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System-level strategic planning for collections management and preservation

Roger C. Schonfeld

RLUK / BL Preservation Advisory Service meeting on
“Dare to Share”

6th September 2010

ITHAKA is a not-for-profit organization dedicated to helping the academic community take full advantage of rapidly advancing information and networking technologies. We serve scholars, researchers, and students by providing the content, tools, and services needed to preserve the scholarly record and to advance research and teaching in sustainable ways. We are committed to working in collaboration with other organizations to maximize benefits to our stakeholders.





- **Ithaka S+R** works with initiatives and organizations to develop sustainable business models and conducts research and analysis on the impact of digital media on the academic community as a whole.



- **JSTOR** helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive of over 1,200 academic journals and other content. JSTOR uses information technology and tools to increase productivity and facilitate new forms of scholarship.



- **Portico** preserves scholarly literature published in electronic form—more than 10,000 e-journals and 28,000 e-books—and ensures that these materials remains accessible to future scholars, researchers, and students.



- **Sustainability of Digital Resources**
 - [Sustaining Digital Resources: An On-the-Ground View of Projects Today](#)
- **The Role of the Library**
 - [What to Withdraw: Print Collections Management in the Wake of Digitization](#)
- **Practices and Attitudes in Scholarly Communications**
 - [Ithaka S+R Faculty Survey 2009](#)
- **Teaching and Learning with Technology**
 - [Unlocking the Gates: How and Why Leading Universities Are Opening Up Access to Their Courses](#)
- **Scholarly Publishing**
 - [University Publishing in a Digital Age](#)

Libraries must act not only individually, but also collectively at the system level, in order to achieve collection management objectives that allow them to transform strategically.

1. As print collections are digitized, many libraries face growing pressure to reduce the size of their corresponding print collections.
2. Library decision-making on print collections management issues has struggled to become strategic and not simply reactive.
3. Libraries must act collectively to determine preservation and collection management objectives.
4. Many mechanisms can be used to organize such efforts, with system design imperative to sustainability.
5. Libraries can thereby manage their own collections, resources, and faculty relationships far more effectively.

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2. What users want

Roger C. Schonfeld and Ross Housewright,

Faculty Survey 2009:

Key Strategic Insights for Libraries, Publishers, and Societies

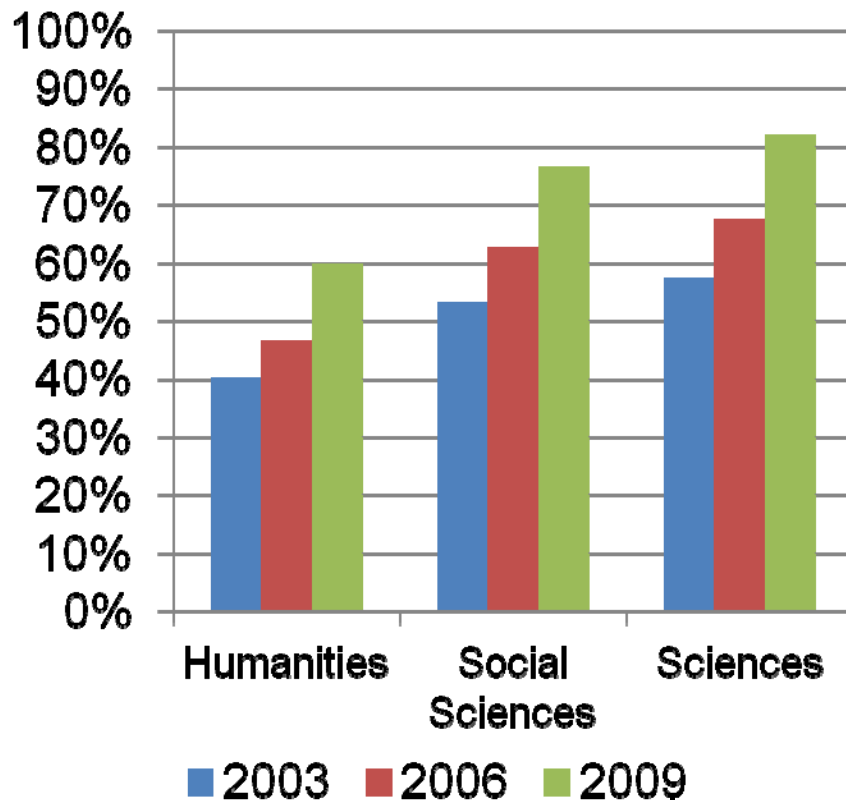
(April 2010)

<http://www.ithaka.org/ithaka-s-r/research/faculty-surveys-2000-2009/faculty-survey-2009>

Faculty members from the U.S.; most disciplines but no health sciences; 3,025 completed responses, for an 8.6% response rate that is representative of the sample.

