

**“An Integrated System for
Scholarly Information Management”**

**Librarian's Association, UCLA
March 2, 1998**

Components of Presentation

- Context
- California Digital Library
- Impacts & Challenges



California Digital Library

Academic & Research Libraries: Challenges

- Transformation of Scholarly Communication
- Changes in Higher Education
- Increases in Cost and Amount of Information
- Future Real Estate Needs
- New Technologies
- Technological Infrastructure
- Funding
- Human Resources
- Chaos in the Information Marketplace
- Organizational Culture of the Academy



California Digital Library

UC LIBRARY PLANNING 1995-1998

UC Digital Library
September 1995 - August 1996

UC Library Planning & Action Initiative
September 1996 - February 1998

Planning Assumptions

- *One* University, *One* Library
- *Dedicated* planning process
- Value in serving constituency *beyond UC*
- Planning should encompass full range of *scholarly communication* activities and technologies
- Planning should reach out to *all stakeholders*
- Immediate *strategic action* is necessary



California Digital Library

Planning Conclusions

- *Major Transition* in Scholarly Communication Has Begun
- Current Library Practices *Cannot be Sustained*
- Campus Unit Cannot Survive; *Leveraging Essential*
- Solutions Will Unfold Organically Throughout a
Multi-Year Transition
- *Strategic Action* is Preferable to a Traditional,
Detailed Plan
- Digital Library Has Potential For *Facilitating Change* in
Scholarly Communication



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Strategies for Immediate

- **Creation of Knowledge Network**
- **Collaboration**
- **Infrastructure Support**
- **Policy and Financial Support for Transforming Scholarly Communication**
- **Ongoing, intensive planning for libraries and scholarly information management**

“...A MIRACLE IN CALIFORNIA...”

“...UC is creating what may eventually be a miracle: a **truly comprehensive, integrated approach to electronic scholarly communication** that will directly serve its...faculty and students, and potentially a much broader segment of the State’s citizenry...”



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UC Libraries: A Shared Vision **One University, One Library**

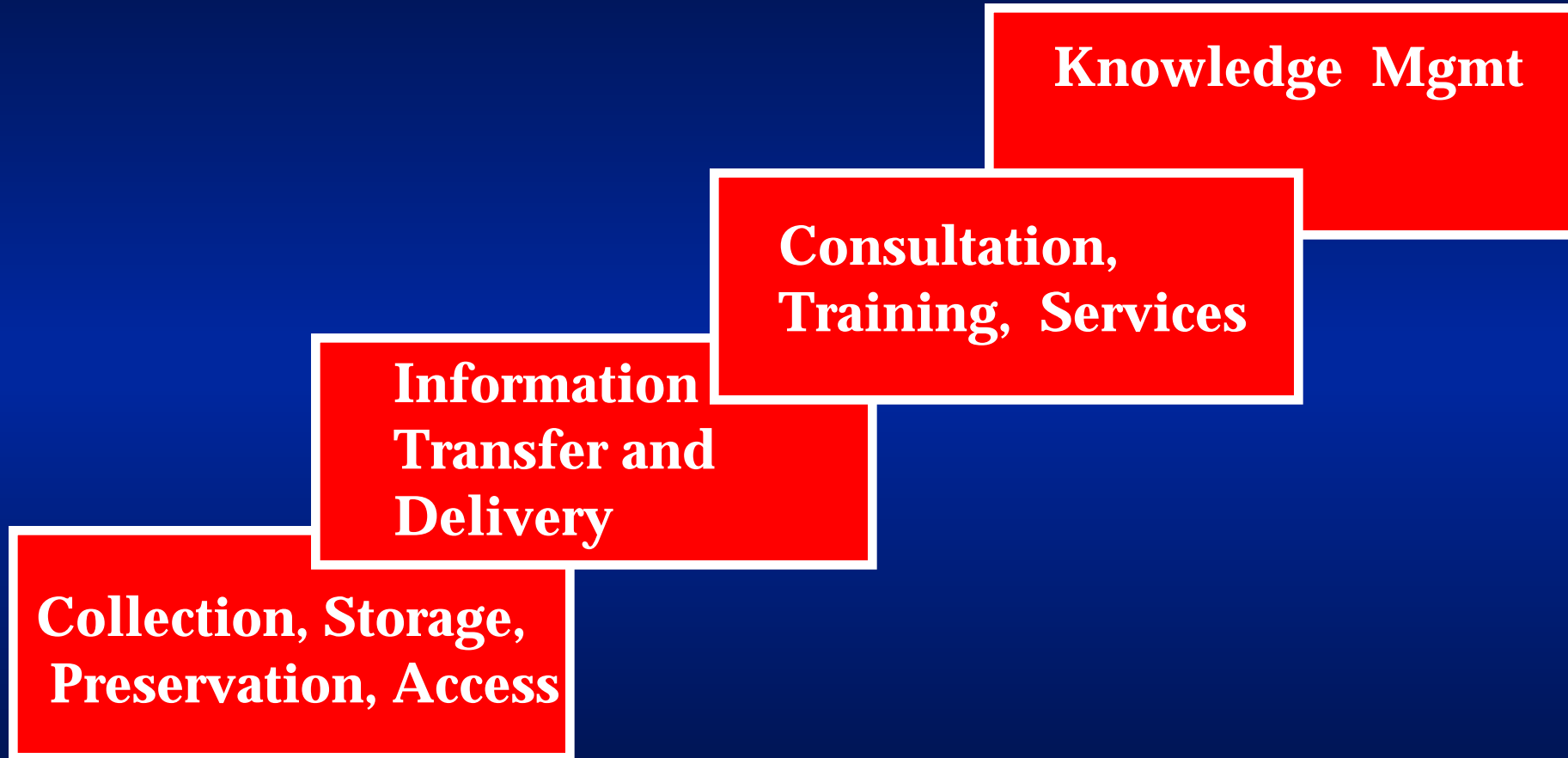
Complementary Paper and Digital Collections
Comprising a Universitywide
Knowledge Network

