

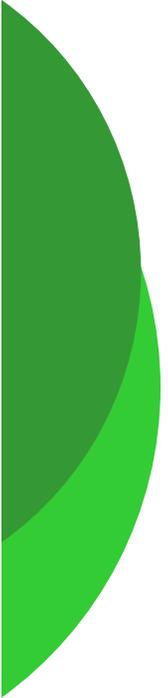
From last time...

- Identifiers:
 - Locating a resource via a permanent channel
 - Solving the *appropriate copy problem*
 - Accessibility and limiting access part of the same problem
- Copyright issues
 - Is copyright important for a particular scenario / document?
 - If so, how to protect it?
 - Determining scope of property rights?



Two worlds: digital and print media

Print	Digital
First sale right – you buy it, you can do anything with it (e.g., resell)	Not applicable. ○ How to enforce restricted access to only those who paid?
Have to be in the same place as material	No restrictions
Zero sum distribution (I borrowed it; so you can't)	My borrowing doesn't impede your borrowing
Discrete and self-contained	Continuous and linked



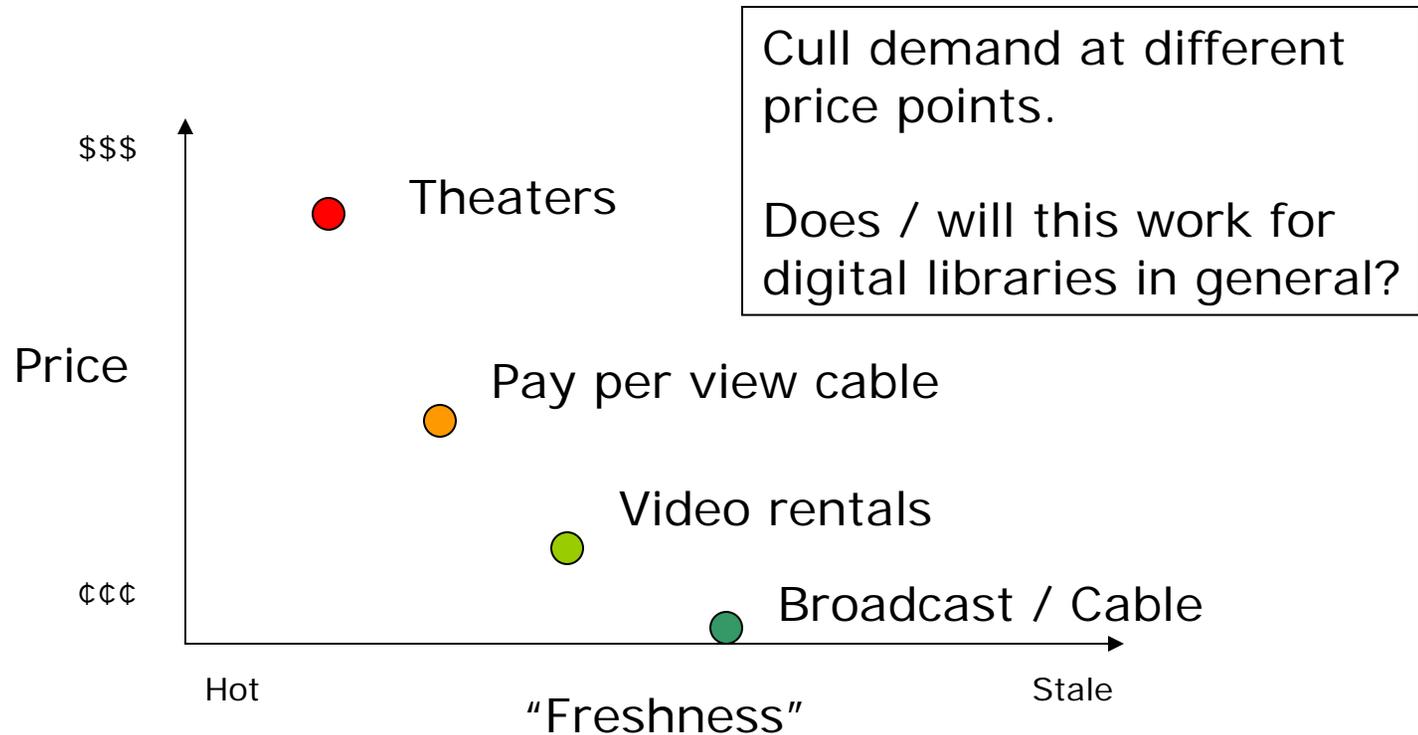
Models for digital economies

- Subscription fees
 - Per month, per year
- Connection time fee
 - Per minute (e.g., Mead Data Central)
- Advertising
 - By an interested party
 - other economic models apply here
- Access fee
 - Per download, may not have profile to remember that you accessed this resource before
- Per-byte fee
 - Typical of connection services (e.g., Broadband)

