



**National libraries in the digital age:
leadership and collaboration**

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Abstract

This is the first of a suite of papers arguing that the digital paradigm is redefining the world of national libraries and is providing national libraries with an opportunity to take a leadership role at both a national and international level over the whole continuum of content-related activities, from the creation of content, through various systems for preserving it and making it accessible, to its long-term and sustainable protection.

Some of the key issues are: the increasing convergence among national collecting institutions across the GLAM¹ sector, the need for strategies to confront the risks of digital amnesia, and the increasing need for, and difficulty of capturing content, especially from informal sources.

The author goes on to present international examples of community, national and global collaborative efforts, arguing that leadership and collaboration among international and national-level collecting institutions in the information and culture sectors, and other public and private sector stakeholders, is essential for the long-term access to, and protection of, digital content needed in a modern, global information economy.

¹ Galleries, Libraries, Archives, Museums

Māori welcome

E te iwi tena koutou ko huihui mai nei tenei ra.
Tenei te mihi atu ki Milano te iwi o tenei rohe.
Nga mihi hoki ki nga manuhiri tuarangi
Ko Penny Carnaby taku ingoa no Te Puna Mātauranga o Aotearoa.
Noreira te hunga iwi e tau nei.
Tena koutou tena tatou katoa

***Translation:** Greetings to the congregation and people who have gathered here today. I acknowledge the local people of this region (Milan). Greetings to all international visitors. I am Penny Carnaby, National Library of New Zealand. Now, greetings to the people that are here today.*

Introduction

Has there ever been a more important time for national libraries throughout the world to leverage from the democratising power of the digital age? Whether it is connecting citizens of the world to information important to their lives for the purposes of understanding and engaging with their unique heritage and culture, or for fostering inspiration and ideas for the generation of new knowledge, whichever way we look at it the digital paradigm is redefining the world of national libraries.

However, it is only through inspired, determined and courageous leadership, and a will to collaborate that we will be able to effectively redefine the purpose and function of the national library brand. This is fundamental to the global flow of information and exchange of new ideas and knowledge internationally.

This morning you will hear a suite of presentations, which will take you on an inspired journey across organisational, national and global activity which will demonstrate that leadership and collaboration is alive and well in the national libraries of the world. Whoever said that collaboration is an “unnatural act between non-consenting adults” should listen to this morning’s session, which will highlight some really good case studies of collaboration and will also highlight the challenges. Effective leadership and collaboration are two vital ingredients that will help national libraries of the world realise the potential of the digital paradigm as a potent change agent.

Our similarities as national libraries globally are far greater than our differences. Each one of us traverses the continuum of protecting and preserving the unique heritage and stories of our nation, as well as ensuring that the rich documentary heritage of our countries is made accessible, enabling greater understanding of our unique national identity and sharing this with pride with the rest of the world. Of course today we deal with the digital as well as the analogue world. We are the engine room of the emerging digital economies in many of our countries. It is the digital paradigm that enables us all to embrace the full spectrum of knowledge, from local to global, from personal to public. Literacy and learning are core to our activities and these three components unite all national libraries.

Slide 2

1. Engine Room
2. Heritage & research
3. Learning & Literacy

Slide 3:
Digital
images eg
CD, laptop

Of course, national libraries inhabit a very complex world. These days we embrace the digital world at a time when print publishing is still growing in many parts of the world. We are the generation who largely looked after tangible documentary heritage and ideas, primarily in the print world. And (there's always an 'and' these days), our world extends to managing information in a digital environment. John Naisbitt's² 1984 prediction of a "high tech, high touch" society still rings true for us today.

No one would argue with the high tech or digital revolution; however it is the "high touch" component of this prediction that will have a more profound impact on the leadership and collaborative activities of national libraries globally.

What do I mean by this? There is an underpinning paradox that needs to be embraced in a world so digital, so technical, so full of widgets, wireless and wonderment. We need to consider that it could well be the softer people-focus³ concepts of leadership and collaboration which will make national libraries really rock and roll on the global stage as well as nationally, at a local and community level and at a personal level. Listen hard to Martin Bossenbroek's paper in this regard. He says the National Library of the Netherlands invests heavily in strategic personnel planning so there is a softer people-focused side that needs to balance the knowledge equation.

