Social Media in Remote First Nation Communities

Heather Molyneaux
National Research Council Canada

Susan O'Donnell
University of New Brunswick

Crystal Kakekaspan
Keewaytinook Okimakanak and University of New Brunswick

Brian Walmark
Keewayatinook Okimakanak

Philipp Budka
University of Vienna

Kerri Gibson
University of New Brunswick

Abstract

Community resilience in First Nations includes ties to people both inside and outside the community, intergenerational communication, sharing of stories, and family and community connectedness. This study, based on a survey of internet users in the Sioux Lookout region of Northwestern Ontario, explores the link between social networking sites (SNS) and community resilience. The region is home to some of the most isolated First Nation (indigenous) communities in Canada. Cultural and familial links between these communities are strong, yet until the fairly recent widespread use of the internet, maintaining regular communications to strengthen cultural ties was challenging. This study examines the links between travel and communication online, how social media is used to preserve culture and maintain communication, and the implications of social networking for community resilience.

Introduction

This study explores the link between social media and community resilience in the Sioux Lookout region of Northwestern Ontario, home to members of the most remote First Nation

communities in Canada. Most of these Ojibway, Oji-Cree and Cree communities are small and fly-in only, and the few road access communities are isolated; travel between them is expensive and prohibitive. Cultural and familial links among these communities are strong, yet until the fairly recent widespread use of the internet, maintaining regular communications in order to strengthen cultural ties was challenging. Social Networking Sites (SNS), websites with content populated by community members to share information for the purpose of networking with each other, provide additional opportunities to communicate within and outside of the geographical communities.

Many of the Sioux Lookout region's community and social services are supported by broadband networks provided by the tribal council Keewaytinook Okimakanak (KO), "Northern Chiefs" in Oji-Cree. KO-KNET Services provides internet connectivity, email, videoconferencing, and many other broadband-enabled services, including MyKnet.org – a community-driven system of homepages produced by members of First Nation communities in the region (Bell, Budka & Fiser, 2007; Budka, Bell & Fiser, 2009). Since the more recent introduction of Facebook in these communities, the use of social networking has risen dramatically. The current study is based on the analysis of 663 responses to an online survey conducted in the region. The analysis complements the earlier research on social networking in the region, adds new data on the link between social media and travel in the region, and develops a deeper understanding about the link between social media, community resilience and cultural preservation in remote First Nations.

Community resilience, First Nations and SNS

Many First Nation communities in Canada are experiencing significant challenges due to historical government policies with an explicit goal to annihilate their cultures (Tousignant & Sioui, 2009; Royal Commission on Aboriginal Peoples, 1996). These policies include more than 100 years of residential schools and the continued existence of the *Indian Act* that defies all the requirements of the United Nations' Declaration of the Rights of Indigenous Peoples. Research has found that through these and other policies, First Nations have been deprived of the tools of resiliency (beliefs, traditions, institutions) that could help communities to resist colonial aggression and reconstruct their identities (Tousignant & Sioui). As one survivor of residential school writes: "Resilience is not a new concept to aboriginal peoples. It's an ancient principle in our philosophy of life. To persevere, to stand strong, to never give up hope. A culture's world view is the lens through which they learn how to nurture, protect, and dream for future generations" (Iris Heavy Runner, quoted in Kenny, 2003: 3).

Researchers recognize that resilience is more than an individual attribute - it is clustered, occurring in groups of people in a web of meaningful relationships. "The individual, family unit, community and larger environment are interconnected, and factors from each realm contribute to processes that can counter stress and adversity" (Kirmayer, Sehdev, Whitley, Dandeneau & Isaac, 2009: 71).

Three important components of resiliency in First Nations are social capital, sharing stories, and networking (Tousignant & Sioui, 2009; Kirmayer et al., 2009). Social capital can be understood

as the various resources within a community that need to circulate between many different groups (women, men, grand-parents, youth and children) (Tousignant & Sioui). These resources provide a form of resistance against the stereotypes of Aboriginal people portrayed in the mainstream media and serve as a means to protect indigenous identity (Kirmayer et al.). A core element of social capital is interconnected dense networks with information and activity flowing between them.

