A bend in the road: the current state of author pays journals

5th Frankfurt Scientific Symposium October 23, 2005

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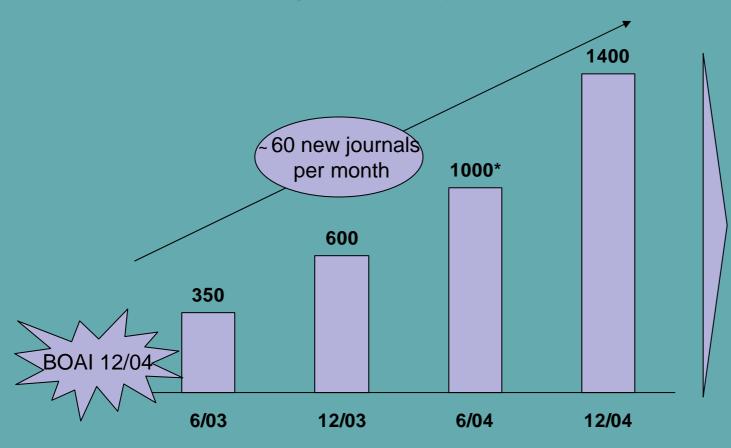
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New Journal Models: Overview

Overview	Status	Trends
Author PaysInstitutional	Less than 0.5% of STM articles are published in Author-	Slowing growth in OA journal titles
Repositories	pays (AP) journals~1.5% of STM articles	Increased growth in articles published
 Author, Publisher, and Funding Agency Perceptions 	 are published in subsidized OA journals Increase in all types of IRs (particularly 	National and related information policy is being developed
Some Cost Analysis Perspectives	 subject specific IRs) Publishers are experimenting with 	Often based on incomplete or undeveloped information
	hybrid models	Economic viability is still untested

Perceived Open Access growth

Titles accessible through the Directory of Open Access Journals



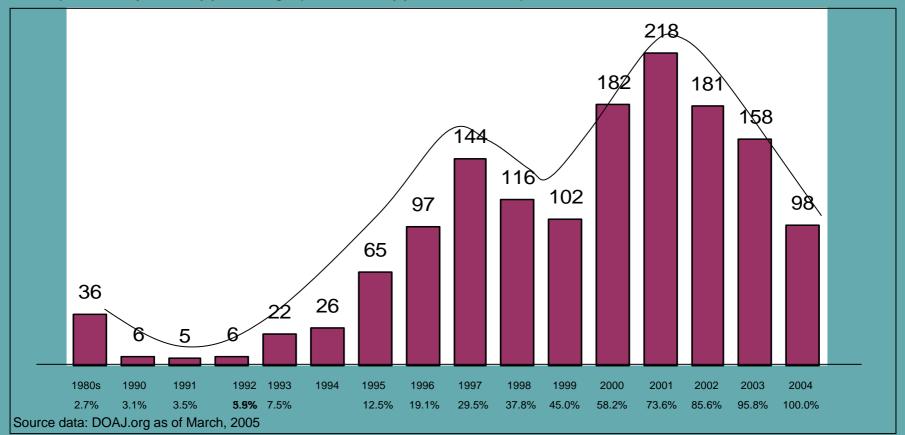
There is a common perception that open access journals have grown rapidly

* Estimate

Source: DOAJ press announcements/websites

Actual OA growth

Number of Open Access journals by year of origin (not necessarily year of foundation)



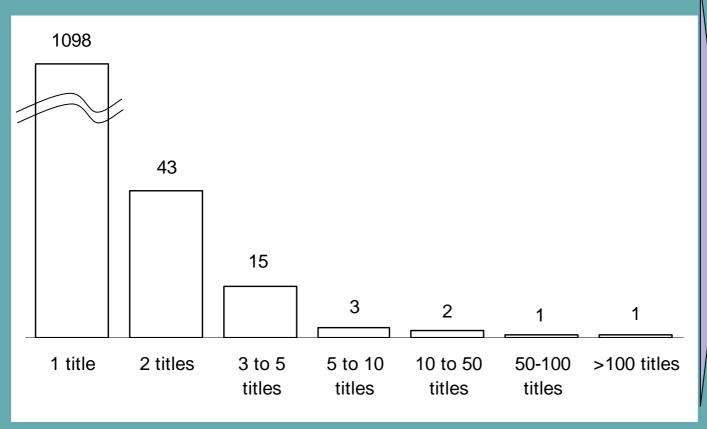
Highlights:

