

DRAFT DIGITAL STRATEGY FOR NZ 2004

Feedback from the Library & Information Association of New Zealand/Aotearoa, Public Libraries Special Interest Group

1.1 We fully agree with the vision. It is essential that NZ uses technology to overcome the difficulties of small size and distance when competing on the world markets, and providing world-class education for our children. We have an advantage in that there is already a high uptake of most aspects of ICT in NZ, and we can build on this. ICT is one business area where NZ's distance from markets is not a disadvantage.

We note that the last sentence on p7 is unrealistic. Yes, in theory students could communicate with scientists at NASA – but NASA scientists are unlikely to have the time to respond. The example should read "... by communicating directly with specialist teachers anywhere in the world where this can be agreed".

1.2 Content, Confidence and Connection are certainly the essential focus areas. However we need to add Collaboration. Because NZ is small, we need to adopt a whole country approach, with partnerships between government, local government, the education sector, and the business sector. There are many examples already happening between local authorities e.g. The ELGAR group of libraries in Auckland who are collaborating on buying new library management software, and finding other ways to co-operate during the process. Some local authorities share library services with the education sector, e.g. MacKenzie District Council and Western Bay District Council partner with local schools to provide public library service. Waitakere City Council is currently building a joint library with Unitec.

1.3 A good summary of SWOT. Two further weaknesses to be added:

- Not only the infrastructure capability is unevenly distributed, but also the "access to a wealth of information". Most of the \$200 million invested annually in public libraries is spent in the major cities, with information provision in the smaller centres and rural areas very limited. While most large public libraries would allow access to their print collections to non-residents if they came to the library to do so, the travel involved would be a barrier to many people. Online resources by the nature of their licencing arrangements are restricted to members of the library which has purchased the licence. The recent joint purchase of the Epic range of databases by virtually every library in NZ shows the enormous value of collaborative action to make resources affordable and widely available.
- Not only smaller NZ firms struggle to keep up with technological developments. Smaller local authorities, community organisations, and individuals struggle just as much. There will be a huge need for technical and skill support inside the building after Broadband is provided to the kerbside.

The Strategy states on p17 that Project Probe "will provide all schools and associated communities with access to broadband". However it is not clear what is meant by

“associated communities”. We believe it is a priority to provide all public libraries with access to broadband as part of the same project, to provide access for adults no longer in school, but who are engaged in formal or informal learning, seeking information, or creating content. Library staff can then provide these adults with technical and skill support as needed, as they already do. This supports the Govt’s Growth and Innovation Framework.

2.1 Unlocking NZ’s store of content would be enormously valuable. NZ carries out world-class science in many topics, but we do not always build on this efficiently because access to the results is often fragmented, or not available, or frustrated by inflexible copyright laws. Titles of recent NZ scientific articles used to be collected by DSIR and published as a digital list called SIRIS, but this is no longer available. Some NZ science is still indexed via Knowledge Basket but very few of the articles are fulltext, and the list is very limited and 2 years out of date in most areas. We need a NZ Science full text database urgently, covering a wide range of research including social science and business (with due regard for commercial rights). The value would greatly exceed the cost.

The British and U.S. governments are currently moving to make all govt-funded research freely available. In NZ much of our govt-funded research is either charged for, or locked up for the benefit of commercial partners. The Govt needs to look at the models being set in place in Britain and the U.S. and free up this information.

Much of our heritage material is held in small institutions such as local museums and libraries without the equipment, skills, or staff to digitise it. Museums and art galleries often attract govt or charitable funding to preserve and display objects, but text resources rarely receive the same type of consideration. Govt funding will be needed to assist small institutions to digitise their resources. The proposed survey by National Library (p28) to identify what information is held in this way, and to prioritise assistance with making it available, is essential. These resources will need to be recorded using common metadata standards, so they are easily retrievable by end users.

