

ANALYSIS OF CURRENT
DIGITAL
PRESERVATION
POLICIES

ARCHIVES, LIBRARIES, AND MUSEUMS

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ABSTRACT

This report discusses the current state of digital preservation policy planning within cultural heritage organizations. The collection of new or recently revised digital preservation policies or strategies, published during 2008 and 2013, resulted in a high-level analysis of the contents within those documents. Discussion of research techniques, evaluation procedures, and data analysis reveal the methods used to conduct this study. Final conclusions explore and offer further explanation as to the development of publication trends within archives, libraries, and museums.

INTRODUCTION

Working to create digital preservation guidelines, the National Digital Information Infrastructure and Preservation Program (NDIIPP) currently engages in research to author a finalized digital preservation policy statement for the Library of Congress. Doing so will allow the Library to “collect, preserve and make available” digital material for current patrons and future generations.¹ To facilitate this initiative, NDIIPP collaborates with institutions around the world, to establish a sustainable digital preservation framework and maintain an on-going conversation about digital stewardship.

In 2011, NDIIPP hired Kirsten Snawder, a Junior Fellow intern, to conduct research and gather digital preservation policies, strategies, and/or plans, published by cultural heritage organizations. Her assessment of digital preservation documents confirmed what types of topics various institutions thought to include, or exclude, within their policies, and to what extent, or detail, they covered each element. Snawder read each strategy, outlined its contents, and under the direction of William LeFurgy, developed a taxonomy based on most commonly cited elements. Snawder chose documents based on their availability and accessibility from the Internet.

This report acts as a continuation of previously conducted research, building upon the documents collected and adding to the overall evaluation of the current state of digital stewardship around the world.

METHODS

William LeFurgy, supervising manager, offered initial advice and examples as to the methodology used in previous research. I followed similar procedures, which I outline below, to identify and gather resources for this project.

¹ <http://www.digitalpreservation.gov/about/>

RESEARCH

Online research served as the main resource for obtaining documents. I also gathered information by attending a digital conservation symposium and maintained on-going discussions with NDIIPP staff to supplement the context of my online research.

SCOPE

During my research, I searched for digital preservation policies, strategies, or plans published, on the Internet, by cultural heritage institutions. To narrow the scope, selected texts met the following criteria:

- Focused primarily on digital preservation, **not** digitization
- Published, or last updated, between 2008 – 2013
- Written (or translated) in(to) English

I did not include “how to” publications that described the process for creating preservation policies for digital content. While these types of guidelines are certainly beneficial for organizations, which require advice for policy creation, they do not fit within the scope of my research. Inclusion of “how to” publications would confuse the outcome, as they do not represent actual, documented strategies created by organizations that actively engage with the stewardship of digital information.

PROCESS

Online research conducted developed from frequent conversations with William LeFurgy and other NDIIPP staff, who offered suggestions as to where I should look for polices, or sent me links to their location.

SEARCH TECHNIQUES

Using Google as a search engine, I used the following queries to begin the search process:

- “Digital preservation policy archive”
- “Digital preservation policy library”
- “Digital preservation policy museum”
- “Digital preservation strategy archive”
- “Digital preservation strategy library”
- “Digital preservation strategy museum”
- “Digital preservation plan archive”
- “Digital preservation plan library”
- “Digital preservation plan museum”

As I gathered documents, I made list of them in a Word document, making note of the creating body, the document’s title and URL. Eventually, the collection of strategies grew to such a capacity, that I began to filter the policies into the following categories: archives, libraries, and museums. For a complete list of these documents, see *Appendix A*.

POLICY SUMMARIZATION

Once the search process ended, I read through each text, outlining the individual documents. My notes identified high-level commonalities, focusing on main headings, subheadings, or topics within each policy.

My initial research revealed that between 2008 and 2013, 33 institutions published 33 digital preservation policies/strategies. I included two policies, which Kristen Snawder originally located during her 2011 research, in this study.

TAXONOMY DEVELOPMENT

As mentioned earlier, Kristin Snawder conducted the first round of research in this project, and under the direction of William LeFurgy, developed a taxonomy and process to record the commonalities found within each policy. I modeled my taxonomy after Kristin's version, but slightly modified the structure to work with the documents I found.

PREVIOUS MODEL

Kristin Snawder outlined 13 policies, which consisted of four universities, six states and provinces, and three national bodies, from around the world. Based on the elements she found within those documents, Kristin identified common headings/topics, developing a list of 15 high-level taxonomy criteria:

- Access and Use
- Accessioning/Ingest
- Content Scope
- Financial Planning
- Glossary/Terminology
- Mandates
- Metadata/Documentation
- Preservation Model/Strategy
- Rights and Restriction Management
- Roles and Responsibilities
- Security Management
- Selection/Appraisal
- Staffing and Training
- Storage, Duplication, and Backup
- System Parameters

CURRENT MODEL

Using Kristin's taxonomy model, I developed a modified list to better reflect the topics within the strategies I located. My decision to amend the criteria resulted after I outlined the policies, and recognized additional topics to cover and/or retract from the original list. My final list included 19 criteria:

- Access and Use
- Accessioning and Ingest

Audit
Bibliography
Collaboration
Content Scope
Glossary/Terminology
Mandates
Metadata or Documentation
Policy/Strategy Review
Preservation Model/ Strategy
Preservation Planning
Rights and Restriction Management
Roles and Responsibilities
Security Management
Selection/Appraisal
Staff Training/Education
Storage, Duplication, and Backup
Sustainability Planning

EVALUATION

I followed a process similar to Kirstin's, which helped me refine and then apply the taxonomy to each policy document. On-going conversations with William LeFurgy allowed for a smooth transition as I assessed Kirstin's evaluation procedure, developed my own approach, and navigated through the diverse set of documents.