- Open Access journal growth has been slowed down since 2001. There are 98 OA journals started in 2004, down from 218 in 2001, among which 18 are by BMC, one by PLoS and the other author pays is Advances in Electronics Manufacturing Technology, published by Vertilog.
- Only 9% of ~1,400 journals classified as Open Access by DOAJ are author pays.
- Almost all of the (currently) known author-pays titles are published by BioMedCentral

Source: DOAJ

Distribution of titles held per publisher

Number of OA publishers

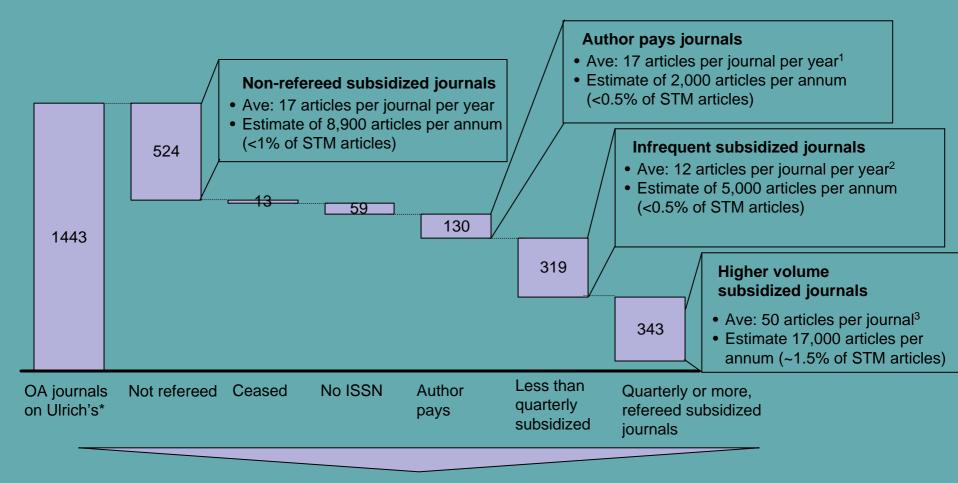


- 94% of OA publishers have only 1 title
- 99.6% of OA publishers have under 10 titles
- Only BioMed Central (121 titles) and Internet Scientific Publications (61 titles) have over 50 titles

Number of OA titles in publisher portfolio

Source: DOAJ as of March 1, 2005

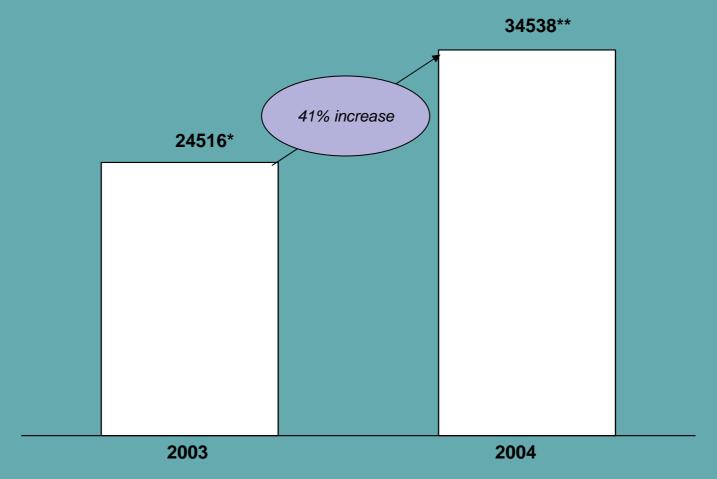
Journal and article distribution by business model



