CoSA & Preservica Practical Digital Preservation 2017

Digital Preservation 101: State Archives and Agencies Putting Digital Preservation into Action Part 1

February 14, 2017

CoSA Council of State Archivists

Preservica Digital Preservation

Practical Digital Preservation 2017

Welcome!

Sarah Grimm
Wisconsin Historical Society

PDP Briefings

- Protecting and Preserving Long-Term Digital Information — January 24
  - For IT Professionals & practitioners
- The Governance of Long-Term Digital Information — May 23
  - For Senior Managers & Budget Administrators

PDP "Hot Topic" Webinars — Tuesdays 2-3pm Eastern

- Preserving and Protecting Audio-visual Files — April 11
- Preserving Digitized State Government Records — May 9
- Best Practices in Digital Preservation: International Perspective — June 13

PDP Online Workshops - Digital Preservation 101:
'State Archives and Agencies Putting Digital Preservation into Action'

- Part 1: Practical Training in the Key Concepts — February 14
- Part 2: Practical Training in the Key Concepts — February 28
- Part 3: Case Studies — March 14

Sign up today on the CoSA website – PERTTS Portal > Education -Training

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Today's Presenters

Lori Ashley
Tournesol Consulting

Matt Veatch
Kansas State Historical Society

Tim Hodge
Preservica

David Portman
Preservica

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Council of State Archivists (CoSA)

- 56 state and territorial archives
  - Preservation of and access to records of enduring value
  - Efficient management of government records

https://www.statearchivists.org/

A Record is a Record Regardless of Format

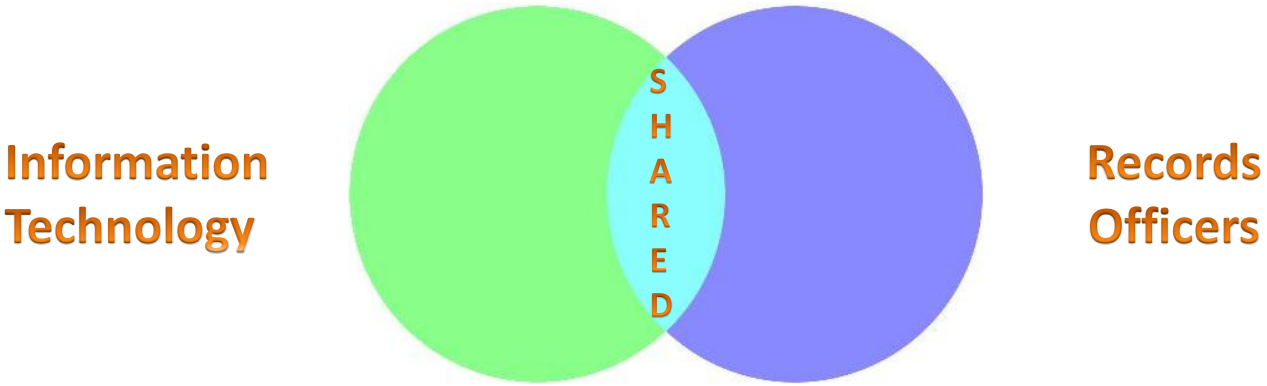
Information created, received and maintained as evidence and as an asset by an organization or person, in pursuit of legal obligations or in the transaction of business ISO 15489-1: 2016

Image: United mail

Image: WiseGEEK

Your IT Department Is Your Partner

- Information Technology
  - Creates and maintains infrastructure
  - Provides support
- Records Officer
  - Determines value of records/information
  - Provides retention and disposition guidance



Your State Archives is Your Partner

- Records appraisal and scheduling
- Advice and training
- Transfer records of enduring value
- State-specific procedures and best practices

https://www.statearchivists.org/connect/resources-state/

Agenda

- Introductions
- Key Concepts
  - Long-Term Records Requirements
  - Long-Term Digital Preservation
- Real World Example
  - Kansas State Historical Society
- Summary & Preview of Part 2
- Q&A