TAXONOMY CRITERIA

The strategies I read did not fit into any particular template: some plans had several pages of text, while others succinctly outlined their policies on one page. As I constructed my list of taxonomy, I set out to define these terms to assist me as I evaluated these dynamic policies. For a list of the taxonomy criteria and their definitions, see *Appendix B*.

MATRIX

I created a matrix to visually highlight which preservation policies addressed the 19 taxonomy criteria I developed. Each matrix reflects the following: institution type, document title, policy creator, year of last update, and the 19 taxonomy criteria. Institution type headings were highlighted in green for archives, blue for libraries, and purple for museums. Organizing the matrix in this way allowed me to easily identify the amount of policies published each year, and the amount of documents published by institution type.

As stated before, taxonomy criteria were made to conduct a high-level analysis of the documents, the intent of which was to identify substantive treatment of specific topics. To match a document to a criterion, I looked for headings, sub-headings, and major topics within a document. If policies briefly mentioned a topic in passing, it was not marked for inclusion on the matrix. For example, if a

document mentioned metadata in one or two sentences, but did not go into further detail, and did not provide an explicit heading, then this criterion was not marked within the matrix.

By looking at the 2008 matrix, I immediately assessed that six institutions published digital preservation policies, strategies, or processes. Of those six, three were archives, and three were libraries. The columns highlighted in yellow reflect policies originally used by Kristin Snawder, which I included in my research, as their year of publication fell within the project scope. Though many policies share commonalities, the 2008 matrix reflects the variation that exists between plans, which proves that organizations do not adhere to any specific template upon strategy creation. For instance, Plymouth City Council's policy mentioned four of the criteria, while the National Library of Wales's policy/strategy used ten of the criteria.

Including all 33 policies into one matrix was difficult to assess; therefore I separated the documents by year. To review the taxonomy matrices for 2008 – 2013, see *Appendix C*.

DATA ANALYSIS

Using the taxonomy and matrix, I evaluated each policy and conducted a high-level analysis from that data. I also used Viewshare, a product created by the Library of Congress, to generate graphics that would convey the results and findings.

INSTITUTION TYPE

From 2008 – 2013, three main types of institutions published digital preservation policies/strategies: archives, libraries, and museums (see **Figure 1**).

ARCHIVES

Out of 33 institutions, 16 archives (48%) published digital preservation policies/strategies from 2008 – 2013. Of these archives, eleven government agencies and five academic institutions sponsored the publication of these documents.

LIBRARIES

Out of 33 institutions, 15 libraries (45%) published digital preservation policies/strategies from 2008 – 2013. Of these libraries, eight academic institutions, and seven government agencies sponsored the publication of these documents.

MUSEUMS

Out of 33 institutions, 2 museums (7%) published digital preservation policies/strategies from 2008 – 2013. One government agency and one non-profit organization sponsored the publication of these documents.

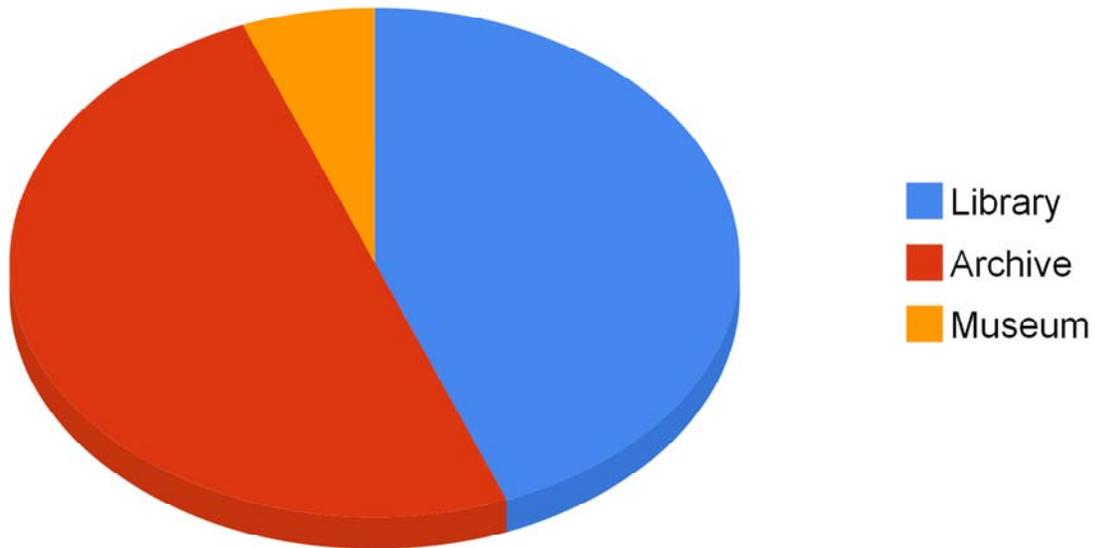


Figure 1 – Institution Publication, 2008-2013

TRENDS

Based on the data, I discovered similar developments within cultural heritage institutions, which I designated as publication trends by year, location of the organization, and usage statistics for the taxonomy criteria.