- •Only a small portion of OA titles are comparable to typical Elsevier journals
- Articles published in subsidized and AP journals remains a small portion of overall STM content
- * Estimated (based on sampling 100 journals) to have 95% overlap with DOAJ 1455 titles on 03/02/05
- 1 Average of PLoS and BMC 2004 publications (121 out of 130 journals)
- 2 Based on sample of 80 randomly selected journals in set
- 3 Based on sample of 70 randomly selected journals in set

Source: Ulrich's database

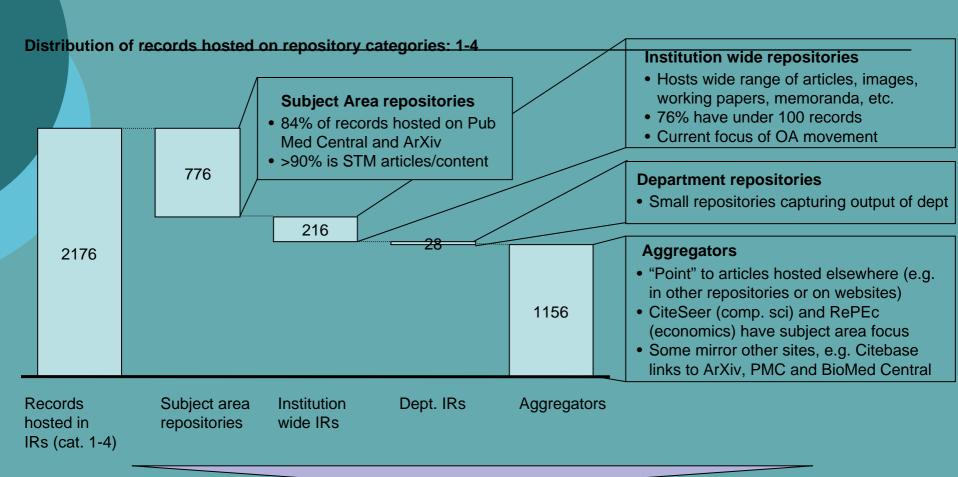
Total growth of OA articles - 2004 Articles published in OA journals



^{*} Based on sampling of 821 DOAJ journals appearing on DOAJ in Spring 2004

^{**} Based on sampling of 1443 OA journals catalogued on Ulrich's database on 03/01/05 as detailed in "Author Pays and subsidized OA journals" Source: DOAJ, Ulrich's database, Market Development

Records hosted in institutional repositories

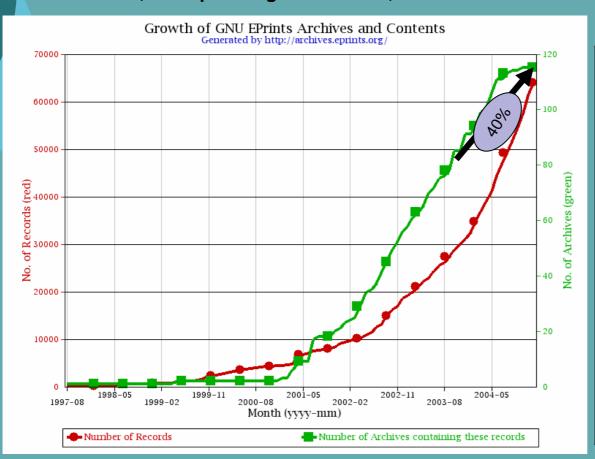


- Subject area repositories and aggregators link to the largest proportion of STM content
- Institution wide, and dept. repositories remain nascent, and link to articles as well as a range of other content

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Growth of IRs – Example: Installation and usage of EPrints IR software*

Installation of, and uploading content into, EPrints institutional repositories



- The establishing of EPrints institutional repositories increased 40% over 2004
- Uploading of content has similarly followed a steep trajectory
- Growth of other IR platforms (e.g. DSpace) has followed suit