Slide 1
Presentation
Title

For national libraries internationally, collaboration has been the name of the game and inspired, courageous leadership has been the underpinning ingredient in making these collaborations so successful. There is little argument that the digital age has made collaborative activities much more realisable, delivering tangible and immediate economic and cultural benefits to those involved. We are in a world of convergence and interoperability, where there is a blurring of traditional boundaries between libraries, museums and archives for example; as well as between the once sacrosanct professions of librarians, teachers, researchers, digital archivists and so on. The timely question for us to ask is "do we want a global identity of national libraries?" We will return to this question later.

Slide 4
Collaboration

Leadership and collaboration in action

It is important to see where collaboration between national libraries in the digital space has benefited each national library individually. The examples I will outline are by no means comprehensive but give us an idea about how far we have come.

Often national libraries have an overarching responsibility for professional leadership and innovation across the whole library sector in their country. While innovation and leadership are not the prerogative of national libraries, national libraries in many countries have a legislative mandate to further the work of other libraries in their countries.

² John Naisbitt, *Megatrends: ten new directions transforming our lives*. New York: Warner Books, c1984.

³ Martin Bossenbroek, *Planning a Digital Library: Reinventing the Tricycle*. 15 July 2009. <<http://www.ifla.org/files/hq/papers/ifla75/190-bossenbroek-en.pdf>>. 13 August 2009.

In the digital world this leadership is all the more demanding, and because this world is essentially about convergence, interoperability, mashups and re-conceptualising content, it is an environment where collaboration is far more prevalent and sometimes necessary because some issues are so new, difficult and costly that no one organisation can operate in isolation. Leveraging from each other makes good sense and can and does ensure creative and innovation solutions that have wide application.

There is a new equity emerging as well whereby smaller countries can contribute with open source solutions that can be affordable, scaleable and shareable. Small is no longer a barrier, nor does being economically disadvantaged necessarily inhibit taking part in the emerging digital economy.

Slide 5
ICADS &
names of
members

There are different ways of viewing the digital problem space and many countries have developed high-level strategies, some of which take a countrywide viewpoint.⁴ The most inspirational example of leadership and collaboration in the digital space has come from the defining work done by [ICADS](#) (IFLA-CDNL Alliance for Digital Strategies). Here the leadership of some national libraries is inspirational: they include the [British Library](#), the [Library of Congress](#), the [National Library of Australia](#), the [Biblioteca Nacional de Portugal](#), the [Deutsche National Bibliothek](#), and the [Koninklijke Bibliotheek](#) as well as the National Library of New Zealand.

Through collaboration, these libraries have stepped up to the leadership challenge and worked together on defining issues, standards and solutions to building strategic state-of-the-art digital libraries. The alliance additionally provides the international library community with current information, documentation and links to a wide variety of information about innovative digital projects in which partners are involved.

Would each of these national libraries on its own have had the intellectual, financial or creative capacity to achieve these sorts of outcomes? We cannot say. What we can say is the philosophy of sharing has meant that libraries throughout the world have drawn learning, standards and inspiration from the work done by these national libraries together. Thank you!

⁴ Library of Congress. *National Digital Information Infrastructure & Preservation Program: a Collaborative initiative of the Library of Congress*. 28 May 2009.

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

British Library. *Digitisation Strategy 2008-2011*. August 2008. 28 May 2009.

<<http://www.bl.uk/aboutus/stratpolprog/digi/digitisation/digistrategy/>>.

National Library of Australia. *Collection digitisation policy*. 28 May 2009.

<<http://www.nla.gov.au/policy/digitisation.html>>.

National Library of Australia. *Digitisation program (still image)*. 28 May 2009.

<<http://www.nla.gov.au/digital/stillimagedigitisationandworkflows.html>>.

National Library of Australia. *Australian Newspapers Digitisation Program*. 28 May 2009.

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Library and Archives, Canada. *Digital Preservation Policy*. 28 May 2009.

<<http://www.collectionscanada.gc.ca/digital-initiatives/012018-2000.01-e.html>>.

Slide 6
Digital
Britain
memory
stick

Another collaborative activity in many countries has been the leadership contribution national libraries have made to all-of-country digital strategies and information strategies. Some of this policy development takes a sector approach such as Canadiana.org, the Canadian model. Others are more comprehensive, taking up a national, cross-sector viewpoint. [Digital Britain](#) is the most recent example of this approach.⁵

Slide 7
Digital
Content
Strategy
Book

New Zealand Digital Content Strategy

In many of these national digital strategies, national libraries have played a pivotal role and in some cases held the policy pen (New Zealand is a good example in relation to digital content and which I will detail shortly). These are just some examples, which demonstrate leadership and collaboration on high-level digital strategies in our countries. Within these strategies there are useful theoretical models, which help us to identify and focus activity. The end-to-end value chain of a digital object, described in the [New Zealand Digital Content Strategy \(NZDCS\) 2007](#), is one such example. The National Library of New Zealand led this policy development, which took an all-of-country view, across community, government and business interests.