Sharing stories facilitates bonding between storytellers and listeners. Stories are important because they help community members, particularly the youth, to understand their negative experiences and look forward to a more positive future; research has found that Aboriginal youth use stories to build a sense of cultural continuity (Tousignant & Sioui, 2009). Two core aspects of networks are bonding relations (connections within a community) and bridging relations (connections among communities). Linkages with individuals outside the community allow for communal empowerment and influence on the wider society. Networks can "provide material, economic, informational resources, assist with problem solving, and provide emotional and other forms of support in everyday life and in times of special need" (Kirmayer et al., 2009: 73).

Very little research has been conducted on how community members in rural and remote First Nations in Canada are using the internet. Studies conducted in collaboration with three communities - the remote Fort Severn First Nation and isolated Mishkeegoogamang First Nation in Ontario and rural Kitigan Zibi First Nation in Quebec - found that in all three, there was active internet use, particularly for social networking (Gibson, Kakekaspan, Kakekaspan, O'Donnell, Walmark, Beaton & and the people of Fort Severn First Nation, 2012; Gray-McKay, Gibson, O'Donnell & the people of Mishkeegogamog, in press; Lockhart, Tenasco, Whiteduck & O'Donnell, in press). Research in British Columbia with the Ktunaxa First Nation also found that community members used the internet for social purposes and to learn from friends and family members. Social applications, such as live chat and Facebook acted as a gateway to engage people in information exchange and cultural communication (Henley, 2010).

Research by Bell, Budka & Fiser (2007) and Budka (2012) is, similar to the current study, based on online surveys of residents of remote and communities in Northwestern Ontario. In his 2011 survey of 117 KO-KNET users, Budka found that social networking use was common. The vast majority of respondents had MyKnet.org homepages and Facebook profiles (95% for each), while 30% used other SNS such as Bebo or Piczo. Although MyKnet.org was not designed with social networking in mind it is similar to SNS in its current function and use (Bell, Budka & Fiser). Budka hypothesized that Facebook is used primarily as a means of communication, while MyKnet.org homepages are a place for expression and self representation (Budka).

Community resilience could result from remote First Nation community members using the internet and social networking sites for communication and cultural preservation. One dimension of community resilience for First Nations is connection to the land, including participation in land-based activities and eating traditional food (Kirmayer et al., 2009). If community members discuss these activities on SNS, the information exchange could strengthen cultural preservation and community resilience.

While using online tools to preserve culture can lead to challenges, such as English and French television programming overshadowing First Nation languages, these tools can also be used to preserve and disseminate culture (Gibson et. al., 2012; McMahon, O'Donnell, Smith, Woodman Simmonds & Walmark, 2010; Nickerson & Kaufman, 2005; Pannekoek, 2011). Examples of how First Nation and Inuit communities in Canada have used digital tools to protect their language and culture include the CIER – Centre for Indigenous Environmental Resources Virtual Environmental Library, the Nanisiniq Inuit Qaujimajatuqangit (IQ) Adventure Website, IsumaTV, BC First voices project and the Kisiki'k Wklusuwaqnmuow or Dear Elders Project in Atlantic Canada (McMahon et al., 2010). A comprehensive literature review on ICT and health and wellness in remote and rural First Nations (O'Donnell, Molyneaux, Gorman, Milliken, Chong, Gibson, Oakley, & Maitland, 2010) highlighted numerous examples of how ICT can support cultural development, including: an online Oji-Cree dictionary (Beaton, Fiddler & Rowlandson, 2004), Elder visitations by videoconference (O'Donnell, Walmark & Hancock, 2010), a syllabic keyboard created by KO-KNET with layouts in Cree and Oji-Cree (Fiser, Clement & Walmark, 2005) and audio podcasts of Native languages (Phillips, 2009) among others.

Another potential challenge related to internet use is social isolation. According to the isolationist view, active users of the internet spend more time online and as a result spend less time communicating with others in person and become less involved in their communities (Veenhof, Wellman, Quell & Hogan, 2008; Turkle, 2011). This trend was evidenced in at least one remote First Nation community in the 1970s when new telephone services and televisions provided people with greater access to information. Community members in the study recalled that greater access resulted in fewer in-person visits and less time spent in person with friends and family members within the community (Gibson et al., 2012). However, current research (Veenhof et al.; Baym, 2010; Hampton, Goulet, Rainie & Purcell, 2011) shows that online communication acts as an enhancement to existing in-person communication, and that digital tools allow people multiple ways to stay connected while allowing for multitasking. Heavy users do indeed spend less time in person with family and friends than non users, but while they are online they participate in social capital building activities. In fact, Veenhof and colleagues present a compelling argument as to why being online fosters greater social capital:

> "Particularly in Canada, long, cold winters encouraged Canadians to stay home and watch television, listen to the radio and read. Thus the advent of the internet is breeding a more social era, with active communication and information seeking activities compared to the more passive traditional forms of entertainment such as television" (Veenhof et al., 2008: 23).

