KORI planning survey of remote First Nation community networks partnering with K-Net Rick Garrick

The Keewaytinook Okimakanak Research Institute (KORI) is looking at potential business models for First Nation community networks.

"We're looking to develop business models the communities are using as Application Service Providers (ASP) to provide broadband services delivered over K-Net," says Franz Seibel, a researcher at KORI. "If a new community or one of the communities that is already connected wish to expand their services, how do they go about it."

Most of the community networks have been focused to date on managing their local networks and providing broadband connectivity services to residents, public buildings and SMEs (small to medium-sized enterprises), explains Adam Fiser, a researcher from CWIRP (Community Wireless Infrastructure Research Project) who is working on the project with KORI.

"But the community network can grow beyond Internet services to include videoconferencing, VoIP phone systems, and now cellular," Fiser says. "These applications can become part of what an ASP can offer locally in cooperation with K-Net Services."

K-Net is currently working to set up cellular phone services in Keewaywin and Weagamow First Nations through a \$1 million pilot cellular demonstration telecommunications infrastructure initiative funded by the Northern Ontario Heritage Fund Corporation's (NOHFC) Public Sector Emerging Technology program, Indian and Northern Affairs Canada and K-Net.

"Mobile telephony just gives everyone a lot more opportunities to take the show on the road," says Brian Beaton, K-Net coordinator, as he explains the advantages and importance of the Keewaywin-Weagamow cellular pilot project. "It's an effective way of communicating, and a different way of doing things."

In addition to being a convenient means of keeping in touch with each other around the community and the surrounding area – the cellular coverage area will extend up to about 30 km from the community – Beaton explains that the cellular services will operate through the community's existing IT infrastructure and will therefore provide an economic support to the ongoing operation of that infrastructure.

"Anything that uses that pipe (the community's IT infrastructure) has to help pay for that pipe," Beaton says. "The community is providing that service, so anyone who is using it has to pay for it."

Beaton foresees that once a viable business case is developed in Keewaywin and Weagamow, other remote fly-in northern Ontario communities will soon follow suit and set up cellular phone services in their communities with NOHFC funding support.

Over the past few years, K-Net has developed a remarkable exchange of ICT (information and communication technology) services and a widespread infrastructure to deliver those services, says Andrew Clement, CRACIN's (Canadian Research Alliance on Community Innovation and Networking) principal investigator and a University of Toronto professor.

"They are amazing and a leading example," Clement says. "There is nothing else like K-Net."

Brian Walmark, KO's research director, adds that KORI does not "do" academic research at KORI in the conventional sense.

"Academic researchers," he says, "study' the suicide epidemic, the grade gap in the schools and the lack of access to health care at the community level as if these issues are ends in themselves."

KORI applies the highest research standards to telling the stories of the communities and how they are shaping and adapting Information Communication Technologies (ICTs) to create community-based applications to address their needs, Walmark explains.

"It's a difficult and complex story to understand," he says. "And frankly, many academics are not patient enough to invest the time to learn about it let alone understand it. Just imagine, what does the Kuh-Ke-Nah Network mean in terms of dollars and employment in the communities. It's huge, and it's more than just the dollars invested, it's also the opportunities created for people living, working and raising families in the First Nations communities."

KORI's business model research project will look at how other communities are supporting their ASP's and delivering applications, how they charge for the services, how to regulate the amount of downloading, whether to set up IP phone networks and videoconference services, whether to hire a local technician in the community and what his job will entail, and other options such as encouraging the court system to become involved through the use of videoconferenced court visits.

"These are all questions that can be answered in a business case," Seibel says, noting that the different sizes of the communities, how they are connected to K-Net, either by satellite or microwave towers, and how they distribute their services, either by cable or wireless towers, will affect the business cases for each community. "For example, everyone in Slate Falls First Nation uses their locally owned and operated IP phone system for telephone service."

KORI and its research partners at CWIRP and CRACIN have already completed the first round of research through an in-depth case study of the Lac Seul wireless community network.

"We're trying to understand how the networks operate and conduct business to find trends, best practices, and lessons learned that could be shared with all the community networks and serve as benchmarks for other communities interested in the K-Net model," Fiser says. "We'd also like to do focus groups with staff from some of the more established ASPs. The phase of research that we're about to embark on with KORI is an attempt to create points of comparison across the different community networks that are working with K-Net."

Seibel adds that the objective of the research is to develop a public tool that communities can use as a template to make their local community networks sustainable through the delivery of different applications that support their ASP's.

"It's a very promising development," Clement says. "By doing an in-depth communitybased research project we can develop a business model tool kit that helps the community make these kinds of decisions."

Fiser adds that various applications could be tailored for specific groups, organizations and businesses within the community, applications which would help artisans find new

markets online through Ebay and other online marketplaces, help a local hockey club build a website and help a local outfitter promote his or her business online. "Local businesses are still an untapped resource," Fiser says. "Lac Seul's Mahkwa Lodge is currently using the network to promote their hunting and fishing services online. What about the growth of virtual businesses. Those are questions that are definitely worth exploring."