Cost structuring

Movie distribution as a possible model

(Lesk, p. 206)





Access versus ownership

- With DL materials we can't really track ownership, just access
- Trend towards microanalysis
 - Publisher: better targeted marketing
 - Library: better profile of user community



Crisis for publishers

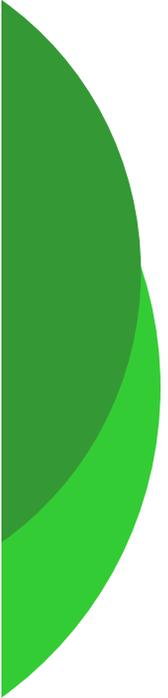
- Ease of publication allows more information to be free
 - And for people to break copyright (perhaps accidentally)
- Ease of accessing (free) information deters users from accessing more cumbersome-to-use sources
- Traditional functions of publishers are taken on by free services
 - Free e-journals do rigorous peer review
 - Search engines act as distributor



Self-archiving

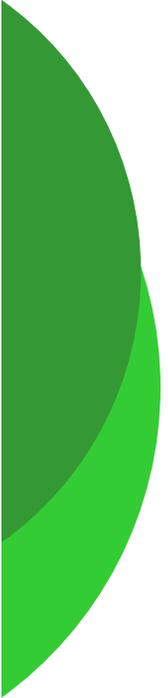
- To deposit a digital document in a publicly accessible website.
 - Preprint: before copyright restrictions have been signed
 - Not a true publication*: hasn't been peer-reviewed, not in prestigious publication.
 - Detractors: accessibility will hurt future revenues of the journal
 - Perhaps 60-80% of a publisher's budget doesn't go towards the direct publication costs

* Debatable, others say it **is** published



E-prints

- Differing acceptance from different fields
 - Physics: accept only if concurrently preprinted
 - Medicine, Business: accept only if not preprinted
- E-journal model: who assumes the cost?
 - Authoring a text Author
 - Peer review Peers
 - Marketing Search engine
 - Editor E journal
 - Publication E journal (disk space and expertise)



Peer review limitations

- Goal of peer review is to insure:
 - Previous work adequately acknowledged
 - Experimental methodology realistic and reproducible
 - Analysis of data justifies conclusions
- Peters and Ceci (82):
 - Resubmitted 12 psychology articles already published with different author names, 8 of 9 recommended against acceptance and were rejected “serious methodological flaw”, not because of déjà vu.
- Inglefinger study of NEJM reviewers:
 - Concordance of reviews only slightly better than chance
 - Reviewers not skilled in all areas of a study, unable to discern poor writing and have their own biases

Legal Deposit



Print	Digital
Title IIC gives a copy of every book to the Library of Congress	No legal deposit <ul style="list-style-type: none">○ How to archive the materials of the web?○ Search engine only covers about 16% of the visible web.

If there's no legal deposit for digital information, how do we archive and preserve website information?

- Especially since search engines only index 16% of the web?

Internet Archive and Bookmobile

Internet Archive

<http://www.archive.org>



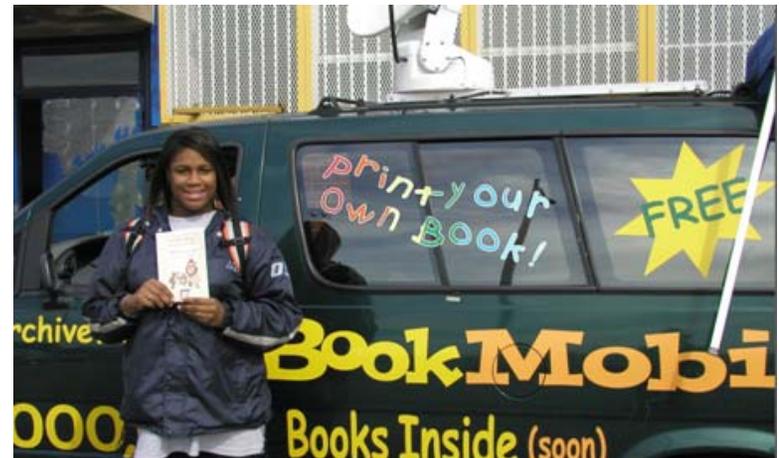
An archive
of the www

“The goal of universal access to our cultural heritage is within our grasp.”

