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CHAPTER 3

Digital technology adoption in resilient remote First Nations

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INTRODUCTION

Indigenous communities in Canada have a rich history and vibrant economy that is often misunderstood by many Canadians. Their communities existed for thousands of years, long before European settlers arrived and began their colonization efforts just a short 500 years ago. Today, remote First Nations are doing the decolonization work required to correct the myths taught in schools while establishing vibrant, contemporary, resilient environments for young people and their families. This chapter demonstrates how their local social enterprises are developed and supported by using digital technologies effectively and how this activity is linked to community resilience.

The recent report from the United Nations Special Rapporteur on the Rights of Indigenous Peoples highlights the challenges facing Indigenous communities in Canada (Anaya 2014). Building healthy Indigenous communities requires the same mutual respect and collaborative efforts that existed in the first 200 years of contact with European settlers. Correcting the damage created after the latest 200 years of colonial governance—poverty and isolation of Indigenous communities within Canadian society—is an ongoing struggle (Palmater 2011; Royal Commission on Aboriginal Peoples 1996).

The five remote First Nations in northwestern Ontario collaborating in this study are members of the Keewaytinook Okimakanak (KO) First Nations council. KO acts as an intermediary organization, providing second-level support services in key areas such as education,

health, public works, and administration (Carpenter 2010; McMahon et al. 2014). Social enterprises based on digital technologies are at the core of the KO community development model. These digital technology-enabled social enterprises create much-needed new and expanded local employment; new learning, training, and education initiatives; access to resources, services, communication, and marketing venues; and many other opportunities for local enterprise and personal development (Beaton and Carpenter 2014).

This chapter includes information from an online community questionnaire that generated data about digital technology use and local social enterprise activities, along with two case studies: an analysis of records of a KO project to support social enterprises and entrepreneurs in remote First Nations, and a presentation by an entrepreneur in one of the KO First Nations. Our study is a collaborative work between university and community researchers.

COMMUNITY RESILIENCE, DIGITAL INFRASTRUCTURE, AND THE SOCIAL ECONOMY IN REMOTE FIRST NATIONS

Digital technologies can support local ownership and control of community social enterprises. These enterprises provide local employment and improved services for community members. Financial resources from public and private partnerships help to sustain the operation of these services. Investments in digital technologies can support local schools and health centres as well as a range of community services, including governance; research; lands and resources; policing; public works for transportation; an airport; the electrical systems; the water and wastewater systems; cable networks for TV, telephone and internet; towers for radio and cellular services; and other local economic and social enterprises (Beaton and Campbell 2014; Carpenter 2010; Gurstein et al. 2009; McMahon et al. 2010).

In non-Indigenous communities, governments raise taxes from citizens and businesses which are then used to fund public services. Most First Nations do not tax their citizens. Historical and modern treaties or other agreements to share some lands and resources support a nation-to-nation relationship between the colonial state and each First Nation. Within this legal treaty and contractual arrangement, in

exchange for sharing lands and resources, the Canadian provincial and federal governments provide funding to the First Nations. With this funding, the autonomous First Nations deliver local services. Local social enterprises are created by the First Nations as the means to operate these services. Education, health, infrastructure, housing, policing, water, electricity, telecommunications, lands, and resources are just a few examples of the services at the core of the social economy in each remote First Nation. Quarter et al. (2009, 23) describe a community's social economy as "an umbrella concept for the many types of organizations created to meet a social need but also involving economic aspects such as the payment of wages and benefits to employees, the purchase of supplies, and in some cases, the exchange of services in the market."

As outlined by the recent United Nations report (Anaya 2014), the Canadian government is not living up to its treaty obligations with respect to funding, making it difficult to deliver equitable services (Alfred 2009; Assembly of First Nations 2010; O'Donnell et al. 2013; Palmater 2011). Supporting qualified staff in small remote First Nations is just one of the many ongoing challenges for local government and social enterprises. Maintaining and sustaining proper infrastructures is another.

The social economy and the social capital it generates support many of the education, health, and other services found in remote First Nations. The social economy built around these services is integral to small resilient communities. In small remote First Nations, community members work with not-for-profit community organizations that operate as local social enterprises or co-operatives established to deliver services and products. The First Nation social economy delivers services addressing local social and economic needs and priorities.