Distributed and Personalized
Information Services



California Digital Library

UC Libraries: *Functions*





California Digital Library

UC Libraries: A Shared Vision **One University, One Library**

KNOWLEDGE NETWORK

- **Robust Campus Collections (Paper) Supporting Local Academic Programs**
- **Distributed Specialized Collections (Paper)**
- **Shared Digital Collection (CDL)**
- **Alternative Forms of Scholarly Communication(CDL)**



California Digital Library

California Digital Library: Shared Vision

“... A Library With No Limits Other Than
The World Itself...”

- *High-Quality* Digital Knowledge Resources
- *Personal* Communication Tools' to Create, Share, Manipulate, Store, and Use Information
- *Effortless* Network Interface for Dissemination of and Access to the World's Knowledge
- Distributed Services and Resources *Integrated* at the Point of Use



California Digital Library

Strategies for Realization: Co - Library

- 10th UC Research Library
- Co - Operative Venture of 9 Campuses
- Co - Equal (Governance)
- Co - Investment (Business Model)
- Build on Existing Automation Efforts
including Melvyl and Campus
Systems



California Digital Library

Strategies for Realization: Co - Library

- **Leadership Team: University Librarian,
Senior Staff (Collections, Business
Development, Education and
Communications, Technology, Services)**
- **Location: Office of the President**
- **Diverse Advisory and Governance Structure**



California Digital Library

Strategies for Realization: Knowledge Network

- Develop Collection **Framework**
- Identify **Science, Technology, and Industry Collection** as Charter Collection
- Future Collections: **Humanities, Social Sciences, Area Studies**

Strategies for Realization: Knowledge Network

Types of Information

- **Published Literature**
- **Digital at Birth**
- **Special Collections & Archives**
- **Scientific Data Sets**
- **Museum Collections**
- **New Forms of Scholarly Communication**

California Digital Library

Transition - Science Journals

OWNERSHIP

**(Building and
Collection Model)**

ACCESS

(Service Model)

