




Digital Archives:
The Challenges and Opportunities


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Knowledge is Power

- Sir Francis Bacon, *Meditationes Sacrae* (1597)



Records and Information
or, Why we do what we do

If – Knowledge is power...
And - Records are storage of knowledge

Then – Records must be preserved for future
generations

Why?
Future generations must learn from our success and
our failures

Public Accountability

- Financial
- Political
- Social
- Strategic
- Ideological
- Stewardship
- Continuity

Focus on the Benefits

- Increase in efficiency
- Increases in effectiveness
- Enablement
- Intrinsic enhancements
- *Accountability*

Public ROI

- Shift away from \$ ROI
- Focus on the public benefit realized

- Difficult to quantify
- Outside the 'norm'
- Requires Champions
- Link IT to goals and business processes


Public Value Proposition

- Re-evaluate cost-benefit analysis to include focus on public value
- Focus on how IT investments generate results of value from public view
- Create method and incentive to tie public value assessment to IT portfolios

If Lincoln wrote the Gettysburg Address on a laptop, would we have it today?

— Washington Secretary of State Sam Reed






Shifting Media

- Historically records were stored on paper, kept in filing cabinets
 - When the cabinet was full, records sent to file room
- Now records stored electronically on computers
 - When the computer is 'full' – add more hard drives

Basic skills to manage and maintain records has been lost, replaced by infinite storage




New Federal Mandates to Manage Certain Electronic Records

As electronic records become more integrated into society, producers of those records will be held to higher standards of conduct

- Health Insurance Portability & Accountability Act of 1996 (HIPAA)
- Gramm-Leach-Bliley Act of 1999
- Patriot Act of 2001
- Sarbanes-Oxley Act of 2002
- Help America Vote Act of 2002 (HAVA)
- Rule 34!
- More mandates to come

Records must be managed and maintained (or destroyed) methodically in normal course of business



What is 'Archiving' in the Electronic Age?

Protecting machine readable records of enduring legal, historical or fiscal value from loss, alteration, deterioration and technological obsolescence in a environment independent from that which produced the record.

So the question becomes... who takes care of the records, and do they have the knowledge?

Who does take care of the Records?

- Who is stepping up to manage the content?
- Who is training for e-records?
- How many 'systems' can keep records?
- Who is your records manager?

How?

- Creating partnerships and understanding to remove silos of responsibility for information and records management
- Ensuring agency information and records compliance
- Creating technology and policy/standards environment that encourages information management

DO!

- Policy – Create and monitor technology and record keeping policies within each agency
- Standards – Use or create single and jointly issued standards impacting technology selection and record keeping
- Technical Infrastructure – Analyze efficient data sharing, data transfer, and data assurance requirements within each agency
- Guidelines – Create and monitor single and jointly issued to guide implementation of standards
- Procedures – Model agency implementation requirements

What does that look like?


Why a Digital Archives?

- **Comply with statutory & regulatory mandates.**
- **Avoid loss of legal & historical records**
- **Preserve rare and 'at-risk' paper records**
- **Centralize Records**
- **Improved access for citizens**




Centralization of records

- One stop shopping
 - Citizens don't need to know creator
- Can access records from multiple ministries
- Fast and Efficient
- Enablers of Justice



Accountability

- Improved trust and legitimacy in government
- Maintenance of history
- No 'gate keepers'
- Visibility
- Noticeable compliance (or lack of)



Societal Continuity

- Beyond just business continuity
- Continuance in the event of a regional disaster
- Protect citizens rights
- Reestablish government quickly, efficiently
- 'Hot Site' backup

How to Get There



Billions of Emails Produced DAILY

Year	Billions of Emails Produced Daily
2000	10
2005	40
2010	95

Source: IDC

“We are drowning in information and starved for knowledge”

- Tom Peters, *Thriving on Chaos* (1988)

Step One: Focus on the Program


- Focus on public value, not ROI
- Benefits to Citizens
- Benefits to Government
- Benefits to open, democratic society

Step Two: Partnerships

- IT and IM must work together
- Maintaining system vs. Maintaining Content
- 'Friends in the Field'
- Power of the Press
- Collect samples
- Partner toward the money
- Update the laws!


Step Three: Common Language

- IT and IM *must* learn to speak each others language
- Key players must step up
- Training, training, training
- Create comfort




What is 'Archiving' in the Electronic Age?

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What is a 'Record' in the Electronic Age?

Information in a fixed form that has content, context, and structure, is created or received in the course of individual or institutional activity and set aside as evidence of that activity for future reference.