Robust digital infrastructure and sustainable social enterprises are necessary for community resilience in remote Indigenous communities (Beaton and Campbell 2014). Building and operating a range of information technology-related infrastructures create socio-economic benefits in the communities with new skills and local employment opportunities. Access to digital infrastructure supports wider forms of local innovation and sustainable enterprises with the development of wider markets for local products, efficiencies related to reducing costly travel, accessible resources such as raw materials, financial support,

and information along with other essential requirements for operating a successful business or service.

Community resilience and sustainability are closely linked. Kirmayer et al. (2009) identified physical infrastructures as a core dimension of community resilience. They believe that community resilience can be measured in part by the availability of built capital infrastructure that provides the support facilities required to deliver the services community members demand. In their model, infrastructure includes housing, transportation, water, power, and communications (Kirmayer et al. 2009).

THRIVE—a Toolkit for Health and Resilience In Vulnerable Environments—is a community resilience assessment tool first introduced by the Prevention Institute in the United States (Davis et al. 2005). THRIVE was developed to help communities identify and foster elements and characteristics in their environments that promote positive health and safety outcomes. The THRIVE tool consists of 20 factors in the following 4 clusters: built environment, social capital, services and institutions, and structural factors. The built environment is a community's developed infrastructure, such as street design, public transportation, and permitted uses of buildings (Davis et al. 2005). Virtual environments made possible with broadband infrastructure and local social capital and social enterprises support resiliency in remote Indigenous communities.

Resilience is a concept well known to Indigenous people. The continued existence of First Nations in Canada after over 100 years of the federal government's efforts of assimilation—including residential schools and the Indian Act policies—is reason enough to celebrate the resiliency of these communities (Kenny 2003; Kirmayer et al. 2009). The fact that residential school survivors and their families have survived after the devastation wrought by the residential schools demonstrates the resiliency of the people. First Nation community members are now collaborating to build sustainable local environments and opportunities that support employment and equitable access to services—including housing, health, education, safety, and security—along with the physical and virtual infrastructure to support these services (Beaton and Campbell 2014; Carpenter 2010).

Community resiliency involves the different relationships in First Nations including the individual, family units, community, and the

larger environment that interconnect and work together. Sharing their narratives with others is critical to supporting resiliency and assisting community members as everyone learns about and understands their colonial experiences and history. The sharing of stories, particularly for the youth, helps to create a positive future for themselves (Kirmayer et al. 2009). Digital infrastructure and applications such as social media connect to community resilience enabling people to share their stories and experiences, and preserve their traditions and culture in online environments (Molyneaux et al. 2014).

Digital infrastructure supports the development and ongoing nurturing of local social capital and operation of services required in every community. With the proper network connecting other professionals, service centres, and professional development for staff, communities are now able to ensure essential services are available for their local residents. With proper services and digital infrastructure in place, innovative local enterprises become possible to further support their social economy. The remote First Nations involved in this study are now 16 years into developing their local social enterprises described in this chapter.

METHODOLOGY

The research for this study involved reviewing various KO documents, and developing and administering a comprehensive community questionnaire. The collaborative methodology involved community researchers, community leaders, their regional research organization, the university-based research project partners, and the lead researcher. Keewaytinook Okimakanak Research Institute (KORI) is a partner in the First Nation Innovation research project based at the University of New Brunswick. Keewaytinook Okimakanak (KO) member First Nations and their Kuhkenah Network (KNET) are recognized leaders in the adoption of digital technologies (Walmark et al. 2005; White-duck 2010). Collaborative methods were possible for this research due in part to a long-term commitment to building relationships and working directly with the communities and their organizations.

In early 2014, we conducted an online community questionnaire of KO First Nation community members. The community questionnaire is the most comprehensive ever undertaken with the members of these remote communities. Gratton and O'Donnell (2011) document

the challenges involved in conducting research in the KO communities, including the high cost of travel, significant time requirements, and challenges developing community partnerships. On the community side, it can be difficult to develop trust with researchers, given the long history of settler colonialism represented in part by educational institutions and research that can continue to appropriate knowledge, erode capacity, and neglect local competencies. Language is another barrier within these English-as-a-second-language environments. Having worked with the communities for more than 20 years, the authors have a good relationship with many of the people and all the communities involved with this research project, which helps to overcome some of these obstacles.