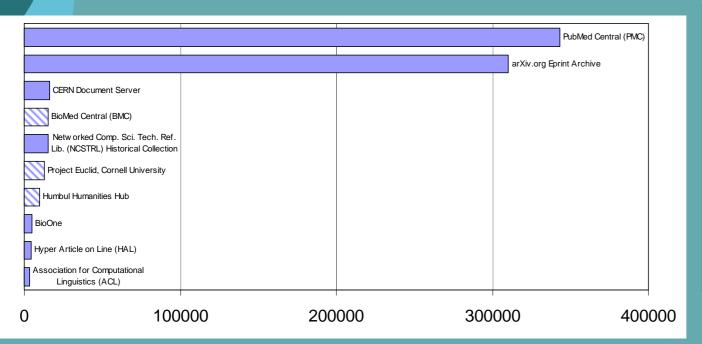
^{*} EPrints offers open source IR software for installing and managing an institutional repository Source: http://archives.eprints.org (generated through 'analyses' link)

Subject area institutional repositories

Top ten subject area repositories (accounts for 95% of subject area records)

Archived records* accessible through OAIster

Not all records are freely accessible



- PMC and arXiv account for 84% of all records in subject area repositories
- Most of remaining major repositories are similar in size to BMC

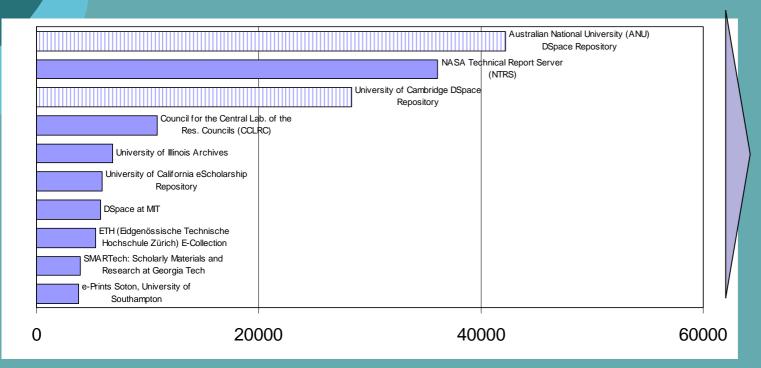
- * Records may include author manuscripts, conference proceedings, dissertations, and other text documents; not all records hosted on IRs may be harvestable by OAIster; not all records accessible through OAIster are freely available
- ** All articles also archived in arXiv.org
- *** All articles also archived in PubMed Central

Institution-wide repositories

Top ten general institution repositories (accounts for 69% of general institution records)

Archived records* accessible through OAIster

At least 80% of contents are image files



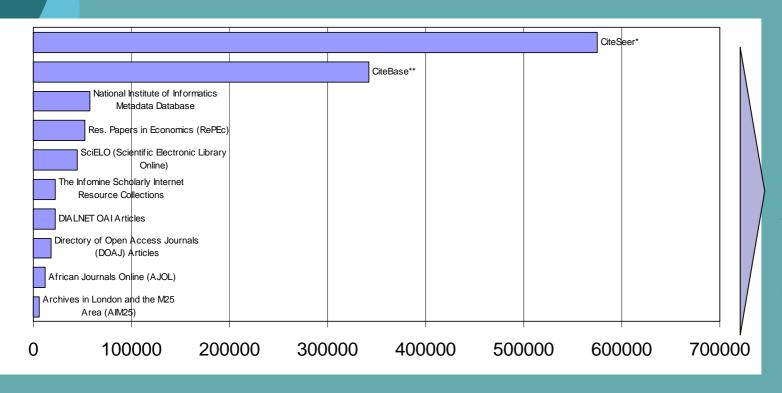
- Content hosted in 'general' IRs is spread across a number of institutions
- Several 'large' repositories (e.g. Cambridge) actually host small amount of potential journal content

Source: OAlster, March 9, 2005; Market development analysis

^{*} Records may include author manuscripts, conference proceedings, dissertations, images, and other media; not all records hosted on IRs may be harvestable by OAIster