YEAR

Cultural heritage organizations published 14 documents (42%) during 2008-2010, and 19 documents (58%) during 2011-2013. The publication of digital preservation documents saw a steady increase from 2008 – 2010, and a dramatic rise from 2011 – 2013 (see **Figure 2**).

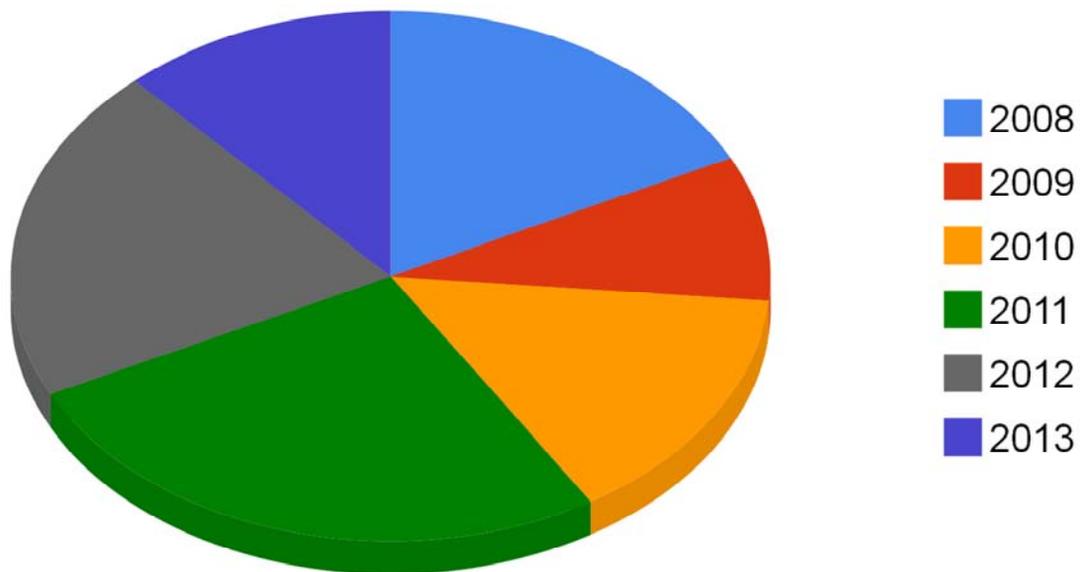


Figure 2 – Publication Trend, 2008-2013

LOCATION

Published digital preservation documents were clustered in the following areas: North America, Europe, and Australia/New Zealand (see **Figure 3**). In North America, publications originated from academic organizations or the local government. In Europe, Australia, and New Zealand, most of the publications originated from provinces or national entities.