The NZDCS is significant in that it does not discriminate between digital content that is informal, or content which could be regarded as authoritative and formal, and where we understand the authenticity of the content. Traditionally, national libraries have operated almost exclusively in the formal, authoritative knowledge systems. The world of Web 2.0 with its social networks and user-generated content is very new to us. Another aspect of the New Zealand Digital Content Strategy worth noting is the end-to-end view it takes of a digital object, from creation through to discovery and access, through to protection and preservation of that asset. The New Zealand Digital Strategy outlined three components that would define the digital environment. These are referred to as the 3 C's framework and are **connection, content** and **confidence**. In 2008, the Government refreshed this [strategy](#), named Digital Strategy 2.0 and added a fourth C, 'collaborate', which fits well with the theme of this session.

Slide 8
Digital
Content
wheel



Figure 2: Digital Content Strategy – Five-Element Framework /p7

⁵ British Library. *Digital Britain: The Interim Report. Response from the British Library*. March 2009. 28 May 2009. <<http://www.bl.uk/pdf/digbritresponse.pdf>>.

This end-to-end view of the value chain in the life of a digital object is a useful construct from which to understand the changing collaborative role of national libraries. Essentially this is how national libraries are organising their thinking. Importantly it also ensures digital preservation is firmly on the agenda because it shows that new investment is needed, not only in the generation of new content, but also in the preservation of these digital assets. This is done for social, economic and cultural reasons so we can look back on our societies in 50 or 100 years time and understand more about our countries' intellectual and social activity on the web in 2009. You will notice that digital preservation continues to focus our attention in the papers that follow this presentation.

Additionally, given the current global economic crisis it simply does not make sense to invest in content creation while failing to protect or preserve this content so it can be re-used, re-purposed for new research, thought generation or business opportunities. Data re-use is firmly on the digital agenda for national libraries globally.

Creating digital content

It is sobering to think that digital content was not really on the global radar even until quite recently. Time Magazine⁶ declared content as the person of the year in 2006, acknowledging that there was a new generation equity emerging internationally, which put the individual person firmly in charge. This revolution is fundamentally changing collaborative models for national libraries. In this world of convergence, not only do we need to look at library collaboration, but also across other sectors, and more recently at individual citizens who these days are co-collaborating. It is a very different world in which we operate.

Slide 9
Visual of
Time cover



⁶ Time magazine, 168 (26), 25 December 2006. 29 May 2009.
<<http://www.time.com/time/magazine/0,9263,7601061225,00.html>>.

Slide 10
Global map
spinning
Europe
start/end)

Today there are very few national libraries that are not involved in memory initiatives of some kind. Some of these projects, like [Picture Australia](#) involve other [libraries](#) or GLAM sector (Galleries, Libraries, Archives, Museums) collaborations. Other joined-up national digitisation programmes include for example, [Memory of Netherlands](#), and [Images Canada](#). Increasingly, these initiatives involved collaborations outside of libraries, for example [Europeana](#), a collaboration with the GLAMS in Europe which is covered in the following papers. Some examples across national borders include the recent launch of the [World Digital Library](#). We will hear more about these later this morning.

Alongside some of the national digitisation initiatives in the Web 2.0 environment we are seeing an extraordinary unleashing of citizen created content drawing together formal and authoritative, and informal knowledge systems together into seamless searches across national content feeds. Material that has never been known about before is surfacing and it is often national libraries leading the way.

National libraries in some countries are also active in collaborating with other sectors to get content important to their countries more accessible online. The fast growing open access repositories in the research sector getting publicly funded research outcomes into the public arena is one such example of a typical collaboration with national libraries⁷. After all, shouldn't publicly funded research be publicly accessible? Several National Libraries have made good progress in this area, contributing to the research infrastructure of their countries and contributing to the growing digital economies.

Access and discover content

Collaborations to look at new ways of surfacing and discovering content are often being led by national libraries internationally.