The community questionnaire covered a range of issues, including feedback on the community social enterprises, use of local businesses and services, and use of digital technologies. The community questionnaire—delivered using an online tool—was a collaborative effort among the researchers and the Keewaytinook Okimakanak (KO) tribal council, KO staff, the KO First Nation community leadership, and members. The online community questionnaire was launched at the start of February 2014 and remained open until the end of March 2014 (eight weeks).

The questionnaire invited responses from members of the five KO communities with year-round permanent residents. According to the latest government records (AANDC 2014), approximately 1,450 eligible adults live in these five communities; of these, 209 started the community questionnaire, answering some of the questions and providing important information for the research. This represents an overall 14 per cent response rate from the KO on-reserve adult population. Participants represented a range of ages, from 18 to 69, with the majority 40 years or younger. More women (64 per cent) than men (36 per cent) participated. More than 43 per cent had completed less than a high school diploma, about 19 per cent had completed high school, and the remainder had some post-secondary education or qualifications.

SOCIAL ENTERPRISES, SERVICES, AND
DIGITAL TECHNOLOGIES IN THE KO FIRST NATIONS

What I like about these services is they're vital to our community. They have made a significant change in servicing our community members in certain areas like health services, cell service and among other programs that are being provided by KO. I highly recommend KO for their work and research that they're doing and that they continue to do so.

– KO community member (from online questionnaire)

The KO organization is recognized as a leader in developing and sustaining First Nation-owned digitally supported services (e-learning, e-health, security, remote plant monitoring) using a variety of digital technologies (local fibre and coaxial cable, satellite, wide-area wireless). The home-grown digital services create new local enterprises with new employment and service opportunities in their communities and across the region. The various innovative regional applications using these technologies demonstrate the resiliency of the KO First Nations. The core social enterprises operating in each of the KO communities are KNET, a community-owned broadband network; the Keewaytinook Internet High School (KIHS); Keewaytinook Okimakanak eHealth/Telemedicine (KOTM); the Keewaytinook Okimakanak Research Institute (KORI); and Keewaytinook Mobile (KMobile) (O'Donnell et al. 2011).

KIHS highlights the effective use of digital technologies supporting e-learning in the remote First Nations (Potter 2010). A community-owned high school classroom in each First Nation is networked with similar classrooms managed by a qualified high school teacher. KIHS provides community families with the choice of where their children can obtain their high school diploma. Before KIHS, the only choice for a high school education was to leave their homes and travel to a large urban centre. KIHS introduced a new facility (the classroom), a high school teacher, local classroom assistant, a digital technologies-enabled learning environment, operations and maintenance, and new locally controlled learning experiences and opportunities in each First Nation.

KOTM is another important KO First Nation social enterprise using digital technology-enabled tools and the additional support for

the local health clinic and services. Introducing telemedicine and e-health services in the remote First Nations created many positive economic and social benefits across the region. Delivering innovative health care services using digital technologies is generating new employment opportunities including the Community Telemedicine Co-ordinator, as well as supporting existing health care providers in each of the First Nations. Being networked directly into the provincial health care system also comes with its benefits for patients who have to travel to access hospital and other health-care services (Carpenter 2010; O'Donnell et al. 2013; Williams 2010).

KORI celebrated 10 years of operation in 2014. KORi is operating in a KO-owned building in the city of Thunder Bay. A combination of programs, projects, contracts, shared operating expenses, and committed staff ensures funds are available on a year-to-year basis to sustain this important service. Identifying, training, contracting, and supporting First Nation community researchers are important KORi objectives. All research in KO First Nations is co-ordinated by KORi staff who ensure the research methodologies are community-determined and the products are owned and controlled by the KO First Nations. Articles, reports, findings, and presentations about the research are shared with First Nation community members and the leadership to ensure it properly addresses local needs and priorities. The community leaders are now lead authors in several published articles. Other community leaders are presenting the information and articles at national and international conferences. The information and publications' ownership and control remain with the First Nations.