Meta-data institutional repositories

Top ten aggregators (accounts for 99% of records of aggregators registered with OAlster)
Archived records* accessible through OAlster (excludes OAlster itself)



Leading aggregators are Citeseer and Citebase (these aggregators utilize meta-data to provide analysis of, and access to, online documents)

^{*} Records may include author manuscripts, conference proceedings, dissertations, reviews and other text files; not all records hosted on IRs may be harvestable by OAIster; analysis excludes OAIster itself with access to over 5.1M records (not all of which are freely accessible)

^{**} Citebase harvests metadata from ArXiv, CogPrints and BMC

OA movement and institutional repositories

Recommendations from the recent Berlin3 OA Conference (Southampton, February 28-March 1):

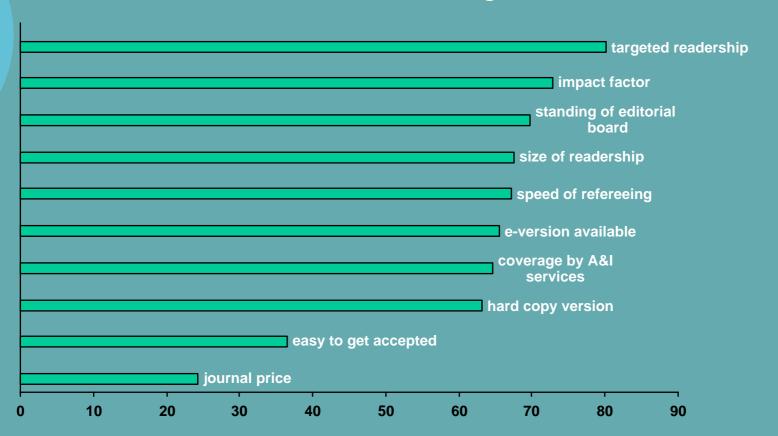
In order to implement the Berlin Declaration institutions should:

- Implement a policy to require their researchers to deposit a copy of all their published articles in an open access repository
- 2. Encourage their researchers to publish their research articles in open access journals where a suitable journal exists and provide the support [i.e. pay the processing fees] to enable that to happen.

A new facet in the OA development

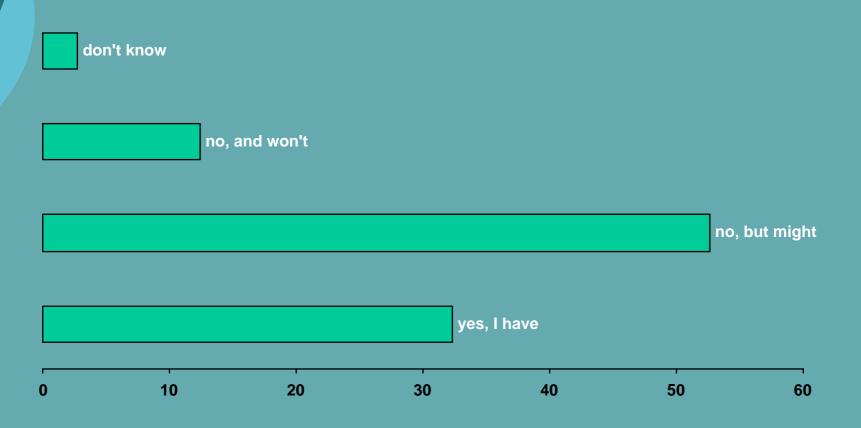
Authors' reasons for choosing the last journal in which they published (Ciber Study 2004)