The print to electronic transition for current issues

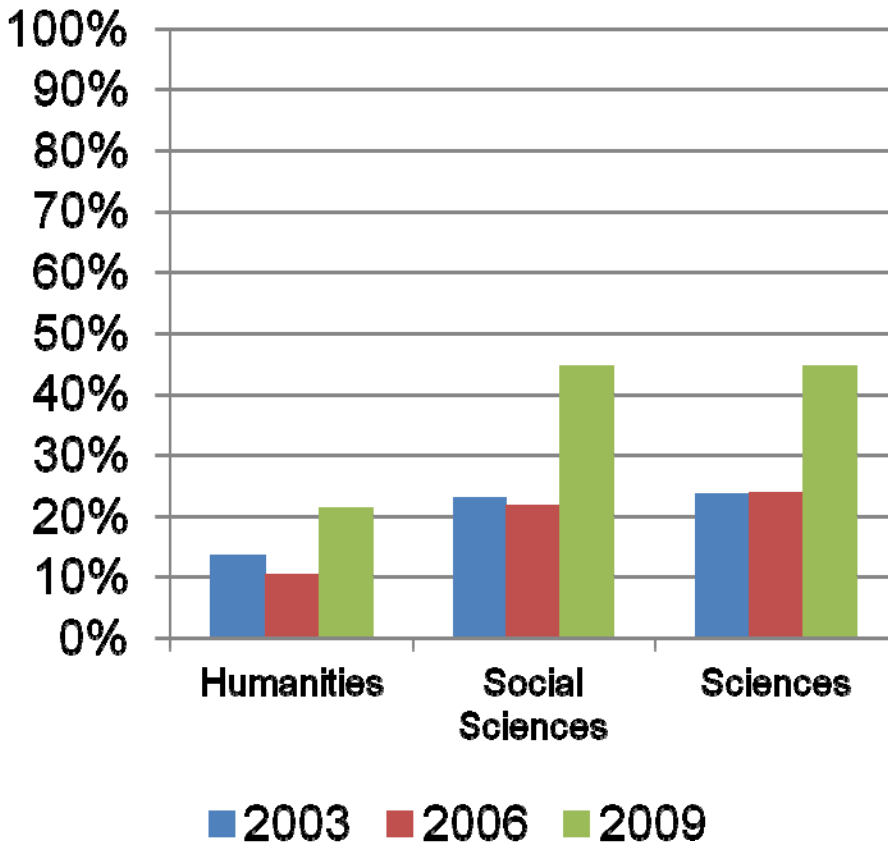
“If my library cancelled the current issues of a print version of a journal but continued to make them available electronically, that would be fine with me.”



- Support for cancelling local print subscriptions in favor of online-only access has grown steadily
- Although there are disciplinary differences, essentially all disciplines are moving in the same direction
- Certain disciplines such as art history and Asian Studies are outliers

