of personalised features – can be used to listen to music, find out about artists you may like, other people with similar music taste, etc.

Changes in Archive

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- Old content has been given new value
- Increasing number of services interested in capturing (digitising) and preserving older content and making it searchable



WebCite

- Collaborative efforts to build permanent archive of digitized text and multimedia content
- Preserves Web content by taking regular “snapshots” of the Web
- Archiving system for web references (cited web pages and websites) servicing authors, editors, and publishers of scholarly papers and books

Impact on Publishing?



Large majority of authors feel that peer review remains important

Current open peer review experiments get very little traction

Authors get tremendous value and prestige from high quality brands e.g., Science, Nature, Cell

Can information which is not validated in the traditional way be trusted?

Why would an author share his / her best results without getting credit for it?

Blogs etc. are often opinions, how much of science is based on opinions?

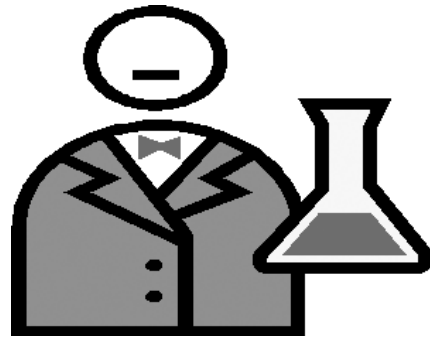
Growth is spectacular

Scientific communication might change later, but there is no reason why it is not subject to general change patterns

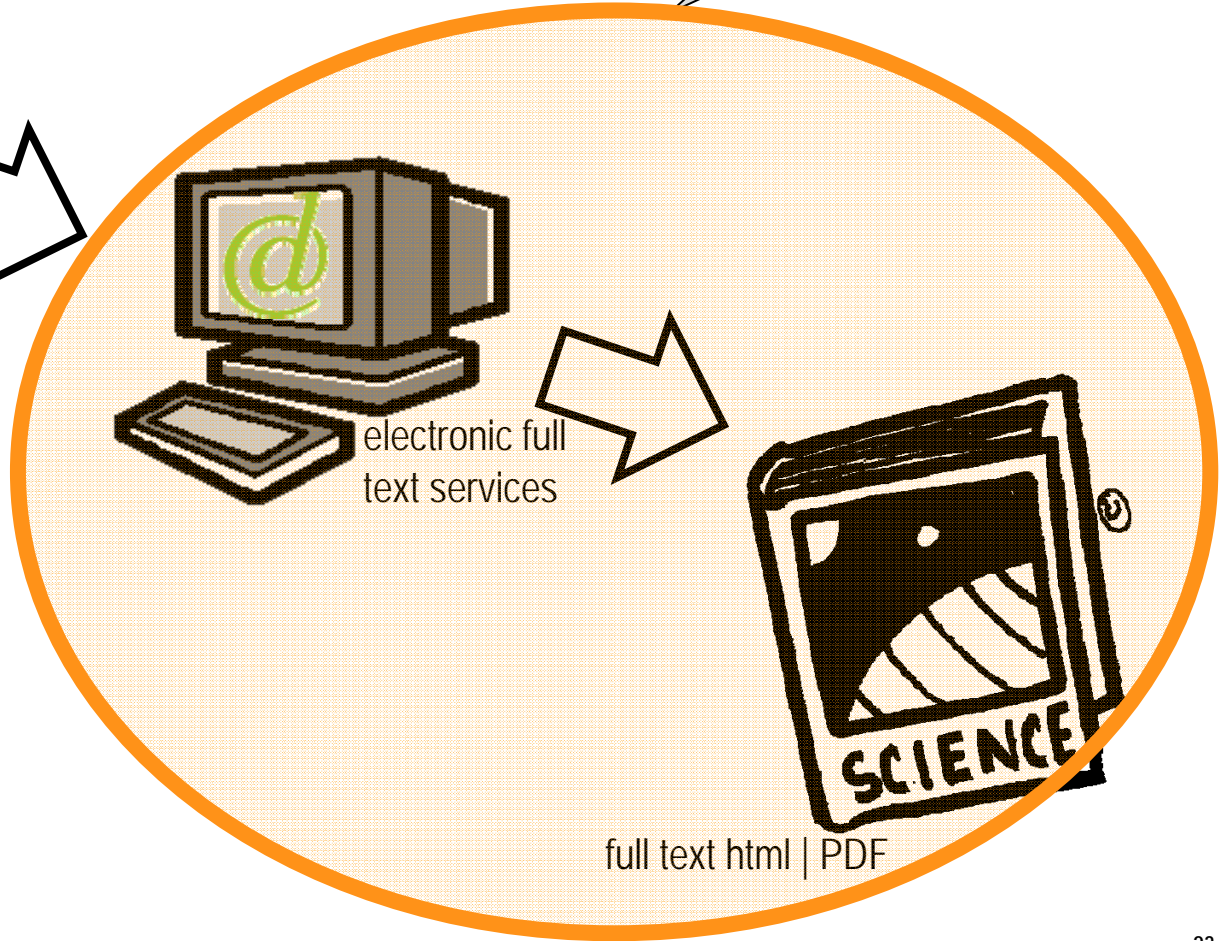
Most important need for scientists is dissemination, not validation or derived reputation from publishing