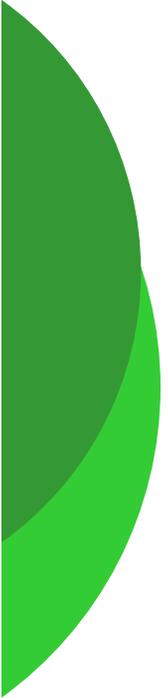
Are these examples of
legal deposit?
Who funds this initiative?

Internet Bookmobile

- Prints out of copyright books for reading
- Over 1m books
- \$1 USD per book printed



- Image from Brewster Kahle's LoC presentation

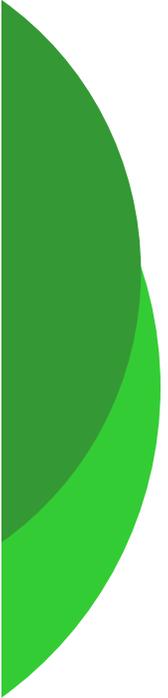


Preservation

- Y2K – two digits to mean four
 - If you knew COBOL, you could get a high paid job.
 - Legacy systems and knowledge need to be preserved
- Use standard formats!
- Media lifetime
 - Tape 15 years
 - CDR 10-50 years
 - HD 30 years
- Software/Hardware lifetime
 - New hardware 3-7 years
 - Software cycles faster
 - How to access old files, applications?

The Digital Divide

- A case of the rich getting richer?



The rich buy access to latest computing resources

New resources allow its users to become more wealthy

The poor cannot afford the latest resources

Those without best resources have less chance to gain economically



Undoing the Divide

- Can use access rights to impose an unequal payment scheme
 - Blackwell's – all 600 journals made free to the Russian Federation.
 - JSTOR – cost to access its DL depends on the size of the organization.
 - Open source movement – make software available to anyone

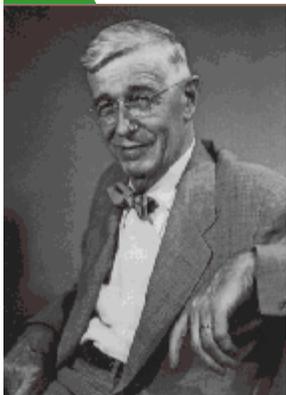


JSTOR Logo ® by JSTOR

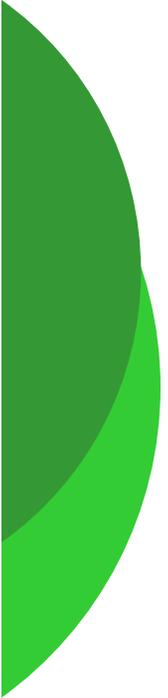
JSTOR scans and archives past issues of selected journals

- Keeps a moving wall for many publishers to let them produce maximal revenue
- To think about: as an archive repository, what format do you think it keeps its collection in?

Libraries of the Future

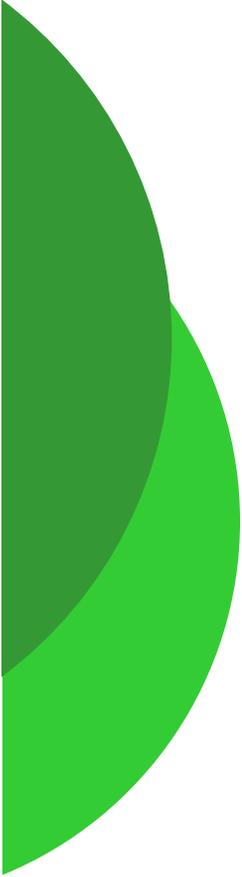


- Immediate, random-access to recent knowledge
- May not understand foundation material
- More effort in selection of materials
- Publisher models changing, unifying
- International policy becoming more prominent
- Customized books as the future?



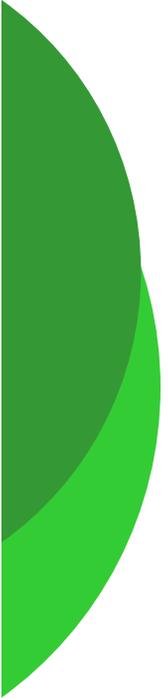
To think about...

- How does the economics of libraries and the information explosion influence publication rates? What about as we make the transition to the digital library?
- Do you think self-archiving and e-journal venues pose a threat to the journal publisher?
- As a single site, the Internet Archives, cannot keep track of all web pages on the web
 - Can you think of a better solution?
 - How would you go about designing a national web page archive for Singapore?



Please fill in the mid term course evaluation

Help me help you!



References

- Copyright in Singapore
http://www.ipos.gov.sg/newdesign/indexpage/inner_frame.html?section=aboutip&sub=4
- Self-Archiving FAQ
<http://www.eprints.org/self-faq/>
- JSTOR
www.jstor.org
- The future of libraries?
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