Long-Term Records Requirements

Lori Ashley

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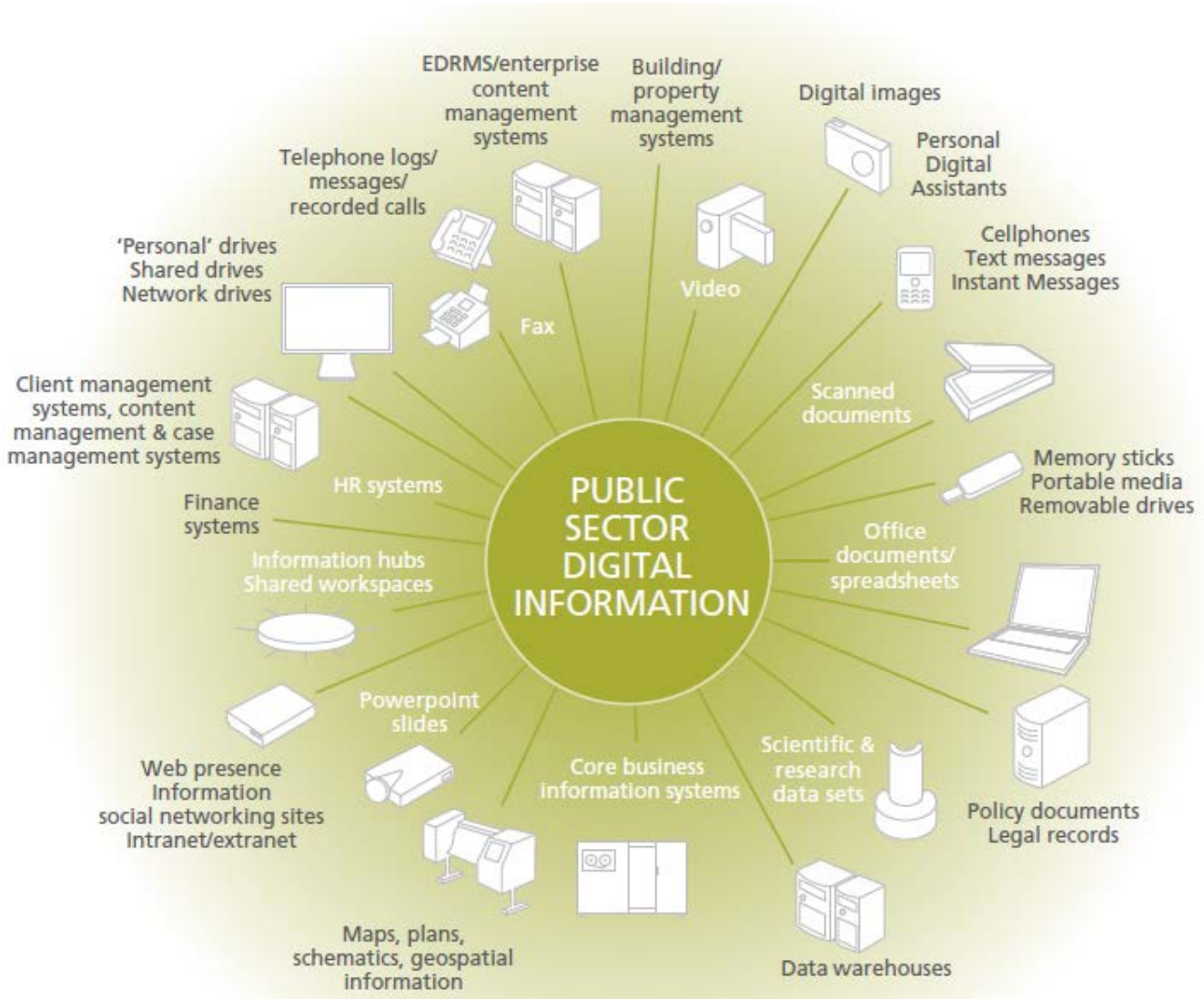
Public Sector Digital Information



Source: Archives New Zealand
Digital Continuity Action Plan

Records Appraisal and Scheduling

- Determine legal, regulatory and operational value
- Identify assets of historical value
- Access restrictions
- Disposition triggers

Homicide or suspicious death investigation case files	75 years

Deeds	Permanent or listing of when & where recorded
Abstracts & certificates of title, title insurance policies	Permanent or as long as land owned

Child-placing agency records		
(a) A register identifying information about children accepted for service or placement	Permanent	HFS §54.06(2)(a)1

Construction plans for county buildings & bridges	Life of Structure
Blueprints	Life of Structure
As-built drawings	Life of Structure

Client-case records including client-attorney information	Until youngest child reaches age 21

RDA Number	Record Series Title	Series Description	PII	Confidential	Minimum Retention and Disposition	Event Description	Examples/ Notes	Previous RDA Number (if applicable)
[Functional Area]								

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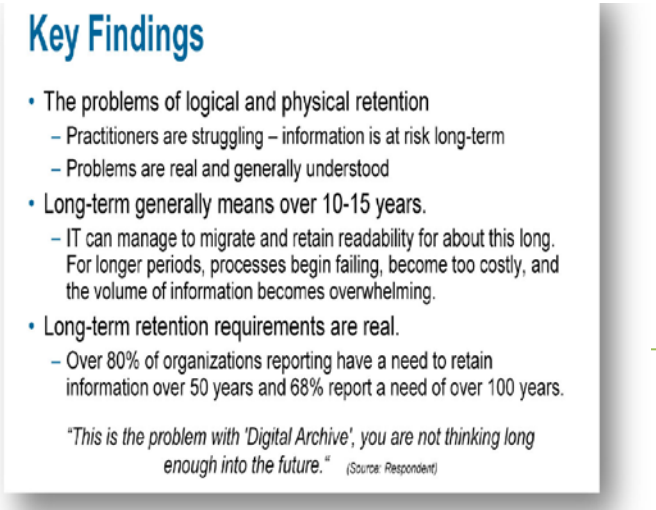
How Long is Long-Term?

