

Improving Canada's Digital Advantage: Strategies for Sustainable Prosperity

Library Sector Commitment to a Canadian Digital Economy Strategy

Key Challenges and Required Future Action: Recommendations from the Ontario Library Association.

www.accessola.com

July 8, 2010

The Ontario Library Association is a member driven organization representing the interests of more than 5,000 people who work in the library and information sector and in all types of libraries (public, academic, school, government, health, and special).

Summary:

The library and information science sector is not only interdisciplinary, but it is the only sector that broadly encompasses all aspects of information management and digital technologies. Libraries are uniquely positioned to equip citizens to participate fully in a knowledge based democratic society and to contribute to and support Canada's Digital Economy strategy.

Libraries are a place for Canadians to freely:

- Have access to internet connectivity in their community.
- Use accessible digital resources, including government information, research, health and job resources.
- Receive training on the use of digital technologies and resources. Libraries contribute to digital literacy and are key players in enabling the 'digital citizen'.

From the library and information sector perspective, the following are key success factors to improving Canada's Digital Advantage:

- Facilitating early adoption of digital technologies.
- Ubiquitous broadband access.
- Digital creation and preservation of Canada's research, cultural, and heritage materials.
- Access to digital tools, training and information resources at libraries regardless of community size.
- Open access to publicly-funded research.
- Cultivating a technology and information literate citizenry.

Libraries are actively engaged with other sectors in developing and implementing these success factors. Federal and Provincial governments already have an investment in libraries. Including libraries in a plan to improve Canada's digital advantage is an opportunity to strategically build upon this investment.

The OLA has responses in each of the five discussion themes identified in the consultation paper:

- Innovation Using Digital Technologies
- Digital Infrastructure
- Growing the ICT Industry
- Canada's Digital Content
- Building Digital Skills

1. Capacity to Innovate Using Digital Technologies

“Collaboration among companies, research centres and universities is key to driving innovation and building a digital advantage for Canada.” (Consultation Paper on a Digital Economy Strategy for Canada, p. 11)

Conditions to promote adoption of ICT and a successful library sector digital strategy

The challenge to develop talent in the use and integration into business and managerial skill of digital technologies was a prominent topic at the second Canada 3.0 conference in Stratford. The organizational structure of most libraries has morphed over the past fifteen years with the rise of the Internet. Academic and school libraries have “information commons” and “learning commons”. Public Libraries have “digital services librarians”. Libraries of all types have demonstrated that they can play a role in introducing new technologies to the community.

Libraries have been early adopters of digital technologies and have used them to create resource discovery tools and data management applications to enhance service delivery to their users. In addition, librarians often collaborate across libraries and library sectors to achieve greater capacity for innovation. Knowledge transfer occurs in several ways:

- 1) development and sharing of open source software,
- 2) knowledge transfer through consortial projects on provincial or sectoral levels, and
- 3) informal knowledge sharing. Some examples of successful collaborative digital projects include the collaborative online research chat project askON (in Ontario) <http://askon.ca/>, the Ontario Scholar's Portal (a collaborative gateway to collections and services at 20 university libraries in Ontario) <http://spotdocs.scholarsportal.info/display/sp/home>, <odesi> (a web-based data exploration, extraction and analysis tool which greatly improves access to statistical data for researchers, teachers and students), etc.
- 4) Innovations in resource discovery and inter-library loan.

This level of innovation should be encouraged and incentivized to:

- 1) model innovative development of digital technology tools, and
- 2) build even greater tools for access and discovery. Libraries, as hubs within their universities and colleges, should operate as Centres of Innovation to model innovative digital development throughout their institutions. If the Government of Canada truly

wishes to model capacity to innovate using digital technologies, libraries in colleges and universities across Canada, as publicly funded organizations, can be the models.

Factors for increasing innovation:

“Governments can help by making publicly-funded research data more readily available to Canadian researchers and businesses....In many cases, data are already available but are difficult to locate. Consistent methods of access will be reinforced.”
(Consultation Paper on a Digital Economy Strategy for Canada, p. 12)

Open access to publicly-funded research should be made a priority of the Government’s digital strategy. Published research results should be made available online within a reasonable time period and access needs to be easy and transparent for the taxpayers who have funded this research. Libraries have been promoting open access initiatives within their institutions and have created repositories to store and provide access to this important knowledge (e.g. Scholar’s Portal.) Recognizing that libraries can take the lead in this area, the Government of Canada should put in place frameworks within the education sector to ensure that libraries are positioned and funded to play this role within their organizations and nation-wide.