The print to electronic transition for journal backfiles

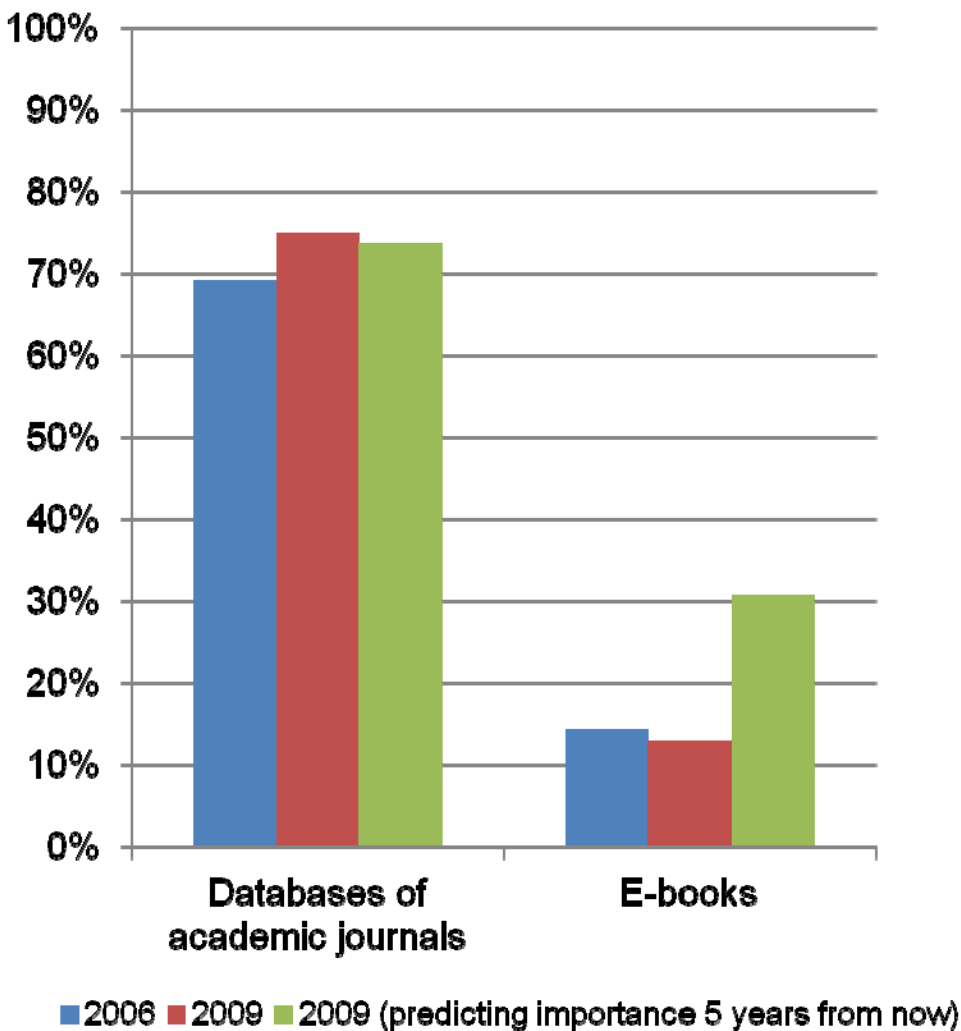
“Assuming that electronic collections of journals are proven to work well and are readily accessible, I would be happy to see hard-copy collections discarded and replaced entirely by electronic collections.”



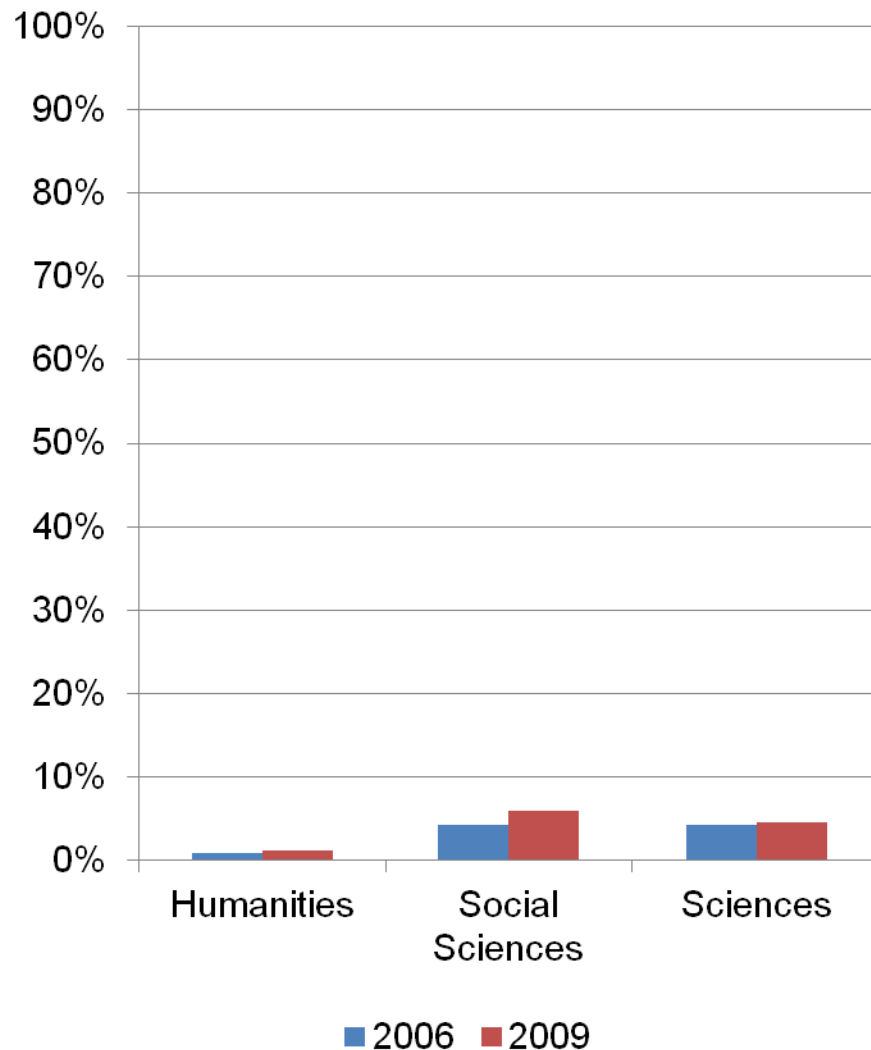
- Note this question measures ***enthusiasm***
- Enthusiasm for replacing print collections of backfiles with electronic-only access has grown significantly
- Lots of initiatives by libraries to consolidate collections.