0 = no influence, 100 = strongest influence, n=3,787

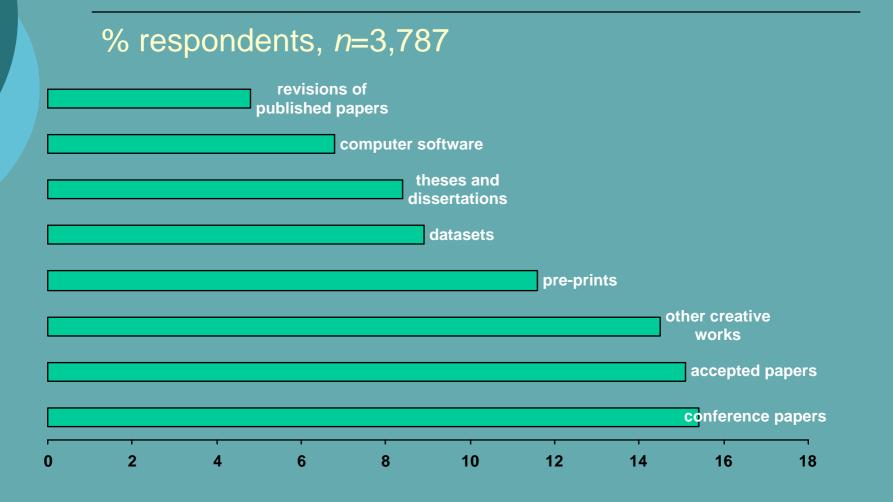


Experience of publishing scholarly materials on home page or website (Ciber Study 2004)

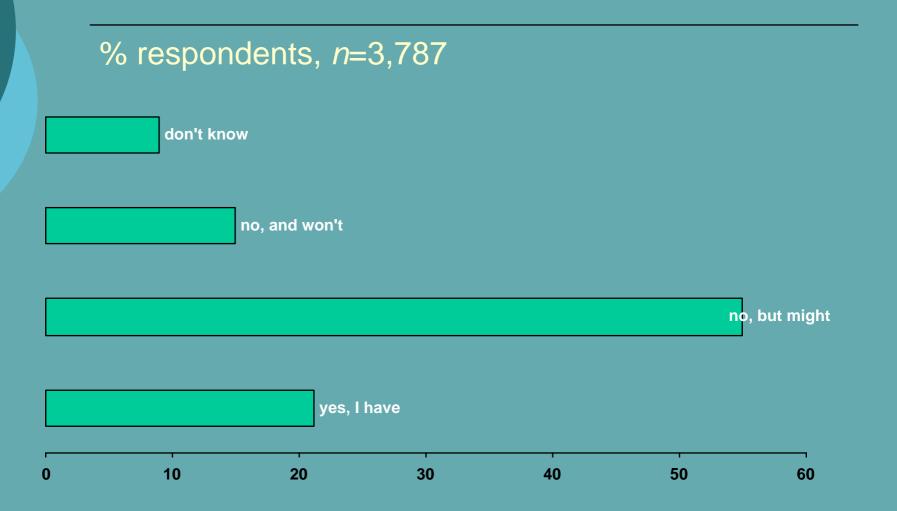
% respondents, *n*=3,787



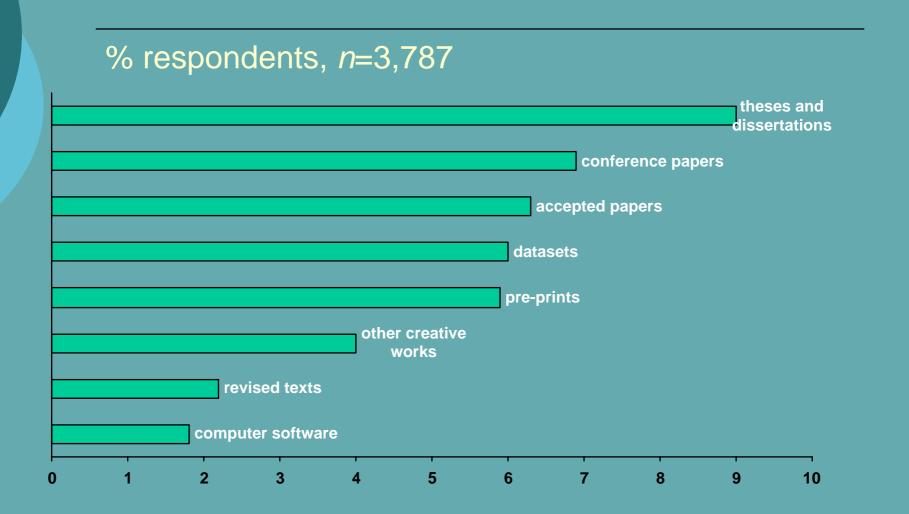
Scholarly materials published on home page or website (Ciber Study 2004)



