



“Aboriginal Culture in the Digital Age” Aboriginal Voice Cultural Working Group Paper

Preface

The Crossing Boundaries Aboriginal Voice project is a multi-stakeholder process intended to build an understanding about Aboriginal eGovernment and to provide a national profile for a set of recommendations that are hoped to influence policy and decision-making on the future development of Aboriginal eGovernment. The initiative is sponsored by the Crossing Boundaries National Council and is a collaborative venture between several national Aboriginal organizations, federal government departments, provincial/territorial governments and the KTA Centre for Collaborative Governance.

Aboriginal Voice has undertaken a series of cross-country regional forums which serve as the consultative basis for arriving at national and regional perspectives on themes and opportunities for Aboriginal peoples and how information and communications technologies (ICT) can or should be used by their communities and governments.¹ These forums bring together representatives from Aboriginal communities, governments, academia, and the private sector, all of whom have the knowledge, expertise and experience to discuss selected themes. In addition to providing direction, the proceedings of the forums will be incorporated into an emerging framework, or “storyline,” for Aboriginal eGovernment.

To date, the issue of culture has emerged at each of the Aboriginal Voice forum discussions. Participants have identified substantial possibilities for the use of ICT in the promotion of language, culture and community connectedness. They see technology having the potential to strengthen Aboriginal identity, but also express concerns about what ICT might mean for Aboriginal cultures, particularly the protection of indigenous knowledge and control by communities over what information is to be made public and how it is to be accessed and used.

The object of this paper is to bring a holistic perspective to the implications of ICT for Aboriginal ways of living, thinking and knowing. Is ICT the potent enabler for the promotion, renewal and enrichment of Aboriginal cultures as many claim? For example does ICT offer new possibilities for the preservation and teaching of Aboriginal languages? Within the context of increasing numbers of Aboriginal peoples living away from traditional communities in large urban melting pots, can technology help safeguard the right of Aboriginal children and young people to learn their culture and speak their Indigenous languages? On the other hand, what types of cultural risks does the new

¹ ICT broadly, but not exclusively, refer to existing and emerging digital technologies such as the computer, telecommunications, the Internet, wireless, satellite, mobile phones, etc.

technology present for Aboriginal peoples? Is appropriation and distortion of traditional Aboriginal knowledge one of them, and if so, what can be done to mitigate the risks of inappropriate access and use of this knowledge? These are some of the major questions explored in this paper.

The paper itself has three broad starting points. One is to recognize the renaissance underway amongst Aboriginal cultures; a renaissance that is strengthening and renewing the distinct identities of Aboriginal peoples within Canada and infusing itself in every aspect of our national cultural life. The second starting point is the pervasive reality of ICT and the transformative impact it is having on our everyday economic, social and cultural fabrics. The hope for the future is that ICT can be effectively and appropriately harnessed by Aboriginal peoples to propel forward their process of cultural renewal. Finally, the preservation and protection of Aboriginal languages, ecology and heritage is of utmost importance to sustaining Aboriginal cultures and mitigating the potential risks of ICT. That being said, the continuity of culture is deeply rooted in the self-determination of peoples and how they wish to shape and evolve their cultural futures. For this reason, an active link is made in this paper between the protection and development of Aboriginal cultures and the cultural rights and self-governance of Aboriginal communities and peoples.

The Importance of Culture and Identity

Aboriginal cultures are alive, dynamic and diverse. While it is possible to identify commonalities between the cultures of First Nations, Métis and Inuit, each nation has its own history, tradition, values, and language that are the foundations for a way of living and of knowing. Cultural diversity is amplified by geographic location and dispersion of communities. This rich diversity of Aboriginal societies and cultures is often lost on other Canadians, but is a source of strength, pride and identity that nurtures the health and well-being of Aboriginal Canadians.

Having resisted overt assimilation and initiating a process of restoring identity, Aboriginal cultures face new challenges. Some are more immediate threats such as the passing of older generations who are the repositories of history and knowledge; while others, like the urbanization of Aboriginal peoples, have permanent and profound consequences for the preservation and transformation of culture and cultural relations amongst Aboriginal peoples.

