Building an Aotearoa New Zealand-wide Digital Curation Community of Practice

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Abstract

How do you build awareness and capability for digital curation knowledge and experience across a country? The National Library of New Zealand has a statutory role in supporting and advancing the work of Aotearoa New Zealand libraries to ensure documentary heritage and taonga is collected and preserved across the country’s memory system. This role includes supporting the collecting and curation of born-digital content. Aotearoa New Zealand’s Gallery Library Archive Museum (GLAM) sector is small but varied and diverse, so requires a flexible and adaptive plan to grow experience and capability in this area. This paper will describe the background research undertaken to gain a better understanding of the current environment, describe the development and delivery of pilot training in managing born-digital archival content, and outline our next steps. Driving this effort has been two foundational principles: 1) theory and practice are always in conversation with each other and practical hands-on experience is as important as theoretical knowledge and understanding; and 2) the work of growing capability should be done in a spirit of collaboration and partnership, meeting each other as equals and learning from each other.
Introduction

The National Library of New Zealand Te Puna Mātauranga o Aotearoa has a strong programme of born-digital archival collecting, management, and preservation. The first digital archivist in the National Library was appointed in the early 2000s. There are now two digital archivists who manage and support born-digital collecting and processing across the organisation. The National Library was a partner in the development of the Ex Libris Digital Preservation System, Rosetta, and with the establishment of the National Digital Heritage Archive and implementation of Rosetta in 2008, has had an active digital preservation programme for over ten years. However, the larger New Zealand-wide cultural heritage and memory sector has not necessarily grown at the same speed in digital curation capability during that period.

In 2015 we observed within our digital archives programme that we were receiving noticeably more requests for advice and assistance from other organisations around the country. While our evidence was only anecdotal, we were under the impression that more cultural heritage and memory organisations across Aotearoa New Zealand were beginning to collect born-digital content. We understood we had a leadership role to play across the sector to provide advice and guidance, but we also started from the premise that collecting, managing, preserving, and curating born-digital archival content to preserve Aotearoa New Zealand’s documentary cultural heritage was a sector or community-wide project. This was not something we could or should be doing alone or in isolation.

This paper will describe the environmental scan of current collecting and curation practices and report on those findings. Next it will describe the initial pilot workshops that were developed to build capability in this area and report on the outcomes of this work. The paper will explore the library’s belief that collaboration across the sector will be key to building the skills and capabilities necessary to manage Aotearoa New Zealand’s born-digital cultural heritage and taonga over time. It will describe some of the collaborative activities we have engaged in, and suggest a number of practices and perspectives necessary when building skill across a diverse and varied sector. Finally, the paper will describe our next steps for continuing to build and support a small community of practice for managing and curating born-digital content, and reiterate that while there are good practices for digital curation, there is currently no one “best practice” for this work.

The Library’s Strategic Priorities and Collaborative Visions

In December 2016 the Library released its strategic direction and aspirations to 2030. This work includes implicit and explicit statements that leadership is as much about collaborating and working effectively with others as it is about directly taking the lead. The Library understands that its ambitious vision will be accomplished through effective collaboration with others across the sector: “We lead and collaborate. We provide sector

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1 Taonga is a te reo Māori word and concept to describe a treasured item, natural resource, document, artefact, or idea and is used to describe our collections and the level of care we apply to them for Aotearoa New Zealand.
leadership and work with partners to create knowledge networks and information systems,” and “we work with communities to help people fully participate in the cultural and economic life of New Zealand” (National Library of New Zealand Strategic Directions, 2016). The Library has identified a number of strategic visions in three streams, Reading, Taonga, and Knowledge. While there are many overlaps between focus areas and all the areas are meant to be complementary, there are a number that specifically focus building the digital curation capabilities across the sector, these include:

- New Zealand’s collections of documentary heritage and taonga will be well-managed and consistently cared for.
- Born-digital content reflecting contemporary New Zealand life and knowledge will be readily available for access and research.
- New Zealand’s collecting institutions will have access to expertise to use new technologies and tools that preserve digital heritage.
- Organisations will integrate digital preservation into their collecting policies and professional capabilities to maintain access to collections in the future.
- Collections in New Zealand’s cultural and heritage institutions will reflect the diversity of people in New Zealand and the Pacific, and the importance of Māori as tangata whenua
- New Zealand’s cultural institutions will be able to employ people with diverse cultural, language and knowledge expertise (National Library of New Zealand Strategic Directions, 2016).