Among the challenges identified in the consultation document is the need to “nurture a culture of innovation with respect to ICT adoption”. Public and school libraries have a key role in nurturing the entrepreneurial spirit. A vision for school libraries is that of the learning commons; a cross-curricular perspective that recognizes literacy, numeracy, knowledge, thinking and communication. The school library is now the place where today’s ‘digital native’ makes sense of how to maximize the use and application of information technology and develops information literacy skills that will enable them to be Canada’s future innovators. A larger investment must be made in Canada’s school libraries to ensure they are properly staffed and resourced. Currently, students across the country have a disparate level of school library service.

2. Building a World-Class Digital Infrastructure

Key service characteristic: broadband access and the role of the library

Provide universal access to broadband to every citizen as a right. Begin by ensuring that all libraries in the country have very robust access, far exceeding that generally provided to homes and businesses. As advances are made in high density markets, have a funding mechanism to implement those advances in all libraries, especially rural libraries, in a timely fashion as a means of preparing for roll out to all Canadians. This will enable a level playing field for people living in smaller or remote communities, and will begin to address the severe lack of digital and information resources for aboriginal Canadians. As more and more content moves online, libraries require increased bandwidth in order to provide quality service to researchers, users and citizens. Videoconferencing, synchronous and asynchronous electronic communications, video

streaming as well as day-to-day operations of libraries are dependent on a solid digital infrastructure.

3. Growing the Information and Communications Technology Industry

“Do our current investments in research and development effectively lead to innovation and the creation of new businesses, products and services? Would changes to existing programs better expand our innovation capacity?” (Consultation Paper on a Digital Economy Strategy for Canada, discussion question #1)

Access to research and recognizing Canadian innovation in the library and information technology sector

The recent cuts to the National Science Library, CISTI, do not build faith in the Government’s claim that “Canada must...ensure that investments already made in our digital infrastructure and economy in digital and digitized Canadian content can be leveraged for long-term access and use.” (p. 27) Dismantling and privatizing digital library infrastructures that support research and innovation in Canada in order to bolster private ICT industry may on the surface seem like a good idea; however it means less access to publicly-funded research for Canadian taxpayers and researchers, and ultimately means less support for Canadian researchers. Open access stimulates research, while closed, proprietary access diminishes it and forces talent to move elsewhere where research is better supported. The Government of Canada must continue to fund digital libraries like CISTI so that public data can remain public and Canadian research and innovation are supported.

Published research results should be made available online within a reasonable time period and access needs to be easy and transparent for the taxpayers who have funded this research. Libraries have been promoting open access initiatives within their institutions and have created repositories to store and provide access to this important knowledge (such as “Scholar’s Portal” www.scholarsportal.info). Recognizing that libraries can take the lead in this area, the Government of Canada should put in place frameworks within the education sector to ensure that libraries are positioned and funded to play this role within their organizations and nation-wide.

Digital library and information technology products have universal application because the international library community adheres to international standards. Canadian innovation and production of these products and services, if invested in, will result in global business interest.

4. Digital Media: Creating Canada’s Digital Content Advantage

“As broadband networks spread around the world, digital media and the content are the advantage; they will be what attracts continued investment and talent, improves productivity, promotes prosperity in the new digital economy and secures Canada’s

place in the digital world.” (Consultation Paper on a Digital Economy Strategy for Canada, p. 24)

Libraries as facilitators and creators of digital content, a market for digital content, and a gateway to accessible information services

Libraries are information ‘centres’ – they have the expertise, standards, and tools to manage and provide access to vast stores of content. Libraries are responsible for the preservation of our scientific, cultural, and historical heritage. As such they should be funded to ensure future access and preservation of their valuable collections. Frameworks need to be put in place to streamline digital preservation and access work to avoid duplication of effort in order to create a national database of information, resources and tools that can be accessed by any Canadian from anywhere.

Libraries of all types have been active in digitizing Canadian content, whether it is a public library scanning community content, an academic library preserving valuable research or archival material or a school library engaging students in a project. Just some examples include The Alberta Digital Library, Knowledge Ontario’s Our Ontario, and Canadiana.org. Each project has been limited by the relative ability of that institution at that time to pursue the goals it was trying to achieve with that project. Order and organization has developed through many collaborative initiatives across the country but these initiatives have suffered from the lack of an overriding national strategy and commitment to seizing the content advantage. The skills and willingness to collaborate are there; further resources need to be committed nationally to leverage access across the country.