1995 **2010**

DIGITAL LICENSING NEGOTIATIONS

Benefits - Product & Process

- Availability of large collections of electronic journals to *LEARN* and further plan
- Cost Control
- Diversification of battle fronts
- Process and Structure for *LEARNING* and potential future collaboration

DIGITAL LICENSING NEGOTIATIONS

Guidelines

- Single and Multi-year licenses
- Electronic Journals lower cost than Paper Journals
- CPI used as benchmark for annual price inflation
- Annual growth is a business not consumer expense
- Moderation of price increases
- Acceptable Rights and Restrictions on content use
- Growing recognition of significance of archiving challenge

THE FUTURE OF LICENSING

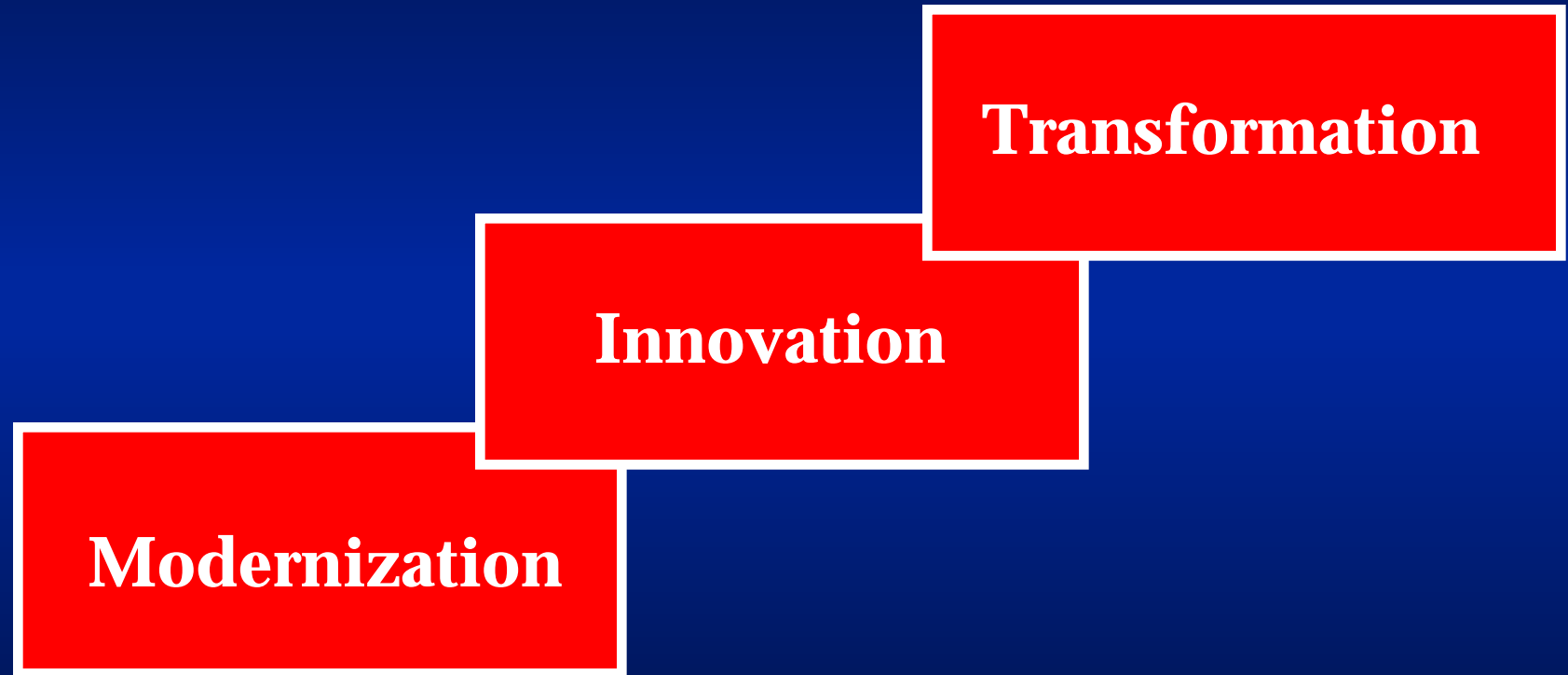
**LICENSING IS A USEFUL
*TRANSITION STRATEGY***