Although growing steadily in perceived importance, e-books are not as ready as journals for a format transition

Percent of faculty responding "very Important" to "For each item that you use, please indicate how Important that item is to your research or your teaching"



Strong agreement with "Within the next five years, the use of e-books will be so prevalent among faculty and students that it will not be necessary to maintain library collections of hard-copy book."



- Faculty members' needs are changing more slowly than those of students.
- For scholarly journals, user needs are moving steadily away from print versions.
- For monographs, any significant movement shift in user needs is more delayed if present at all.
- Funders and resource allocators increasingly demand a reduction in library expenditures, especially on print collections.
- Strategically, libraries must take a more vital role in the lives of their users than as managers of print collections.



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2. Library decision-making

Source: Interviews
conducted at 14
American colleges and
universities conducted
in 2007

Library collections management strategic planning?

- Many libraries have responded to user needs by cutting acquisitions of new print journals and replacing them with e-only access.
- But capital and operating budgets are generally not fungible, so space-savings in backfile collections often yields cost-savings that do not accrue to the library.
- A library is consequently unlikely to withdraw print materials proactively except to the extent it has an alternative use for the space.
- In other words, libraries have rarely managed their own collections strategically but rather have done so responsively.

Library *community* collections management strategic planning?

- All libraries face space pressures eventually, but timing has varied from library to library as does interest in system-level solutions.
- The oscillation at any individual library between pressure and relief has complicated community-wide strategic planning.
- Have we reached a moment where enough libraries want to make large-scale strategic change to print collections management to drive a system-level solution?
- Or, is there a framework in which libraries could make their own local choices but do so within a community context?
- In either case, there is a basic question: how many copies?

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3. System-level strategic planning: How many copies? (Focus on journals)

Roger C. Schonfeld and Ross Housewright,

What to Withdraw:

Print Collections Management in the Wake of Digitization

(September 2009)

<http://www.ithaka.org/ithaka-s-r/research/what-to-withdraw>

- Define rationales for print preservation in the presence of digitized surrogate
- Based on these rationales, categorize journals according to their relative preservation needs
- Use an operations research methodology to determine the levels of print preservation required for each category

What to Withdraw: rationales for print preservation

Rationales that are relevant for the whole community

- Fix scanning errors
- Inadequate scanning standards & practices
- Inadequate digital preservation
- Unreliable access

- Scholarly needs
- Campus politics

Additional rationales that apply at the local level

What to Withdraw: model

- Ithaka S+R commissioned Candace Yano, operations researcher at UC Berkeley, to develop a model for how many copies are needed to meet these preservation goals
- Assumption that dark archives have an annual “loss rate” of 0.1%

Scenario	Time Horizon	Probability of Success	Number of “Perfect,” Uncirculating Copies Required
Ideal Scenario: High digitization quality standards, Active error-correction, Reliable digital preservation, Not Image intensive, Reliable terms of access	20 years	>99%	2

How many copies?

- Presently, the What to Withdraw framework provides system-level guidance for a relatively narrow set of digitized journal backfile sets.
- For the future, Ithaka S+R has applied for funding to expand the framework to cover most of the ~10,000 digitized journal backfile sets.
- How can the appropriate system-level collections management and preservation outcomes be successfully achieved?