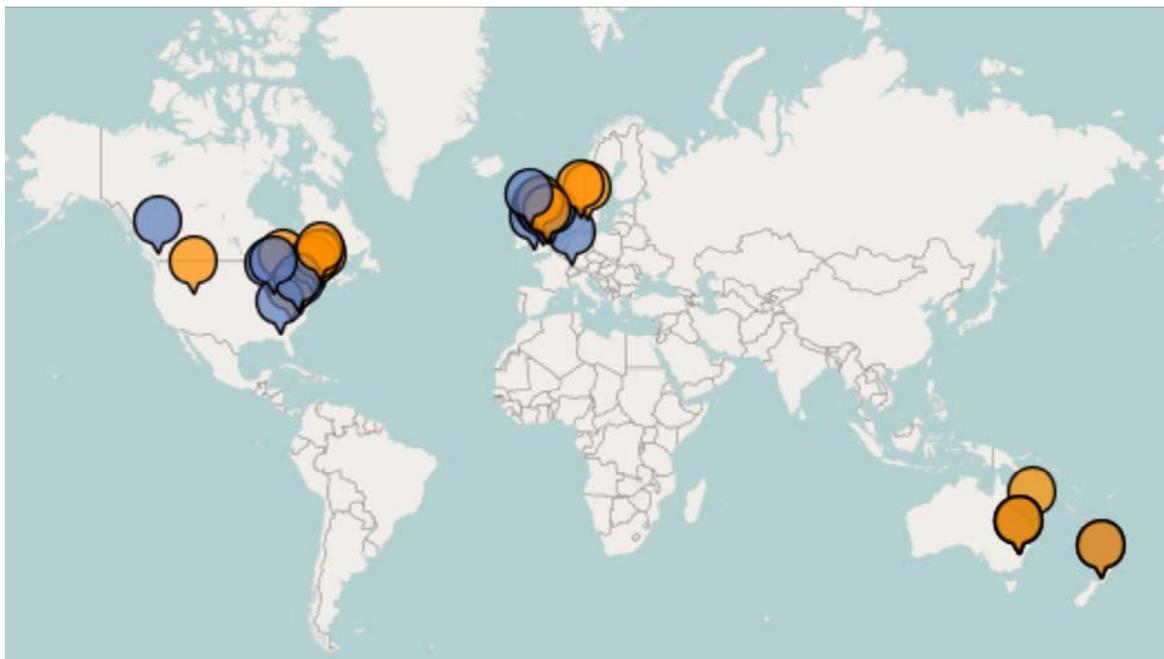


Figure 3 – Location Trend, 2008-2013

TAXONOMY CRITERIA

I gathered usage statistics from the taxonomy matrices, tallying the criteria popularity within each institution. Three of the most commonly used criteria included preservation strategy/model, collaboration, and content scope. Three of the least commonly used criteria included accessioning/ingest, audit, and preservation planning. For a complete list of the taxonomy element rank, see **Appendix D**.

Organizations which used most of the taxonomy criteria included Swiss Federal Archives (2009), United Kingdom Parliamentary Archive (2009), and Dartmouth College Library (2012). Organizations which used least of the taxonomy criteria included Plymouth City Council (2008), HathiTrust Digital Library (2010), Boston University Library (2011), National Archives Australia (2011), University of Manchester Library (2012).

CONCLUSIONS

CONTEXT ASSESSMENT: ARCHIVES, LIBRARIES, AND MUSEUMS

Based on the data, archives and libraries served as the primary actors regarding digital preservation planning, from 2008 – 2013, publishing over 90% of the documents in this study. On the other hand, museums published significantly less digital preservation policies/strategies than archives and libraries, or less than 10% of all documents collected. While the relative scarcity of published documents for museums is striking, it is worth considering some contextual differences among the institutions studied.

Leslie Johnston, Chief of Repository Development at the Library of Congress, stated that electronic records management and prior experience with digital material substantially affects the ways in which archives, libraries, and museums approach digital stewardship. The establishment of MARC records in the 1960s allowed libraries to maintain the bibliographic information of their content in a virtual environment, inspiring archives and museums to follow similar procedures in later years. As archives and libraries began to collect more and more digital content within their repositories, experience with managing electronic records facilitated their ability to preserve digital materials.

Though museums collect some time-based media, much of their experience and efforts focus on maintaining hybrid pieces, consisting of analog and digital material, while archives and libraries acquire digitized or born-digital collections that can be managed at scale with relative conformity. According to Ben Fino-Radin, a digital conservator at Rhizome, archives and libraries are “ahead” of museums, when it comes to digital *preservation* policy planning, because most museums invest in the digital *conservation* of their media-based artwork. Museums work in a slightly different capacity than archives and libraries, which requires specific conservation treatments to restore both the physicality and content of their media-based artworks, as well as the intent of the artist. As discussed in a symposium titled, *Conserving & Exhibiting the Works of Nam June Paik*, museum professionals consistently struggle to find long-term conservation solutions for Nam June Paik’s work, the pieces of which often contained a hybrid of analog and digital material. This inconsistency leaves larger institutions “wary” when publishing preservation policies for digital content, fearful of forcing a “one size fits all” strategy onto a medium that requires flexible planning (Fino-Radin).

As more artists engaged with and created digital art, museums proactively reacted by forming collaborative partnerships and active digital preservation initiatives, such as:

- Matters in Media Art (<http://www.tate.org.uk/about/projects/matters-media-art>)
- Guggenheim Museum (<http://www.guggenheim.org/new-york/collections/conservation/time-based-media/establishing-new-practices>)
- Smithsonian Time-based Media Art Working Group (<http://www.si.edu/tbma/about>)

In July 2013, the Smithsonian TBMA initiative announced their plan to develop long-term preservation strategies for time-based art.

DATA AND TREND ASSESSMENT

Academic and state governments predominately published policies or strategies in North America, while most of the organizations that sponsored publications in Europe, Australia, and New Zealand originated from provinces or national government bodies. North America had a total of thirteen contributors, twelve of which originated from academia and one from a local body of government. Europe also had a total of thirteen contributors: five of which came from provinces, four from national bodies, and one from academia. Australia and New Zealand had a total of five contributors, four of which originated from a national body and one from a province. Australia is the only nation to have published a digital preservation strategy for their national archive, library, and museum.

The rate of inclusion for taxonomy criteria was not consistent, as institution types, year range, and location of organization bodies favored some (or more) elements over others. Trends within institutions revealed that archives had a higher inclusion rate within their policies than libraries for the following: glossary/terminology (10-7), security management (9-5), storage, duplication, and backup (10-4), policy/strategy review (10-4), and rights and restriction management (4-1). Libraries had a higher inclusion rate than archives for collaboration (11-8), bibliographies (9-3), sustainability planning (8-5) and metadata and documentation (6-3). The following elements were not cited within museum policies: access/use (0), storage, duplication, and backup (0), policy/strategy review (0), sustainability planning (0), staff training/education (0), and mandates (0).