**Legitimate Concerns About
Scaling and Future Viability**



California Digital Library

Stages of Technology Development





California Digital Library

Strategies for Realization: Knowledge Network

**The Digital Library broadly conceived provides
the necessary and appropriate Infrastructure
To Transform Scholarly Communication
Through Leveraging Our Collective Investments
in Content, Technology,
and Human Resources**

***Strategies for Realization:
Transforming Scholarly Communication***

- **Prototype Projects to Transform Scholarly Communication**
- **Committee on Copyright**
- **Alliance with National Efforts (AAU/ARL)**
- **Observation/Coordination of Innovation**

***Strategies for Realization:
Transforming Scholarly Communication***

PEW HIGHER EDUCATION ROUNDTABLE

Publish and Perish

- **Turn Down the Volume**
- **Be Smart Shoppers**
- **Get a Handle on Property Rights**
- **Invest in Electronic Forms Of Sch Comm**
- **Decouple Publication and Faculty Evaluation**



California Digital Library

Strategies for Realization: Knowledge Network/Resource Sharing

- **Highly-coordinated collection development**
- **Easy Access to Core and Specialized Paper Collections**
- **Rapid Delivery of Physical Objects**

Strategies for Realization: Collaboration

- **Join with Libraries, Museums, Universities, Industry**
- **Collaborate with all segments of California education**
- **Partner with commercial providers and users**



California Digital Library

LIBRARY OF CALIFORNIA

- Resource Sharing
- Service to the citizens of California
- Leadership in Developing Infrastructure to Deliver Information Throughout California

CALIFORNIA DIGITAL LIBRARY

- Resource Sharing
- Service to UC & the citizens of California
- Leadership in Access to Digital Knowledge



California Digital Library

UC/CSU LIBRARIES *Joint Agreement*

- ***Interoperability*** among systems
- Joint Consortium ***Licensing*** Agreements
- Strengthen ***Resource Sharing***
- Cooperative Programs for Staff and User ***Training***
- Support ***Regional*** Initiatives and ***Outreach***

Libraries and Museums

- **AMICO**
Getty Museum, SF MOMA, San Jose, San Diego, LA County, NY Museum of Fine Arts, San Diego Supercomputer Center
- **UC Museums**
- **On-Line Archive of California (EAD)**

ization: Initial Design

- CDL Introduction: 1998/1999 Academic Year
- Strong, Unifying Concept
- Integrity
- Complementarity

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Strategies for Realization: Technology

- **Highly Distributed**
- **Melvyl a Key Building Block**
- **Compatibility with other UC systems**
- **Consumer of Best-Practice (Digital Library Federation)**
- **Links to Basic Research**

Strategies for Realization: Research

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- **Seek** Partners and Collaborators
-
- **Unique** Testbed
- **Facilitate** Technology Transfer

InterLib

A Foundation for Knowledge Creation and Sharing

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- Unique **Collaboration** among UCSB, UCB, Stanford, SDSC, and California Digital Library
- **Integrate** Research, Development, and Production
- **Facilitate** Technology Transfer



California Digital Library

***National Center for
Information Transfer
in the Sciences***

Richard E. Lucier

University of California

Strategies for Realization: Finance

- **Leverage Current Investments**
- **New Monies**
FY 97/98: \$1.5 Million; FY 98/99: \$4 Million
- **Co - Investment (10 Libraries)**

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California Digital Library

Benefits to UC

- Economies of Scale
- Enhancement of Public Service Mission
- Leverage Purchasing Power
- Support new forms of teaching and learning
- Facilitate Research and Scholarship
- Foundation for Alternative Forms of Scholarly Communication



California Digital Library

Ongoing Challenges

- Political
- Organizational
- Financial
- Information Policy
- Interface between Paper & Digital
- Interoperable Technology Solutions
- Human Resources
- Transition Strategies