This discussion of social capital and bridging and bonding on the internet can also be linked to the broader literature on social capital, including Bordieu, 1993; Coleman, 1994; Wellman, Quan Haase, Witte & Hampton 2001). Different authors have different perspectives on the role of social capital in supporting community development. For example, Pierre Bourdieu (1993[1984]) sees social capital as "connections," or the benefits accruing to individuals through belonging in a group or family. In his view, social capital is linked to economic capital and the means for understanding the relations between them lies in analysis of the functions of institutions such as

clubs, families, businesses and other social structures. In contrast to Bourdieu, James Coleman (1994) focuses on the individual motivations for creating social capital, rather than the social and economic conditions underlying its creation. Coleman believes that the value of the concept of social capital is its ability to identify certain aspects of social structure by their function, and that the function of social capital is as a resource that can be used by the actors to realize their interests.

The review of literature raised a range of questions pertinent to our study related to social media use in the remote communities and the potential links with cultural resilience and social isolation. To explore these questions, we implemented and analyzed an online survey of people living in First Nation communities in the region to understand the frequency and extent of the following: use of social media; online communication with others in the region and outside the region; travel outside the communities; the potential link between online communication and travelling; and the use of online communications for cultural preservation. Our analysis also explores the implications of this networking for community resilience.

Research method

This study was conducted as part of a larger ongoing project, First Nations Innovation, that investigates the use of broadband networks and services in remote and rural First Nations in Ontario, Quebec and the Atlantic region. KO-KNET - one of the partners in the First Nations Innovation project and the primary partner in this study - is the telecommunications division of the Keewaytinook Okimakanak (KO) tribal council. KO-KNET provides broadband and ICT services to not only its KO communities but also more than 25 other First Nation communities in the region. The online survey was open to users of the KO-KNET email service.

An invitation to complete the survey was sent to everyone with a KO-KNET email account, and the survey was open for the month of November 2011. KO-KNET had 7,209 email accounts in November and during that month, 4,175 account holders accessed their email and received the invitation to complete the survey. The 663 responses gathered by the end of the month represent a 16% response rate overall, with 568 completing the survey, a 14% completion rate. According to the demographic information collected, participants represented a wide range of community members. They were 58% female and 42% male, ranged in age mostly from 18 to their 60s, and held a variety of roles within their communities, including band council members, artists, musicians, Elders, health and education workers, students and many others.

Survey questions included 29 quantitative and qualitative items related to technology use, evaluation of the online services provided by KO, and the participant demographics. In the survey, MyKnet.org was grouped as a SNS alongside Facebook and MySpace. Respondents who submitted written feedback discussed MyKnet.org alongside other SNS including Facebook. The authors used SPSS to analyze the data gathered. Quotes from the qualitative responses are used to illustrate the findings.

Survey findings

Using SNS

The analysis found that the majority of survey respondents used SNS (MyKnet, Facebook, MySpace, etc.) on a daily basis, more frequently than any other ICT. Participants were asked how often they participated in a number of online activities including SNS, email and instant text message. SNS were most frequently used (72.8% reporting daily use), and email the second most frequently used (63.4% reporting daily use). In addition the survey found that only 1.1% reported never sending an email and 8.5% reported never using SNS. This indicates that more people use email than SNS but those who use SNS are more likely to use SNS everyday than email everyday.

Sending text messages and watching online videos were also daily activities (34.2% and 30.5% respectively). Participants less frequently engaged in other online activities such as updating websites/homepage/Blog/Vlog, making video calls, uploading videos, shopping online and playing online games.

Communicating online with others

Survey respondents communicated frequently with others online (including social media), including on a regular basis (daily or weekly) with those from the same community (80.9%), in other communities in Northwestern Ontario (73.9%), with people living elsewhere in Ontario (66.7%), and with others elsewhere in Canada (50%). Most respondents (73.2%) reported rarely or never communicating online with others outside of Canada.

