

Building Trust in the Public Record: managing information and data for government and community

A Response from the Digital Preservation Coalition

13th August 2020

Introduction

1. The Digital Preservation Coalition (DPC) welcomes the opportunity to respond to a draft of *Building Trust in the Public Record: managing information and data for government and community* published by the National Archives of Australia (NAA) as well as the supporting evidence that supports this draft.
2. This response introduces the context of the DPC and its work and the context of the draft policy from the perspective of changing practice within the archival profession, before moving to high level reflections on the draft policy and specific line-by-line comments. The text was drafted primarily by DPC staff.
3. DPC members have been invited to comment on the draft policy individually and from their own perspectives. Practical constraints of time and process mean DPC members have not had sight of the DPC's contribution, nor has the DPC been provided with any early drafts of comments from members.

About the Digital Preservation Coalition

4. The DPC is an international not for profit membership organisation with 108 members around the world, including members across Australia and an office at the University of Melbourne. We exist to ensure a secure digital legacy. We enable our members to deliver resilient long-term access to digital content and services, helping them to derive enduring value from digital assets and raising awareness of the strategic, cultural, and technological challenges they face. DPC is vendor and technology neutral, so can give clear and impartial advice on the maturity and suitability of different digital preservation tools, products and techniques.
5. DPC has a significant track record in the development of digital preservation policy among our members as well as the provision of subject specialist insight to support and guide implementation. Recent examples include:
 - [Digital Preservation Policy Toolkit](#) (April 2020): guidance in the development of digital preservation policy with templates and case studies.
 - [Digital Preservation Procurement Toolkit](#) (June 2020): guidance on the procurement and design of digital preservation products and services in diverse contexts.
 - [The Global List of Digitally Endangered Species 'The BitList'](#) (November 2019): identifying at risk digital content and providing models of good practice to ensure their survival.
 - [Executive Guide to Digital Preservation](#) (May 2019): briefing decision makers and policy advisors on the benefits of embedding digital preservation within organisations of all kinds.

DPC is drawing upon that expertise and experience in response to the draft policy.

Archival practice and digital disruption: a global challenge

6. The rise of new technologies has created an unprecedented challenge to archives globally. The archive sector, especially national agencies with strategic leadership roles like NAA, have of necessity been at the forefront of re-imagining the purpose and function of an archive and by extension the skills, resources, and processes that are required to manage information and data for the long term. Established archival practices and values like authenticity, arrangement, appraisal, disposal, and sensitivity review have all been challenged and redesigned to cope with the digital turn in record creation and generation.
7. Digital preservation has emerged in recent years as a fast-moving and growing community of practice, initially in the archive sector but now more widely, which is of ubiquitous relevance, but in which capability is unevenly distributed. Capacity erodes quickly, establishing a need for continuing reconnaissance to ensure skills, technology, and policy remain fit for purpose.
8. By 'digital preservation' we mean the 'series of managed activities necessary to ensure continued access to digital materials for as long as necessary.' It is defined very broadly, including 'all of the actions required to maintain access to digital materials beyond the limits of media failure or technological and organisational change. Those materials may be records created during the day-to-day business of an organisation; "born-digital" materials created for a specific purpose (e.g. teaching resources); or the products of digitisation projects.'¹
9. The disruption to archival practice originates outside of the archive, and outside the digital infrastructures on which records are created. Instead, the economic and social configuration of the technology sector which has promised and enabled profound, unprecedented opportunities for collaboration, communication, and efficiency has simultaneously intruded a volatile set of dynamic dependencies typically manifesting as obsolescence, media degradation, and organisational change. There are many elements of this challenge. The practice of digital preservation is still emergent and, because the dependencies which it addresses are volatile, it will remain dynamic. Consequently, there is no 'once and for all' solution that can be applied within the archive.
10. Digital preservation is typically understood as a technology problem in the first instance whereas experience of DPC members is that it is a socio-technical problem which has three parts: technology, resources and organisation. Any measure of organisational effectiveness therefore needs to evaluate all three elements.