Community-owned mobile telecommunication services became a possibility across the region in 2007 with a small demonstration project involving two small First Nations working in partnership with KO. Private, public, and not-for-profit partnerships and investments resulted in 20 First Nations developing their locally managed and supported cellular phone service by 2012. KMobile, as the regional enterprise is called, is a full cellular telecommunication service generating local and regional revenue for its operation and maintenance (Beaton et al. 2015; O'Donnell et al. 2011). As a social enterprise, KMobile is providing a means for First Nations to own and access some of the financial benefits formerly only available to the larger telecommunication corporations. This community-owned cellular network incor-

porates a billing system that allows KMobile customers to manage their own services and cell plans (O'Donnell et al. 2011). Roaming agreements with other regional mobile providers makes it possible for KMobile users to travel and use their phones in other locations. Local towers and facilities are now making it possible for additional services to be developed in the communities (Beaton et al. 2015).

In addition to KNET, KIHS, KOTM, and KORl, many other core services in the KO First Nations use digital technologies to sustain the local social economy. Local public works operations include the development and maintenance of roads, electrical, water and waste water, airport, housing, public facilities, and heavy equipment. The operation and maintenance of these services are now using the network, mapping and inventory services, remote monitoring systems, and other digital technologies tools to sustain and support their delivery. First Nation administration, including governance responsibilities, continues to be a major source of employment in these communities. The use of digital technologies supports the reporting and fundraising requirements within the administrative offices (Kakekaspan et al. 2014). Other operations such as the local cable system, radio and television, mobile phone service, videoconferencing, and public access sites or e-centres also use digital technologies. Streamlining these operations to adequately support their smooth operation within these environments is often a challenge, but everyone understands and appreciates the reality of introducing new services in a relatively short period of time. Innovative uses of digital technologies are addressing many of these challenges.

COMMUNITY FEEDBACK ON THEIR SOCIAL ENTERPRISES

KIHS is an option for students who cannot make it out of town for school due to homesickness... It provides a safe environment for students to ensure that they pass their grade level.

– KO community member (from online questionnaire)

As previously presented, KO First Nations are supporting a number of local social enterprises in partnership with their KO regional organization. The online community questionnaire asked several questions

that generated information and feedback about each of these: KNET, KIHS, KOTM, KORI, and KMobile. These services and the social enterprises they support operate with local staff in each community. The findings support the resilient and vibrant environment existing in each of the KO First Nations.

The high number of people who stay in their communities almost all the time underlined the importance of local social enterprises to the community. The community questionnaire revealed that KO First Nation community members rarely leave their communities. For the question, “How often do you travel to another community?”: 79 per cent replied that they rarely or never travel to another community; most participants who answered this question with little or no travel were women (86 per cent).

Many of the community members’ comments provide an endorsement of the social enterprises in their community, and include suggestions for future developments and requirements. Their comments also point to an increase in understanding and appreciation for digital technologies and its role in supporting these enterprises. These comments are found throughout the chapter and in the community questionnaire information to ensure community voices are included, recognized, respected, and valued.

The community questionnaire revealed that most (82 per cent) KO community members use the KO-KNET service often—daily or weekly. Most (87 per cent) agreed that KNET is an important service in their community and that KNET should have more capacity and workers in their community (81 per cent). More than half (62 per cent) indicated they are willing to pay more for faster KNET internet service. In the comments about KNET, participants made several recommendations including: “should have a computer tech for our community to fix computers”; “training should be taught to full time employees how to use video conferencing”; “it would be awesome to have faster Internet, more channels on the community TV service and we only have one cable guy.”

The statements and feedback concerning their Keewaytinook I internet High School (KIHS) provides useful information. Most people (79 per cent) know about KIHS because a member of their family is or has been a KIHS student. Many people (58 per cent) agreed that KIHS students receive an excellent education. And 69 per cent will

likely recommend KIHS to someone in the coming year. Participants left a number of important comments for everyone's consideration including: "KIHS teachers need more support in our community. They arrive highly motivated and become discouraged because they are entirely independent in running their programs"; "students need to be provided with transportation! They don't like to walk on the cold, cold mornings" (NOTE: if a student has access to a computer in their home, they are able to complete their work at home); "occasional motivation speakers, local and not local"; "provide the KIHS classroom a larger space with better access to internet and needed resources."