Notable in these ambitions is that none of them are specific to the National Library; rather they focus on how we can ensure that the documentary heritage and taonga across Aotearoa New Zealand are well-managed, that our collections are representative and accessible, and that our knowledge system has access to technological tools and systems, but also expertise. Finally, our cultural institutions will have access to a strong and knowledgeable workforce of people with diverse backgrounds and expertise. By framing our ambitions outward or sector-wide, these strategic directions will necessarily require that we collaborate effectively.

Framing collaboration as central to the work of the National Library’s digital curation professional development training fits within the larger direction internationally of libraries and related cultural heritage fields. Indeed, the recent IFLA Global Vision report included the statements:

“We see the need to build collaboration and partnerships. We recognise working collaboratively amongst ourselves, and in partnership with those outside, as essential for creating a strong, united library field. We need to develop a spirit of collaboration. Understanding and addressing actual and perceived barriers to collaboration will help end a tendency to work in isolation, and realise the vision of a united library field.” (IFLA, 2018).

It also fits within similar projects internationally that have a specifically digital curation or preservation focus. For example, the Digital POWRR Project (Preserving Digital Objects with Restricted Resources) reported that it was through their collaboration with regional organisation and professional associations that their training project was successful (Spalenka, Schumacher and VandeCreek, 2017). Nancy
McGovern has argued at IDCC just last year that collaborating across communities is essential for ensuring sustainable programmes and services (McGovern, 2018).

**A Framework for Collaborative Learning**

A Community of Practice (CoP) is defined as a “group of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis” (Wenger, McDermott and Snyder, 2002). For the purpose of our work, it is the idea of a group that comes together to share and gain knowledge related to a specific field. CoPs are often informal groups and self-motivated. They are characterised by how membership cuts across organisational boundaries or job descriptions (Anderson, 2017; Kim, 2015). These characteristics allow us to flow with the context in which we work instead of against it. Understanding collaboration specifically as participating in a community of practice, and seeking to build born-digital competencies within this context, is a valuable exercise because it reflects the reality of where training and professional development often occur in Aotearoa New Zealand’s GLAM sector. For example, in Aotearoa New Zealand there are currently no higher-education courses focusing on digital curation, digital preservation, or born-digital collecting so training happens in the workplace once practitioners are already distributed around the country. Management of born-digital material also happens across a variety of organisations, such as national institutions, university and public libraries, school archives, Iwi, and city councils. Individuals with responsibility for born-digital content may have wildly different job titles or not meet in other professional contexts. Rather than having a few individuals from large institutions who position themselves as experts, understanding collaboration as a CoP allows us to acknowledge that everyone has something to teach and something to learn.

**The Survey**

In developing our approach to building capability we began with the premise that different organisations across the country would be at different points in the development of a digital curation programme and would have differing priorities or needs dependent on their local context. To provide the most effective assistance and find collaborative partners it would be important to first have a system-wide view. This in turn would inform the growth of a CoP.

To understand the current state of born-digital collecting, management, and preservation across New Zealand we started with a survey to gauge current capabilities. We wanted to uncover data about how well prepared and positioned the Gallery, Library, Archives, and Museum (GLAM) sector is to collect and preserve these collections in memory institutions, and to measure New Zealand’s progress against international benchmarks (Dooley and Luce, 2010; Helmus, 2015).

The survey (Moran, 2017a) revealed that institutions across New Zealand are collecting born-digital material, and expect to collect more in the near future. 81% of survey respondents reported already holding born-digital archival materials and 86% reported expecting to be collecting and managing born-digital materials in the next two years. Perhaps most striking was that all of New Zealand university libraries participated in the survey and all reported collecting or expecting to collect born-digital content in the next two years. Similarly, 93.5% of museums also reported already collecting or expecting to be collecting born-digital content in the next two years. This was stark evidence that there was active selection and collection of born-digital content across
Aotearoa New Zealand already happening. The survey also revealed the diverse nature of born-digital formats being collected. Born-digital photographs, audio, and video were, perhaps unsurprisingly, the formats collected by most respondents, but significant numbers of respondents reported collecting manuscripts and personal papers, archival organisational records, oral histories, electronic records, email, and data sets.