The rate of inclusion for elements varied by year and by institution type. In 2008, three institutions (two archives, one library) mentioned nine or more taxonomy criteria; while three institutions (one archive, two libraries) mentioned eight or less. In 2009, two archives cited nine or more criteria, and one archive cited less than nine. All institutions (three archives, two libraries) in 2010 mentioned less than nine of the taxonomy elements; while in 2011, one institution (archive) cited more than nine criteria, while seven institutions (four archives, three libraries, one museum) cited less than nine. The reverse occurred in 2012, with six institutions (one archive, four libraries, and one museum) mentioning more than nine criteria, and one library citing less than nine. Finally, in 2013, one archive cited more than nine criteria, and three institutions (one archive, two libraries) cited less than nine.

Trends for taxonomy criteria by location showed that European countries had a higher inclusion rate than North America for the following elements: access/use (10-7), security management (10-4), storage, duplication, and backup (8-5), policy/strategy review (8-4), staff training/education (8-2), and preservation planning (6-1). North America had a higher inclusion rate than Europe for mandates (7-1). Australia and New Zealand used all of the taxonomy criteria, except for accessioning/ingest (0), and preservation planning (0).

It is difficult to predict exactly how the future of digital preservation policy planning will evolve. Based on the data, government agencies and universities will most likely remain leaders within the digital steward community, focusing on the development of preservation strategies for digital content and encouraging persistent collaboration between cultural heritage organizations. To obtain a wider assessment, future research projects regarding the analysis of current digital preservation policy planning may want to include documents from non-English speaking countries.

REFERENCES

Fino-Radin, Ben. Personal interview. 12 June 2013.

Johnston, Leslie. Personal interview. 16 July 2013.

Handardt, John G., Jon Huffman, Michael Mansfield, Hugh Shockey, Lori Zippay, John Hirx, Richard Bloes, Reinhard Bek, Christine Frohnert, Joanna Phillips, and Ann Goodyear. (2012 June). Conserving & Exhibiting the Works of Nam June Paik. Symposium conducted in the Lunder Conservation Center at the Smithsonian American Art Museum, Washington, DC.

GRAPHIC SOURCE

Graphics, for Figures 1, 2, and 3, populated using Viewshare (<http://viewshare.org/>)

APPENDIX A: INSTITUTION/URL LIST

ARCHIVES

*Archives New Zealand te Rua Mahara o te Kawanatanga and National Library of New Zealand Te Puna Matauranga o Aotearoa – *Digital Preservation Strategy*
http://archives.govt.nz/sites/default/files/Digital_Preservation_Strategy.pdf

Cheshire Archives – *Digital Preservation Policy*
http://archives.cheshire.gov.uk/record_care/digital_preservation/digital_preservation_policy.aspx

Florida Digital Archive – *FDA Policy and Procedures Guide, version 3.0*
<http://fclaweb.fcla.edu/uploads/FDAPolicyGuideversion3.0.pdf>

Hampshire County Council Archives – *Digital Preservation Policy*
<http://www3.hants.gov.uk/archives/hro-policies/hro-digital-preservation-policy.htm>

Illinois Digital Environment for Access to Learning and Scholarship (IDEALS) – *IDEALS Digital Preservation Policy*
https://www.ideals.illinois.edu/bitstream/handle/2142/2383/IDEALS_PreservationPolicy_Nov2009.pdf?sequence=4

London Metropolitan Archives – *Interim Digital Preservation Policy*
<http://217.154.230.218/NR/rdonlyres/6466F6FA-2F04-4E3E-8D8D-9158FD303425/0/DigitalPreservationPolicyJun2010.pdf>

National Archives of Australia – *Digital Preservation Policy*
<http://www.naa.gov.au/about-us/organisation/accountability/operations-and-preservation/digital-preservation-policy.aspx>

North Carolina Department of Cultural Resources* – *Archival Process for Data and Image Preservation: The Management and Preservation of Digital Media*
http://www.records.ncdcr.gov/guides/AH_Best_Practices_Digital_Preservation_Final_2008_04_01.pdf

Plymouth City Council – *Plymouth and West Devon Record Office Digital Preservation Policy*
<http://www.plymouth.gov.uk/archivesdigitalpreservationpolicy>

Public Record Office of Northern Ireland (PRONI) – *Digital Preservation Strategy*
http://www.proni.gov.uk/digital_preservation_strategy.pdf

Purdue University Research Repository (PURR) – *PURR Digital Preservation Policy*
<https://purrr.purdue.edu/legal/digitalpreservation>

Swiss Federal Archives – *Digital Archiving Policy*
<http://www.bar.admin.ch/themen/00876/index.html?lang=en>

United Kingdom Data Archive – *Preservation Policy*
<http://data-archive.ac.uk/media/54776/ukda062-dps-preservationpolicy.pdf>

*United Kingdom Parliamentary Archives – *A Digital Preservation Policy for Parliament*
<http://www.parliament.uk/documents/upload/digitalpreservationpolicy1.0.pdf>

*United Kingdom Parliamentary Archives – *A Digital Preservation Strategy for Parliament*
<http://www.parliament.uk/documents/upload/digital-preservation-strategy-final-public-version.pdf>

University of British Columbia cIRcle – *Digital Preservation Policy DRAFT*
<http://circle.sites.olt.ubc.ca/policies-2/digital-preservation-policy/>

University of North Carolina at Chapel Hill: The Howard W. Odum Institute for Social Science –
Digital Preservation Policies <http://www.irss.unc.edu/odum/contentSubpage.jsp?nodeid=629>