Seventy-two per cent of the participants indicated that the KOTM telemedicine service that supports a patient in a First Nation community to visit and share information, by videoconference or other digital medical device, with a health professional in another community is considered a good alternative to visiting the health professional in person. Sixty per cent indicated that telemedicine would be a useful service for them to use. There is a concern about the privacy of a telemedicine session for many people (53 per cent). Overall, people consider it to be an important service (69 per cent) and 65 per cent indicated that telemedicine services should be increased in their community. Many of the comments recognize the importance of telemedicine with statements such as: "Telemedicine is very good for elders that can't travel much"; "this is important service especially to those that do not like to fly." Suggestions to improve the local service include: "Workers need to promote more in community what they do. Get out more, and talk to others about this"; "train more than one person to operate the equipment"; "scared to use services due to confidentiality issues with constant change of workers."

Although KO Research Institute (KORI) provides research, training, and development support for KO First Nation programs and services from their offices in Thunder Bay, 39 per cent of the participants indicated they did not know about their services (10 per cent indicated they use their services regularly). Sixty per cent indicated that KORI training workshops are needed in their community and 49 per cent indicated that KORI provides an important service in their community. The comments about the KORI services provide some good suggestions for change including: "Provide the reports to each customer of the services provided by KORI by email or even mail"; "they need a

8-12 week program for youth entrepreneurship focusing on e-commerce”; “advertise on facebook, if there is training in the next month or so, for people coming to the community, so people are aware of it in advance.”

KO community members are actively using their community-owned cell phone network, KMobile, with 79 per cent using it daily. Fifty per cent are KMobile customers and 58 per cent indicate they plan to use the KMobile service in the next year. There is strong support for KMobile (78 per cent) and its importance for the safety and security when being out on the land (68 per cent). Many comments and recommendations were provided concerning KMobile service in the KO First Nations, including: “Better long range phone communication system because cell service is limited to around the community”; “stronger distance in service for cell tower for all cell phone... like 50 MILES not 30 KMS”; “for a person that doesn't use KMobile I still recommend very strongly to keep it going because a lot of people depend on it in the communities.”

When asked about the service provided by the different KO services, there is an overall level of satisfaction with the support that KO is providing in their member First Nations. To the question, “The last time I contacted KO I was satisfied with the services they provided”: 83 per cent agreed with the statement. Ninety-five per cent of the people agreed with the statement, “KO staff should visit my community more often to discuss services with community members.” For the question, “KO staff respond quickly when I have a problem”: 77 per cent agreed. Several comments left in different sections of the community questionnaire referred to the need for more information and communication between KO First Nations and the KO staff. This general feeling is reflected in the strong emphasis by many participants requesting additional training and support services in their community.

The daily use of the different local businesses provides additional information about people’s engagement with the social economy. The most daily common activity is to go to the local or community store (39 per cent), followed by the Northern store (37 per cent), the school or other education location (32 per cent), Band office (30 per cent), Public Works (26 per cent), Health Centre (24 per cent), Airport (15 per cent--people go to the airport to see who is coming into the community and to get the latest news), Recreation (14 per cent), or Police

or security office (6 per cent). On a daily basis, they also buy or trade items online from outside the community (12 per cent), buy or trade for traditional food (9 per cent), and buy or trade crafts, services, and items from others (6 per cent).

When asked what changes to existing businesses or services are required, community members shared a number of recommendations, including suggestions for other businesses or services that they would like to see in their community. Many of the comments addressed the challenge of supporting young people who are now staying in the community instead of leaving to attend school. Suggestions included: “a restaurant or place for teens to go to hang out”; “More recreational services would be nice. I’ll have something else to do on my Friday nights”; “Arena/complex--promotes healthier lifestyles”; “Youth Centre”; “a recreation area for our youth. Also maybe a coffee shop where we can interact with other community members in a more positive and laidback manner”; “Younger people in the community to hunt for people who can’t hunt for themselves.”