Typically, national libraries have connected the bibliographic infrastructure of their countries through national union catalogues of holdings in libraries of all kinds connecting with other networks of different kinds. The [European Library](#) is one such example offering access to the resources of 47 European national libraries and based on a consortium of 23 subscribing national libraries.⁸ We will hear more about this later. The strategic importance of this contribution cannot be emphasised enough.

Leveraging from the opportunities of the digital age these national networks connect with others, with many countries now negotiating all-of-country agreements with aggregators such as [OCLC](#) to connect their citizens with global networks. Through [WorldCat](#), a citizen living in a small library in a remote rural area can now potentially connect not only with a country's bibliographic infrastructure, but also, in the case of WorldCat, to 57,000 of the world's great libraries. This is an extraordinary example of leveraging and collaborating in the digital domain in a way that brings previously unimaginable benefits to individual citizens. And it is leadership from national libraries globally that has brought together the knowledge assets of our countries into a profound knowledge web that has no international boundaries.

⁷ Norbib - National Library of Finland. 28 May 2009. <<http://www.nordbib.net/>>.

⁸ Europeana partners. 28 May 2009. <<http://www.europeana.eu/portal/partners.html>>.

Slide 11:
Digital
dark ages
etc

Preservation and Protection

The loss of part of our digital memory, our data and information is of course completely unacceptable and it is redefining the thinking of the library profession. Have we not managed information through the ages? Have we not protected and preserved knowledge so that there will be access and therefore creation of new knowledge? So what is different in the digital environment? What are the professional challenges for us as we seek to press 'save' (in perpetuity) as an alternative to delete?

This profession, and national libraries specifically, have a key role to play in focusing on what can be done to arrest this unacceptable loss of data, appreciating there are complexities to this. The aspect of long-term preservation comes up in all the presentations that follow. The combined message comes across loud and clear, preservation needs to be reliable, cost-effective and is very much tied to a national library's role as a trusted civic repository.

While we have made a start in addressing the preservation and protection of digital content from formal and authoritative knowledge systems, the same cannot be said for community or citizen created content. And it is not that we are signalling that citizen created content is less valuable or significant; it is a complex intellectual problem to preserve and curate digital objects over time and in a way that ensures we can trust the authenticity of the original. However, it is just as important that we harness the ideas of 21st century creativity and inspiration, for future generations to understand, and from which to draw new learnings.

The emerging preservation repositories are highly intuitive; essentially the archive is warned when something is going out of date, and integrates the tools and services required to migrate from one generation to the next, thus ensuring that a digital object created in 2008 - perhaps a born-digital cartoon from an eminent cartoonist - will be exactly the same in 50 years time. This is a real breakthrough and it is important to acknowledge the leadership and collaboration of many libraries here today. This complex issue of protecting and curating digital assets over time is quickly becoming core business for national libraries globally.

Considering formal and informal content

Typically national libraries and libraries generally have been used to managing information, which is formal and authoritative, and where there are elements of trust and “knownness”. It is the difference between an authoritative encyclopaedia where we know and trust the information and [Wikipedia](#), which is well respected by those who use it but where the origin of the information or its authenticity is much less trusted.

When considering the digital world, another theoretical construct of a digital asset is also useful.

Slide 12
Digital
Space

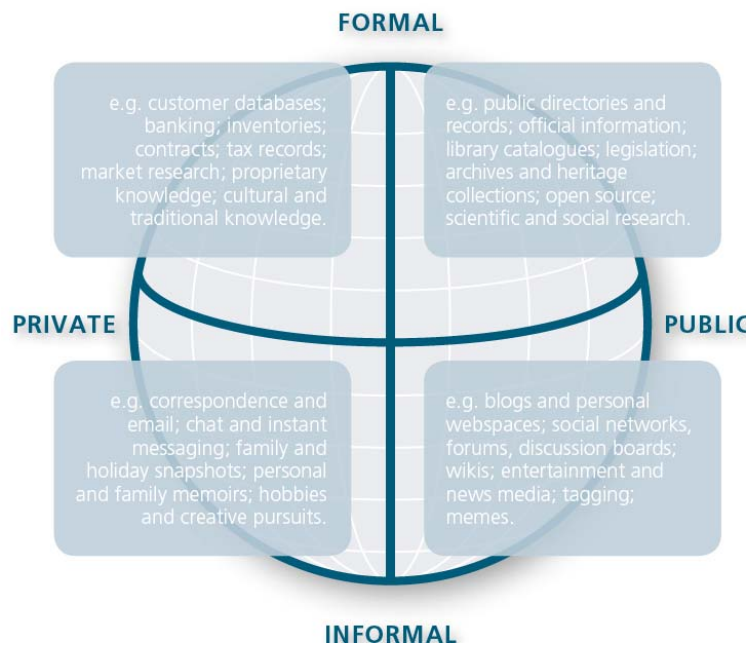


Figure 3: Digital Content Strategy – The Digital Space page 1

As we all know, the authoritative formal knowledge systems with which we are familiar have been well and truly shaken up by the world of Web 2.0, with citizen created content, including tagging, adding so much more richness to the metadata which we have created.