For Aboriginal peoples in Canada, with a spirituality and consciousness deeply rooted in the land, there is a unique set of principles which guide relationships between individuals, communities, nations, confederacies and, increasingly, participation in the global village. These are the underpinnings of Aboriginal social and cultural life, which, if they are to endure and flourish, must survive and find everyday expression in contemporary knowledge, behaviour and social relations both within and outside the Aboriginal community.

It is against this backdrop that we need to assess the significance of ICT to Aboriginal cultures. What possibilities does ICT open up for meeting the cultural challenges facing Aboriginal peoples today? What we find is that some of the most promising ICT applications are in the cultural field. These technologies can serve as tools to enable the transfer of cultural information – language, stories, practices and symbols. It is important to remember that ICT is not a panacea, however, by embracing technologies and harnessing their potential, Aboriginal peoples can protect their culture from being misrepresented or misappropriated, and, more importantly, ensure cultural renewal.

When examining the impacts and implications of ICT on Aboriginal cultures it is useful to consider the following framework:

- Cultural continuity and community renewal;
- The role of culture and learning in a knowledge society;
- Sharing Aboriginal culture in the New Economy;
- Making cultural and historical knowledge public;
- Protecting culture and indigenous knowledge; and,
- The relationship of culture to self-determination and control of knowledge.

A fundamental underpinning of this framework is the recognition that the customary laws which govern the use of culture have been threatened, and that cultural survival is rooted in Aboriginal peoples and their communities having the authority and capacity to act as the stewards and keepers of their languages and indigenous knowledge. Put another way, communities are repositories of in-depth knowledge and expertise that members can harness using ICT to promote and preserve their cultures and languages.

Role of ICT in Cultural Continuity and Community Renewal

Given the propensity towards the isolation and fragmentation of Aboriginal peoples and disengagement from Aboriginal ways of life, connectivity offers the potential for enhancing cultural continuity and rejuvenating community ties. Why is cultural preservation and continuity so important? At one level the answer is obvious. A peoples' identity and cohesion is tied to their ability to retain and express their culture. The loss of one's culture implies assimilation into another. An important part of the history of Canada's Aboriginal peoples is about the resistance to such loss.

We are also discovering other powerful reasons why cultural and linguistic continuity and the strengthening of identity are critical issues. An accumulating body of evidence, most notably research by Steven Cornell from Harvard University and Michael Chandler and Christopher Lalonde at the Universities of British Columbia and Victoria, has demonstrated a direct correlation between a community's economic and social wellbeing and the cultural identity of its residents. Whether it is Cornell's emphasis on the match between indigenous cultural understandings and institutions, or Chandler and Lalonde's on the importance of the preservation and rehabilitation of threatened cultures, the core message associates strengthening the cultural fabric of indigenous peoples with improving a community's overall health and social wellbeing. We know, for example,

that the incidence of youth suicides is dramatically reduced in Aboriginal communities that are empowered with a strong sense of identity, have control over decision-making and possess the ability to address community needs.

The implication for Aboriginal eGovernment is that it should be “culture-centric.” In other words, culture and identity should be at the forefront and permeate the storyline of Aboriginal e-government. By extension primary roles for ICT ought to be the preservation and revitalization of Aboriginal cultures and languages, the incorporation and strengthening of cultural components in the way institutions are designed, function and deliver services and the building of community and cultural networks to promote cultural cohesion, connectedness and renewal amongst Aboriginal peoples.

Language Preservation and Growth

If there is a starting point for cultural continuity, it lies in the preservation and learning of Aboriginal languages. As the primary articulation of culture, language connects individuals to their community. As vehicles for culture, Aboriginal languages reflect a worldview and connect individuals to a system of values. Language retention and new speakers have decreased dramatically in recent decades and cultural knowledge and traditions have become threatened. According to UNESCO (1996), approximately half of Canada’s 50 Aboriginal languages are facing extinction or are endangered. Considering that languages are more than tools of communication, this is particularly alarming. Aboriginal dialects speak to who you are, where you come from and who your kin are. Elders act as the gatekeepers of Aboriginal wisdom and knowledge, and by means of oral traditions and customs they pass on cultural information to younger generations. That being said, personal and collective interactions are as important in the transmission of culture as the use of language itself.

The question is, given the subtleties and nuances of language and dialects, to what degree can ICT be employed to ensure the intricacies of Aboriginal cultures are not lost? Considering the intimate nature of cultural transmission and traditional methods of storytelling, what role can ICT play in preserving traditions?