- ISO 14721 standard defines long-term as “long enough to be concerned with the impacts of changing technologies, including support for new media and data formats, or with a changing user community. Long term may extend indefinitely.”

- In the SNIA 100 Year Archive Survey (2007), long-term, by consensus, came out to be anything beyond 10-15 years because that is the time-frame beyond which they begin to lose control of logical and physical migration.



Key Findings

- The problems of logical and physical retention
  - Practitioners are struggling – information is at risk long-term
  - Problems are real and generally understood
- Long-term generally means over 10-15 years.
  - IT can manage to migrate and retain readability for about this long. For longer periods, processes begin failing, become too costly, and the volume of information becomes overwhelming.
- Long-term retention requirements are real.
  - Over 80% of organizations reporting have a need to retain information over 50 years and 68% report a need of over 100 years.

“This is the problem with 'Digital Archive', you are not thinking long enough into the future.“ (Source: Respondent)

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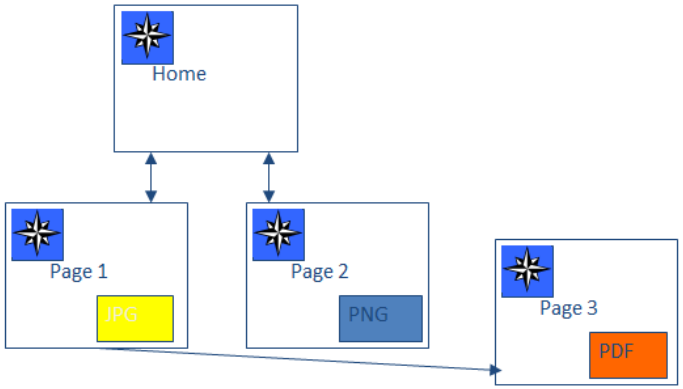
Challenges of Government E-Records

- Ever-increasing volume of records created in or converted to electronic formats
- Consolidation of state IT resources
- Federal Rules of Civil Procedure e-discovery provisions
- Frequency and scope of open records requests
- Disasters and other emergencies
- Growing emphasis on transparency and accountability
- Uncertainty due to change in administrations

Complexity of Digital Content: Web Site

- Two Structures
  - "Physical" (digital objects)
    - Understood by machines
    - Technology dependent
    - May need to be migrated
  - "Conceptual" (information objects)
    - Understood by humans
    - Technology independent
    - Needs to be preserved

Home.html
Style.css
Logo.gif
Page1/Page1.html
Page1/Image.jpg
Page2/Page2.html
Page2/Image.png
Page3/Page3.html
Page3/Document.pdf



Inventory Categories of Records Content

- Identify format types within categories of records content

- Images
- Video
- Audio
- Text

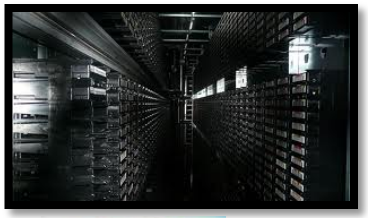
- Geospatial
- CAD Files
- Web content
- Structured data

Map Record Content to Applications and Repositories

Google

Cloud
Platform

amazon



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Two Sides of the Disposition Coin

Temporary Records

- Apply retention rules
- Automate classification, retention and metadata capture wherever possible
- Remove records from storage and destroy in the normal course of business using controlled and audited processes
- Document certified destruction

Long-Term Records

- Monitor active/inactive repositories and systems
- Apply disposition triggers and transfer as soon as practical in the life of the records
- Apply format and metadata standards as consistently as possible
- Automate workflows wherever possible

Records Management is a Shared Responsibility

- Records Creators
- Agency Management
- Records Management
- CIO
- State Enterprise Architect
- Domain Managers and System Administrators
- State Archivists
- State Librarians
- Local Government
- Third Parties