A key theme running throughout responses and across institutional type and size was an identified lack of staff with the knowledge and expertise to manage born-digital archival material and a desire for more training. While survey results illustrated that institutions and organisations across Aotearoa New Zealand were already collecting born-digital materials, they also demonstrated that there was a clear lack of staff expertise, experience, and infrastructure to manage and provide access to that material in the long-term. The majority of respondents reported that they are already collecting born digital, but only 32% reported having a plan or strategy already in place for long-term management and preservation. The survey also revealed that 61% of respondents felt that their greatest impediment to digital collecting was staff with the necessary training and expertise. When asked to rank future institutional needs, most respondents ranked building staff expertise with born digital content as their highest requirement for collecting, managing, and preserving born-digital archival materials. When we dug deeper into the processes organisations were currently undertaking to manage their born-digital materials, the need for more staff expertise was clear. Almost 90% of those institutions held born-digital materials on obsolete physical digital media, but only a third of these were actively transferring content from media carriers onto more secure and stable storage. Again, a comment in this section suggested staff training was a major issue: “[we] would like to, but lack training, direction, equipment, and staff.”

The survey also revealed a strong desire for collaboration and information sharing among respondents, illustrating again the need for training and guidance as well as the potential to build a community of practice in this area. Some of the comments in the final open ended question asking for any further thoughts reinforced this theme:

‘I would welcome a collaborative approach to knowledge sharing, planning and collecting digital born materials between New Zealand collecting institutions working in this space. [Name redacted] hopes to begin piloting targeted collecting of digital-born manuscript and ephemera materials by the end of 2016, to work out what’s involved – particularly looking at digital materials(iterations which are progressively replacing physical formats like letters, diaries, invitations etc.’

‘Support from national institutions for digital repositories, practice, training and financially viable solutions for born digital material is lacking’

‘Born-digital content is important, and will become a priority…once we have better control over the physical collection. As a small regional library, we would like to benefit from the research/processes of larger, municipal libraries with greater resources in this area’ (Moran, 2017a).

This survey was the first of its kind in Aotearoa New Zealand to look specifically at the current state of born-digital archival collecting. While we should be cautious not to
make too many extrapolations from comparisons to surveys undertaken in other countries and international regions, it is worth noting some basic international trends. As Figure 1 shows, Aotearoa New Zealand respondents are collecting born-digital content at a similar or slightly higher rate than respondents in surveys in North America, Europe, and the United Kingdom/Ireland. While Aotearoa New Zealand respondents reported the highest levels of born-digital material, this survey was also the only one to focus specifically on born-digital archival material. It is likely our sample was weighted toward those already collecting or otherwise interested in collecting or curating born-digital content.

![Figure 1. Percent of survey participants reporting born-digital holdings by survey.](image)

Like the Aotearoa New Zealand survey, previous surveys (Dooley and Luce, 2010; Helmus, 2015) also noted a skills gap in the area of education and training to work confidently with born-digital content, and the identification of born-digital as a key area for future staff training and development.

The results from the Aotearoa New Zealand survey suggested an increased focus on professional development and practical experience managing born-digital materials should be a top priority for organisations across the country. The survey provided evidence that professional development was needed before organisations could feel confident managing these collections. The survey also indicated that a collaborative approach would be welcomed.

**Pilot Workshops**

Furnished with the evidence from the survey findings, the Library’s digital archivists designed two pilot workshops to further test the appetite for born-digital training and advice. This included an environmental scan of available professional development and training already available in Aotearoa New Zealand. There are currently only two universities in the country delivering courses in Library and Information studies and only one that provides Masters or PhD level study and coursework. As noted above, neither university currently offers courses in digital curation, born-digital archives, or digital preservation.

The workshops were designed by the Library’s digital archivists with support and input from other parts of the Library, including digital collections and digital preservation staff. The design of the workshops was a mixture of lecture-style information sharing, as well as hands-on demonstrations and practice, and time to
workshop future directions and build relationships. The workshops were also designed to be flexible and modular so that they could be adapted and scalable as needed.