LIBRARIES

*Archives New Zealand te Rua Mahara o te Kawanatanga and National Library of New Zealand Te Puna Matauranga o Aotearoa – *Digital Preservation Strategy*
http://archives.govt.nz/sites/default/files/Digital_Preservation_Strategy.pdf

Boston University Libraries: Digital Initiatives & Open Access – *Digital Preservation Policy*
<http://www.bu.edu/dioa/openbu/boston-university-libraries-digital-preservation-policy/>

British Library – *Digital Preservation Strategy*
http://www.bl.uk/aboutus/stratpolprog/collectioncare/discovermore/digitalpreservation/strategy/BL_DigitalPreservationStrategy_2013-16-external.pdf

Dartmouth College Library – *Digital Preservation Policy*
<http://www.dartmouth.edu/~library/digital/about/policies/preservation.html?mswitch-redirect=classic>

HathiTrust Digital Library – *Digital Preservation Policy* <http://www.hathitrust.org/preservation>

John Hopkins Sheridan Libraries – *JScholarship Digital Preservation Policy*
<http://old.library.jhu.edu/collections/institutionalrepository/irpreservationpolicy.html>

National Library of Australia – *Digital Preservation Policy 4th Edition* <http://www.nla.gov.au/policy-and-planning/digital-preservation-policy>

National Library of Wales – *Digital Preservation Policy and Strategy*
http://www.llgc.org.uk/fileadmin/documents/pdf/2008_digipres.pdf

The Royal Library: The National Library of Denmark and Copenhagen University Library – *Policy for long term preservation of digital materials at the Royal Library*

http://www.kb.dk/export/sites/kb_dk/da/kb/downloadfiler/PreservationPolicyDigitalMaterials_21092012.pdf

State Library of Queensland* – *Digital Preservation Policy*

http://www.slq.qld.gov.au/_data/assets/pdf_file/0020/109550/SLQ_-_Digital_Preservation_Policy_v0.05_-_Oct_2008.pdf

Statsbiblioteket State and University Library – *Digital Preservation Strategy for State and University Library, Denmark, version 2.0*

<http://en.statsbiblioteket.dk/about-the-library/dpstrategi>

University of Manchester Library – *Digital Preservation Strategy*

<http://www.library.manchester.ac.uk/aboutus/strategy/files2/Digital-Preservation-Strategy.pdf>

University of Massachusetts Amherst Libraries – *Digital Preservation Policy*

<http://www.library.umass.edu/assets/aboutus/attachments/University-of-Massachusetts-Amherst-Libraries-Digital-Preservation-Policy3-18-2011-templated.pdf>

University of South Carolina Libraries – *USCL Digital Preservation Policy Framework*

http://library.sc.edu/digital/USC_Libraries_Digital_Preserva.pdf

University of Utah J. Willard Marriot Library – *Digital Preservation Program: Digital Preservation Policy*

<http://www.lib.utah.edu/collections/digital/digital-preservation.php>

MUSEUMS

National Museum Australia – *Digital Preservation and Digitization Policy*

http://www.nma.gov.au/_data/assets/pdf_file/0013/1453/POL-C-028_Digital_preservation_and_digitisation-2.2_public.pdf

Rhizome at the New Museum – *Digital Preservation Practices and the Rhizome Artbase*

<http://media.rhizome.org/artbase/documents/Digital-Preservation-Practices-and-the-Rhizome-ArtBase.pdf>

***Note:** Archives New Zealand and the National Library of New Zealand co-authored a strategy, which I counted as two separate institutions. The United Kingdom Parliamentary Archives published two documents, one policy and one strategy, which I included as two separate documents, and chose to count the body as one institution, not two.

APPENDIX B: TAXONOMY CRITERIA DEFINITIONS

Access/Use – Statement of principle which allows continued access/use of digital content

Accessioning/Ingest – Process through which digital objects are added into a digital repository

Audit – Internal/external audits conducted for authenticity/integrity

Bibliography – Bibliographic information included within document

Collaboration – Collaboration with external organizations to share/meet digital stewardship objectives

Content Scope – Defines digital content accepted within repository

Glossary/Terminology – Definitions of terminology used within digital stewardship community

Mandates – Digital Stewardship commitments/responsibilities to designated community

Metadata/Documentation – Metadata documented for preservation throughout lifecycle

Policy/Strategy Review – Periodic review of policy/strategy

Preservation Model/ Strategy – Proposed procedures for continued preservation of digital content

Preservation Planning – Monitor digital steward environment for changes in technology and standards/best practices to ensure long-term preservation of digital content

Rights and Restriction Management – Restrictions related to intellectual property/copyright, license/donor agreements, security, and user access

Roles and Responsibilities – High-level roles/responsibilities of institution and/or staff

Security Management – Risk assessment, disaster planning, and/or security procedures

Selection/Appraisal – Selection/collection policies related to preservation of digital content

Staff Training/Education – Training/continued education encouraged and/or provided for staff or producer/submitter

Storage, Duplication, and Backup – Duplicate/backup digital content stored in multiple locations for long-term preservation