NZ also needs access to international content through commercial databases. The recent purchase of the Epic databases jointly by almost all NZ libraries will make a huge difference to availability of information nation-wide, especially to the rural areas. This has been made possible by a consortium purchase which reduced the price to each library, and then a pricing model between libraries based on population and expected use, so that even small libraries could afford to buy in for their communities. This model could be extended to provide further content affordably across the nation. The creation of the consortium was aided and partly funded by National Library – a good example of govt partnering with a range of local govt and private agencies to produce a benefit for all NZ.

An international science database is urgently required but so far has not been affordable by the library consortium. While the larger research and tertiary institutions and the largest public libraries have been able to pay for such access for their members, not all

research happens in these institutions. The recent trial by Tauranga City Libraries of the “Science Direct” database (on behalf of National Library) demonstrated enthusiastic use by regional businesses such as Zespri and Comvita, which will enhance their innovation and export potential. It has also been used extensively by local health professionals to improve their service to patients, and by some patients wanting to make informed decisions about their own care. This has enormous value to the health sector. Regional businesses need the same access to information as their global competitors. Govt assistance may be needed to provide access to such a science database nationwide, perhaps under the Growth and Innovation Framework, but the benefits would be far greater than the cost.

2.2 If we rely on the market to populate the “digital content value chain”, we will have huge gaps. Much of our heritage information is irreplaceable, but offers no direct economic reward. However the cost of not digitising our heritage is also great. Our children need content in order to understand our cultural identity. If we do not make this content available, will we be happy for our children to learn from digital scraps and propaganda supplied by other nations and individuals? National Library’s new Matapihi database of heritage pictures shows how this material can be made available, and strong interest from educational institutions and individuals demonstrates the perceived value of such information. Heritage material (including archives) and Maori cultural material has a great economic potential as shown by the Tai Tokerau example on p30 and many tourism and heritage ventures around NZ. This material needs to be digitally available to strengthen cultural identity and pride, as well as its potential economic value. A contestable fund to assist institutions to digitise heritage content would help to prioritise the most valuable projects.

One of the outcomes of the People’s Network project in Britain (a similar all-nation digital strategy) has been the encouragement of both school-children and adults to collect and record local history. Huge amounts of local content have been created, and catalogued using standard metadata for easy retrieval. In NZ, Te Kete Ipurangi has started a similar scheme and needs to be supported further in this. The Tai Tokerau example mentioned (p30) also illustrates content creation by communities.

Some aspects of matauranga Maori have potential economic value world wide. Maori groups may need assistance to record and open up the potential of such information. Further discussion is needed to determine whether there are Treaty of Waitangi issues in this area.

Ownership of content needs to be clarified in some areas, e.g. geospatial information is owned and sold by govt and local govt because the depts which create the content are required to produce revenue streams. Is this in the best interests of the nation? This needs to be explored with a whole-of-govt and local govt approach.

It should be noted that libraries of all kinds around the country are strongly supporting the goal of making material available also by cataloguing it in standard international formats, thus improving awareness of what is available.

Public libraries and CABs assist govt depts on a daily basis by assisting the public to find and use govt information in both print and (increasingly) digital format, as “infomediaries”. The Govt’s policy of providing almost all official information online would be ineffective without the guidance provided by public libraries. This cost is currently borne by local authorities, but this needs to be reconsidered. The recent partnership initiative from StatisticsNZ to enhance the availability of statistics and of training for library staff to use them, is an excellent example of how govt and local govt can work together.

Funding is also needed from Govt or other partners to remove the cost barrier for citizens. The majority of local authorities insist that their libraries charge for internet access by the public, even for information depositing or retrieval, and they also charge for printing the information.

The National Library Act 2003 will allow National Library to collect born-digital materials. However they will also need to take responsibility for ensuring availability of equipment capable of reading the material, and/or migrating it onto new platforms as the medium becomes obsolete.

2.3 All these actions are essential and need to proceed together. However there will need to be some education of many local authorities as to the value of providing funding for collecting content. Local Government NZ could assist with such education to persuade local authorities to include funding in their Long Term Council Community Plans.

2.4 See 2.2 for details

- Creation of a NZ science database
- Assistance to the Epic consortium to purchase access to an international science database for all NZ libraries to make available.
- Assistance to small institutions to digitise unique content, and to record it using standard metadata.
- Creation of a policy framework for documentary heritage. (A Reference Group is currently working on this and will report to the Minister in October).
- Together with the goal of “all digital materials are preserved”, thought needs to be given to a systematic programme of maintenance and deselection for the future.