There are some wonderful international examples of national libraries embracing the Web 2.0 environment. The fundamental question for national libraries is how seriously are we going to take this citizen created content in terms of contributing to the documentary record of our countries?

National libraries have led the world in terms of thinking about long-term preservation of digital assets over time, including web harvesting of the country domain. However, I detect some real tension, including within my own organisation, about the role of national libraries in engaging with emerging knowledge systems. Yes, these are far more unpredictable, anarchic even, and they essentially use digital formal content, some digitised by national libraries globally, to draw into personal spaces to be mashed up, re-used, and re-purposed in any way an individual chooses. It really is very challenging for us.

But wait, there is more! Last year IFLA welcomed a new special interest group into the fold. We began to accept that we needed to understand much more about indigenous knowledge systems and practices. What do we know about indigenous cultural property rights? Is the indigenous world view and indigenous knowledge the same as the formal and authoritative systems we are used to? Should we lead the development of indigenous creative commons licences internationally? Who will lead this if we do not?

There is a new power system emerging, one of taking the democratising potential of the digital world to new heights. Many of you will be thinking about how to engage with citizen created content. The debates within our own organisations are very lively and are based on open source, open standards, which could be utilised by any national library. Importantly in the Web 2.0 space, solutions need to be agile, affordable and able to be utilised by anyone.

The role of a national library in this scenario is very simple indeed. It is as a harvester of metadata presented in a standards-compliant way. For example, this could work across all research repositories in a country where there is a will to ensure publicly funded research is made publicly accessible through national sound and moving image content services, or geospatial content which is so important these days to citizen created content. Unlike the print world, digital content can be distributed across a variety of repositories residing where it was created with the content creator deciding what can be surfaced in the public domain.

Slide 13
Ketes rolling
out in NZ

In terms of citizen created content, a New Zealand example shows the rollout of open source community repositories in our public libraries. The Māori language term we use for these is “kete”, or basket. We use it to refer to a kete or a basket of knowledge, and we are figuratively connecting the ketes of New Zealand, both in the formal knowledge arena and that created by communities and citizens.

Slide 14
Connected
New Zealand

A great example of a community repository is [Kete Horowhenua](#), a rich story of spontaneous, grassroots content, collected by the communities within the Horowhenua region, which is in the lower North Island of New Zealand. Kete Horowhenua has had an extraordinary journey - and is not only a strong example of how community and marae-based repositories can work together and connect in the digital world, but also how they can be leveraged from, and be applicable to, every community around the country.

With the new IFLA emphasis on indigenous issues, community repositories may provide a solution for surfacing and protecting sacred knowledge systems. This year in New Zealand ketes will extend to marae, which are Māori meeting places and centres of Māori cultural life, so that indigenous knowledge systems will contribute to the rich tapestry of New Zealand content, which has never been surfaced before. Importantly, all the ketes have creative commons licences ‘[Attribution-Non-commercial-Share Alike 3.0 New Zealand](#)’, which gives the content creator the power to indicate how and by whom the content may be used. Rural and provincial public libraries are developing their own ketes. Imagine if every rural and provincial community in every country had a network of citizen created memory and stories. An extraordinary global network would emerge.

Slide 15
Video clip
of People
using a
National
Library
(NZ)

New Generation Workplace

An assessment of the changing impact of the digital paradigm on national libraries would be incomplete without some comment on the people and culture of our organisations. These are the ‘high touch’, people focused components of Naisbett’s predictions. Several years ago some wise person (I don’t remember who!) said “for every dollar you spend on the digital paradigm, make sure you match it with another dollar for the creation of a new generation workplace.” The point here is that many of us are trying to manage the paradigm shift of the digital age within the constraints of old world structures, established organisational models and workplace cultures and capabilities. While creating new generation workplaces is another very large topic, there are a couple of fundamentally important leadership challenges faced by most national libraries. For discussion purposes I have outlined the National Library of New Zealand’s own new generation transformation ([New Generation National Library Strategic Direction to 2017](#)) – which will within the next three years see the following:

- No job will remain unchanged. New generation jobs will be created
- A zero-basis financial restructuring of the organisation will be completed
- All existing front-line services
- The largest heritage digitisation programme in New Zealand’s history will be undertaken
- Indigenous knowledge community memory will be protected and preserved.
- Leadership development and capability building will be a part of our People in Transition programme

Slide 15
So what is a
new
generation
workplace ?