Sustainability Planning – Plans to address or maintain financial stability

APPENDIX C: 2008 – 2013 MATRICES

2008

Type	ARCHIVE				LIBRARY		
	Archival Process for Data and Image Preservation: <i>The Movement and Preservation of Digital Media</i>	Plymouth and West Devon Record Office Digital Preservation Policy	A Digital Preservation Strategy for Parliament	John Hopkins Sheridan Libraries	Digital Preservation Policy and Strategy	Digital Preservation Policy	
Document Title	North Carolina Department of Cultural Resources	Plymouth City Council	UK Parliamentary Archives	John Hopkins Sheridan Libraries	National Library of Wales	State Library of Queensland	
Creator							
Last Updated	2008	2008	2008	2008	2008	2008	
Creation Date	2006	2008	2008	2008	2003	2008	
Accessioning/Ingest		Yes	Yes		Yes	Yes	
Audit				Yes			
Bibliography	Yes					Yes	
Collaboration			Yes		Yes	Yes	
Content Scope		Yes		Yes	Yes	Yes	
Glossary/Terminology	Yes		Yes			Yes	
Mandates							
Metadata and Documentation	Yes			Yes	Yes	Yes	
Preservation Model/Strategy	Yes	Yes	Yes	Yes	Yes	Yes	
Preservation Planning			Yes		Yes		
Policy/Strategy Review	Yes		Yes				
Rights and Restriction Management	Yes						
Roles and Responsibilities			Yes	Yes	Yes		
Security Management	Yes		Yes	Yes	Yes		
Selection/Appraisal Staff							
Training/Education	Yes		Yes		Yes		
Storage, Duplication, and Backup	Yes	Yes		Yes		Yes	
Sustainability Planning			Yes	Yes	Yes	Yes	

Type	ARCHIVE		
	IDEALS Digital Preservation Policy	Digital Archiving Policy	A Digital Preservation Policy for Parliament
Document Title	Illinois Digital Environment for Access to Learning and Scholarship (IDEALS)	Swiss Federal Archives	United Kingdom Parliamentary Archives
Creator			
Last Updated	2009	2009	2009
Creation Date	2009	2009	2009
Access/Use	Yes	Yes	Yes
Accessioning/Ingest		Yes	Yes
Audit			Yes
Bibliography			Yes
Collaboration	Yes	Yes	Yes
Content Scope	Yes	Yes	Yes
Glossary/Terminology		Yes	Yes
Mandates	Yes	Yes	
Metadata and Documentation		Yes	Yes
Preservation Model/Strategy	Yes	Yes	Yes
Preservation Planning			Yes
Policy/Strategy Review		Yes	Yes
Rights and Restriction Management			Yes
Roles and Responsibilities		Yes	Yes
Security Management		Yes	Yes
Selection/Appraisal		Yes	Yes
Staff Training/Education		Yes	Yes
Storage, Duplication, and Backup		Yes	Yes
Sustainability Planning		Yes	Yes

Type	ARCHIVE			LIBRARY		
	Digital Preservation Policy	Digital Preservation Policy	Interim Digital Preservation Policy	Digital Preservation Policy	Digital Preservation Policy	USCL Digital Preservation Policy Framework
Document Title						
Creator	Cheshire Archives	Hampshire County Council Archives	London Metropolitan Archives	Hathi Trust Digital Library	University of South Carolina Libraries	
Last Updated	2010	2010	2010	2010	2010	2010
Creation Date	2010	2005	2008	2010	2010	2010
Access/Use	Yes	Yes			Yes	Yes
Accessioning/Ingest						
Audit				Yes		
Bibliography						
Collaboration						Yes
Content Scope		Yes	Yes	Yes		Yes
Glossary/Terminology		Yes				
Mandates						Yes
Metadata and Documentation				Yes		
Preservation Model/Strategy	Yes	Yes	Yes	Yes		Yes
Preservation Planning						
Policy/Strategy Review	Yes		Yes			Yes
Rights and Restriction Management						
Roles and Responsibilities			Yes			Yes
Security Management	Yes	Yes				
Selection/Appraisal	Yes					Yes
Staff Training/Education						
Storage, Duplication, and Backup	Yes	Yes	Yes			
Sustainability Planning						

Type	ARCHIVE			LIBRARY/ARCHIVE		LIBRARY		MUSEUM
	Policy and Procedures Guide	Digital Preservation Policy	Preservation Policy	Digital Preservation Policies	Digital Preservation Strategy	Digital Preservation Policy	Digital Preservation Policy	Digital Preservation Practices and the Rhizome Artbase
Document Title	Florida Digital Archive	National Archives of Australia	UK Data Archive	University of North Carolina at Chapel Hill: The Howard W. Odum Institute for Social Science	Archives New Zealand te Rua Mahara o te Kawanatanga and National Library of New Zealand Te Puna Matauranga o Aotearoa	Boston University Libraries	University of Massachusetts Amherst Libraries	Rhizome at The New Museum
Creator								
Last Updated	2011	2011	2011	2011	2011	2011	2011	2011
Creation Date	2006	2009	2011	2011	2011	2011	2011	2011
Accessioning/Ingest	Yes		Yes	Yes			Yes	Yes
Audit				Yes				Yes
Bibliography								
Collaboration		Yes	Yes			Yes	Yes	
Content Scope		Yes	Yes	Yes		Yes	Yes	Yes
Glossary/Terminology	Yes		Yes					
Mandates				Yes				
Metadata and Documentation								
Preservation Model/Strategy	Yes	Yes	Yes			Yes	Yes	Yes
Preservation Planning			Yes					Yes
Policy/Strategy Review			Yes					
Rights and Restriction Management	Yes	Yes						Yes
Roles and Responsibilities	Yes		Yes	Yes		Yes	Yes	
Security Management	Yes		Yes					
Selection/Appraisal Staff				Yes			Yes	
Training/Education								
Storage, Duplication, and Backup	Yes		Yes					
Sustainability Planning	Yes		Yes	Yes				