Confidence

3.1 The outcome needs to make clear that literacy skills includes digital and information literacy skills.

3.2 We need to ensure that ICT training is affordable, and available close to people’s homes. Free community computing courses currently run by some polytechs and public libraries, and courses run by Seniornet and some REAPs are good examples. Partnering with existing organisations is likely to be more cost-effective than setting up new delivery mechanisms.

All ICT training needs to be constantly revised to keep up with new developments. They need to include hands-on components and a range of media to allow for the different learning styles of the students (visual, audio, text, pictures, learn by doing etc). Quality assurance checking of courses is essential. NZQA needs to move faster to ensure that courses are still up to date by the time they are certified.

However after ICT courses are completed, those attending will continue to need support to put their new skills into practice and to extend them. There is an IT helpdesk available for schools and this needs to be extended to assist the community. Much of the informal support is provided by public libraries and CABs. We recommend provision of govt funding to public libraries and CABs to ensure that all their staff are competent at least to the level of the International Computer Driver's Licence, so they can assist the public with their ongoing ICT learning.

In addition there need to be courses available for the community in information literacy. At the moment this is provided for children by most schools, but with widely varying levels of quality. These courses often include classes run by and at the public library. Some tertiary institutions provide information skills classes for their students, but many of the smaller institutions do not. There are very few opportunities for learning information literacy for other adults, and almost all available courses for the general public are run by public libraries. This initiative needs to be strengthened with funding for further training for library staff and extra equipment such as PCs and datashows for use in teaching where required.

Some of the teacher training institutions also need to improve their capabilities in teaching information literacy to teachers so these skills can be taught effectively to students. Teacher training courses in general should reflect best practice in using ICT to best advantage to cater for learning styles and demonstrate effective use of multiple tools.

We would like to see all public libraries capable of delivering a minimum standard of information literacy training to the public, particularly in teaching effective use of the Epic databases. This is being addressed already by the library profession both with courses and with "buddying" large and small libraries. However a small amount of Govt funding for small libraries would assist with travel to training sessions and provision of relief staff to release regular staff to attend.

Information literacy training must also include reference to print and other material which is unlikely ever to be digitised. These resources should not be ignored. It should also include training for community groups who are creating content, in the benefits and use of metadata to describe their information for standardised retrieval.

Public libraries are a key resource in linking to communities to deliver the Digital Strategy. 55-60% of NZers are already members of their local libraries, and have confidence in them. Public libraries already deliver information to the community in a range of ways, and this role can easily be expanded. They also work co-operatively

together nationally. For example a pilot project called Online Librarian currently under way between National Library and ... is exploring how best to deliver 24-hour information service to all NZ by rostering the larger public libraries round the country to staff the necessary time slots.

Wellington Public Libraries provide the community training for the Computers in Homes scheme in their city.

The People's Network project in Britain, where a structured educational approach has been taken combined with free access to internet through all schools and public libraries, has resulted in huge improvements in community skills and knowledge, and creation of new content. The latest report from The People's Network describes thousands of new courses which have been created, many of them taught within public libraries, and encouragement of person-to-person learning. Many of the new learners have enhanced their work skills and acquired jobs. The community as well as individuals has been enriched by cultural studies, and by creation of online groups of people with shared interests.

Public libraries and CABs helping to deliver the strategy to put NZ communities online could be even more successful. Various partnerships created amongst Government, Local Govt, National Library, and community organisations could deliver programmes tailored to local community needs and attractive to those who will benefit, as demonstrated by the pilot project in the Tokoroa community. These need to be working together, not competitively.

Several examples of this kind of partnership come from Tauranga City Libraries. A programme on Information Literacy is delivered jointly by staff of the Bay of Plenty Polytechnic and the public library, at no charge to the learners. Another popular programme run by the public library with the encouragement of the Chamber of Commerce, teaches Low Cost Research for Small Business. Another course run by the public library was on researching Maori information, in partnership with the Maori Land Court.