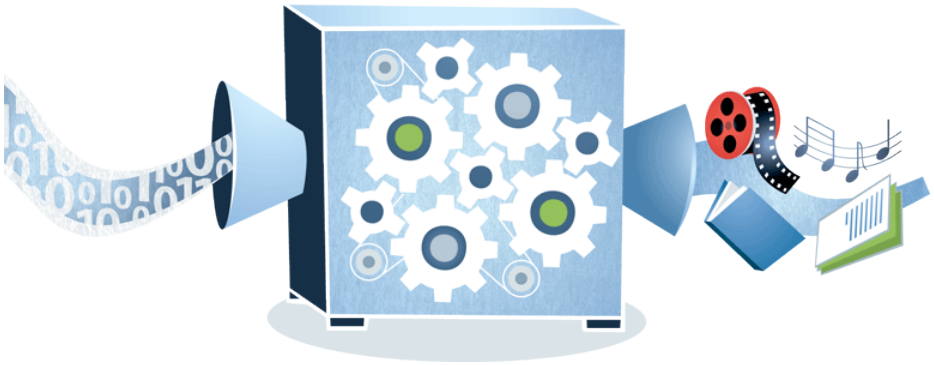
Long-Term Record Requirements

- Electronic records must be actively and continuously managed
- Start as early in the lifecycle as possible, ideally when planning to create records and/or configuring systems
- Decisions include formats and essential documentation about the systems and information objects (metadata)
- Impact information infrastructure and architecture
- Must be supported by working practices and accountabilities
- Specialized expertise required for addressing the scope, scale and diversity of information assets

Long-Term Access Requires Preservation

- Preservation relies upon proven technologies to actively monitor and transform digital objects across generations of technology

- Access relies on evolving technologies to provide prompt and accurate access to records at a point in time in the future