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Type	ARCHIVE					LIBRARY					MUSEUM
	Document Title	Digital Preservation Policy	Digital Preservation Policy	Policy for long term preservation of digital materials at the Royal Library	Digital Preservation Strategy for State and University Library, Denmark Version 2.0	Digital Preservation Strategy	Digital Preservation Policy	Digital Preservation Policy	Digital Preservation Strategy	Digital Preservation Policy	
Creator	Purdue University Research Repository (PURR)	Dartmouth College Library	The Royal Library, The National Library and Copenhagen University Library	Statsbiblioteket State and University Library	University of Manchester Library	University of Utah, J. Willard Marriott Library, Digital Preservation Program	National Museum Australia				
Last Updated	2012	2012	2012	2012	2012	2012	2012	2012	2012	2012	2012
Creation Date	2012	2011	2009	2012	2012	2010	2010	2012	2012	2012	2012
Accessioning/Ingest	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Audit											
Bibliography	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Collaboration	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Content Scope	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Glossary/Terminology	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Mandates	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Metadata and Documentation		Yes		Yes							Yes
Preservation Model/Strategy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Preservation Planning											
Policy/Strategy Review		Yes	Yes	Yes							
Rights and Restriction Management			Yes								Yes
Roles and Responsibilities	Yes				Yes					Yes	Yes
Security Management					Yes					Yes	Yes
Selection/Appraisal	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Staff Training/Education		Yes	Yes	Yes	Yes						
Storage, Duplication, and Backup	Yes	Yes			Yes						
Sustainability Planning		Yes	Yes	Yes	Yes					Yes	Yes

Type	ARCHIVE		LIBRARY	
	Digital Preservation Policy DRAFT	Digital Preservation Strategy	Digital Preservation Strategy	Digital Preservation Policy 4th Edition
Creator	University of British Columbia cIRcle	Public Record Office of Northern Ireland (PRONI)	British Library	National Library of Australia
Last Updated	2013	2013	2013	2013
Creation Date	2001	2013	2011	2001
Access/Use				Yes
Accessioning/Ingest				
Audit				
Bibliography			Yes	Yes
Collaboration		Yes	Yes	Yes
Content Scope	Yes	Yes		Yes
Glossary/Terminology	Yes		Yes	
Mandates	Yes			
Metadata and Documentation				
Preservation Model/Strategy	Yes	Yes	Yes	Yes
Preservation Planning		Yes		
Policy/Strategy Review	Yes	Yes		
Rights and Restriction Management	Yes			
Roles and Responsibilities	Yes	Yes	Yes	
Security Management		Yes	Yes	
Selection/Appraisal				
Staff Training/Education		Yes		Yes
Storage, Duplication, Backup and				
Sustainability Planning		Yes	Yes	Yes

APPENDIX D: TAXONOMY ELEMENT RANK*

Taxonomy Criteria	Element Totals	Archives	Libraries	Museums	North America	Europe	Australia and New Zealand
Preservation Model/Strategy	31	14	12	2	13	14	4
Content Scope	24	13	11	1	10	9	5
Collaboration	20	8	11	1	8	9	3
Access/Use	19	10	9	0	7	10	2
Roles and Responsibilities	19	11	10	1	9	8	2
Glossary/Terminology	17	10	7	1	6	8	3
Security Management	15	9	5	1	4	10	1
Storage, Duplication, and Backup	14	10	4	0	5	8	1
Bibliography	13	3	9	1	6	4	3
Policy/Strategy Review	13	10	4	0	4	8	1
Sustainability Planning	13	5	8	0	5	7	1
Selection/Appraisal	11	5	5	1	6	4	1
Metadata and Documentation	10	3	6	1	4	4	2
Staff Training/Education	10	5	5	0	2	8	1
Mandates	9	6	4	0	7	1	1
Rights and Restriction Management	8	4	1	2	4	2	2
Accessioning/Ingest	7	4	2	1	4	5	0
Audit	7	3	4	1	4	2	1
Preservation Planning	7	4	2	1	1	6	0

*Note: In some instances, the **Element Totals** and **Archives**, **Libraries**, and **Museums** amounts will not be equal. The **Element Totals** reflect the amount of individual documents, which included a specific criterion within its pages. The **Archives**, **Libraries**, and **Museums** amounts reflect the number of institution *types*, which included a specific criterion within its document. For example, 13 documents included a policy/strategy review, while 14 institution types, 10 archives and 4 libraries, used the element within their policies. Remember that Archives New Zealand and National Library of New Zealand co-authored a digital preservation strategy and are referred to as two separate institutions types (archive and library).