The initial workshops were designed as all-day workshops in four parts. Participants were first introduced to basic concepts of what born-digital content is, where you might find digital content, and how to handle physical digital carrier media. This also included a discussion of conducting an inventory of born-digital content already held by an organisation, and describing or accessing any born-digital content not yet under any intellectual control; much of this introductory material was developed using the OCLC report “You’ve Got to Walk Before You Can Run: First Steps for Managing Born-digital Content Received on Physical Media” (Erway, 2012). The second and largest part of the workshop was a detailed walk through of the basic steps of transferring born-digital content off media to secure storage and included discussions of virus checking, fixity checking, transfer methods including both disk imaging and copying logical directories and files, creating and using file inventories and lists, and file format identification using PRONOM and DROID. This section was a mix of lecture, then demonstration, then hands on exercises and discussion for each step of the process. The result was that by the end of this portion of the workshop participants should have seen each step of the process performed, had the experience of performing the process, and hopefully gained an understanding of why the step was undertaken and what it accomplished.

The third section of the workshop included a brief discussion of arrangement and description of born-digital materials, how to manage and plan for digital storage and use your available collection or content management system (especially if you didn’t already have a digital preservation system in place, which none of our participants did). Next there was a small group exercise to map out what a born-digital processing workflow might look like back at home institutions, and how to incorporate a born-digital workflow into existing infrastructure and available tools. This final exercise proved useful, as it gave workshop participants time to think about not just what they learned but how they might take that information away and apply it to the practical reality of their home organisations. Finally, there was a group discussion of “when things go wrong”. This provided time for the workshop facilitators to share experiences of issues, difficulties, and lessons learned not already covered. This was also an opportunity for group discussion, where participants shared their own experiences. After spending a day together learning, they were well-prepared to have an open and informationally rich conversation about the sometimes messy reality of working with born-digital archival content.

The workshops were delivered in collaboration with both the national archival and library professional bodies in New Zealand, the Archives and Records Association of New Zealand Te Huinga Mahara (ARANZ) and the Library and Information Association of New Zealand Aotearoa Te Rau Herenga O Aotearoa (LIANZA) respectively. This allowed us to consult with leaders of both organisations about the needs of their members and what they thought would be most useful to participants. The co-sponsorship of these workshops by the two professional bodies helped establish that these workshops were a priority not just of the National Library, but across the sector. It also ensured that participants at the workshops felt welcome and their professional backgrounds respected regardless of what sector they worked in. Additionally, working in collaboration with these two organisations figuratively opened the door to future collaborations. In the process of developing and delivering the pilot workshops, and transparently reporting back on our work, we identified other organisations that wanted to collaborate with us in future workshops and trainings. As more staff in New Zealand libraries, archives, and museums gain experience working
with born-digital materials and develop expertise, we hope to build a collaborative network of practitioners. This in turn will help the development of regional digital collecting expertise, capable of delivering more regional workshops in the future (Moran, 2017b).

The two pilot workshops were limited to 20 people and participants were required to bring their own laptops with a suite of pre-defined open source tools and applications already installed. We took time to ensure that all the tools were freely available, relatively easy to install and had a graphical user interface (GUI) so they could be used in the workshop with only minimal instruction. Through sponsorship from the professional bodies, we were able to offer the workshops at a subsidised rate of $50 per person. Following announcement on the two country-wide library and archives listserves, as well as the National Library website, both workshops were fully booked within a week; in total 41 people attended the two pilot workshops.

Initial evaluation of the two workshops showed that participants unanimously believed their expectations for the workshop were met or exceeded. They overwhelmingly stated that they most enjoyed the practical exercises, tool demonstrations, workflow examples, and the discussions of potential issues, difficulties, and lessons learned. Perhaps most importantly, 85% of workshop attendees stated they felt more confident about approaching collecting and managing born-digital materials, and 90% said the workshop had increased their technical understanding of born-digital collecting issues.

More Workshops and Community Building

Following the success of the two 2017 pilot workshops, further workshops were delivered in late 2017 and 2018. These workshops allowed us to extend the reach of our collaborations. This included a Pacific workshop in Fiji through the PARBICA (Pacific Region Branch of the International Council on Archives) conference, as well as partnering with organisations to deliver workshops attached to annual conferences within Aotearoa New Zealand.