What we discover is that, if used appropriately, ICT can play a key role in language preservation and promotion in new and exciting ways. Exploring best practices and innovative solutions already employed in First Nations, Métis and Inuit communities demonstrates how technology is used to facilitate cultural transfer while preserving traditions. In Iqaluit a former school teacher has translated popular English children’s songs to Inuktitut and recorded them on compact discs (CDs) to be used as tools to teach Inuktitut as a second language. Although the source materials are not originally in Inuktitut, the teacher has recreated songs and drawn upon the Inuit tradition of *ayaya* singing, a tradition of using songs to recount stories about the past in entertaining and engaging ways. CD recordings by no means replace *ayaya* singing, nor are they intended to. What is pertinent is that technology has been employed to reintroduce the dwindling cultural tradition of *ayaya* singing while at the same time acting as a device for language learning.

If ICT is to act as a medium for preserving and promoting Aboriginal languages and cultures, it needs to be developed in ways that accurately channel the animation and vibrancy of those traditions. Undoubtedly, the Internet is being used to create forums for communicating in Aboriginal languages: stories are archived online and advanced language software offers great opportunities to sustain and perpetuate Aboriginal culture. The Atlantic First Nation Help Desk offers one of several online Aboriginal language tutorials. In addition to interactive language lessons, there is a talking Mi'kmaq dictionary, books, songs and prayers. One obvious difficulty that arises is around the unique software required for the appropriate symbols and fonts of First Nations, Métis and Inuit languages. A number of major software companies are playing a leading role in developing programs and applications that meet these requirements. Microsoft, for example, has developed Windows in Inuktitut and is developing a Mohawk language version. In other cases, Aboriginal communities have taken the lead to ensure that their language application needs are met. For example, the national Michif Language Department has produced an online dictionary and teaching aids geared towards the preservation and expansion of the Métis language.

What we must keep in mind is that Elders retell events in a language that is as rich in nuance as it is in detail. While it will never replace face-to-face contact with Elders, teachers and peers, ICT may serve as tools to reinvigorate language usage, especially with the younger generations who, by and large, have experience with technology and a high level of comfort with it. Visual technologies such as videoconferencing can relay the facial expressions of a storyteller and the intonations of his or her words. Even further, highly specialized computer programs have the capacity to analyse Aboriginal language structure, thereby eliminating the need for English translations.

Cultural Preservation and Transfer

A second point of departure for cultural continuity lies in the preservation of cultural knowledge and its transfer to future generations. With the passing of older generations, the risk of losing the history and knowledge of Aboriginal peoples makes preservation a critical priority. Although not without issues, communications technology of every sort has become a vital thread in the process of retaining cultural and historical knowledge. But the second half of the equation is equally important. For the culture to survive and remain vital it has to be absorbed and made relevant to a new generation of Aboriginal young people, many of whom will grow up in large urban environments often quite disconnected from traditional community roots.

We know that the early years are particularly important in the formation of values and language development. The intergenerational transfer of culture has to start here, in providing Aboriginal children wherever they live with opportunities to learn their culture and language. ICT has a powerful role to play in ensuring that Aboriginal children and young people can grow up in a culturally-rich environment that helps instil in them a sense of pride and knowledge about who they are. These early foundations of knowledge

and understanding amongst Aboriginal young people are a driving force in revitalizing and extending the reach of Aboriginal cultures.

The virtual communication capabilities of ICT cannot only foster the on-going use of Aboriginal languages, it also serves to bridge existing generational divides. For example, the National Research Council has partnered with the school board in Kangirsualujjuaq and the Government of Nunavut in videoconferencing schools from across the north, allowing children to, among other things, hone the traditional skills of throat singing and drum playing. Perhaps in communities which promote interaction between generations, learning can then become a two-way street; the younger generations can help to instil a sense of confidence in older generations around the uses of ICT.

