Managing Scholarly Information

Innovation in Libraries & Publishing

THE CALIFORNIA DIGITAL LIBRARY

PNC ANNUAL CONFERENCE
January 15, 2000
Crisis and Opportunity

• CRISIS OF SUSTAINABILITY
  Cost of Information/Business
  Model for Scholarly Communication
  Information Explosion
  Needs and Demands of Scholars

• TRANSITIONS
  Higher Education
  Research Environment
  Scholarly Communication

• OPPORTUNITY FOR LEADERSHIP
  Ubiquitous Digital Technologies
  Faculty Innovation
  Shared Vision
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SYSTEMWIDE PLANNING

UC Library Technology Strategy
June 1992 - June 1995

UC Digital Library
September 1995 - August 1996

UC Library Planning & Action Initiative (LPAI)
September 1996 - February 1998

Systemwide Planning for Libraries and Scholarly Information
June 1998 - Ongoing
PLANNING AND ACTION
LONG-TERM OUTCOME

A Viable System for Scholarly Communication

- Advances Science and Scholarship, Fosters Teaching and Learning, Promotes Public Service
- Consistent with Values of the Academy
- Compatible with Academic Work
- Financially Sustainable
Strategies: Immediate and Continuous Action

- Support Traditional Library Collections
- Foster Resource Sharing
- Create the California Digital Library
- Experiment with new models of scholarly Communication
- Plan and manage carefully ongoing transition
A Shared Vision:
One University, One Library

World-class Research Library for the 21st Century Consisting of Complementary Paper and Digital Libraries With Services Distributed to the Point of Need
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A Shared Vision:
California Digital Library

An Integrated Digital System for
Scholarly Information Management

Comprehensive Involvement:
Generation of new Knowledge
through its dissemination and use
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California Digital Library Functions

Collection, Storage, Preservation, Access

Information Transfer and Delivery

Consultation, Training, Services

eScholarship
California Digital Library Components

- **High-Quality** Digital Knowledge Resources
- Tools for *Producers and Consumers* of Information
- Network Interface for *Integrated Access* to Information for Research, Teaching and Learning
- **Distributed** Services
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Access

Integrated Bibliographic Content

SciTech Collection (Science Journals/Databases)
JSTOR (Social Science Journals)
LION/PCS (Humanities Texts/Resources)
Web of Science (Abstracts and Indexes/All Disciplines)
Melvyl Catalog (more than 9.5 million unique titles)
California Serials Database (Serials from more than 500 libraries)
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Building Digital Content

- Digital Government Information Depository
- Online Archive of California
- eScholarship: Archive and Value-Added Products
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Scholarly Communication Challenges

“Perhaps the only prediction that can be made with confidence is that scholarly publishing is in the early part of a turbulent era unlike anything it has experienced since the invention of movable type. The turbulence is not likely to abate soon, for technological innovation will suggest alternative ways of doing things. Which innovations will be adopted or adapted probably depends on how well they fit established academic ways, and on such factors as cost, ease of use, retrievability of information, and durability of storage...

On such matters, there is simply not yet enough experience.”

Richard E. Lucier
University of California, Office of the President
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eScholarship

Scholar-Led Innovation in Scholarly Communication

GOAL
Influence and Facilitate the Development of Useful and Innovative New Models which are Financially Sustainable

Richard E. Lucier
University of California, Office of the President
Stages of Technology Development

1. Modernization
2. Innovation
3. Transformation

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Richard E. Lucier | University of California, Office of the President
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Assumptions

- Effectively managing the continuous and rapid increase of information is a more significant driving force than the increasing cost of publication

- Digital libraries/universities are investing in infrastructure necessary to support scholarly discourse

- Collaboration among universities is essential for scaling and long-term sustainability, and worth the overhead inherent in collaboration
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Assumptions

- Minimum alteration to current copyright policies and practices desirable
- Variable solutions likely to emerge from different disciplines
- Technology can improve upon our current system for scholarly information management
- Lack of decisive action by key universities will ensure a worsening crisis, loss of opportunity, and a decline in academic productivity, particularly in the sciences
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Scholar Forums

- Faculty Groups: Sciences/Humanities/Social Sciences
- Desire Opportunities to Innovate and Lead
- Guaranteed Protection of Intellectual Property and Enduring Future Availability
- Encouragement to Remove Financial and Policy Barriers to Entering Digital Publishing
- Ensure Adequate Signals of Quality Within New Forms of Scholarly Communication
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eScholarship
Infrastructure for Digital Scholarly Communication

- Facilitates Mutual Interests of the University, its Faculty, and Broader Scholarly Community

- Leverages formidable capabilities and strengths of the University of California

- Supports and Extends Experimental Reconfigurations of the Components of Scholarly Communication by Communities of Scholars
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**eScholarship Model**

- **Disciplinary** Databases of Self-Archived Scholarship
- Digital tools and services that allow replication and experimentation with digital forms of publication, review, certification, and archiving
- **Value-Added Products**
Develop and Deploy an *eScholarship* Archive

- Mirror the LANL XXX e-print archive
- Enhance submission, revision and withdrawal, and searching services
- Extend to new self-identified communities
  - [International and Area Studies, Pharmacology, Clinical Medicine, Economics, Tobacco Control]
- Encourage establishment of additional e-print archives
- Implement new technologies for extension and enhanced functionality
Create New/Link Existing Digital Journals

- Develop and Adapt Tools for Format Conversion, Document Version Control, Security

- Establish experiments with new journals, support existing journals

- Work closely with those who mirror academic values
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eScholarship Strategies

Develop Support Services for Community-Led Innovation

- Steering Committee
- Copyright Policy Development
- Economic Analysis
- Technological Advice
- Education, Promulgation, Marketing
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eScholarship Strategies

Integration of Digital Publishing and Access

• Linkages between eScholarship Archive and CDL databases

• Inclusion of eScholarship Archive in CDL tools for topical browsing and searching
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Transitional Goal

Traditional Forms of Scientific Communication

Alternative Forms of Scientific Communication

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