Some leadership is currently provided by Library and Archives Canada (LAC) which develops the digital content infrastructure and frameworks. Funding of LAC to continue these initiatives and to engage libraries from across the country should be a priority of the Government of Canada if it seriously wishes to preserve Canada’s rich cultural heritage.

Libraries have a commitment to equity of access for persons with disabilities. Digital technologies have the huge potential to level the playing field. Further investment in the Library and Archives Canada (LAC) Initiative for Equitable Access and the CNIB is required. This includes a strategy to engage the publishing community to make works available in accessible formats, increase production of accessible formats, and a national digital resource sharing strategy across all libraries in Canada, so that a person with a disability has access regardless of where they live.

A strong and cohesive e-book and e-content strategy is urgently needed from the publishing sector. Canadian culture is at risk in maintaining any international and even domestic market interest because this sector has been slow to contribute digital content or develop an e-book strategy. Libraries represent a significant purchasing market for e-content. Currently libraries offer primarily U.S authored e-content to patrons as little Canadian content is available.

Libraries are the gateway to a strong digital media industry and give balance to both the creator and the consumer. A fair and balanced copyright will stimulate content production and ensure people have access to information.

5. Building Digital Skills for Tomorrow

“As Canada builds towards a world-class digital economy, it is essential that all Canadians have the skill sets to be able to access, use and interpret a growing and increasingly complex range of digital information.” (Consultation Paper on a Digital Economy Strategy for Canada, p. 32)

Libraries are closing the digital divide

Libraries are at the intellectual heart of their communities, be they public or academic libraries. Not only do they provide authoritative, quality information and the means to access that information but in many cases, they also provide the training necessary for their users to access information independently. Computer training classes are provided by many public libraries and information literacy seminars and more advanced research skills classes are taught on a regular basis at college and university libraries. Libraries are already at work diminishing the digital divide; however more needs to be done. Not all libraries are funded appropriately to carry out this important work, nor do all have the technological capacity. In order to provide equitable access to information for all Canadian citizens, digital skills training is essential. The Government of Canada needs to ensure that libraries as community hubs, school, public and academic are adequately funded in order to continue to tackle the digital divide and ensure that all Canadians have the digital skills required to succeed in today's economy.

In many communities, Industry Canada's Community Access Program (<http://www.ic.gc.ca/eic/site/cap-pac.nsf/eng/home>) or "CAP", has contributed considerably to the development of entrepreneurial and youth leadership in digital initiatives. At its height, CAP was considered by other countries to be a model to strive for. Much energy has been expended over the past several years considering what CAP should transform itself into. A new revitalized CAP that is focused on developing digital entrepreneurship and on enabling the emergence of digital leaders among youth, should become a linchpin of Canada's digital strategy.

A more intense commitment needs to be focussed on our aboriginal and first nation communities. The aboriginal birth rate exceeds the growth rate of the general population, yet access to libraries, the Internet, and digital resources are severely limited. The Canadian library community has numerous initiatives to provide supports and resources, but they are not adequate without a strong federal commitment.

In Conclusion

In the Citizens First surveys undertaken every two years since 1998, public libraries have consistently been ranked by Canadian as providing the highest level of customer satisfaction (other than providers of emergency services such as fire departments). Academic libraries are consistently ranked as valuable components in ranking the relative desirability of universities and colleges across Canada. Canadians already know and trust their libraries.

The network of collaboration that already exists amongst library sectors can be developed and grown into a network of innovation that will have spill over effects into the community at large, through public libraries. Academia is just one source of innovation. Private scholars and entrepreneurs in the community (often not at schools) should be embraced into Canada's digital strategy. The library network that includes public libraries in communities of all sizes across Canada presents the nucleus of an organism that can be grown into such an all inclusive network which will foster innovation and digital creativity on all fronts.

In moving into a digital future, there is no need to invent a new infrastructure for ensuring equity of access and encouraging citizen engagement. It would be inexcusably wasteful to ignore the investments already vested in building the library sector to its current level of capacity. Invest in the people and the associations that are already committed to make Canada and each of its communities successful in the coming age.