Cost and Business Models for Digital Preservation:

Developing Digital Life Cycle Management Services at OCLC

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Overview

- 1. What is a Digital Archive?
- 2. Some Models
- 3. OCLC's Digital Archive
- 4. Next Steps



Definition

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



Institutiona I Repositorie Pregrints

ETDs

OCLC
Digital
Archive

ligital Common

Publisher s' Data

Business Model

revenue

value-added processes

cooperative development

revenue

e-learning resources
cooperative epublishing

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

