



*Managing Scholarly Information*

*Innovation in Libraries & Publishing*

**THE CALIFORNIA DIGITAL LIBRARY**

**PNC ANNUAL CONFERENCE**

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## **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*



*Managing Scholarly Information*  
**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*



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**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



*Managing Scholarly Information*

***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***

*eScholarship*

**Consultation,  
Training, Services**

**Information  
Transfer and  
Delivery**

**Collection, Storage,  
Preservation, Access**



## **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 Data Base** *(Serials from  
more than 500 libraries)*

***Building Digital Content***

- **Digital Government Information Depository**
- **Online Archive of California**
- ***eScholarship*: Archive and Value-Added Products**



## *Managing Scholarly Information*

### **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.”**

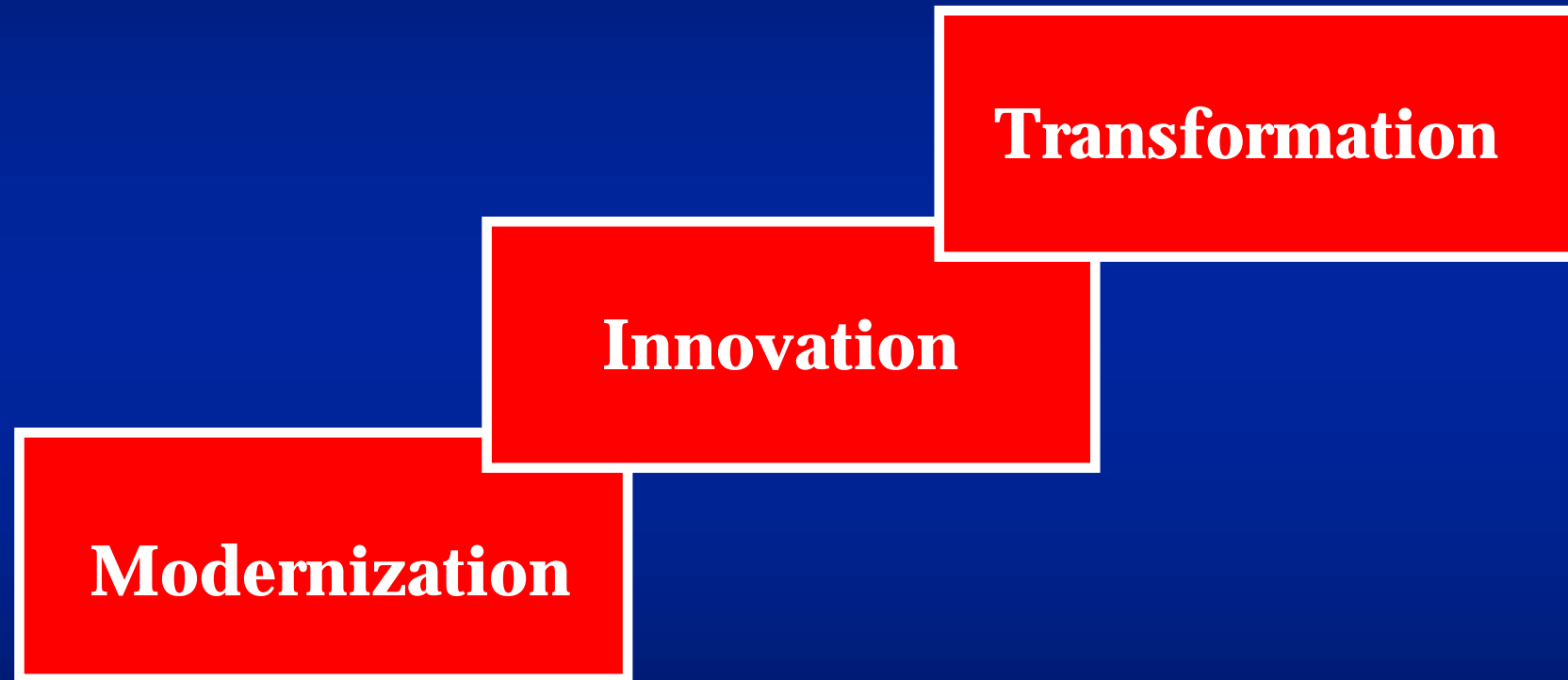
## ***eScholarship***

### ***Scholar-Led* Innovation in Scholarly Communication**

#### **GOAL**

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

## **Stages of Technology Development**



## *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



## *Managing Scholarly Information*

### *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**





## *Managing Scholarly Information*

### ***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**

***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*

***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**



*Managing Scholarly Information*  
***eScholarship***  
***Strategies***

**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**



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***eScholarship***  
***Strategies***

**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**

***eScholarship  
Strategies***

**Develop Support Services for Community-Led  
Innovation**

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

***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**

**2000** ..... **20\*\***