Many suggestions also described the need for locally owned and operated stores. One community member recommended: “A locally owned store would benefit the community and provide access to traditional food as well as an ordering location for large community events that can help with costs.” Others recognized the importance of local ownership to ensure the community benefits from the local revenue. This is demonstrated with statements such as having “a local grocery business to bring in revenue to the band” or “local grocery store etc.... and kick the northern store out that money leaves our community” or “we need a CO-OP store!” The local transportation methods are also recognized by many people with suggestions for “mechanical services for ski-doo’s, atvs, and outboard motors” or “gas station.”

The themes introduced earlier—a unique social economy, resilience, effective use of digital technologies, sharing of available resources, co-operation, and sustainability—are highlighted in the following two case studies of the social economy working in remote First Nations. The first case study examines several components of a program developed to introduce, support, and develop locally led social enterprises in the remote First Nations. The second case study highlights how a local entrepreneur from his home in Ontario’s northern-

most First Nation of Fort Severn is using digital technologies to support his business, his family, and his community.

I bake/cook and sell things within the community for my own money. When I don't have money because I don't have a job, I use the internet to go on Facebook to sell the stuff I make.

– KO community member (from online questionnaire)

CASE STUDY 1:

Owner-operator training initiative supporting the social economy

By analyzing documents from KO's project, the Owner-Operator Training Initiative, we developed a case study of how social enterprises are supported in the KO First Nations (KORI 2011). Building on existing KO services in their member First Nations became a strategic component for the training project. In January 2011, KO responded to a call for proposals from the Ontario government's Northern Training Partnership Fund to develop and deliver skills training to support small-business development in the northern region of the province. KO proposed an online training project employing local youth in each KO First Nation and providing accredited skills training delivered by the Keewaytinook Internet High School (KIHS) emphasizing social enterprise development and operation. The proposal was successfully funded and the Owner-Operator Training Initiative began in April 2011 and ran for two years until March 2013.

An important component of the two-year training project was raising awareness that existing indigenous entrepreneurship efforts and local enterprises support the resilient economic and social well-being of the First Nations. The project recognized that using local traditional skills and land-based activities to feed their families and community are successful, essential, and meaningful employment undertakings. Recognizing local traditional activities as gainful employment positions challenges commonly accepted definitions of employment and business. In cities, hunting and fishing is considered a recreational activity, whereas in rural and remote regions it is an essential activity for people who use the food to feed their families and supplement household income.

Project participants worked with their KIHS teachers, their project leaders, local elders, and mentors and co-workers in the other KO

communities, using the local broadband network connections provided by KNET to research and access resources supporting their business planning and operation. By taking advantage of existing social enterprises including KIHS, their KNET Internet connections, and practicing traditional skills, the youth learned to appreciate and develop their personal skills and awareness about local opportunities. Recognizing, developing, and supporting local social enterprises and traditional activities—including hunting, beading, sewing, trapping, and fishing—supports the economic and social well-being of the families and community. These activities and enterprises are often delivered using the local language and teachings. They ensure the resilient First Nations continue to be places of choice for raising families and continuing the practices of the people who survived for thousands of years in this region.

Several regional support organizations provide business mentorship and grants to youth entrepreneurs across Northern Ontario. Often their financial support requires a bank account to be an eligible participant; however, there are no banks in the communities and many young people do not have a bank account as they require an expensive flight to open an account. As a result, many First Nation youth were unable to access available resources and the existing regional support networks. Important project outcomes included some of the organizations changing their criteria to accommodate the needs of these youth by offering virtual business mentorship by video conference, the involvement of youth with the effective use of social media, and the adjustment of their grant requirements to include youth without a bank account. Youth are now self-identifying as social entrepreneurs and are seeking resources and support from their peers and these support organizations.

Another outcome of the Owner-Operator project was the celebration of a KO community elder as a local entrepreneur. The Thunder Bay non-profit organization—PARO Centre for Women's Enterprise—gave the 2011 Enterprising Women Award for Aboriginal Entrepreneur of the Year to Fort Severn First Nation elder Adelaide Koostachin. KO nominated Adelaide as a local entrepreneur who feeds her family using the resources available in her local environment. She heats her house with wood and she teaches the youth the traditional skills that she learned from her ancestors. She is paid to guide, teach, and work on the land. After she learned about the award Adelaide refused to

travel to the city to accept her reward and instead sent a video to the awards gala that showed her cutting up a caribou to help everyone understand her work and love of the land.

