

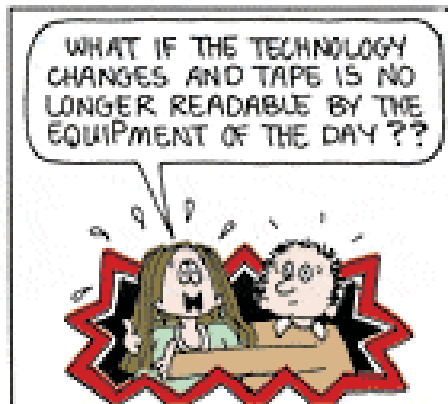
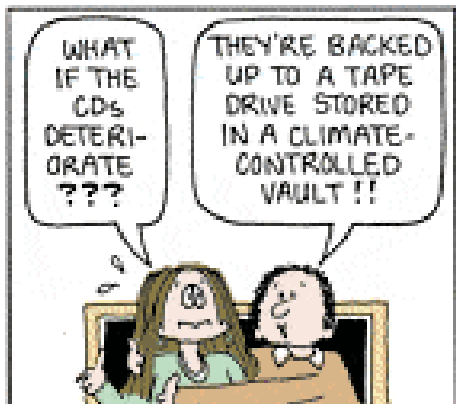
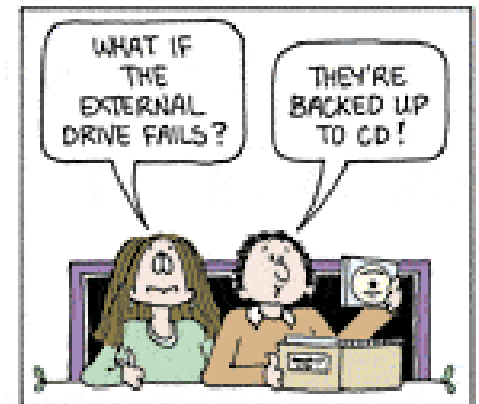
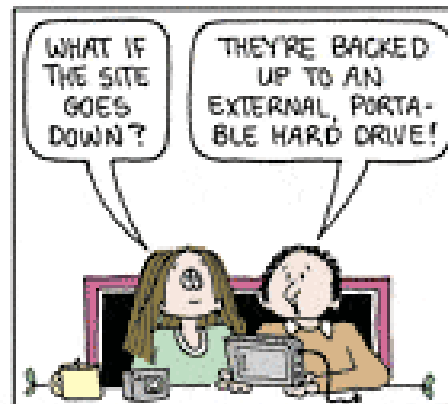
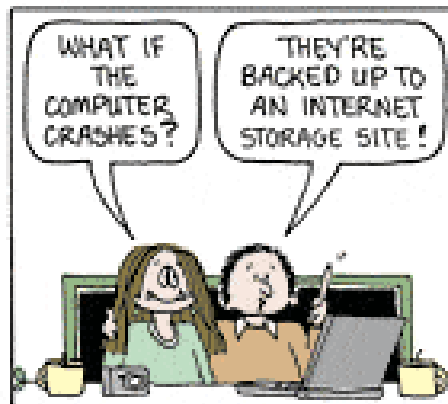
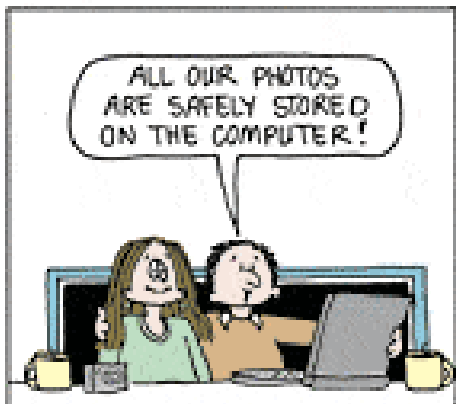
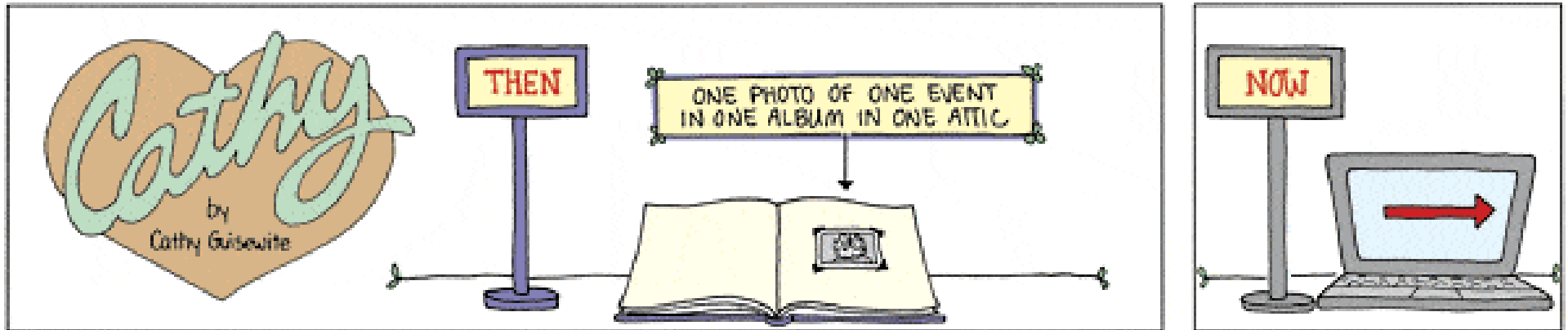
OCLC Programs and Research