Travelling to other communities

The majority of survey respondents travelled infrequently to other communities (either nearby or further away by roads or planes). When asked how often they travelled to another community, only 8.6% of respondents reported doing so on a regular basis (daily or weekly); while 65.1% reported that they rarely or never travelled to another community. Many of the remote communities included in the survey are fly-in communities. When asked how often they took a flight, only 4.7% of respondents reported doing so on a regular basis, while 58.1% indicated that they never or rarely flew. The second most frequently reported travel was taking a road trip from 1-2.5 hours, with 17% of respondents doing so on a regular basis and 56.1% never or rarely engaging in this type of travel. Longer road trips, in duration from 3-5 hours and 5 hours or more were taken less often on a regular basis (5.7% and 3.5 % respectively) and more people reported rarely or never taking such trips (64.4% and 74.8%). Travelling on the winter roads for the short season they exist was the most frequent type of travel, with 25.6% reporting using these roads on a regular basis and 56.7% rarely or never using the winter roads.

Relationship between online communication and travel

Although most survey respondents do not travel to other communities on a daily or weekly basis (either nearby or further away by roads or planes), they communicate online with people in and outside of their communities on a daily basis. There was a statistically significant positive pearson correlation between the frequency of social media use to communicate with people in different communities ($r=.120, p= .01$), elsewhere in Ontario ($r= .151, p= .01$), elsewhere in Canada ($r= .163, p= .01$) and in other countries ($r= .174, p= .01$), and frequency of travel to another community. This means that an increase in communication and an increase in travel were linked. While correlation does not mean that one caused the other, these findings show a positive relationship between travel and SNS use. In particular, the use of SNS does not seem to negatively correspond with a person travelling or connecting in-person. This suggests that SNS could potentially add to travelling and in-person communication and may aid in cultural preservation and the strengthening of community ties.

Preserving culture

More than half the participants indicated they post photographs and stories on SNS (56.4%), listen to music and look at art (58.7%) and/or read about their culture online (49.3%). Fewer indicated posting announcements about pow-wows and other cultural events (23.1%), sharing their own art or music online (14%), and writing a story and sharing it online (20.8%). A minority indicated they do not preserve their culture online in any way (14.3%).

When invited to share comments, several respondents wrote that they do learn and share their culture online using SNS and described how they used SNS to share cultural knowledge. Several respondents indicated that SNS offered them a means to stay connected with the communities in which they were raised but no longer lived:

I am located in Southern Ontario attending school and the only means of staying connected to my home community is visiting KNET archives and viewing the photos of community events, feasts, elders, etc. [MyKnet.org] Homepages are also a great place to stay connected through the stories and emergency community events. eg. illness, etc.

In particular, MyKnet.org was mentioned by several respondents; one wrote: *Personal myknet.org homepage is used to share experiences and family pictures.* Another mentioned that myknet.org allows them to post in their own language: *using my own language on my Knet homepage...which is good that they have that syllabics fonts on there!*

Others indicated that they would like to learn more about how to learn and share cultural knowledge online, and felt that MyKnet.org could offer additional support. One person mentioned going online to *ask other people about words, word usage in a native language on facebook. it would be great to have something like that on knet.* Another respondent also recommended ways that the MyKnet.org homepages could be used for language preservation: *The knet homepages should have a feature or a site where people can learn Ojibway, Oji-Cree or Cree or interact with one another for the purpose of preserving language. Or have a*

page/interactive site where you learn a "word of the day" in a native language or learn how to write it in syllabics.

Several respondents mentioned various offline activities in which they shared their culture, including participating in community events and sharing their cultural knowledge in person with friends and family. For example, one respondent noted: *I go hunting and fishing. Go out on the land. I go with my children and show them physically. I don't post things online.*

Implications of these findings for community resilience

Community resilience, as discussed earlier, is an important focus of work and development for First Nations in Canada. Social networking sites are a potential tool that can support communities who have endured centuries of colonial aggression to reconstruct their identities. This study explored the use of SNS by respondents in the Sioux Lookout zone of Ontario, home to some of the most isolated First Nation communities in the country.