Thematic Reflections

11. Digital preservation is a whole of government issue. Experience of DPC members typically indicates that preservation cannot be left to benign neglect. The preservation pathway of digital records is defined by the applications and computing environment in which it is created. Critical failures in preservation arise when records become locked into the unsustainable or unsuitable systems. Consequently, preservation of records cannot be left to the archive but needs to be inserted at the outset: whether at the point of creation, or earlier in the requirements through which record systems are designed or procured. The draft policy shows that NAA understands this, recognising also the challenge of communicating this requirement to such a large and diverse audience. Consequently, the DPC offers its help in amplifying and extending the messages that NAA has crafted to build a culture that makes digital preservation possible across all of government.
12. In particular, the importance of developing skills in data creators is essential to highlight and to tackle as soon as possible. It is unreasonable to hope that systems and tools for digital

¹ <https://www.dpconline.org/handbook/glossary>

preservation applied at the end of document lifecycles will be sufficient. Skilled practitioners who understand various aspects involved in long-term preservation are needed throughout the management lifecycle of valuable information assets. The DPC offers significant training resources on digital preservation which complement and extend those already provided by NAA. We invite the NAA to exploit these, and through membership to guide and supplement their development to the best advantage of NAA's stakeholders across government and the DPC's membership world-wide.

13. System procurement is also an opportunity to embed digital preservation capability across government. The barriers or enablers to preservation are often encoded within system architectures or workflows. For example, detailed specification and verification of file formats or transactional data mean that records are 'preservation ready' at the point of creation. In order to achieve this it is necessary to include preservation capability within system procurement. Therefore, we encourage NAA to provide preservation capability guidance for government agencies during the requirements gathering and acceptance testing phases of IT procurement. This is not a trivial effort and we believe NAA should be funded sufficiently to support it. This will have two effects: a set of infrastructures across government where records are preservation-ready at the point of creation thus optimising the transparency of government and sustainability of government record-keeping; and, considering the size of the budgets in question, a significant influence on IT vendors to plan preservation from the outset as part of system design.
14. Collaboration between and across varied sectors is key to progressing effective long-term management and preservation of valuable information, and to avoid duplication of effort wherever possible. The digital preservation community growing internationally provides a ready-made opportunity to enhance collaborative ways of working, such as for development of training modules and skills uplift, for determining preservation planning and risk assessment, for assessment of tools and technology and more. Experience of DPC members is that sharing capacity builds capacity. The draft policy is largely silent on the opportunities for collaboration that would accrue for the NAA as well as its many partners. Therefore, we invite NAA to identify and consider how policy objectives might be furthered in partnership, and in turn what NAA might offer into such collaborations. In doing so we offer the DPC and its membership as a platform and catalyst for partnership.
15. Sustainable practice for digital preservation is increasingly becoming a concern to the international community, as the reliance of digital preservation on technology creates adverse environmental impacts. Thoughtfully implemented, preservation provides a framework for managing data more efficiently and thus is a foundational step to reducing carbon consumption. However, power-hungry workflows or badly designed storage can lead to inadvertent overconsumption. There is an opportunity to include aspirations in policy for environmentally sustainable practice more explicitly, such as including a commitment to investigating and implementing efficient use of technology and associated processes for preservation; to assuring efficient selection and accountable destruction of data as required to limit expending unnecessary resources. The DPC welcomes the opportunity to explore this topic in partnership with NAA.
16. The draft policy brings an explicit and meaningful focus on the importance of the community (p5) and the need to build and maintain trust of stakeholders. This is particularly welcome. The aspiration of the title with respect to "building trust" is appropriately represented in the text.
17. The question arises about what the NAA might want to do with this trust. In particular there is scope to include discussion of the NAA aspirations to lead, uplift, and support the archives sector; and a possible role within the wider information management community with respect to digital preservation across the whole of Australia, within and beyond government agencies.

Such leadership has been effective and transformative to the development of digital preservation in other countries, but it also invites a consideration of the institutional scope of NAA such as defined in the Archives Act of 1983, as well as practical capacity. Distributed leadership, typically through collaboration, is an attractive and practical way to extend influence when capacity is limited, or the constraints of legislation and policy are reached. The DPC is available to support the NAA delivering such aspirations.