The simple point I make here is that transformation of our workplaces and cultures is the new leadership challenge for us all as we seek to embed business opportunities that the digital paradigm affords us in establishing new services, new generation workplace cultures, often within the same baseline funding. It is not a minor restructuring we need to look at but something far more fundamental. The digital paradigm is so all-embracing that we need I believe to completely deconstruct the workplace a re-imagine a cultural organisation for the 21st century.

Looking ahead: Leadership and collaborative opportunities and challenges for national libraries

There is not a national library here that will not have benefited from the inspirational collaborative activities described. While the following comments may be challenging and questioning they should not be seen as criticism.

If collaboration is the name of the game, then it could be that we need to get a whole lot better at playing this collaborative game. Have we gone far enough and quickly enough, and how does the digital paradigm challenge us to look very differently at the role and functions of national libraries globally?

If we accept we are in a “both/and” world what are the challenges and what are some of the new opportunities for us? Where does the joined-up collaborative thinking need to be delivering new opportunities and services that benefit us all? Returning to the end-to-end view of the life of a digital object as mentioned earlier, it may be useful to see where the new leadership, i.e. collaborative opportunities emerge.

Another question for national libraries globally is whether there is value in harvesting metadata across our country’s content as one way of surfacing content important to our citizens? If there is value, then is there a more comprehensive collaboration between connecting the digital output of all our countries through the brand National Libraries Global? Last year the CDNL agreed to work together in the digital space and published a [statement](#)⁹ that outlined a long-term vision as “the development of a global distributed library – comprehensive, open, seamlessly-connected and universally accessible on the internet – giving read access to library materials in the collection of all the national libraries of the world...”

I acknowledge there are differing viewpoints on this; as to whether this is an area into which we should put our energies. We see clear worth in national collaborations and within clusters of nations. However it is less clear whether we will embrace a joined-up collaboration which would see a global brand for national libraries emerge. Personally, I am a strong advocate for this and while we are in a world of convergence, mashups and connectivity, I would like to see the national libraries of the world united and building on the wonderful collaborative endeavours we have already realised to strengthen the national benefit of our institutions to have a more profound global impact.

The digital environment as we know it unleashes content in an unprecedented way. It has the potential to connect and celebrate the cultures of the world, traversing all the cultural differences, which sometimes divide us. The democratising potential of the digital environment presents the next great leadership challenge of national libraries globally. While we already have a proven track record in achievements in the digital environment, it is not the “high tech” challenges that we need to solve. The digital solutions are largely already there and affordable.

⁹ Conference of Directors of National Libraries (CDNL). *Vision for the Global Digital Library*. October 2008. 28 May 2009.
<http://www.cdnl.info/2008/CDNL_Vision_for_the_Global_Digital_Library.pdf>.

The real challenge is one of leadership, which I think will lift the national libraries from good to great. We will need vision, inspired leadership and every ounce of collaborative spirit, which has been so much part of this profession for a very long time. We are living in a world that has been completely transformed by the digital age. It is a world that brings us closer together rather than further apart; through changing paradigms of access to our cultures and knowledge as well as new challenges of protecting and preserving the digital memory.

National libraries are not only meeting some of the challenges of the digital age but are on the cusp of redefining the flow of information, research, ideas generation, and how we look after digital memory over time. There are many complex questions for us to understand, and new generation services to develop. We have drawn inspiration from inspired leadership in the past and collaboration has always been fundamental to our profession. Now we need to step up and unleash the incredible opportunities offered by the digital world to take the lead on a global stage.

In our culture I lay down a [wero](#) - challenge - to us all here today to lift the tempo on collaboration and leadership across national libraries around the world. Right now we have the technology, interoperability and convergence. However, it is the softer, sometimes more difficult qualities of leadership collaboration which will give new momentum to the opportunity of the national library brand globally.

Thank you for listening everyone. Noreira tena koutou, tena tatou katoa

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