The first finding is that SNS is the most actively used ICT in the region, and most survey respondents use SNS daily. Although slightly more people use email, the use of SNS is more intense overall; only a small percentage of respondents reported never using social media. Considering the literature on community resilience, it is clear that this heavy use of SNS contributes to social capital – the resources within a community that circulate between many different groups that serve as a means to protect indigenous identities.

The second relevant finding is that SNS – along with other online tools – are being used frequently by community members to exchange information with not only members of their own communities but also other communities in the region and further afield. Again, the literature on community resilience suggests that social media fulfills the two core aspects of networking – bonding relations within the same community, and bridging relations with members of other communities. These inter-community linkages indicate that community members are contributing to regional empowerment and influencing communities and social processes outside their home communities.

The respondents in our survey travel outside their communities infrequently. The analysis of the relationship between online communication (frequency of social media use) and travel found that people who travel more frequently outside their communities also communicate more frequently online with people outside their communities. Our finding supports related research that frequent online communication can add to in-person contact, in this case specifically with people outside the communities. Although this link does not necessarily mean that one causes the other, it does suggest the possibility that the use of SNS has created interconnected dense networks with resources and information flowing in many directions, which contributes also to social capital development in the region.

Our study found that most respondents – more than four-fifths – use the internet or social media to celebrate and practice their culture. More than half post photographs and stories and listen to music and look at art created by Aboriginal people on SNS. Many post announcements of

cultural events. As discussed in the review of literature on community resilience, sharing stories – particularly among youth – is important because this activity can help community members make sense of negative experiences and look forward to a more positive future, which can build a sense of cultural continuity. In addition, the discussions on SNS about land-based and traditional activities can strengthen cultural identity and thus contribute to developing community resilience.

Conclusions

Our study contributes further evidence to the growing body of literature on social media use by First Nation community members in Canada and community members of indigenous communities internationally. Clearly, members of First Nation communities in the Sioux Lookout zone are frequent users of SNS. The discussion of the links between our findings and cultural resilience strongly suggests that this intense SNS activity in the region is contributing to social capital, strengthening both bonding and bridging networks within and among the communities, and providing an important avenue for sharing information and stories that support the development of culture and the maintenance of cultural preservation.

This study suggests many future avenues of research to further explore these initial findings. One limitation of the study is that it was conducted with KO-KNET email account holders only and was a self-selected survey, so we cannot generalize these findings to all community members in the Sioux Lookout region. A broader connectivity study of all community members would result in a more complete picture - realistically however, given the context of the research, it is unlikely that such a survey would be feasible or affordable.

The findings suggest that much more could be done to give First Nation community members the ability to turn SNS into means for cultural sharing and potential aid in community resilience. Many respondents stated the need for additional bandwidth to make their use of these online SNS tools more rewarding both for themselves and the people they are sharing their stories. Everyone would like to be able to view and share video materials but this is very challenging in a bandwidth-restricted online environment. This points to the need for the ongoing and continued efforts of KO-KNET to work with the First Nations in the region to increase the capacity and bandwidth on their networks to support these applications and processes.

Several respondents commented on the nature of materials posted on the homepage, noting the prevalence of "negative stuff" and content of a "pornographic" nature on MyKnet.org, which they said should be controlled. Also concern was expressed about people posting negative comments anonymously on the homepages, a finding Bell, Budka and Fiser also reported in their 2007 study. Negative comments on various types of SNS are not uncommon (Rainie, Lenhart & Smith, 2012), but such concerns could act as a deterrent for using SNS sites like MyKnet.org and should be considered in further studies.

Given the evidence by this and related studies about the role of SNS and other online tools in the development and maintenance of community resilience, it is also important to raise the consideration of the need to for First Nations to own and control their online content as well as

their networks. Our ongoing research has a related outreach project, the First Mile (http://firstmile.ca). The First Mile work is exploring concepts such as OCAP – Ownership, Control, Access and Possession (Schnarch, 2004) and the need for First Nations to own and control their local broadband networks and the data flowing through them (McMahon et al., 2010; O'Donnell, Kakekaspan, Beaton, Walmark & Gibson, 2011). Ultimately, when considering community resilience, the need for community self-determination and autonomy is a core consideration (Kirmayer et al., 2009; Tousignant & Sioui, 2009). Having control over their local networks will allow First Nations to make decisions about how SNS and other online tools are used to meet the needs of community members now and into the future.

Acknowledgements

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