Cost and Business Models for Digital Preservation:
Developing Digital Life Cycle Management Services at OCLC

14 October 2002
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Overview

1. What is a Digital Archive?
2. Some Models
3. OCLC’s Digital Archive
4. Next Steps
Archive: An organization that intends to preserve information for access and use by a Designated Community. -- OAIS
Attributes of a Trusted, Reliable Digital Repository

- Compliance with the Reference Model for an Open Archival Information System (OAIS)
- Administrative responsibility
- Organizational viability
- Financial sustainability
- Technological and procedural suitability
- System security
- Procedural accountability
“Business” Models

- Publisher archives
- Library archives
- Publisher pays third party
- Libraries pay third party
- Cooperatives
Sustainability Models

- Dowry/Endowment
- Governmental/Institutional Subsidy
- Digital Cooperative/Commons
- Income Generation through Digital Content
- Institutional Responsibility
- Philanthropy
Extending the OCLC Cooperative

- Digital Cooperative
- Digital Creation Services
- Digital Archive
- Discovery and Fulfillment
OCLC Model

- Control cost and quality through services
- Act as an agent on behalf of membership with publishers
- Lend credibility to publishers through third party management
- Cost sharing of a Digital Commons through the cooperative
- Develop income generation through repurposing
Business Model

Institutional Repositories

PrePrints
ETDs

OCLC Digital Archive

Publisher's Data

Digital Commons

Revenue
Value-added processes
Cooperative development

E-learning resources
Cooperative e-publishing
OCLC Digital Archive Cost of Development

- **Staff & Administrative - $2.4 million**
  - Design / pilot participant / development of requirements
  - Software development / Integration
  - Quality Assurance

- **Hardware / Software - $675K**
  - Incremental hardware – IBM SP servers, etc.
  - Oracle, Symantec, IBM, etc
  - Existing StorageTek hierarchical storage mgmt
OCLC Digital Archive

- Deep Infrastructure
- Standards driven and driving
- Economies of Scale
- Not-for-profit
- Governed by membership
- Library culture/values
- Managed by business principles
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Issues

1. Certification of digital repositories
2. Significant attributes that must be preserved
3. Models for cooperative repository networks and services
4. Systems for the persistent identification of digital objects
5. Intellectual property rights
6. Technical strategies for continuing access
7. Minimal-level metadata required for long-term management and tools to automate extraction
8. Economic sustainability
Unknown Costs of Digital Preservation

Jones and Beagrie

- Managing technological changes over time
- Proliferation of digital object types
- Lack of standardization in object types
- Defining what is essential
Work in Progress

- Developing cooperative for digital commons
- Negotiation with publishers to extend the ECO model
- Developing publishing models for shared content
- Research and development on digital preservation
- Economic Modeling Studies