Audit & Certification of Digital Repositories: Exposing Risk & Fostering Collaboration

Robin L. Dale

9 October 2006

*iPRES 2006: International Conference on the
Preservation of Digital Objects*



Overview

- Audit & certification: understanding repositories and assessing risk
- Envisioned uses of a checklist
- Checklist development (RLG-NARA, CRL)
- Emerging audit & certification process
- Potential process outputs, and compliance issues

Understanding & Assessing Risk: a semantically confusing scene

- Digital repositories
 - Digital archives
 - Data archives
 - Institutional repositories
 - Digital object management systems
 - Digital asset management systems
- *de facto* network of varying development, capabilities, content, intent/services, data longevity, vulnerabilities, horizons/sunsets

Envisioned Uses of a Checklist

- Repository/Archives Planning
 - Set of minimal characteristics for a digital *preservation* repository
- Self Assessment
 - Gap analysis
 - Risk assessment
- Audit
 - Organizations/Institutions
 - Services
- Basis for certification

RLG-NARA Checklist Development

- TDR as a *system*, not just technical bits
 - Organizational infrastructure
 - Digital object management
 - Technical infrastructure
- Repositories will differ, but good practice and reliable technical infrastructure are universal
- Audit as objective evaluation; risk assessment, evidence of capabilities, basis for trust
- Focus on transparency
 - i.e., policies, procedures, content, vulnerabilities

Moving Theory into Practice: the CRL Project

- Center for Research Libraries (CRL) *Auditing & Certification of Digital Archives* project
- Leveraged RLG-NARA checklist & contributed findings to revisions
- Test audits of three archives/repositories & LOCKSS distributed archiving system
- Audits to determine...
 - Technologies & technical infrastructure
 - Archive processes and procedures
 - Characteristics that affect performance, accountability & business continuity

CRL Project Issues

- Audit process development
 - Additional questions (beyond checklist)?
 - Evidence required
 - Personnel required
 - Institutional investment required
- Reporting Out
 - What constitutes a report?
 - Audience?
 - Who has access to outputs?
 - Information confidentiality issues
 - Community's/depositor's/funder's "need to know"
 - Trusted network partners

Reporting Out: CRL Report Design

- Provost/CIO statement
- Executive Summary
- Full Report
 - Introduction
 - Institutional overview
 - Scoping the audit
 - Findings
 - Organizational Analysis
 - Governance, Staff, Policies & Procedures, Financial, Succession planning
- Technical Analysis
 - Architecture, Data Security, Data Ingest, Archival Storage, Preservation Planning, Data Management, Access Management, Business Continuity, Environmental Management, Disaster Planning
- Content Analysis
- Vulnerabilities
- Observations & Recommendations

Some CRL Project “Discoveries”

- Compliance Issues
 - Is it a true checklist?
 - Levels of compliance are more appropriate
 - Audit compliance versus certification grading
- Business model(s) for audit & certification
 - Based on audit audience
 - *Partially* based on geopolitical influences
 - Based upon institutional willingness (investment)
 - Possible model for audit yielding public review

Certification as a Global Effort

- A trustworthy system of repositories, archives, services
 - Data archives, academic content, e-journal archives, government archives, etc
 - Common, objective metrics (principles?) for policies, practices, and technical capabilities
 - Provisions for evidence, competency, reliability, sustainability
 - Collaboration across continents, nations, “specialty” repositories and archives, initiatives
- *Cannot rely solely on a de facto network!*

Audit & Certification “Boiled Down”

- Regularized audits of digital repository capabilities, infrastructure & policies combined with defined levels of compliance
 - Make life predictable
 - Create a community
 - Make it easier to collaborate
- TDR vs. DGR

Trustworthy Digital Repository

VS.

Darn Good Repository

Questions?

Thank you.

Robin_Dale@oclc.org

