Topic 10 - Assessing Sustainability

Overview

- Introduction to ISO 16363
- Challenges to long-term sustainability
- Assessing sustainability

Digital Preservation Foundation

The 3-legged stool

- Technology
- Organization
- Resources

Organizational Infrastructure

Policies, procedures, practices, people required to build and run a program

Resources framework

Requisite startup, ongoing, and contingency funding to enable and sustain the digital preservation program.

Technological Infrastructure

Requisite equipment, software, hardware, a secure environment, and skills. Anticipates and responds wisely to changing technology.

ISO 16363

ISO 16363

> *"Space data and information transfer systems -- Audit and certification of trustworthy digital repositories"*

- 90 pages of standards-speak
- 110 metrics
- 4 levels of inconsistent hierarchical nesting

ISO 16363:2012 (CCSDS 652.0-R-1

Lovely, ey? ;)

What for?

- How do we know if we're doing it right?
- How does a user know if we're doing it right?

It does make sense.

ISO 16363 provides criteria with which to evaluate the three essential components of a digital preservation environment

- Organizational Infrastructure
- Digital Object Management
- Technical Infrastructure & Security

Organizational Infrastructure

1. Governance & organizational viability
2. Staffing & structure
3. Procedural & policy accountability
4. Financial Sustainability
5. Contracts, license & liabilities

Organizational Infrastructure

1. Are we supposed to be doing this?
   Governance & organizational viability
2. Do we have the people to do this?
   Staffing & structure
3. Are we sure we know how to do this?
   Procedural & policy accountability
4. Can we afford to do this?
   Financial Sustainability
5. Do we have the rights to do this?
   Contracts, license & liabilities

Digital Object Management

1. Ingest: Acquisition
2. Ingest: AIP creation
3. Preservation Planning
4. AIP preservation
5. Information access & management

Digital Object Management

1. Do we have everything?
   Ingest: Acquisition
2. Is this going to be preservable?
   Ingest: AIP creation
3. How are we going to do this?
   Preservation Planning
4. Are we keeping an eye on everything?
   AIP preservation
5. Can people find and use this stuff?
   Information access & management

Technical Infrastructure

1. Technical infrastructure risk management
2. Security risk management

Technical Infrastructure

1. Is our infrastructure working properly for the task?
   Technical infrastructure risk management
2. Can we deal with an emergency?
   Security risk management

Assessing sustainability

Certification? Me? Naaah.

- But isn’t this about certification?
- What if we don’t want/need that?
- And is there even a certification process?
- Why should I care?

Self-Assessment

- Identification of strengths and gaps
- Risk assessment & prioritization
- Road mapping

Speaker notes

Even though ISO 16363 was designed for external, official certification, it is also a great tool for *internal* assessment: No matter how mature your preservation service is or who it serves.

Self or 3rd Party?

> *"You are doing a great job on a, b, c, but we recommend making improvements on x, y, z. Here is a roadmap."*

- Self assessment is okay
- But working with 3rd party has advantages

Speaker notes

Outsiders: * See things differently * Brings fresh opinions * Discussions * May see internal blind spots * May say things you know, but don't dare to say... * Are less personally involved. Yes we're all people.

Level of compliance

0. **Non-compliant or not started:**
   The repository has not yet addressed the requirement.

1. **Slightly compliant:**
   The repository has something in place, but is less than halfway compliant towards addressing the requirement.
2. **Half compliant:**
   The repository has partially addressed the requirement and has significant work remaining to fully address the requirement.
3. **Mostly compliant:**
   The repository can demonstrate that it has mostly addressed the requirement and is working on full compliance.
4. **Fully compliant:**
   The repository can demonstrate that it has comprehensively addressed the requirement.

Challenges

to long term sustainability:

- Time
- Know-How
- Money
- Team splits up
- Tech failure
- Obsolescence
- Complacency
- Management
- ...

Speaker notes

A train-the-trainer once asked us when preparing lectures for the BenG Winterschool:

> *Why would anyone want to do what you're doing? It sounds like it's only problems and troubles!*

It's not. But it's a neverending challenge - and that's the fun (at least for me).

Cost of Inaction Calculator

The Cost of Inaction Calculator | The Acme Story | Analyze Your Collection | Log In / Sign Up

Enter your collection details

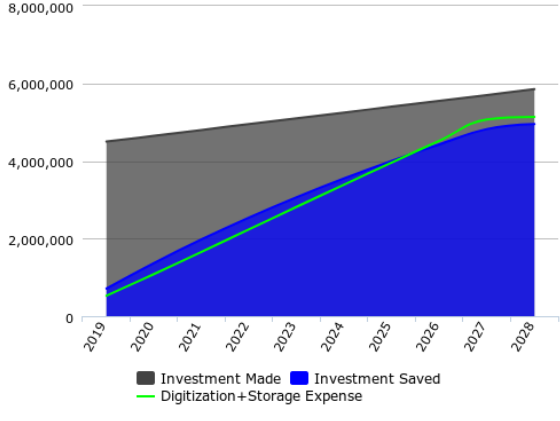
Save | Get Link

Last year for magnetic media?	Number of objects in collection?	Collection's audio-video percentage?	Investment to date for media?	Annual cost per media item moving forward?	Digitization cost per item?
2028	50,000	50% Video / 50% Audio	$4,500,000	$3.00	$60.00

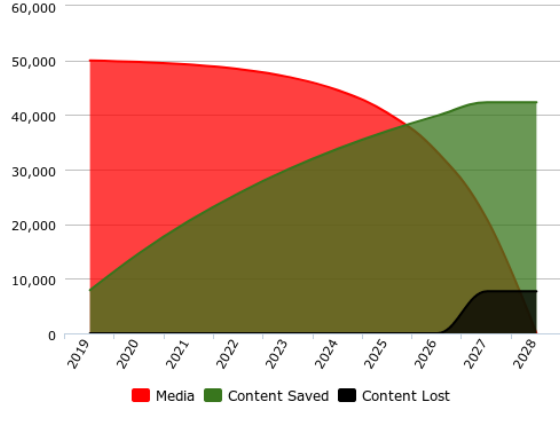
Year you will start digitizing items?	Annual digitization budget?	Storage service?	Annual decrease in cost of storage?	Annual increase in cost of digitization?
2019	$475,000	Amazon Hybrid	15%	16%

Collection Analysis | Start Implications

Investment Analysis



Item and Accessibility Analysis



Key Findings

Investment saved per $1 of expense	Return	Investment Lost	Content Lost
$0.96	96.34%	$900,499	7,697

Links

- Nancy McGovern, Anne Kenney, "Digital Preservation Management: Implementing Short-Term Strategies for Long-term Problems"
- Cost of Inaction Calculator (AVP)