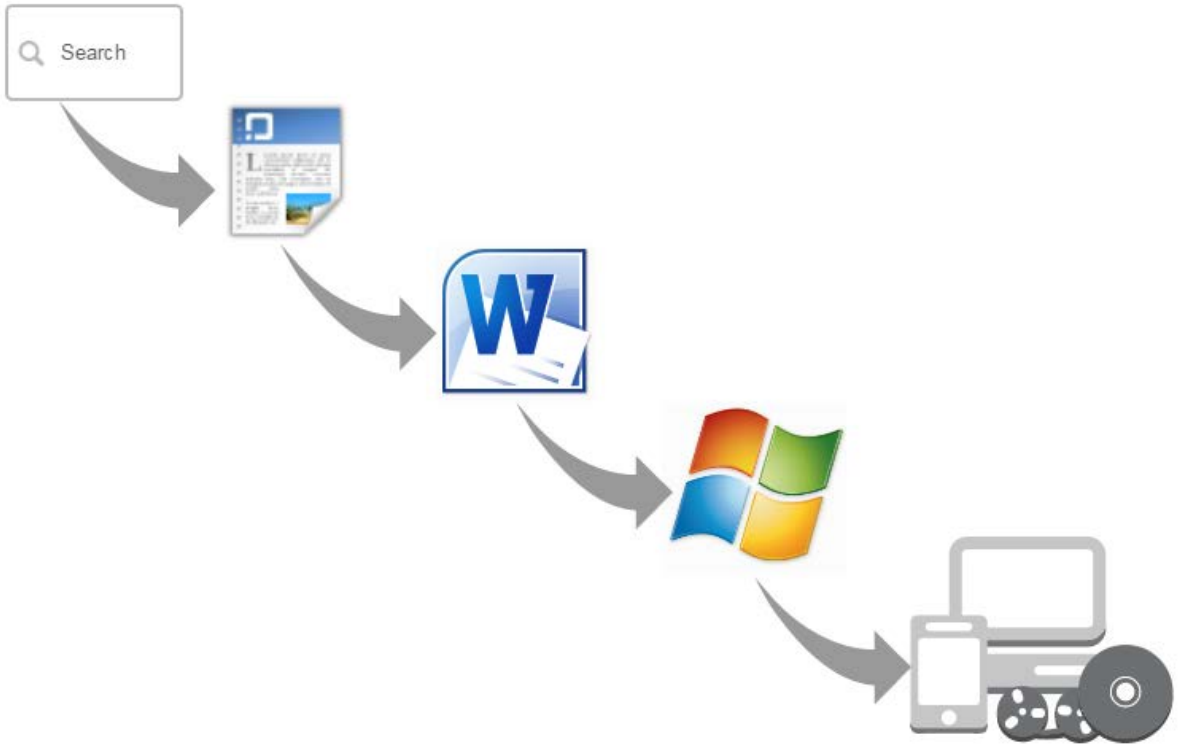


Long-Term Digital Preservation

Tim Hodge

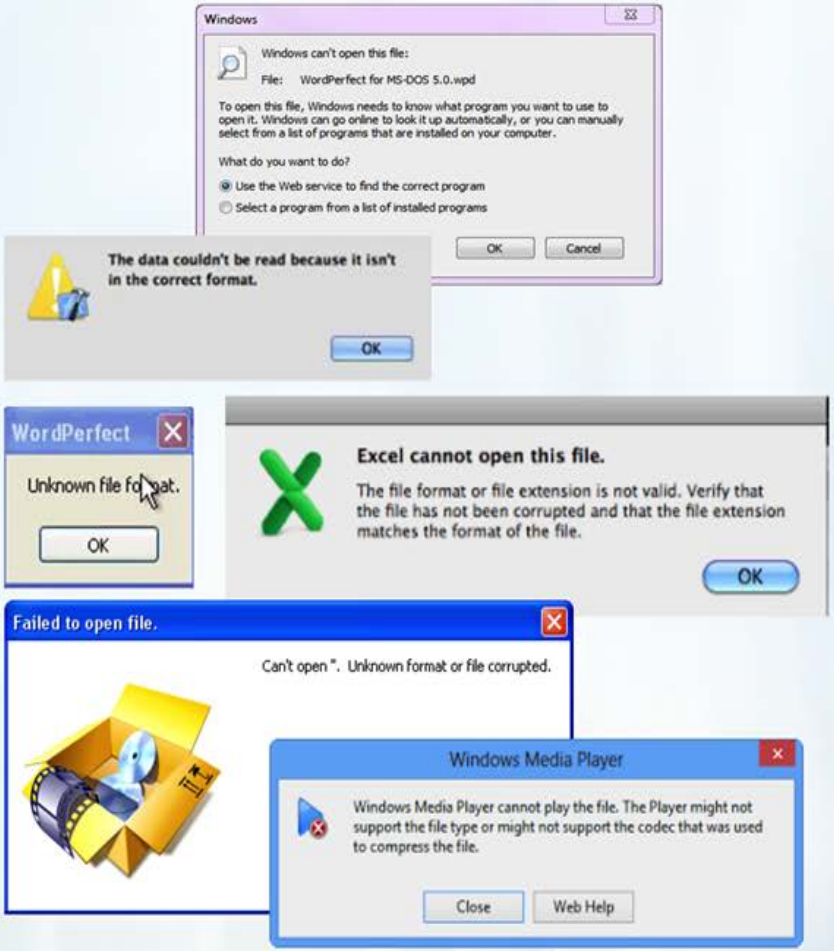
The Fragility of Digital Content

- Information does not exist in isolation



- Each part can be obsolete within information's lifetime

Digital Content older than 10 years is at risk



98%
Yes

Organizations that need to keep digital records and information for the long-term because of it's importance

97%
Yes

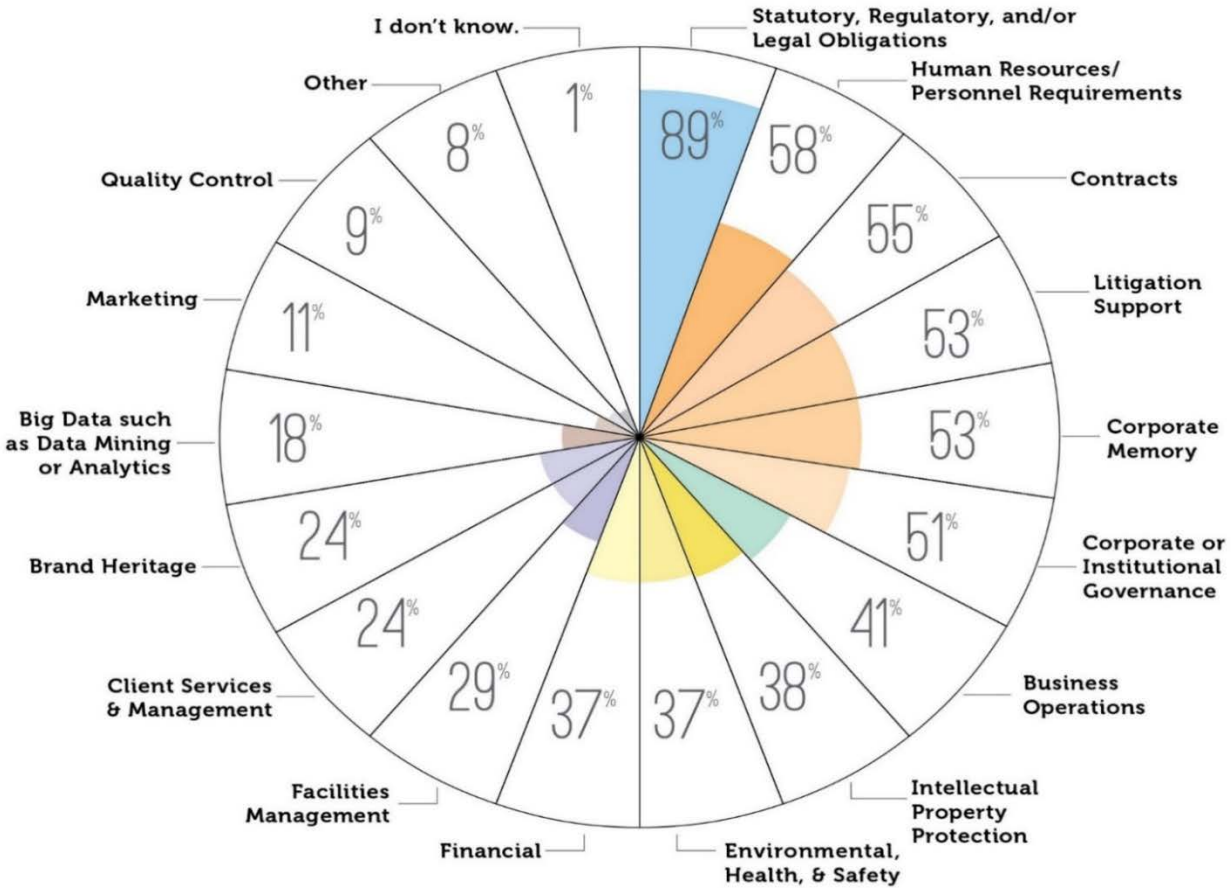
Information Managers are aware that technology obsolescence puts long-term digital records at risk