Step Four: New Skills

- The hardest step
- Overcome resistance to change
- IT needs to learn about legal obligations
- Control access and deletion
- ORGANIZE data, don't accumulate or mix
- IM needs to learn to 'speak geek'
 - Become familiar with new technology
 - Networks
 - Database
 - Storage technology

8 Requirements for Preservation

- Readable
- Retrievable
- Intelligible
- Encapsulated
- Reconstructible
- Identifiable
- Understandable
- Authentic

} Hardware

} File Format

} Content Management

* From *Authentic Electronic Records* by Charles Dollar

Hardware

- File Room of the 21st century
- Capacity and Speed double every 18 months
- Many choices, prices dropping rapidly
 - Tape
 - Optical
 - Hard Drives
- Pay close attention to lifespan – migrate, copy

“What hardware you use today will be obsolete within four years”

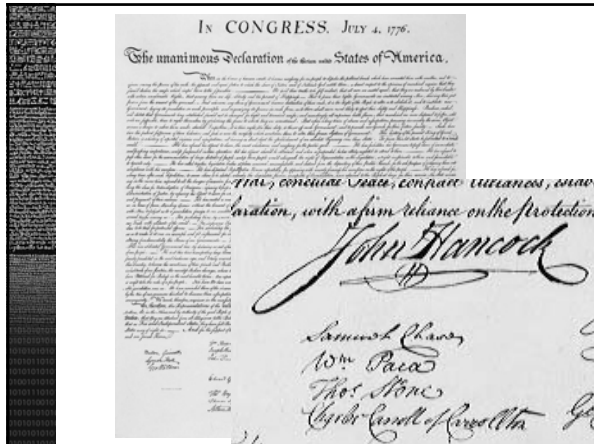
Archival Software Formats

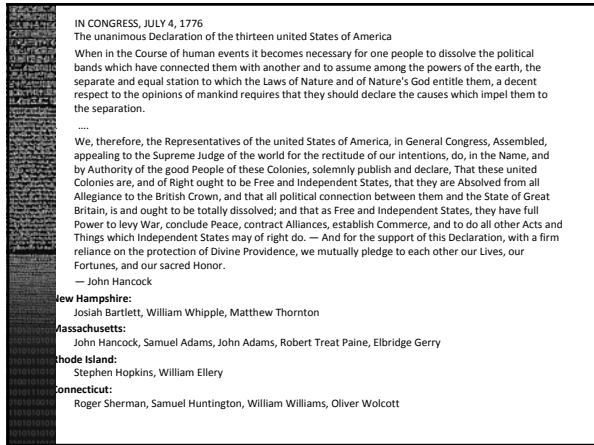
- ASCII
- TIF
- PDF/A
- ODF
- XML
- OpenXML

Records must be accessible over the generations

- Migrate binary bits to open formats
- Preserve the cultural and intellectual assets of government
- Format matters!

Remember WordStar and dBase II ???






Content Management

- Essential to maintain control of the information explosion
- Allows hard coded rules and information exchange
- MUST be simple to use, easy to deploy and globally accessible
- BUT still requires a strong knowledge, understanding and implementation of basic records management


Data is Data, a Record is a Record, It is the content that drives retention, not the media

“You control your records”




Content Management

If you don't know what you got,
how can you preserve it?




Step Five: Build it

- If you build it, they don't come...
- Must think outside the box
- Dare to be bold
- Ok to be wrong, learn
- Multiple interactions, small and focused



Bridging the Gap

- Someone needs to step up
- System and Retention hand in hand
- Content separate from media
- Training, training, training
- Executive level understanding and support
- Create base level understanding of 'record'
- Understand 'Archiving'



HI Public Records Law


Chapter 626, HRS, Hawai'i Rules of Evidence: Title X
A "public record" means any writing, memorandum, entry, print, representation, report book or paper, map or plan, or combination thereof, that is in the custody of any department or agency of government

Chapter 94-3, HRS
Authorizes the Comptroller to determine the disposition of State Government Records, except Judiciary and Legislative Branch records

Act 177-2005
Allows the creation, use and storage of government records in electronic format, as well as the conversion of existing paper records and microfilm records to electronic formats

State Archives Mission

- Foster open government by preserving and making accessible to the public the historic records of state government
- Partner with state agencies to manage their active and inactive records



Who does take care of the Records?

- Who is stepping up to manage the content?
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What you can do to help

- You are doing it right now!
- Fill out the survey
- Spread the public records cheer
- Share your thoughts in the survey
- Attend records management training
- Turn in the survey
- Know your departmental records officer
- Complete the survey
- Help us help you!

17th Century
"So long as men can breath, and eyes can see,
So long lives this, and this gives life to thee."

- William Shakespeare, *Sonnet XVIII (1609)*

21st Century
As long as the media is still readable, a drive available,
the software can be loaded, the hardware still runs
and file can be found!

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NHPRC
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Questions?

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