The Internet also greatly increases the capacity for cultural interaction by removing physical barriers. Most post-secondary education and employment opportunities exist outside Aboriginal communities, and, as a result, younger generations have become increasingly mobile and more removed from the communities that are traditionally the nurturing places for Aboriginal culture. As a tool for communication, ICT has the potential to remove “distance” and keep individuals connected with family and other community social supports. In large urban centres, where Aboriginal populations are diverse, online cultural forums, chat rooms and email allow individuals to connect with others from similar or different cultural backgrounds. Similarly, webcams enable face-to-face communication and can be a means to interact in one’s native language. The recent launch of www.Métisradio.fm, which archives historic recordings and solicits and promotes new artists across the Métis homeland, is an excellent example of how disperse Métis populations are informed of cultural and political events – connecting community members’ traditional cultural practices using a contemporary medium.

While ICT may facilitate the renewal of culture and community on the one hand, it has the capability of creating new Aboriginal cultural communities on the other. Once connectivity has been achieved, technology also offers favourable circumstances for the development of new Aboriginal social and cultural networks. As we know, youth are generally more digitally literate, adept with technology and are proportionally the largest users of ICT. The Aboriginal Youth Network (www.ayn.ca), an online network established in 1995, engages Aboriginal youth across Canada in online discussions about health, education and employment opportunities. It links them to conferences and cultural events and creates a safe forum in which they can talk about “life” in general. In essence, the AYN gives Aboriginal youth a “voice” and encourages connections that enable individuals to become stronger. AYN has demonstrated that technology can help create cultural networks regardless of geography and empower Aboriginal youth to surmount disadvantages such as addictions or racism. While this type of online forum does not replace the more traditional roles of peers and mentors, it does allow youth to engage in issues that are significant to them and their communities. This example illustrates how ICT can be used to its fullest potential to generate a genuine enthusiasm in Aboriginal youth to learn about their culture, traditions and history.

Role of Culture & Learning in a Knowledge Society

ICT tools are now an integral aspect of the learning process – the use of technology and the application of skills are taught at the point of entry into school and persist throughout the span of our lives in our personal, work and business practices. This requires a great shift in learning, including developing a whole new range of literacies and capacities. But what does the integration of technology and learning mean for Aboriginal learners?

First of all, ICT tools can be used to integrate culture and learning in ways that are much more conducive and culturally appropriate for Aboriginal learners, possibly ensuring a more holistic experience akin to what Aboriginal learners received in the past. In keeping with the notion of “cultural match,” there is a growing body of evidence showing strong linkages between culture and learning and successful learning outcomes. While the technology and skills needed to use it are for the most part homogeneous, they can be adapted and used to incorporate the way that Aboriginal peoples see the world and the way that they learn, and to create culturally-appropriate learning environments (including learning in one’s own language). At the Aboriginal Voice eLearning Forum, Eileen Antone, Associate Professor at OISE/UT, pointed out that Aboriginal perspectives on learning primarily involve education by example and experience, include storytelling and continue from birth to death. While acknowledging the assimilative power of the Internet and eLearning, she made a powerful case for how eLearning, if properly developed, can help students learn in ways that are consistent with Aboriginal perspectives on learning by making strong connections to culture, language and identity through:

- Independent / interactive learning;
- Learning at one’s own pace;
- Modifying terms based on cultural practices;
- Bridging learning of both content and skills (e.g. information management, time management, working independently);
- Developing student/teacher relationships at a gradual pace, while building trust; and,
- Adapting provincial science and math curricula to be more relevant and meaningful within their social and cultural contexts.

The results? In instances where eLearning tools have been utilized, school retention and enrolment rates have increased as a result. The Sunchild eLearning Community (www.sccyber.net) and the Keewaytinook Internet High School are models of how technology can be tailored to fit the needs of First Nations students. Since 1999, they have delivered eLearning programs to students ranging from grades 7 through 12 as well as adult learners, successfully improving the overall levels of education for Aboriginal peoples in Alberta and Ontario. In the Sunchild example, eighty percent of students enrolled in their Grade 12 program graduate with many continuing to post-secondary education. These education models have been developed with keen consideration of the specific learning needs of Aboriginal peoples including First Nations’ sense of time and relationships, and personal and family factors which might interrupt the learning process.

Not only are these education models culturally relevant and socially sensitive, the courses are available without high-speed access, which begins to address some of the issues around accessibility.