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4. Organizing a system

Structure and incentives

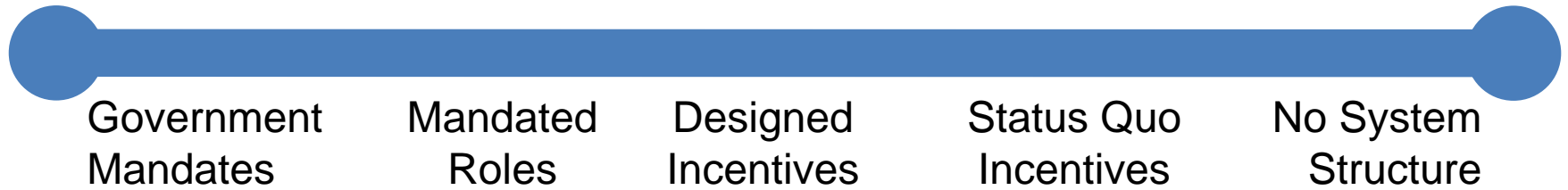
**Centrally
Governed**

**Locally
Governed**



**Centrally
Governed**

**Locally
Governed**



**Centrally
Governed**

**Locally
Governed**



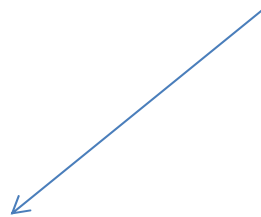
**Government
Mandates**

**Mandated
Roles**

**Designed
Incentives**

**Status Quo
Incentives**

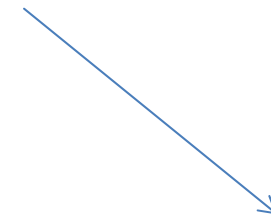
**No System
Structure**



**A. US Federal
Depository
Library Program**



**B. Journal
Backfile: New
Network Design**



**C. Journal Backfile:
Regional Print
Repositories**

A. Mandated roles: US Federal Depository Library Program (FDLP) is organized around regional “hub” libraries



A. FDLP: incentives to participate

- Every Regional depository library receives one copy of every item published tangibly by the federal government.
- Structure from 1962, when libraries elected to become regionals due in part to the prestige of receiving so much printed matter.
- This is a mis-match for a growing share of participants
- The role is mandated in a governing law that cannot easily be changed, one reason the program is in a state of decline.
- Ithaka S+R was recently commissioned to recommend new structures. One objective is to provision central governance without such inflexibility.

B. Designed incentives for journal backfiles: new network design

Assumptions:

- Access to print will be needed regularly so logistics for moving print around the network to users are critical
- Usage is an acceptable proxy for preservation value and can be used to allocate resources across the network

Method:

- Print repositories are centrally organized even if locally administered
- A fee is assessed for access to needed preserved print holdings
- Other libraries pay these fees when access is needed by their users
- Debits and credits are administered either directly or on a central basis

Challenges:

- Fear of relying on unknown network members for preservation
- Discomfort with increasing centralization

C. Status quo incentives for journal backfiles: regional print repositories

Assumptions:

- Sufficient print preservation concerns as an incentive
- Existing regionally organized print repositories, with a space-saving or last-copy mission.

Method:

- Information sharing and analysis regarding community preservation activities.
- What to Withdraw analysis: can my library withdraw our copy?
- For other materials, regional print repositories accession additional copies to allow their members to save space.

Concerns:

- How to pay for the information sharing and analysis?
- Is print preservation an adequate incentive over time?

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5. Local implications

- Ithaka S+R's Proof of Concept Decision-Support Tool (freely available online) permits libraries to quantify how many copies are being securely retained in order to determine which items can be withdrawn without preservation risk.
- It focuses on the JSTOR-digitized journal titles, based on holdings in JSTOR-affiliated print repositories.
- Ultimately, working with the Center for Research Libraries and other partners, we hope to develop a more mature holdings analysis system that would provide decision-support for all digitized journals

- In the absence of central planning, libraries can withdraw print holdings without threatening their long-term preservation
- In developing collections management strategies, libraries can use an accepted system-wide framework in communicating with campus stakeholders
- By bringing collections management to the system level, libraries can deploy scarce preservation resources more effectively

Local implementation will remain challenging

Minimize system-wide preservation risks

What to Withdraw framework and
decision-support tool

Acute understanding of campus stakeholder needs
Library strategic priorities
Opportunity and resource constraints

Local implementation

- Preservation departments are library-based, but collection management is becoming a system-level collaboration
- Preservation departments are increasingly omitted from key strategic choices that influence preservation, both print and digital
- The formalized responsibility for preservation has independent value and should be retained wherever possible
- What is the strategic future for preservation programs in terms of general collections?

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Conclusion and discussion

- Libraries need to direct resources away from functions that are no longer as widely valued and towards new, more highly valued roles.
- Collection management is becoming a system-level collaborative exercise, whether formally or informally.
- If this is more than just a short-term exercise, system design issues are paramount, respecting context and culture.
- A strategic approach to print collections management would improve:
 - aggregate preservation;
 - library decision-making and resource allocation, and
 - faculty communications / relationships.

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Thank you-
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