In 2018, a stand-alone workshop was held at the request of the University of Auckland for its special collections staff, and workshops were run alongside two heritage sector conferences. The University of Auckland workshop included a half day of hands-on time working with unprocessed born-digital materials from the University’s collections as a test case for the workflows which had been demonstrated in the first half of the workshop.

The workshops at the GLAM sector conferences were available to conference attendees, but also open as stand-alone events to those who may not have been able to attend the main conference itself. In August 2018, a workshop was held in ahead of the ARANZ annual conference, Nga Taonga Tuku Iho 2018: a conference on Māori Archives and Records in the central North Island city of Rotorua. This provided an opportunity to lead the workshop outside of the major urban areas where it had been piloted, and, due to the conference theme, resulted in a larger number of Māori archivists, librarians, and museum staff attending the workshop. As a result, there was a greater emphasis on biculturalism and tikanga (Māori customs and protocols) than in previous iterations of the workshop. The workshop also provided space for conversations about the traditionally western nature of digital preservation practice, and ways in which Māori world view, knowledge and ways of thinking might be applied. One participant, an archivist at an Iwi radio station, generously provided additional language after the workshop that others could use to express Māori perspectives for managing...
digital content, which the facilitator added to the presentation slides and resent to participants. In this instance, the facilitator gained new information, and continued the ongoing journey towards developing a deeper understanding of digital practice specific to Aotearoa New Zealand.

In evaluations for the workshop, participants overall scored the workshop highly. When asked what they liked best about the workshop, responses included:

‘Detail. Presentation was very detailed and comprehensive. I think it covered everything that would affect me in my personal role when dealing with digital material.’

‘I appreciated the thoughtfulness surrounding Kaupapa Māori methods – e.g. tapu and noa. It was approached very well and I liked this as someone who is Māori.’

‘Very clear. Covered all the ground. Practical solutions not just the ideal solutions. Really useful. Not too jargony either - Thanks!’

‘Getting a good overview of the issues surrounding digital preservation – this was really appreciated as we are getting more material coming in in this form and only had limited ideas of how we should be preserving it. Getting an idea of tools like DROID, etc.’

Suggested improvements from this workshop included spending more time on introductions and getting to know each other as a community, and more advance notice regarding the software required for the hands-on portion, as many participants needed to liaise with IT departments in order to get programmes installed on work laptops.

In November 2018 the National Digital Forum (NDF) conference was held in Wellington. The NDF is a “network of people and organisations working together to enhance New Zealand’s digital interaction with culture and heritage” (National Digital Forum, 2014) and the conference is a high-profile annual event that draws attendees from across the GLAM sector. Since it was held in the same city as the National Library, we were able to have three facilitators and also increase the number of attendees to 30, from the usual 20 or less. Participants came from museums, district councils, public libraries, community and organisational archives, as well as national and international collecting institutions. This diversity was clearly a strength: there was a larger pool of knowledge to draw from, but it also proved challenging since participants’ varied disciplines and backgrounds meant there was less shared experience and vocabulary. More time was required to build a shared understanding of the theoretical principles behind the practical tools and workflows before they were critically applied by participants. Our aim was to create an inclusive learning environment and the curriculum was designed to be modular and adaptable to individuals’ unique circumstances. People could take away tools that were useful to their level of resourcing. This workshop also included a deaf participant and people whose first language was not English, so it was especially incumbent on the facilitators to ensure the material was clearly and accessibly delivered.
At this workshop we also expanded and added more structure to the portion of the workshop where participants map out what they can apply at back at work. This was inspired by the POWRR Institutes, which put significant focus on creating post-workshop momentum (Digital POWRR, 2018). Most of the afternoon was dedicated to an exercise that involved group work, discussion, and writing. Participants filled in a worksheet, adapted from one used at the “Archiving Email: Strategies, Tools, Techniques” workshop at iPres 2018 (Patterson and Prom, 2018). They were prompted to identify where digital collections might be stored at their organisation and what equipment they needed to process this material. They were encouraged to sketch out their workflow. If there were road blocks, participants were asked to consider who they needed to collaborate with in order to move forward. Most significantly, people documented time-bound tangible “next steps” they could take within three months, six months, and one year. This activity was intended to give individual practitioners the opportunity to work together beyond the workshop. We hope it will also empower people to create their own paths forward.