These examples underscore the importance of a school curriculum that is culturally and linguistically appropriate, especially in places where Aboriginal culture is overshadowed. In addition to allowing for culturally appropriate learning, eLearning allows children to stay within their communities, breaking the cycle and history of relocation (such as residential schools), which has had irreparable damage on community cohesion, family bonds and individual educational retention. By keeping young people in Aboriginal communities longer, they can mature and become better equipped to deal with social transitions and get an extended opportunity to learn about and actively participate in the cultural life of the community.

Sharing Aboriginal Culture in the New Economy

When individuals have the skills and the confidence to use ICT, the knowledge economy presents new opportunities for economic development that extend well beyond the boundaries of Aboriginal communities. The Aboriginal Voice eEconomy Forum demonstrated that these opportunities are often in the culture industry. Currently, First Nation, Inuit and Métis entrepreneurs are:

- Using ICT as a tool to expand markets for Aboriginal cultural products;
- Integrating technology into traditional activities to showcase talents in music, dance and other arts;
- Expanding commercial opportunities such as eco-tourism to global economies;
- Using indigenous knowledge to assist in environmental management preservation; and,
- Commercializing unique and culturally-appropriate service delivery models in areas such as eLearning.

The Internet allows for an increasing visibility of Aboriginal artists and opens new markets for cultural products. ICT have already been introduced into traditional Aboriginal artistic expressions with great success. For example, technology plays a critical role in the visual arts. Whether it is Buffy St. Marie using computers to “paint” or Douglas Cardinal pioneering computer applications for his earthy, curvilinear architecture by using mediums such as film, video, and digital photography, Aboriginal artists are able to bring new exposure to “living traditions” of Aboriginal culture. Other examples include the Virtual Museum of Métis History and Culture (www.metismuseum.ca), which catalogues all types of artistic expression from traditional clothing to contemporary artwork, and the imagineNATIVE Film + Media Arts Festival (www.imagenative.org), which promotes and showcases Canadian and international Aboriginal filmmakers and media artists. As an exporter of Aboriginal cultures, imagineNATIVE is regarded as one of the most important Aboriginal film and media arts festivals in the world and showcases the vibrancy and diversity of Aboriginal cultures globally.

While much of the focus of technology is on the new industry, ICT can strengthen traditional Aboriginal economies by expanding markets in areas such as tourism and the craft industries. The challenge, though, is finding a balance between the promotion of traditional ways of life in a culturally-sensitive manner and the commercialization of culture. In December, 2003, The National Gathering on Aboriginal Cultures and Tourism discussed the meaning of an “authentic experience.” Communities involved in the tourism industry need to determine what this means: experiencing and participating in Aboriginal traditions and customs of the past, or a guided tour along a trap line by an Aboriginal guide? In either case, communities that engage in eco-tourism must educate the public about what to expect from a “cultural experience” so both the community and visitor have a positive experience. The development of an Aboriginal eco-tourism industry is conducive to finding ways of sustaining a cultural heritage-related tourism. A good example of this is the Lennox Island First Nation in Prince Edward Island which, in forging its vision of economic development and increased self-sufficiency, has created an eco-tourism complex and adventure centre that promote hands-on ways of learning history and culture.

Making Cultural & Historical Knowledge Public in an Information Society

One of the best ways to preserve a culture is to practice and disseminate it as widely as possible. Given its unlimited potential, the Internet can function as an ideal candidate for making Aboriginal cultural information easily and readily available. Inroads have already been made in the online storage and access of histories, important documents and letters online; artefacts can be archived into electronic databases; and, it is possible to map sacred sites in a protected manner to allow for virtual teachings and tours. For example, online archives are serving as repositories for Elders’ teachings and connect Aboriginal youth with their heritage through such vehicles as the *Virtual Circle – The Aboriginal Community* (www.vcircle.com) website. In many First Nations, Métis and Inuit schools, students undertake learning projects to trace their roots and post information on the Internet, a learning process which successfully engages youth in technology as well as serving to strengthen their cultural identity.

Notwithstanding the continued threat that the English language poses to the survival of Aboriginal languages in Canada, it can function as a unifier in certain instances, especially with regard to intercultural learning. In an information age, connections are unlimited so long as there is a common language for communication. If Aboriginal groups, each with a distinct language and history, employ ICT to communicate on issues of vital importance, English enables them to articulate common cultural threats and develop unified strategies for protection.