New generation of scientist will have no extra appreciation for scientific journals as they also have no extra appreciation for the NY times for their news – no branding of information source

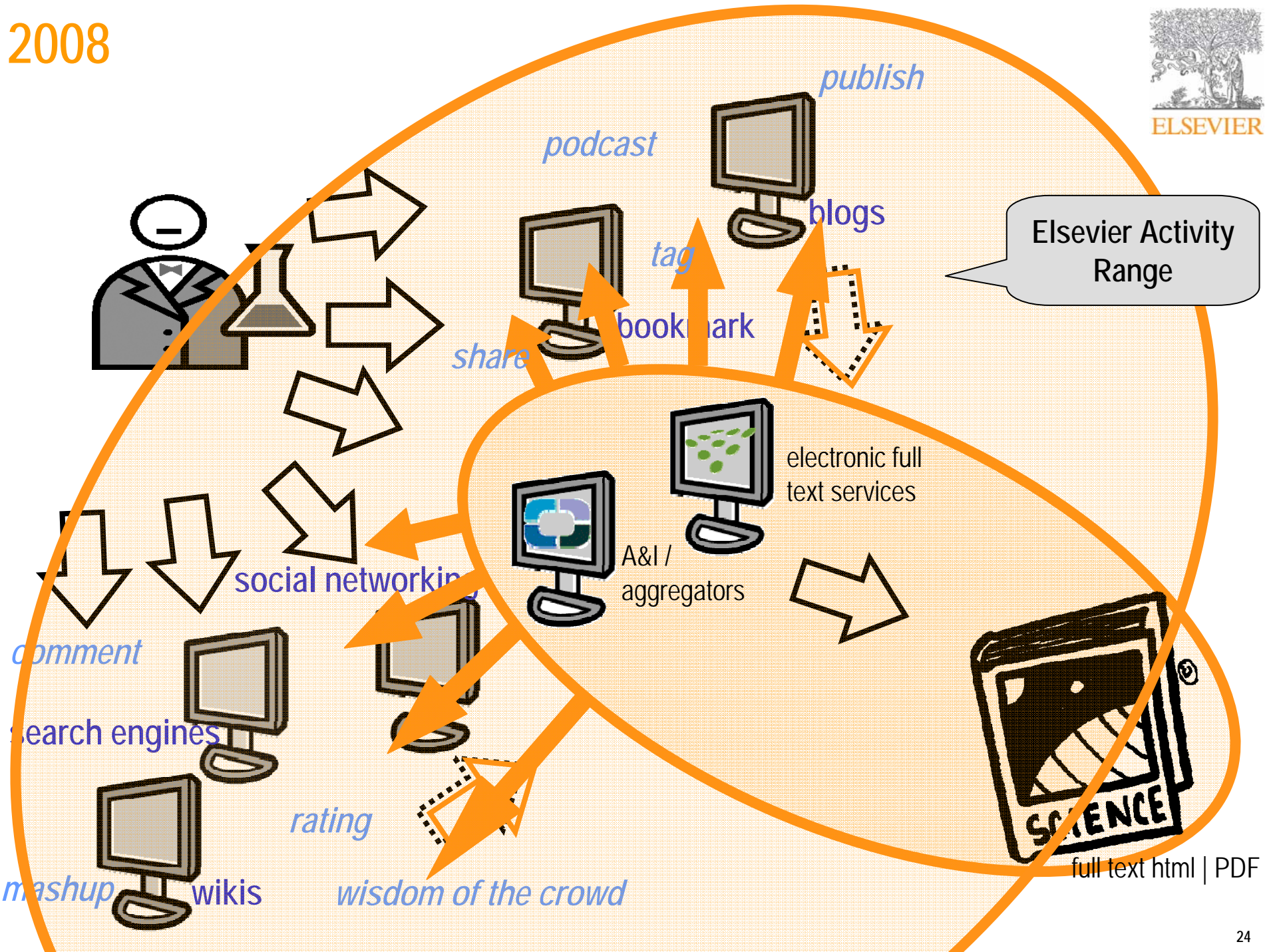
1998



Elsevier Activity Range

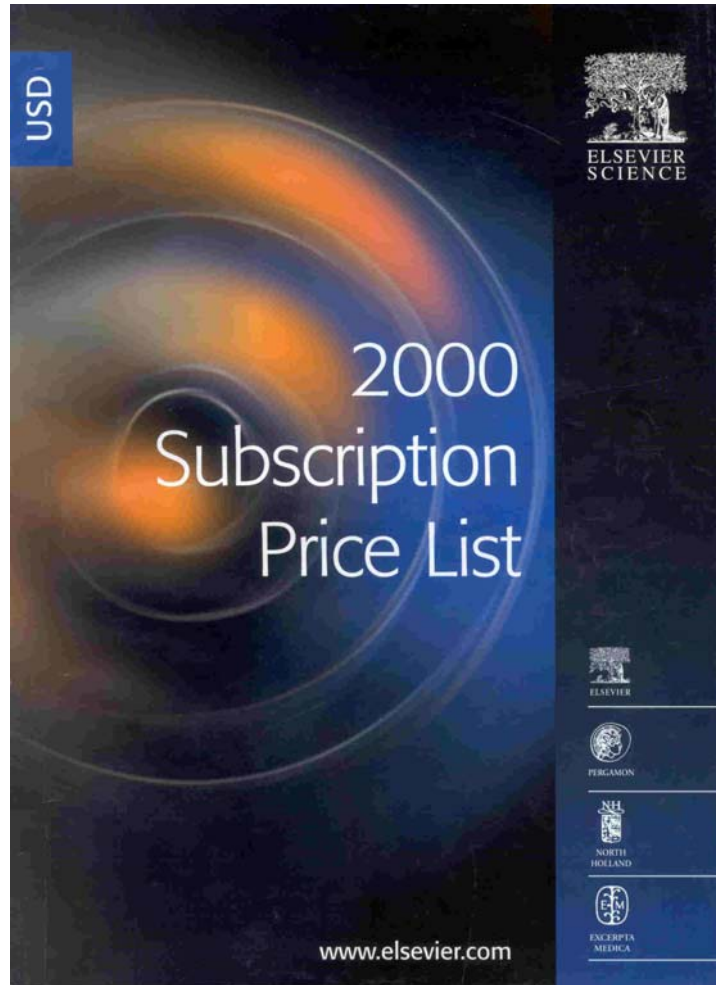


2008



- Customer Needs
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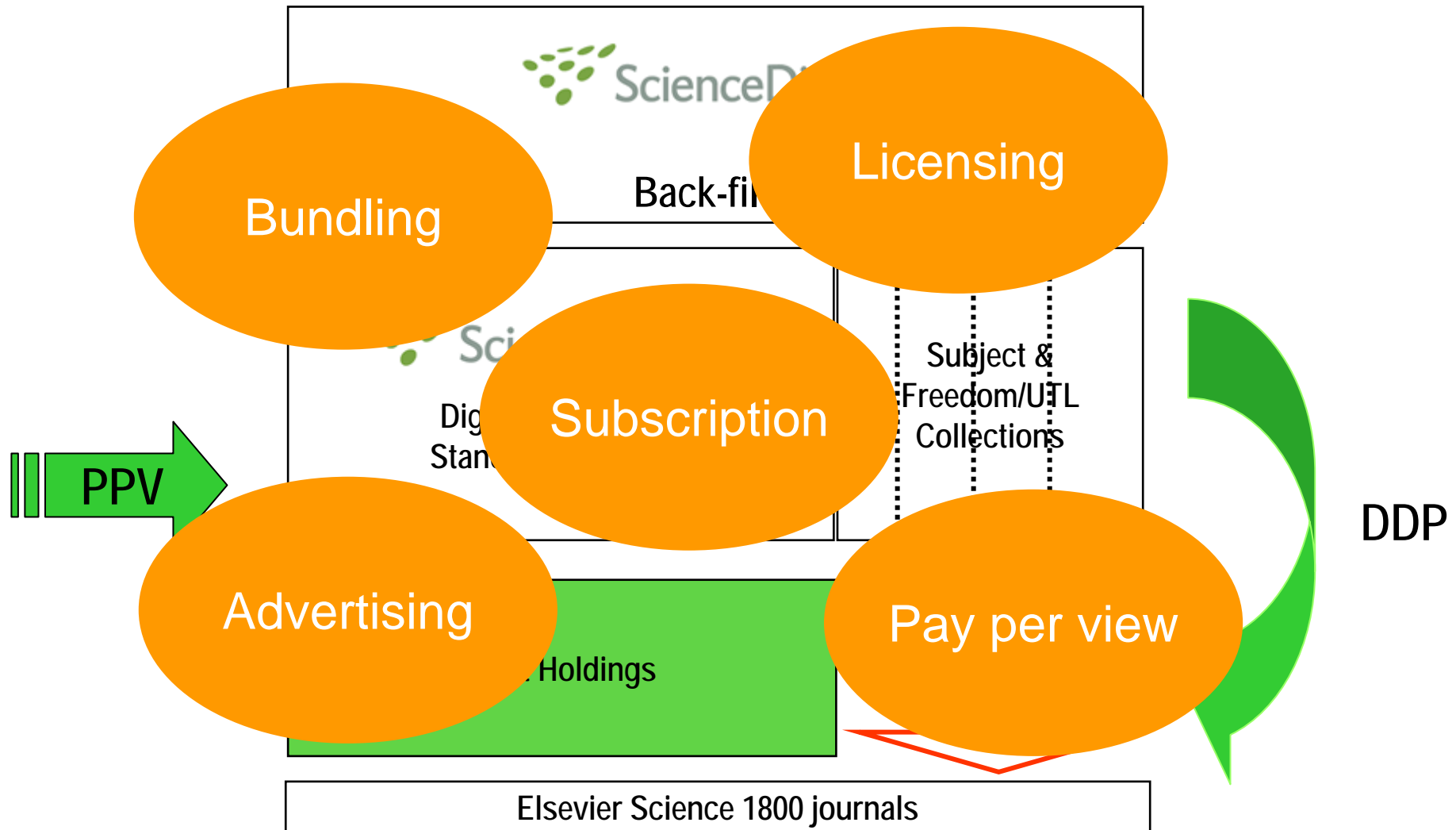
Print Pricing



03063	Land Use Policy ISSN: 0264-8377 www.elsevier.com/locate/landusepol	17	1	4	541
00616	Language & Communication ISSN: 0271-5309 www.elsevier.com/locate/langcom	20	1	4	401
00867	Language Sciences ISSN: 0388-0001 www.elsevier.com/locate/langsci	22	1	4	389
01016	Language & Communication with Language Sciences www.elsevier.com/locate/lcoful	N/A	2	8	711
07433	The Leadership Quarterly Recent Addition ISSN: 1048-9843 www.elsevier.com/locate/leader	11	1	4	269
07434	Learning and Individual Differences Recent Addition ISSN: 1041-6080 www.elsevier.com/locate/lindif	12	1	4	269

- Based on local needs customer orders print subscriptions on an annual basis via an agent.
- All customers pay the same price (catalogue price)
- In case of additional demand Interlibrary Loan or Document Delivery