Experience of publishing in an institutional repository (Ciber Study 2004)

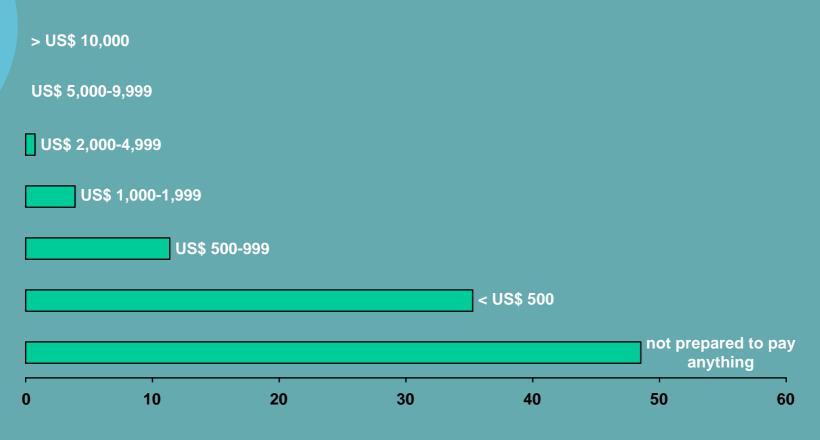


Scholarly materials published in institutional repositories (Ciber Study 2004)



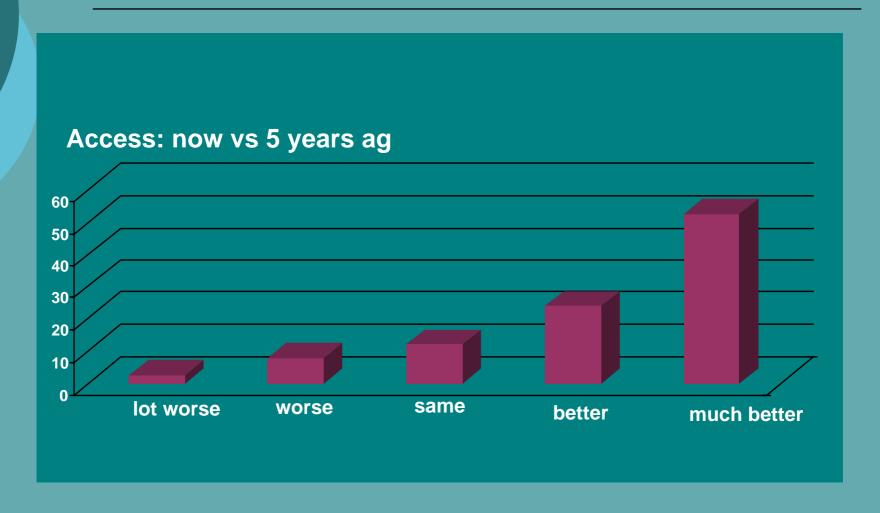
Willingness to pay author charges: for the best journal in their field (Ciber Study 2004)





Authors as readers: views on journal access (Ciber Study 2004)