Once culture has been posted and preserved online, technology can be a powerful tool for intercultural learning, particularly amongst young people. The reach and openness of the Internet offers opportunities to build awareness and understanding of Canadian and Aboriginal cultural diversity. Communities can share information and traditions, and heritage can be exported to larger, non-Aboriginal communities. Knowledge can also be

shared between Indigenous peoples from the North and the South, developing intercontinental partnerships.

As ICT social networks expand, they themselves can also be a forum for cultural learning. Since 1972, the Saskatchewan Indian Cultural Centre (SICC) (www.sicc.sk.ca) has played a key role in preserving the province's First Nations heritage and fostering cultural awareness and cross-cultural understanding in Saskatchewan, nationally and internationally. One of their objectives is to provide a resource base for bands and school systems to draw upon so that First Nations children can inherit the values and traditions of their heritage. The SICC website also includes a calendar of cultural events, a library database, digital archives, virtual powwows, Aboriginal Arts Gallery and the Keeping House Project, a virtual showcase of First Nations artefacts. In this way, SICC sets high standards for using the Internet as a forum for cultural sharing.

Protecting Culture & Indigenous Knowledge - Mitigating the Risks

Capitalizing on the potential of the Internet as an open access system to increase the availability of cultural information is desirable, however the pervasiveness of the Internet creates certain concerns that will have to be addressed if the Aboriginal community is going to readily accept ICT as a tool for cultural preservation. In the information age, the threat of misappropriation of knowledge is strong and of foremost concern to Aboriginal groups, particularly the threat of appropriation of cultural knowledge and symbols for commercial use. We must keep in mind that a prominent discourse around these issues is already taking place on the national and international stages.

In many instances, indigenous knowledge is disseminated differently. In Aboriginal communities, knowledge has been traditionally passed on by apprenticeship or going out on the land with skilled hunters and gatherers as well as Elders. Since some people are choosing to leave their communities, there is a threat that indigenous knowledge will not be passed along to the next generation through these methods. New audio and video recording technologies can allow Aboriginal communities to maintain their strong oral traditions beyond community borders. Audio recordings ensure that words are transmitted above and beyond written text; video accommodates for facial expressions, gestures and tones, all vital to the transmission of stories. It should be recognized that the shift to using technology in disseminating knowledge does not preclude traditional methods, it simply provides an alternative.

We see the potential of ICT to promote indigenous knowledge and ways in other examples that are quite practical. Over centuries of living in harmony with their surroundings, Aboriginal peoples in Canada have gained a deep understanding of the complex way in which the components of the environment are interconnected. The value of this indigenous knowledge has become increasingly important in efforts associated with environmental management and preservation. The Inuit Tapiriit Kanatami (ITK) is the national Inuit organization in Canada, representing four Inuit regions – Nunatsiavut (Labrador), Nunavik (northern Quebec), Nunavut and the Nunakput region in the Northwest Territories. The Environment Department at ITK is dedicated to protecting

and advancing the place of Canada's Inuit in the use and management of the Arctic environment and its resources. ICT facilitates their communication and ongoing conversation with other Inuit organizations who share the same concerns; it is a tool for disseminating information about their initiatives.

But many questions about the relationship between ICT and indigenous knowledge persist. How do communities strike a balance between sharing "cultural property" and protecting it? How is the authenticity of information determined and authority for use granted? And finally, how can we ensure the protection of this knowledge?

It is well known in Aboriginal communities that many songs and dances are tied to spirituality and their sanctity is derived from live performance, thus, there are concerns around seeing these performances out of context, say, over the Internet. Decisions need to be made about what is appropriate to put online and what is to be considered authoritative cultural content. This is not as straightforward as it appears. Questions arise such as, what is the role of Elders in making this decision and what is the role of the community when many members may not have been imparted with the knowledge of the Elders? Should there be a cultural discussion or increased cultural awareness before critical decisions are made? Given the propensity for youth to be engaged in ICT how are they to be involved in the governance equation? Just as there has been a shift in dynamics in learning, so too is there a shift in dynamics of decision-making surrounding ICT initiatives. Elders, youth and community members all have a vested interest in cultural protection and expression.