In another example of cross-sectoral partnership, Manukau Libraries provide a structured 6-week programme for school classes on information literacy. Students are brought to the library from local schools to attend the sessions. Many other public libraries provide information literacy sessions for school classes.

Public libraries also constantly teach individuals skills at the point of need, when they are most receptive, in informal situations tailored to the individual need.

Another issue in skills creation is affordability of access to ICT. Free access to internet for all via public libraries has been the norm in Britain and Australia for some years. Members of the community need time online to consolidate their learning, to experiment, to seek information, and to connect with other individuals or groups with similar interests or useful knowledge. If there is a cost for this, a barrier is created for some members of

the community. Most NZ public libraries are currently required to recover cost or provide a revenue stream from public access to internet. LGNZ could assist in educating local authorities to the benefits free access would provide to the community in excess of the cost.

3.3 The most urgent actions are

- To continue and expand proven ICT programmes. These programmes have already identified the competencies which are the necessary outcomes for such courses, so govt can easily create the framework for skills acquisition.
- Where necessary, it should be easy to add modules for cybersafety and for health.

We wonder why Dept of Labour is the body doing the quality assurance rather than the NZQA?

3.4 Assist public libraries and CABs to build skills to achieve a consistent level of training and information provision for their communities. Govt benefits from the work of public libraries but so far has not funded them. Govt needs to assist local govt, especially small ones, with training support, and in some cases hardware and the cost of communications, to ensure consistent service can be supplied on behalf of govt. We note that CABs will need even more assistance as they tend to be low on both ICT and human resources.

Connection

4.1 This vision is not a finite one with a completion date as the demand will rise continually as new technology and applications appear. Being connected is only the first step. Support for staying connected, and for providing a consistent level of service will require ongoing effort and support.

4.2 Broadband is essential to achieve savings, innovation, and service. However, getting broadband to the kerbside is not enough. Many community facilities will need technical and financial support to deliver it from there to the PC for their customers. High-speed access within the building is essential too. The Jetstream solution is inadequate and expensive.

For some libraries there are technical and cost issues due to library branches being in different toll zones e.g. Tararua, Horowhenua. Some agreement needs to be reached with the tele-provider to overcome these artificial barriers.

Intermodal competition – we have some concerns that the wireless-based companies have been unable to win contracts because of the time-frame, but may in the longer term be able to provide service to more of rural NZ. Having virtually all the Probe contracts awarded to phone companies will inhibit the inter-modal competition recommended in the strategy.

Time-frames – On the other hand we also have concerns about the timeframe for Project Probe to complete rollout. If some communities do not get access till 2007 they will be seriously disadvantaged nationally and internationally.

Project Probe proposes to roll out broadband to all schools “and adjacent communities”. It is unclear who this refers to. We strongly recommend that Probe be extended to all public libraries and their branches. This would not be a huge extra cost as almost all public libraries are reasonably close to schools. This would give the same access for adult informal learners as for school students. Public libraries contribute to many of the Government’s objectives of the Digital Strategy, such as providing equipment and facilities for citizens to access ICT, training citizens to use ICT and information, providing and explaining govt information, and creating and making available content. However, at the moment Government does not contribute to the cost of doing so. As a result, the provision of all these services across the country is highly uneven depending on the attitude and funding capability of the local authority.

We endorse the proposed initiatives to ensure that competition and some govt funding will make broadband affordable enough to increase uptake greatly.

We note the plan to provide “super-broadband” for researchers down the centre of NZ. While it is essential to provide an Advanced Network for research and education institutions, it is not enough to provide it only in the main centres and institutions. Growth and Innovation do not happen only in these institutions, or in the main centres. Many businesses and organisations are carrying out research and many of these are located in the regions, for example Zespri, Fonterra, iwi organisations, museums and art galleries. Cultural content-creators such as multimedia companies, iwi, historical societies may be located in small towns but their work enhances the NZ economy, reduces pressure on transport networks, and provides jobs in the regions.