The owner-operator project developed and implemented by KO supported the development and recognition of resilient social enterprises and entrepreneurs in the remote KO communities. With the completion of the two-year program in March 2013, KO started a new three-year project, Bami'aawaso (Nurturing Seeds of Change: www.bamiseedsofchange.ca), which has digital technologies as a core delivery and support element. The training for this new project is delivered online using the KNET network, and all project materials are in digital format and stored on First Nation-owned servers and digital technologies infrastructure. Bami'aawaso is a partnership with two additional regional organizations: Nishnawbe Aski Nation and PARO Centre for Women's Enterprise, and is funded by the Ontario Trillium Foundation (KORI 2013).

The project operated from 2013 to 2016 with the goal of raising the awareness of social enterprises so that more youth work for themselves to feed their families while making a positive change in their communities. The project supported an accredited KIHS program where students learned how to create an effective social enterprise. The project built a sustainable hub where youth could gather to share experiences and best practices with each other online. In addition to the high school course, youth engaged with the hub through video conference workshops, online gatherings, social media, and community visits. Economic Development Officers and youth mentors were engaged and were invited to participate in capacity building so that they could also push back on the western model of entrepreneurship and foster a culture of Bami'aawaso social entrepreneurship.

Resilient First Nations are beginning to host their own craft fairs, catering co-operatives, beading circles, and Elder-youth teaching gatherings to practice and learn traditional skills, sell and barter their creations, co-ordinate supplies, and work together to develop the local social economy. Developing these enterprises and skills requires time and patience as almost 500 years of colonial practices are undone. The project recognizes that decolonizing work required must be led and supported locally so the communities are safe places for future generations.

CASE STUDY 2:

Small local businesses supplementing the social economy

As illustrated in the first case study, small remote First Nations have a unique type of resilient social economy in which local traditional land-based activities are central. In addition, small local businesses also are an integral part of the social economy. There are few opportunities for full-time employment in these communities; local businesses, entrepreneurial activities, and traditional land-based activities supplement other sources of household income that is spent locally. Local small enterprises such as sewing and crafts production, operated on a part-time basis, generate new community revenue. This “mixed economy” supports individuals, families, and the remote communities through boom-and-bust economic times (Abele and Delic 2014).

Local stores, hairdressers, tourist outfitters and guides, small engine repair, and bed and breakfast operations are examples of enterprises that exist in these communities. Often these businesses supplement their operations with traditional land-based activities including hunting, fishing, harvesting, and trapping. With the introduction of social media, people are now selling their services and products including baked goods, moccasins, bead work, crops, etc., on local Buy and Sell sites. Innovative uses of available communication tools are a trademark of everyone who lives and survives in these remote environments.

An example of a successful local entrepreneur is Fort Severn First Nation member Lyle Thomas, a co-author of this chapter. Lyle is employed by the Fort Severn band office as the community digital technologies technician. The funds to pay for his salary are generated by the community cable/Internet service provider business that supplies connectivity to homes and social enterprises. He is active in the community, mentoring young technicians, and putting his creative talents into his work to help others. The local TV station does announcements for community events. Lyle uses his graphic design experience to publish professional announcements the community is proud to share. Lyle also operates his clothing business—Warchief Native Apparel—from his office in the community. He uses digital technologies extensively for his business. On their Facebook page, the business is described as “an underground Indigenous clothing line that promotes Native Culture with the elements of resistance and struggle.” On their Piczo.com

mission statement website, the business's original vision is further clarified as "Warchief Native Apparel was created to give Native People young and old a true sense of pride and connection to their roots. Through original designs based on native culture we believe that we are helping to achieve this goal."

During a small-business presentation delivered recently by video-conference, Lyle began by providing the audience in Sioux Lookout with an overview of how he operates the business from Fort Severn. The workshop co-ordinator began asking contemporary business-centric questions concerning hits on his web site and profit margins. When another person mentioned that colonial business practices might work well in large urban centres but small Indigenous communities require a different approach, Lyle took control of the discussion and described in detail his international network of business partners who he works with online to deliver his finished product to his customers. Other Indigenous workshop participants were impressed with Lyle's experience and the information shared, recognizing the challenges and work required to support a successful business from a small, remote First Nation.

