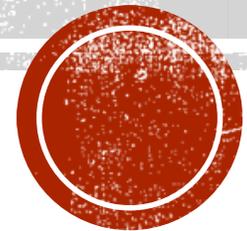


***FEED ME SEYMOUR:
INGESTING AUTHENTIC
DIGITAL RECORDS***

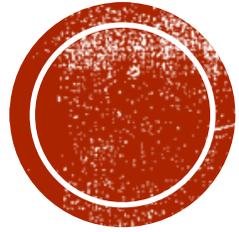
Adam Jansen

State Archivist

Hawai'i State Archives



16 Feb 2019



THE CHALLENGE



PRESERVING AUTHENTIC DIGITAL RECORDS

What does this mean?

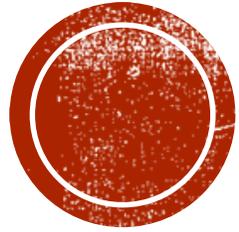
**(Hint: its more than online access
or backing up to tape)**





Preserve digital records of enduring legal, historical or fiscal value and **protect** them **from** **loss, alteration, deterioration and technological obsolescence** while maintaining them in a **trustworthy** state within an **environment independent** from that which produced the record; partner with agencies to reduce their burden of managing inactive digital records; and make said records that are disclosable by law **accessible to the public 24x7x365.**





WHY ARE RECORDS IMPORTANT?



RIGHT TO KNOW

- Freedom of Information delineates the public's right to open access to records:

“In a democracy, the people are vested with the ultimate decision-making power. Government agencies exist to aid the people in the formation and conduct of public policy. **Opening up the government processes to public scrutiny and participation is the only viable and reasonable method of protecting the public's interest.** Therefore the legislature declares that it is the **policy of this State** that the formation and conduct of public policy--the discussions, deliberations, decisions, and action of government agencies--**shall be conducted as openly as possible.**” [§92F-2]

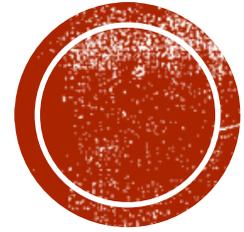


FEDERAL RULES OF EVIDENCE: RULE 803(6)

Hersey Exemptions:

Records of regularly conducted activity. A memorandum, report, *record, or data compilation, in any form*, of acts, events, conditions, opinions, or diagnoses, made ... if kept in the course of a regularly conducted business activity... all as shown by the testimony of the custodian or other qualified witness, or by certification ... *unless* the source of information or the method or circumstances of preparation *indicate lack of trustworthiness*.





WHY ARCHIVES ARE RELEVANT IN THE DIGITAL AGE



NEW PARADIGM

- Shift from Paper to Electronic more than just format
 - Different process of creation
 - Storage more fluid
 - More easily corrupted
 - Shorter useful 'lifecycle'
- Greater potential
 - Search
 - Extract metadata
 - Validation of integrity



Role of the Archives

Above all,

The physical and moral defence of documentary evidence
of activity (Jenkinson 1922)

Involves not only the object itself, but also protecting:

- **Naturalness** (produced as a by-product of activity)
- **Interrelatedness** (gain meaning from each other)
- **Impartiality** (free of external influence)
- **Uniqueness** (derived from context)
- **Authenticity** (uncorrupted)





AUTHENTICITY IN THE DIGITAL AGE

Maintaining **integrity** does not necessary mean **authenticity**, while it is an important part there is something more...

Authenticity requires understanding the **identity:**

- Determine one version from another
- Sender from receiver, draft from final

For a record to be “what it purports to be” **requires understanding of intent and context of creation, collection and handling** (chain and process of custody)



IDENTITY AND INTEGRITY ARE ESSENTIAL ATTRIBUTES TO CAPTURE

Identity	Integrity
Name of person creating	Name of person handling
Date of Creation	Name of custodian
Matter or Action	Indication of annotation
Relationship to other records	Technical changes
Documentary form	Presence of digital signature
Digital Signature	Location of duplicates
Name of person responsible	Hash value



IN CONGRESS, JULY 4, 1776
The unanimous Declaration of the thirteen united States of America

When in the Course of human events it becomes necessary for one people to dissolve the political bands which have connected them with another and to assume among the powers of the earth, the separate and equal station to which the Laws of Nature and of Nature's God entitle them, a decent respect to the opinions of mankind requires that they should declare the causes which impel them to the separation.

..

We, therefore, the Representatives of the united States of America, in General Congress, Assembled, appealing to the Supreme Judge of the world for the rectitude of our intentions, do, in the Name, and by Authority of the good People of these Colonies, solemnly publish and declare, That these united Colonies are, and of Right ought to be Free and Independent States, that they are Absolved from all Allegiance to the British Crown, and that all political connection between them and the State of Great Britain, is and ought to be totally dissolved; and that as Free and Independent States, they have full Power to levy War, conclude Peace, contract Alliances, establish Commerce, and to do all other Acts and Things which Independent States may of right do. — And for the support of this Declaration, with a firm reliance on the protection of Divine Providence, we mutually pledge to each other our Lives, our Fortunes, and our sacred Honor.

— John Hancock

New Hampshire:

Josiah Bartlett, William Whipple, Matthew Thornton

Massachusetts:

John Hancock, Samuel Adams, John Adams, Robert Treat Paine, Elbridge Gerry

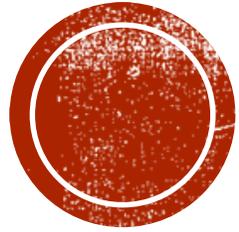
Rhode Island:

Stephen Hopkins, William Ellery

Connecticut:

Roger Sherman, Samuel Huntington, William Williams, Oliver Wolcott





INGESTING AUTHENTIC DIGITAL RECORDS



NEW PROCESS

To reap the greatest benefit, provide strong security = new way of 'doing business':

- Evolution of current archival processes to leverage technology, cutting edge research
- Digital Records cannot simply be 'dropped off'
 - Interrelatedness, creation process much more complex
- Requires more preparation in advance of transfer
 - BUT, one time effort* (*until things change)
- Starts with Digital Transmittal Agreement
- Then Records Transmittal Plan
- Then Testing
- Finally, all systems 'Go'



BASED ON INTERNATIONAL STANDARDS

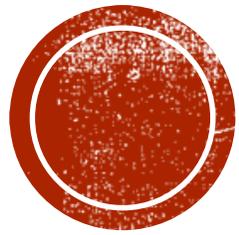
- **ISO 14721: Open Archival Information Systems**
- **InterPARES – twelve year research project at U of British Columbia**
- **Pittsburg Project – Research out of UPitt regarding Literary Warrant**
- **Diplomatics – 17th century science of document analysis and interrogation**
- **BagIT, METS, PREMIS, JPEG2000, ARK**



DIGITAL PRESERVATION... THE LONG VIEW

- Digital Preservation **REQUIRES** migration and conversion
- Digital preservation is a continual process
 - Research
 - Constant verification of integrity
 - Test of upgrade options
 - Verification of upgrades





QUESTIONS?

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