Source: Information Governance Initiative, April 2016

information governance initiative

MOST ORGANIZATIONS HAVE DIGITAL RECORDS AND INFORMATION THEY KEEP LONG TERM BECAUSE OF THEIR IMPORTANCE

Organizations Report a Variety of Reasons Why They Keep Digital Information



Primary Drivers for Keeping Long-term Digital Information:

- Compliance & Regulation
- FOIA and Legal Defence
- Information Re-use
- History & Heritage

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Source: The Governance of Long-Term Digital Information, IGI 2016 Benchmark

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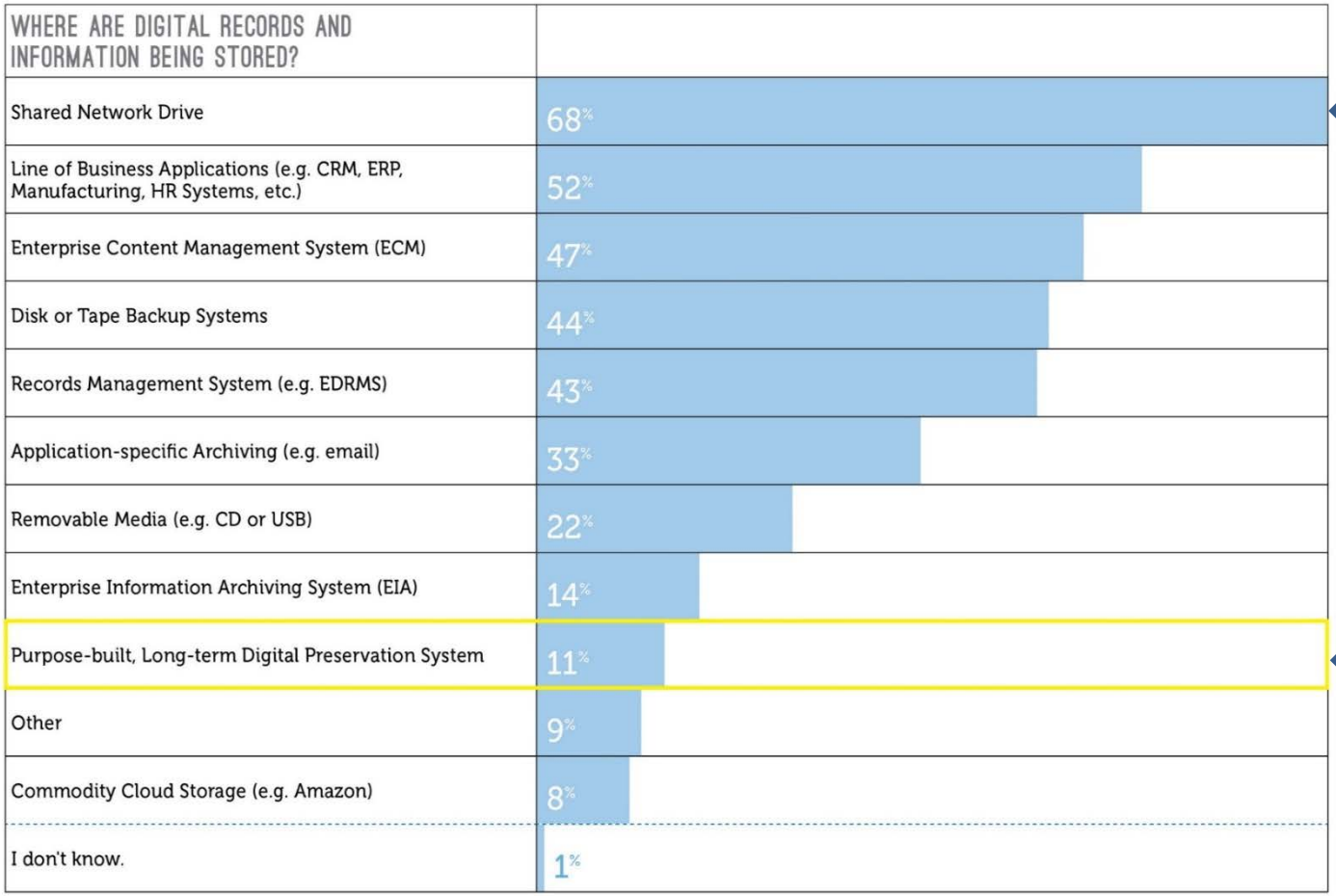
information governance initiative