CONCLUSIONS

In this chapter we have described the value of the social economy and social enterprises in remote First Nations, how digital technologies are supporting these efforts and activities, and why this contributes to community resilience. Our analysis and descriptions of the Owner-Operator training initiative and the entrepreneur in Fort Severn First Nation, and of the community questionnaire responses by members of all the KO First Nations, provide evidence of innovation with digital technologies to support these resilient social economies. The five remote KO communities that collaborated on this research—Fort Severn, Deer Lake, Keewaywin, North Spirit Lake, and Poplar Hill—are examples of remote community resilience in the face of adversity.

The challenges of contemporary colonialism include poverty and underfunding of core services in remote First Nations. The KO tribal council, in its capacity as a regional intermediary organization, has been strategic in its support for the development of social enterprises to overcome these challenges. Strategically, the KO Chiefs first supported the development of their regional broadband digital network

KNET in 1994--resulting in core social enterprises including KMobile and other initiatives using the network becoming possible in these small, remote communities and across the region.

The information collected and presented from the online community questionnaire highlights the importance of local social enterprises and the effective use of digital technologies in the KO First Nations. Our analysis provides further evidence that social enterprises in these remote communities build local capacity, sustain employment opportunities, and bring financial resources into the communities from both public and private sources. Developing, owning, managing, and sustaining local infrastructure (roads, water, waste water, IT network, electrical system, etc.), the school, the health centre, the administrative offices, and other services using these resources is creating new employment opportunities and businesses to better serve community members. Maintaining and developing the local network and digital technologies tools supports all these enterprises to deliver the products, the reports, the management, and the skills required to sustain their ongoing operation. Our chapter highlights how local social entrepreneurs and enterprises are demonstrating innovative and resilient strategies for supporting strategic development of the local economy and the services required by the growing population. These themes are also highlighted by many of the people who participated in and contributed to the online community questionnaire.

In addition to collecting research data, the online community questionnaire helped introduce community members to many of the services being provided by their regional organization, KO. The information obtained from the community members develops an understanding of many of the uses, needs, challenges, and opportunities about the use of digital technologies for learning, education, and skills training in these remote First Nation communities. The community questionnaire data identifies general trends that others can use in their own communities and in future research work. Online surveys addressing community services and desires require cultural and language appropriate context and support especially for the elders; local support for promotion and translation, along with the time for every participant to complete the survey; and easy public access to online computers is also required to support low-income families to participate in the survey. Reliable digital connections were a challenge in some

communities, resulting in partially completed questionnaires. Following the study, reports summarizing the information were prepared for face-to-face meetings and follow-up interviews were conducted to support local and regional developments.

Remote First Nations are challenging contemporary colonialism using innovative digital technologies strategies in local social enterprises. The collaborative research and this resulting chapter identify and share the values being practiced and passed along to future generations. The study provides the communities with the information required to celebrate their successes and support local development. It replaces the colonial perspective, which does not address the pertinent issue for resilient remote communities, with a positive contemporary Indigenous view of local social enterprises and opportunities.

A strong local economy provides choices for its citizens and young people for where and how they wish to access and share learning opportunities; establish social enterprises, businesses, and services; raise their families; and secure meaningful employment. Healthy resilient KO First Nations provide their members with the opportunities to innovate and contribute to their environments for future generations. The KO First Nations have occupied their traditional territories since time immemorial. As more Indigenous people choose to stay in their communities, new support facilities, including recreation and counseling services, are required, creating additional employment opportunities and a stronger local economy.

Digital technologies help overcome many challenges of remoteness and offer so many possibilities--from connecting community members out on the land with emergency services, to linking, in real time, residents from numerous communities for regional learning, to offering mobile health applications to community members in their homes--along with many others. The KO First Nations are demanding to be included in decisions and policy-making, challenging the marginalization of their resilient communities and history, and rising above the oppression imposed by colonialism on their lands and people.

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