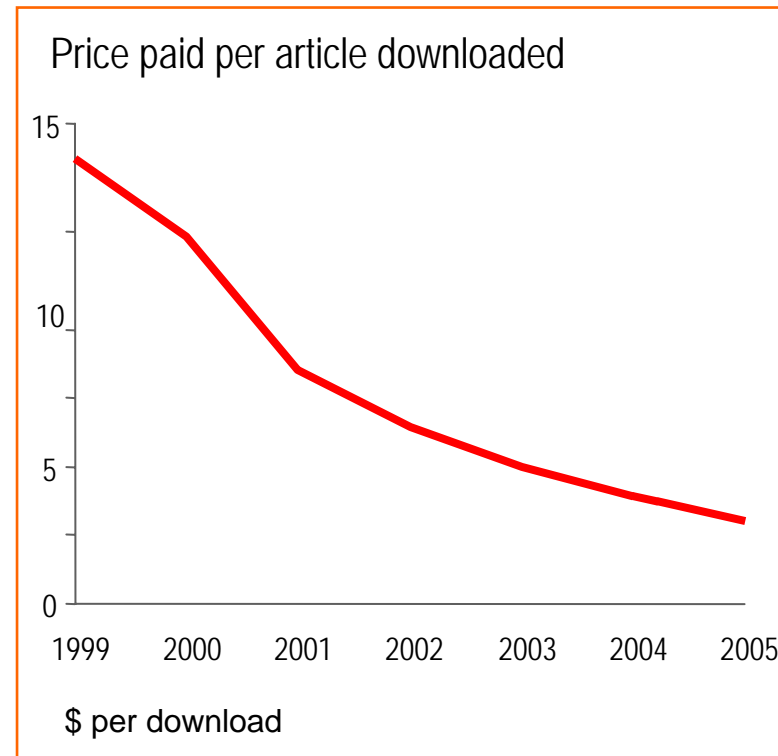
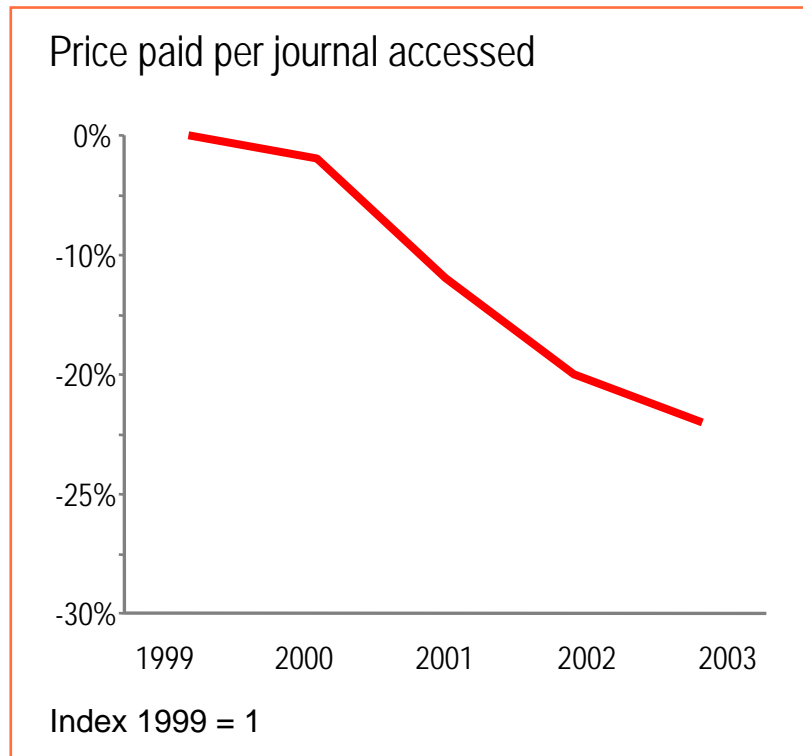
Electronic Pricing