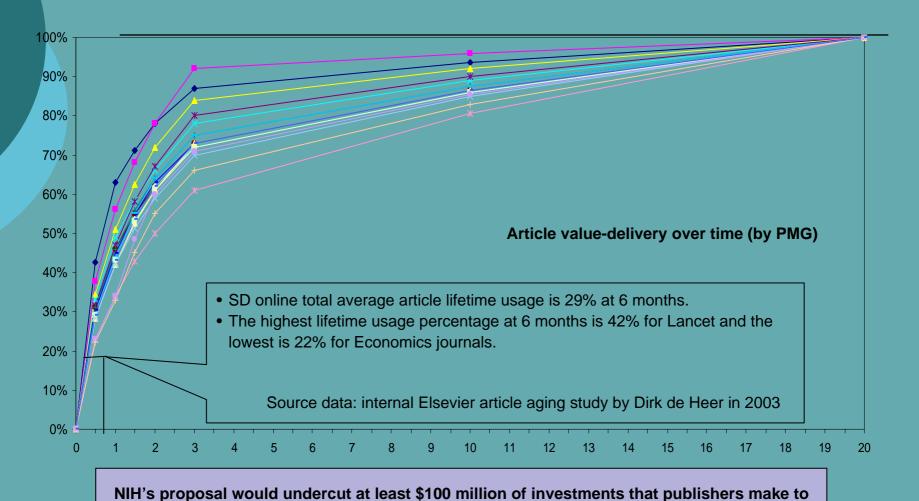
of authors expressing an opinion, *n*=3,754



JISC Recent Assessment

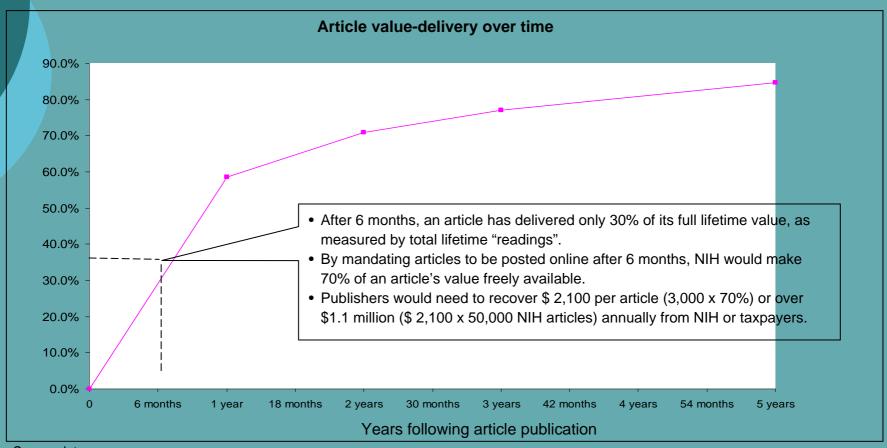
- There is no substantive evidence that a mandatory requirement on researchers to deposit a copy of their final, peer-reviewed manuscript into an open access repository will impact negatively on journal publishers' business indeed, such evidence as exists (such as that relating to the long-established e-print archive 'arXiv') suggests the opposite (see Swan, A. and Brown, S (2005) Open access self-archiving: an author study). Furthermore, the evidence shows that the mandatory requirement is an essential component of an effective position on open access.
- The JISC is investing heavily in an infrastructure to enable innovative research to take place, including interoperable repositories, preservation best practice and user-oriented services, and open access remains an important cornerstone of this infrastructure.

Lifetime usage of Elsevier journals on ScienceDirect



review, approve, disseminate and archive NIH-funded articles each year

After Six Months, An Article has Delivered Only 30% of its Lifetime Value



Source data:

Tenopir & King, "Towards Electronic Journals: Realities for Scientists, Librarians, and Publishers", Special Libraries Assn, p 189, 2000. Heer, "Article Aging", http://nonsolus/sciencedirect/usage/content/article_ageing.doc, 2003. The study was done for Elsevier ScienceDirect overall.

Some Preliminary Indications and Conclusions

- Author Pays publishing is not growing, and does not seem to be meeting the fundamental market needs of current authors
- Institutional repositories are showing good growth, not yet for articles but rather for other scholarly genre, such as images, supporting data, and so forth
- Experiments are underway to leverage IRs to disseminate scholarly articles, and this seems particularly effective for specialized subject areas and/or in for highly subsidized or mandated areas
- Not clear how the key elements of scholarly communication, i.e., verification, registration, dissemination, and preservation are financed adequately over the life of an article if articles are simply transferred by authors or mandate from commercial or non-profit sectors to the public domain