18. The associated *'Products and Advice Listing'* which was published alongside the draft policy is a case in point. It is a remarkable document, not only for the formidable output which it signposts but also because of the relatively modest profile which these resources enjoy. Some elements of the guidance, such as *'Outsourcing digital storage'* or E-Learning content like *'What's in a name'* are of very high quality in terms of content and production value and of universal relevance. It is telling that key members of the DPC community, with insights into all manner of technical and operational guidance on digital preservation around the world, were unaware of these assets. That may represent a failure of the DPC's own horizon scanning: but it also represents an opportunity to present the work of NAA to a much wider community and with significant reputational benefits. Therefore, DPC seeks to help NAA amplify these messages and maximise the impact of NAA's investment.
19. Digital preservation involves many different communities of practice and expertise, and it helps to be explicit with meanings and assumptions. While the draft policy is internally consistent in usage it may help readership and enhance impact to provide brief and clear definitions for key terms, especially "accountably destroyed" and "digital preservation" in the policy, terms that are interpreted in different ways by different stakeholders. The DPC provides a simple Glossary of key digital preservation terms in the [Digital Preservation Handbook](#) which may usefully be referenced instead.

Line by line commentary

20. p.7, second paragraph 2: *"Over time, formats and systems become outdated and need active intervention to preserve the accessibility of content."* Suggest adding 'integrity' or similar to this sentence. Ensuring the content is what it purports to be is as important as the ongoing accessibility of that content and is easily lost by well-intentioned but ill-judged efforts to sustain access.
21. p.10, fourth paragraph (and elsewhere): if mentioning migration specifically, it would be appropriate to mention other and emergent preservation strategies (such as emulation or encapsulation) or keep references broader e.g. 'various preservation strategies may need to be implemented' or similar, unless migration is the only preservation strategy that NAA will use for digital information assets.
22. p. 11 final paragraph: this paragraph seems to overlook mention of accountable destruction guidance, especially as these assets are defined as 'no longer required for agency business purposes'? Could the policy direction be made clearer for how to deal with legacy assets, for example, to ensure there is a robust plan for review of their sentencing requirements then accountable destruction? Or to include preservation plans for legacy assets as part of guidance documentation?
23. p. 12 first and second paragraphs *'work is digital by default'* and *'analogue processes are regularly reviewed and replaced with digital processes'*: is there any grey area here, such as an acknowledgement that where appropriate, analogue work and processes could be retained? Presumably not all information assets will be digital. Noted that p.16 has more clear guidance on this: *'Manage all information assets created in digital format from 1 January 2016 digitally'* – can this perhaps be consistently reiterated in the earlier reference on p. 12? Perhaps *'analogue*

processes could be clearer. Does this mean that analogue processes pertaining to the management of digital assets should be transformed to digital?

24. p. 14, row seven '*Register your information assets where there is business or community value in doing so*': if this action were mandatory rather than recommended it would send a strong message of commitment to the 'building trust in the public record' aspiration of the policy, as well as better enabling preservation processes.
25. p. 15, second table, row one '*Transfer "retain as national archives" information assets as soon as practicable, or within 15 years after creation, to the care of the National Archives*': this is a long time span for digital assets given the rate of technology change and other systemic dependencies. Is it possible to introduce a recommendation for inspection and assessment of such materials by the NAA within 5 years of creation, albeit accepting that materials may not be transferred to NAA for several years?
26. p. 15, second table final row '*sentence digital information assets and (accountably) destroy digital information assets*'. Should this be mandatory rather than recommended for government agencies given the responsibility of the NAA to authorise the retention and destruction of Australian Government information assets? How practical would that be?

Conclusions

27. In conclusion the DPC welcomes the opportunity to comment on this policy. We welcome any questions or observations that arise from our comments and would be glad to provide further clarification or discuss relevant action points that may arise.
28. In summary: as far as digital preservation is concerned, sharing capacity builds capacity. We welcome and encourage the NAA's disposition to collaboration in the sure knowledge that by sharing its expertise NAA will create a solid basis through which its own capacities will be enhanced.

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