Unit Costs of Access Declining

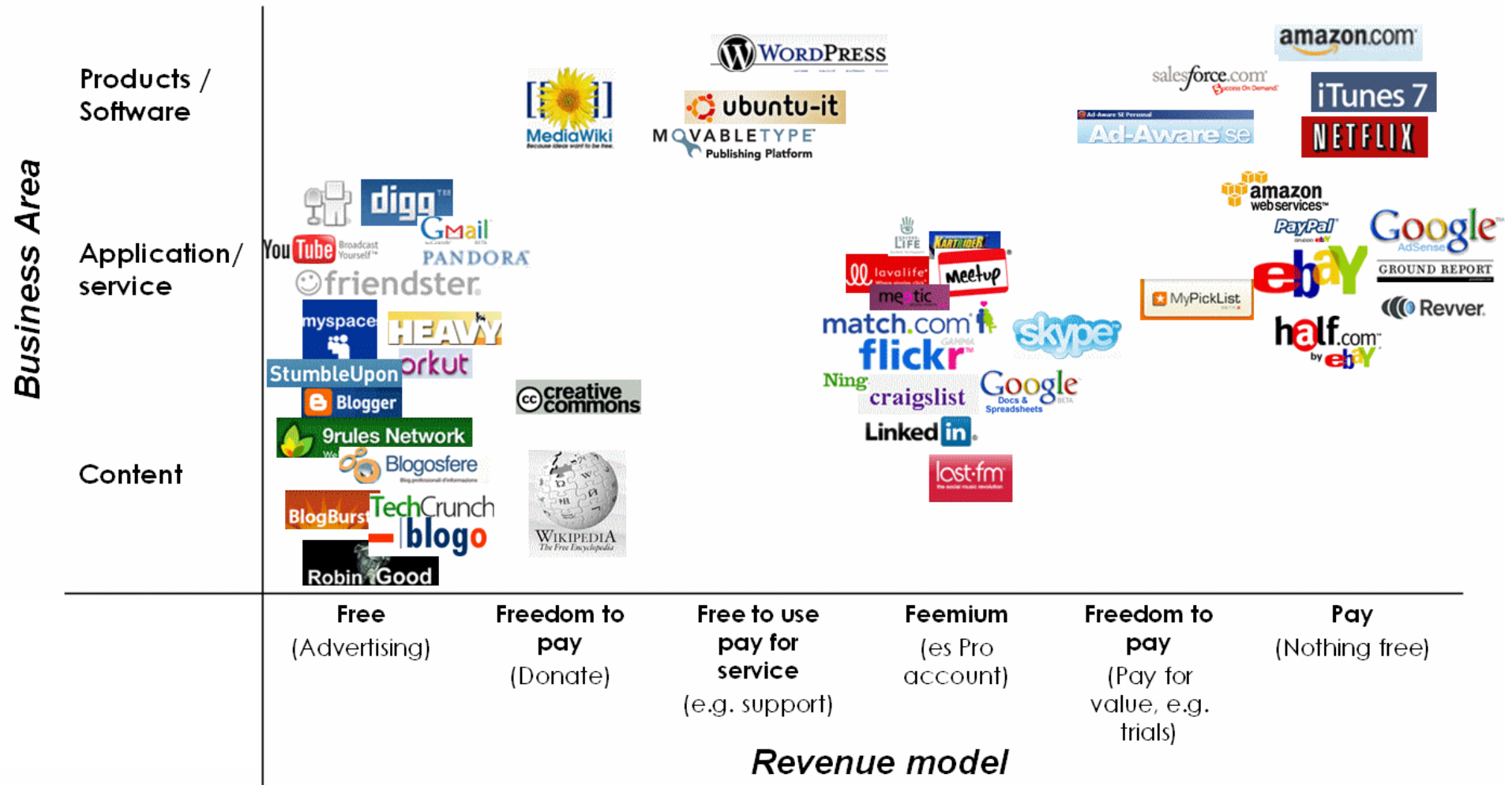


The cost per journal accessed and article downloaded on ScienceDirect has significantly decreased since 1999



Long Term Models – The Internet as Example

Hybrid Models, Different Revenue Streams



Final Remarks



The fundamentals of scholarly communication remain the same

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... but customer behaviour – and therefore publisher's business models – will increasingly change, strongly driven by technology

- Service development to authors and reviewers is expanding from the point-of-submission or point-of-review, to before submission, after publication and after peer review
- Increasing integration of information and tools for editors, reviewers and authors
- Enhancing authors output (linking, usage, additional article information, comments / rating) while testing the needs of readers is the basis of further innovation in scientific communication
- We strongly advocate a fact-based, test-and-learn approach with regard to new economic models to ensure that net benefits for researchers are positive - one-size-fits all approaches will not work



Thank You