We support the proposed provision of an advanced broadband network throughout NZ. The current trial of the research database Science Direct in Tauranga City Libraries (on behalf of the National Library) and the enthusiastic use of it by local firms, demonstrates the level of research and innovation which would be carried out in the regions if connection, content, and confidence were all available. The information these firms are using is enhancing their export capacity and their international competitiveness.

We recommend that access to it be made available through public libraries which will provide access for small organisations and individuals with limited equipment and skills of their own.

4.3 The most urgent actions are to complete implementation of Project Probe and to fund the extension of this to all public libraries and CABs to ensure community access, and to all health and disability facilities to enhance medical capability.

4.4 The cost of ICT services to the public is uneven, and is a major barrier to use for some of the community. Many local authorities insist on a revenue stream for use of ICT

in public facilities, which inhibits access to both the equipment and to specific information sources and communication via email. Govt and local govt need to jointly fund free fast access to ICT and information sources to encourage business innovation and personal growth, particularly in regions where personal access is lower than the national average. It is important not to allow some groups or regions to fall behind as it will be even more costly to catch up later, and a waste of human capital. This may need a legislative approach.

In many public libraries which share systems with their parent councils, there is also a conflict between the need for security for council ICT and open access to information via the public library. This needs to be addressed by technical support to enhance both security and access, or funding of separate equipment to avoid issues around keeping council information secure. A pilot project to ascertain the issues, and an Implementation Task Force to assist with technical and capability issues, would be cost-effective.

Communities

5.1 Pleased to see social and cultural given equal weight with economic ambitions.

However, in encouraging communities to design their own solutions, we also need to ensure that some groups are not disadvantaged or left out.

5.2 Encouraging e-democracy. Community groups need to be aware what govt info is available and how to vote and communicate with govt depts online.

Public libraries can do a lot to assist Govt in raising awareness of ICT in the community.

5.3 Expanding existing recycling projects, and establishment of e-centres in existing locations such as maraes, homework centres and libraries can be achieved relatively quickly. They can be running while the other actions are prepared. Volunteers from communities of interest can be invited to offer help from there at advertised times, until the community is able to run its own scheme.

5.4 See 2.4 and 3.4

Businesses

6.1 The first outcome, “NZ businesses in all sectors will...” is of little value without a timeframe for achievement. “All sectors” seems unrealistic, so some form of prioritising is probably desirable e.g. “all businesses in export sectors” or “all businesses with turnover \$1-10m” first.

We endorse the statement p71 “As content is a crucial resource in the knowledge economy, the govt needs to ensure that firms have appropriate access NZ’s stock of science and technology research”. We would extend that to access to international research and to other subject areas, such as management (to improve our supply of

excellent managers which the Strategy acknowledges to be inadequate), and social science. The Epic databases have addressed this to some extent but the range of databases needs to be extended. National Library can assist the Epic consortium to negotiate this.

6.2 No comments

6.3 No comments

6.4 All start-up businesses working through govt-funded or Chamber of Commerce schemes such as BIZinfo, should have a session on ICT and information literacy included in their course. The courses currently run by Tauranga City Libraries with support from the local Chamber of Commerce is an example of how this could be done. Smaller libraries would need some upskilling and a few extra print resources but now that most libraries have the Epic databases, and access to internet, a basic level could be provided from every public library with a little training of staff. If the library does not have suitable computers or space, it may be appropriate to take library resources and staff to another local venue to do the teaching.

Government

7.1 The outcome on integration across govt agencies (p79) is a good objective to encourage these agencies to align their processes and requirements for the convenience of their customers as well as their own needs.

Outcome on health – Smart use of ICT has enormous potential in the health industry but many staff will need further skills training.

Outcome on education – Smart use of ICT has the potential of raising achievement.

However many teachers need further training in smarter use of ICT. Teaching using the new tools does not involve just sending out lessons using a PC (which is still happening in some institutions), but changing the style of teaching to make the best of new media, and making it as interactive as in a real classroom.

7.2 No comments

7.3 Public libraries can do a lot to assist Govt in raising community awareness of available Govt and other information, both digital and in older media.

7.4 Further need for training for teachers (see above).