CURRENTLY USED STORAGE SOLUTIONS ARE PUTTING LONG-TERM DIGITAL RECORDS AND INFORMATION AT RISK



68% keep vital long-term records on shared network drives

Only 11% have a purpose-built, long-term Digital Preservation System

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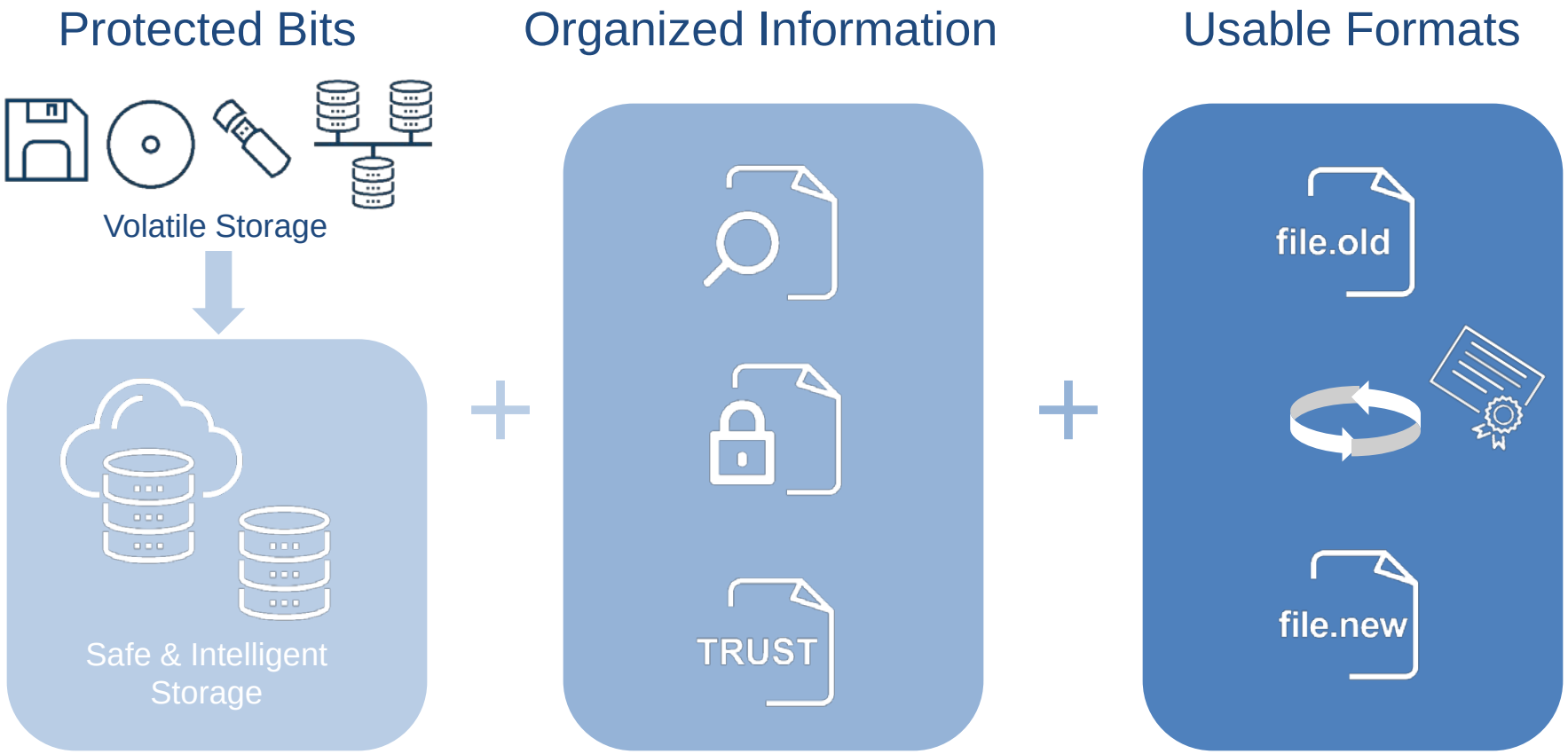
What is Digital Preservation?