What we’ve found in each of these experiences is that people are hungry for information, but also for the chance to gather with their colleagues and work together. The answers in the NDF workshop evaluation forms reflect this. When asked what they most appreciate about the workshop, people stated:

‘Speaking with like-minded people with similar issues from different backgrounds.’

‘The conversations were very open and varied; the space felt safe enough to ask basic questions without feeling behind on the subject.’

‘Meeting others grappling with the same issues.’

‘Step-by-step breakdown of what can be overwhelming to manage. [It was] accessible to smaller institutions.’

‘Experience of instructors. Sharing issues/experiences with others.’

Having experienced the value of ‘talking shop’ with their colleagues and having identified others in their cohort, we hope practitioners feel comfortable continuing these conversations outside the confines of a workshop.

Next Steps

As we have continued working to develop and refine the workshops, we are guided by a philosophy of meeting our workshop participants as equal partners, recognising that we each have valuable information and experiences to share. While at the National Library we are often in the privileged position of having access to both staff and technological resources not always available to smaller organisations, many of these organisations have
much to teach us about being agile and coming up with creative solutions to common challenges. We structure our work from the premise that digital curation is not a one-size fits all set of principles, workflows, or tools. Rather than insisting on a favoured workflow or tool, we’ve tried to introduce the various components that might be useful, their purpose and the theory or idea behind the practice. We start from this place of flexibility so that we are able to continue learning from each workshop. In turn, each iteration has adapted to the needs of participants, acknowledging that the idea of best practice or even good practice is contextually derived (Druery, McCormack, and Murphy, 2013). In this way we hope that rather than teaching a particular workflow or tool, we have introduced a number of tools and the ideas behind them so that professional are well equipped to think critically about how to apply the concepts in their organisation.

By starting from this place we’ve been able to grow effective relationships and a community of practice in which power and information are shared. A key principle for us is that theory and practice are always in conversation with each other. While we continue to be informed by our core archival principles when developing our workshops, and keep abreast of developments internationally in the care and management of born-digital cultural heritage, we are also explicit that we have all learned through doing the work. Our ideas have grown, developed, and changed over time as we’ve gained more experience and learned from our successes and from our mistakes. We want to share that information as well as learn from the work of our colleagues across Aotearoa New Zealand in order to grow a strong digital curation community of practice. In many ways this work has been guided by an influential article which encouraged those working in the field to:

‘Explicitly collect the digital. When working with contemporary individuals and organisations, many of whom have rooms of paper and audio-visual records to offer, archivists should, as a routine, target their digital files. Doing so will not only allow archives to collect a fuller (and at times, better) record, but it will also encourage the archivist to learn the new tools necessary to handle the digital. Archivists should do this fearlessly and opportunistically, and share what they accomplish with their colleagues’ (Onuf and Hyry, 2011).

Since the November 2018 workshop we have established Aotearoa born-digital collecting, an invitation-only Google Group for workshop participants to “continue the conversations and momentum from the born-digital collecting capabilities workshops run by the Te Puna Mātauranga o Aotearoa” (Aotearoa born-digital collecting, personal communication, 2018). While we know there are many digital curation lists and groups already in existence, having an Aotearoa New Zealand-specific list for continued discussion of digital curation issues and questions hopefully creates a safe and inclusive space for the community of practice to continue learning together. Further workshops are planned for 2019, this time focusing on expanding our community outreach and partnering with other colleagues to deliver a workshop for the Aotearoa New Zealand Chinese community, and a workshop specifically for those working with Māori digital archives.

This paper has given an overview of the work the Library has done to date to develop a community of practice in curating born-digital content across the Aotearoa New Zealand GLAM Sector. In the next year we want to continue developing targeted professional development opportunities to those just getting started with born digital. At the same time we anticipate that by 2019-2020 we will have a cohort of people around
the country who have enough experience and practice with born-digital content that they too will be in a position to provide advice and deliver other training opportunities. Our ultimate goal is not to continue delivering these same workshops, but to grow a community empowered to identify their needs and collaboratively develop the next chapters in digital curation training and development.

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