We are confident that First Nations, Métis and Inuit peoples can use many methods to protect and preserve their cultural and indigenous knowledge and skills for the benefit of their communities. First and foremost, there is a level of security in the use of Aboriginal languages; only those who can speak and read the language can retrieve it. Also, cultural information stored online can be protected by implementing a variety of mechanisms such as password protected sites and virtual private networks. Communities can impose limits on networks to keep unqualified people or non-community members from gaining access to culturally sensitive information. New forms of multimedia allow knowledge to be stored not simply through writing but through video and pictures. Although search engines for non-written text are still in the infancy stages, these new media sources permit the archiving of indigenous knowledge.

To further ensure protection and control, Aboriginal peoples and communities need to be involved in the creation of the information being disseminated. Since Aboriginal peoples are not the exclusive recipients of the content (ICT rarely allows for this), they need to play an active role in developing it. The National Congress of American Indians acknowledges that "the creation of culturally and socially relevant Internet content is essential to the development of tribal constituencies and legitimate representation of American Indians on the Internet...The challenge for tribes and individual American Indians today is to produce content in all forms (multimedia, Internet and broadcast) in order to use the medium of an online community for the formation of tribal constituencies

and public opinion - and to bring tribal content on the web to a new level of utilization, not just representation.”²

Information Governance

In addition to using technology to safeguard information and create content, it is also pertinent to have appropriate governance structures in place. For example, the Mi’kmaq Ethics Watch, a governing board that defines the processes and outputs for using Mi’kmaq knowledge, has developed principles and guidelines to ensure that the ownership of Mi’kmaq heritage rests with the appropriate communities. This represents a starting point – the basic premise is that Aboriginal peoples need to play an active role in the ownership, control, access and protection of their cultural information. The implementation of these principles, as developed by Aboriginal groups is the ultimate method to protect and preserve cultural expression.

Standards and mechanisms, such as community protocols and Elders’ committees, need to be put in place when deciding what community information should be made public on the Internet and what information is considered authoritative cultural content. Customary laws which govern the use of culture – including the appropriate environments and conditions (the where, when and how) – should be reflected in formal guidelines and agreements. These protocols need to be established by communities, as the diversity of protocols is often dependent on place.

Protocols are intended to outline the principles and contexts for the uses of certain information, which is particularly important when cultural appropriation can be attributed to ignorance and lack of knowledge around protocols. Protocols will provide a working framework to ensure that customs are respected and misrepresentation does not occur. Communities therefore need to employ a strategy that not only clearly defines procedures but also effectively communicates an understanding of these protocols to all members. Then, once cultural and indigenous knowledge is posted on the Internet, communities need mechanisms to control and maintain it.

Self-determination, Self-government, and Culture

Having a recognized and respected community-based system of information governance, while critically important, is not enough to deal with the challenge of a digital age when information is so easily captured and used by others for unintended purposes. Indigenous knowledge is a case in point. Indigenous knowledge is held by an Aboriginal group as a collective and is widely seen within the Aboriginal community as an expression of collective cultural rights. When it comes to knowledge and artistic creations, however, the current legal system moves in a different direction. Intellectual property laws are focused on individual, private rights. They grant ownership of knowledge in the forms of patents, copyrights or trademarks and are designed to promote innovation or artistic work by promising rights to economic returns to individuals and companies over a certain

² NCAI *Bringing Tribal Content to the Internet*. <http://www.indiantech.org/main/pages/content/index.asp>

period of time. Because these laws do not encompass collective rights, collective privacy and collective ownership, they do not offer appropriate or adequate “digital rights” protection for indigenous knowledge. Indeed, many see current legal regimes around intellectual property as creating a risk for Aboriginal communities that make their cultural knowledge openly accessible on the Internet.

In commenting on what is required, Professor Marie Battiste notes that: “With respect to indigenous knowledge, we stress the necessity of recognizing and respecting, in both national legislation and international law, the principle that any acquisition, publication, scientific use, or commercial application of indigenous knowledge must be in accordance with the customary laws of the peoples concerned, as determined by them.”³ Such laws would go a long way to ensuring that when community knowledge has entered the public domain, those who access the information will adhere to a community’s laws; and, if these laws are infringed, mechanisms will be in place to enforce them. In other words, local and national systems of law must recognize and support indigenous legal systems that may govern the use of indigenous knowledge. Moreover, the focus of these laws should, in addition, include the general protection of Aboriginal culture and knowledge.⁴ There have been important developments on this front. The United Nations’ Draft Declaration on the Rights of Indigenous Peoples (1994) incorporates the importance of cultural and linguistic identity as intrinsic to the survival of Aboriginals worldwide and provides for the protection of indigenous knowledge.