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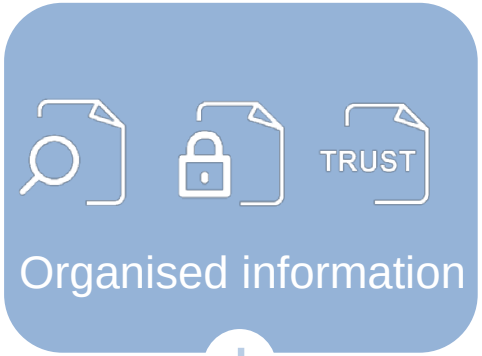
The Challenge at Scale

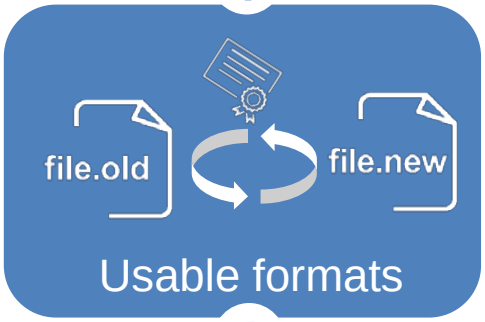
Millions of long-term files

Hundreds of formats

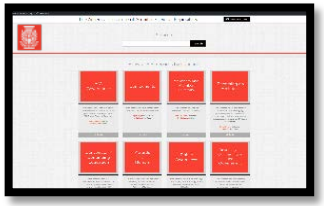
Many content sources

Outlook Lotus Notes Gmail by Google SharePoint documentum by EMC CONTENTdm® ArchivesSpace Calm





Secure & Immediate Access



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Key Takeaways

- Long-term digital records (10+ year retention) are inherently at risk, and require specific technology and governance to ensure their future accessibility
- Digital content must be protected in safe and intelligent storage options
- Records and information must be organized and safely stored in order to be searchable and trustworthy over successive generations of technology and custodians
- Preserve the original record and actively migrate to newer formats using the latest tools
- Preservation makes access possible and is vital for long-term records management

Kansas Electronic Records Management: Early Intervention & Preventive Care

Matt Veatch

Kansas Historical Society

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Early Intervention: IT Project Plan Reviews

- IT projects > $250K require a project plan
- Electronic Records Retention Statement (ERRS) (2000)
- State Archivist review & approval of ERRS (2010)
  - Does new system include long-term records (10+ years)?
  - Are appropriate plans in place to ensure long-term records preservation and access?

Early Intervention: IT Project Plan Reviews

- **Pros**
  - ✓ IT awareness of records management requirements
  - ✓ State Archives awareness of new recordkeeping systems
- **Cons**
  - – Communication gaps between IT & records officers
  - – Follow through by agencies and State Archives

Preventive Care: Electronic Recordkeeping Plans

- Required for long-term e-records = 10+ year retention
  - Electronic Records Committee reviews and endorses
  - State Records Board approves
- Questions
  - Records integrity & authenticity
  - Backup procedures & disaster planning
  - Preservation planning

Preventive Care: Electronic Recordkeeping Plans

- **Pros**
  - ✓ Agency awareness of electronic records challenges
- **Cons**
  - – Learning curve for agency staff
  - – Keeping plans updated

Summary

- Government records deemed to have long-term value will pass through a number of technology environments, challenging its authenticity and accessibility
- It must be possible to find, retrieve and use digital government information upon demand
- Information must be securely stored and protected from unauthorized access for its entire life span
- Government information increasingly must be available digitally and online
- Preserving the original record and actively migrating to newer formats to ensure records are readable and accessible for the long-term

Resources

- CoSA PERTTS Portal – Electronic Records Training, Tools and Standards

  https://www.statearchivists.org/pertts/

- CoSA/Preservica Practical Digital Preservation Program: https://www.statearchivists.org/pertts/education-training/cosa-preservica-practical-digital-preservation/

- Preservica Resources Center

  http://www.preservica.com/resources/

- Preservica Webinars

  - Live Demo: Feb 16 @ 3pm Eastern

    Register at www.preservica.com

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Preview of Part 2 – Key Concepts

Tuesday February 28 @ 2pm Eastern

- Introductions
- Retention and Disposition Strategies and Tools
- Real World Example
  - Kentucky Department for Libraries and Archives
- Taking Action to Protect Long-term Records: Collaboration with IT
- Summary & Preview of Part 3

Questions?

Thank You!

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