North experiencing quiet tech revolution

Electronic commerce catching on as Arctic residents go wireless

By Tom Keenan - Business Edge
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Yellowknife

"Yellowknife is really an outpost of the South in the North," says Kevin Kennedy.

Kennedy is a city councillor who chronicles life in this northern town on his blog, www.duq.ca.

It's true.

You can buy fresh, if expensive, pineapples at the Extra Foods market, and use the Internet from your room in the Northern Lites Motel.

Of course, the wireless ID of the strongest signal is "Download-Porn" - a subtle reminder that you really are on Canada's frontier.

The contrast to life in the South becomes even more pronounced if you jump on a plane or drive on an ice road to one of the 32 other communities that make up the Northwest Territories. Wekweti (previously Snare Lakes) had a population of only 131 in the 2001 census, most of them Tlicho Aboriginals.

However, it's the closest community to the Ekati diamond mine. And now, it has high-speed Internet.

Randy Bergen of Wekweti came to Yellowknife, along with about 100 community representatives, businesspeople and government types, for the recent Connect NWT conference.

He says that what people in the North really need are practical skills, "like how to be a vendor on eBay."

His comment was typical of the ideas explored in this two-day session on how information and communications technology (ICT) could make a difference to life in the North.

And what they found out could provide valuable insights even in parts of the country where it isn't -43°C with the windchill.

In particular, it might tell us how to make electronic commerce more useful to all Canadians.

The conference featured the announcement by Industry Canada of a new broadband service for communities of the N.W.T., an initiative that will bring high-speed, satellite-based Internet access to 30 mainly Aboriginal communities.

Darrell Beaulieu is president of Yellowknife-based Falcon Communications, the company created to implement the initiative under the brand name Airware.

"We were still waiting for power to be installed in eight communities," he reports, "but I just heard that four of them have been done."
After the juice is on, a single satellite dish on a tower allows anyone within about 30 km to connect up through a wireless modem. As the Airware homepage explains, "You plug it in, tilt the modem to find the strongest signal and it works."

Of course there's more to connecting up the N.W.T. than conquering gnarly technical challenges. Internet service providers can't stay in business unless somebody pays their bills. Airware charges $60 a month for the Gold Plan, which allows 256 Kbps-burst speeds. That's faster than dialup, but pretty pokey by big-city cable and DSL standards.

Then there's the matter of collecting that $60. "People in small communities don't really have any use for credit cards," says Beaulieu, though that is changing. To allow for this, and for that matter the lack of bank accounts, Airware customers can pay their bills in cash to their local community service provider, the person who also passes out the wireless modems and troubleshoots any problems.

An even bigger issue is just what traffic is going to move on this new northern information highway.

Some of the intended users still remember being nomads, and their parents may well have been born on the land in skin tents.

Cece Hodgson-McCauley, founding chief of the Inuvik Dene band, lambasted the Canadian government for making life in the North worse, not better.

"I'm getting frustrated with the government for lying to us nomadic people when they came up here 47 years ago," she said, adding, "I'm only here for the kids, because something needs to be done to help them."

In a recent column she wrote for the Northern News Services, Hodgson-McCauley argues that multinational mining and resource companies come into the North "with smarts and brains and money" but "give a few jobs, and while we diddle away and cry in our soup, they put millions and millions into their big bank accounts."

Yet there are some signs of hope. Beaulieu tells of a woman from the Eastern Arctic who purchased a Swedish berry-picking device on the Internet. She now has a business selling berries online.

He also believes the connections will be a boon to Northern carvers and other artists, who can now post images of their work online and take orders electronically.

Another story that received a very positive reaction at the conference concerned a Newfoundland community that was facing a crisis when the fish plant closed. They did an inventory of their skills and wound up getting outsourced paperwork from the Glasgow, Scotland, police department.

The Smart Communities Society (SCS) in Yellowknife recently conducted an asset-mapping project. They sent people, some of them tech-savvy youth, into local communities with a detailed 27-page questionnaire. People were asked if they had the skills to cook for a work camp, load and unload aircraft baggage, mop floors, drill blasting holes, etc.

According to SCS executive director Soumeya Movaffagh, many hidden talents were uncovered.

The study also found the Northern residents surveyed put a high value on learning ICT skills, ranking it above skill areas such as mining, operating equipment and repairing machinery. The report concluded that "initial results suggest that there is the potential to evolve to ICT-enabled learning."

In her feisty column, Hodgson-McCauley complains that she had to come to Yellowknife for a medical checkup, since "us unlucky people in the Sahtu region don't have a resident MD."

Telehealth may make at least some routine medical flights a thing of the past.

The new high-speed network should support video consultations, provided there's the ability and the will to do them.

There's also a move afoot to build electronic health records in the North. Since seriously ill N.W.T. patients are often flown to Alberta, the territory is building electronic links with Edmonton's Capital Health Region. A physician in the North can now track the progress of a patient in Edmonton directly from a computer.

Other health services are also becoming a northern reality through technology. In a written submission, the SCS noted that "for three years,
Inuvik did not have a speech therapist," and 92 students were on a waiting list.

Now, a child there can access this kind of help from Ontario, and the program is set to expand to Tuktoyaktuk, Fort Good Hope, Tulita, Norman Wells and Colville Lake.

While Japanese tourists swarm the posh (for the North) Explorer Hotel and ride dogsleds to view the Northern Lights from a heated hut, there's a quiet revolution going on in the North.

Fuelled by success stories from other places, at least some northerners are seeing the potential of firing up their web browsers and e-commerce engines, and pointing them at the world.

Web Watch: www.connectnwt.ca

www.looknorth.ca (Tom Keenan is a professor at the University of Calgary and an expert on technology and its social implications. He can be reached at keenan@businessedge.ca)