This discussion highlights the importance of having Aboriginal governments with the authority to establish formal, transparent rules and regulations to govern their information and cultural practices, including their digital expression. Having Aboriginal governments with this capacity requires that these governments acquire the necessary jurisdiction to enable communities to make laws that can better protect their cultural ways of life and that there are legal relationships among government that enable these laws to be enforced both inside and outside the community. As we have said, the preservation and protection of culture is an urgent issue for Aboriginal groups. Unfortunately, at the moment, little progress is being made on putting in place the legal framework and governance capacities that will give Aboriginal peoples and their communities the tools to tackle the challenge of protecting their knowledge and heritage.

Conclusion

A people’s culture represents the most fundamental expression of who they are. The Royal Commission on Aboriginal Peoples (RCAP) identified First Nations, Métis and Inuit peoples as nations onto themselves - political and cultural groups with distinct values and ways of life. We have seen that ICT can facilitate and increase the capacity of Aboriginal peoples, their governments, communities and institutions to engage in processes of cultural and linguistic development and renewal. For an increasingly

³ “Protecting Indigenous Knowledge and Heritage”, Marie Battiste, Purich Publishing Ltd. Saskatoon SK, 2000.

⁴ Professor Shelly Wright, University of Sydney, Australia.
http://www.ubcic.bc.ca/docs/International_HR.pdf

geographically dispersed population, these technologies can link and network Aboriginal citizens so that they stay socially and culturally connected. We have seen the power of this technology as a tool for culturally-appropriate learning and the benefits that this has for the future of a young Aboriginal population.

As Aboriginal nations become further integrated into the knowledge society and economy, ICT will play an important and vital role in the protection of their cultures and in the promotion of language, culture and community connectedness. ICT provides many opportunities for renewing, preserving and strengthening the social and cultural fabric of Aboriginal communities. We have pointed to why political agendas need to prioritize the protection of indigenous knowledge and the enhancement of language and culture.

If First Nations, Métis and Inuit peoples integrate ICT into their communities on their own terms and at their own pace, they maintain ownership and control of its use. Non-Aboriginal technologies have often been introduced into Aboriginal communities supplanting traditional ways of cultural engagement. ICT, if adapted and modified to mesh with Aboriginal cultures and needs, can act as a powerful enabler for the transmission of culture and language.

We have argued that self-determination and self-governance are strongly tied to the protection, expression and renewal of Aboriginal languages and cultures. Self-government provides the authority which allows Aboriginal communities to ensure that programs are adequately designed for their needs and implemented in ways that are culturally appropriate and relevant. It enables Aboriginal communities to create institutions and governance structures that are culturally meaningful and relevant to them, which as we have highlighted, increases the prospects for the health and socio-economic wellbeing of communities.

Finally, ICTs, especially through the Internet, offer powerful ways to acknowledge and promote the diversity and history of First Nations, Métis and Inuit peoples within Canada and to engage in a spirit of intercultural sharing and learning. In so doing we all benefit as Canadians by enriching the texture and understanding of our country's vision of diversity and citizenship.

About the Writers

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Jay Kaufman is a principal at KTA Consulting and the KTA Centre for Collaborative Governance. He specializes in leading edge public policy reform and negotiations, including recently leading successful federal negotiations on a number of treaty and self-government files. He has worked for many years in the field of Aboriginal affairs. Jay is a former Ontario Government Deputy Minister of Finance, Secretary to Treasury Board and Assistant Deputy Minister of Health.

About the Culture Working Group

The Aboriginal Voice Culture Working Group was established to explore the relationship and impact of information and communications technologies on Aboriginal cultures and identity. Its purpose was to bring together a small group of knowledgeable individuals with a cross section of experience and backgrounds to develop this discussion paper. The ideas, perspectives and questions developed in this paper are intended to guide and stimulate further dialogue on issues of Aboriginal identity and culture, as well as influence thinking within the broader Aboriginal policy community.

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