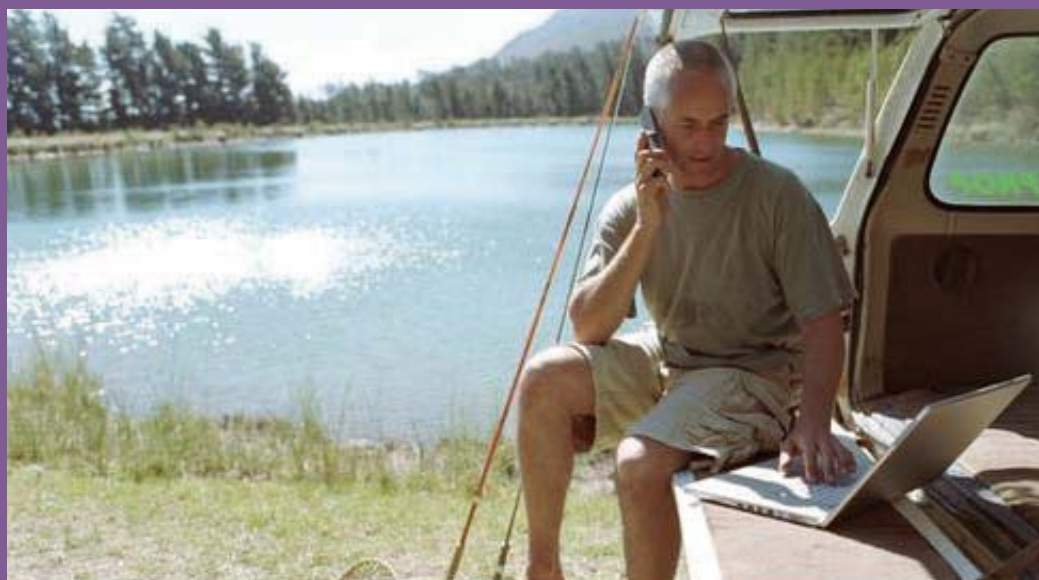




> CONNECTING COMMUNITIES FOR COMMERCE: A SMALL TOWN REAPS BIG BENEFITS WITH BROADBAND

NORTEL



Project Chapleau

How are a town's social life and economy affected by access to a high-speed network? Which municipal services can benefit the most from an advanced network infrastructure? What process can a city or community employ to help it determine whether new network-based services will be cost-effective? These are some of the questions that Nortel wanted to explore more fully when it joined forces with Bell for an innovative technology and research project.

Case Study

Project Chapleau

The customer

The Canadian township of Chapleau, Ontario, lies 310 km north of Sault Ste. Marie and 800 km northwest of Toronto, amid numerous pristine lakes and near the Northeastern Ontario Boreal Forest. As the gateway town of the largest Crown Game Preserve in the world, Chapleau is a year-round destination for hunters and anglers, naturalists and eco-tourists. Chapleau began as a railroad town — formed in 1885 when the Canadian Pacific Railway extended its reach — and today its economy still depends on rail transportation, in addition to forestry and tourism. This friendly, bilingual community of about 2,800 residents is proud of its five schools, a public library, emergency 911 service and local hospital. On the edge of town are three First Nations communities whose residents add to the cultural fabric of the area. New technology applications are now bringing this small town even closer together and letting it share all it has to offer with the rest of the world.

“Broadband connectivity is changing the way communities conduct business by allowing them to overcome their geographic hurdles and participate in the global marketplace. In partnership with Bell and the Township of Chapleau, Nortel is learning about the challenges and opportunities that communities face, and how technology can help rural communities overcome geographic and financial barriers. Nortel is a pioneer in this marketplace and is deeply committed to partnering with communities to transform the way they live and work.”

– Mike Zafirovski, President and Chief Executive Officer, Nortel



The challenge

Chapleau wanted to promote the area's natural resources to attract commerce and tourism.

Chapleau, like other municipalities, has always provided its residents with needed community services and a desirable quality of life. In recent years, economic and environmental influences on the logging and forest products industry have impacted employment and exports for the area. With the downsizing of a local mill, Chapleau set out to reinvigorate the community with new ways to market its abundant natural resources. By retooling for an information economy, the township could promote itself as a popular tourist destination, where hunters, anglers, naturalists and eco-tourists would find what they were seeking. Already, Chapleau had built relationships with Canadian universities whose researchers valued the area's game preserve. Now, Chapleau wanted to attract more commercial ventures. But how could it sell itself to others when the nearest urban centre of Timmins, Ontario, was two hours away, and that was on a good day?

The solution

Broadband access throughout the community brings the world into Chapleau.

Project Chapleau is transforming this remote township into a technologically advanced, connected community. Chapleau area residents are benefiting from next-generation wireless mesh, optical, multimedia communications and enterprise solutions made possible by an upgraded optical network. Working with the Township of Chapleau, Nortel and Bell are creating broadband solutions that can stimulate economic development, improve quality of life and foster long-term community growth — bridging the digital divide and bringing the information-rich advantages of urban living to this remote area.

People across the community now have mobile, flexible and reliable access to Internet-based services, including an online encyclopedia, adventure and strategy games, educational software, and a downloadable music store. In addition to the expanded optical and broadband network, four of the five schools and the local hospital will be installing wireless local area network (LAN) solutions and upgrading their wide area network (WAN) connectivity. Residents have taken advantage of many new training opportunities, both in traditional school settings and through partnerships with community-based adult education programs.

Nortel and Bell also helped evolve Chapleau's technology strategy with the opening of the Chapleau Innovation Centre — a central place where residents can access and learn about new technologies, including desktop videoconferencing and other multimedia tools. A highlight is the Nortel LearnIT digital studio where “students” of any age can develop 21st century skills and even bring in their own digital content for editing.

At the launch of the mesh network, Chapleau Mayor Earle Freeborn emphasized the competitive advantage advanced networking solutions can bring to a community. Mayor Freeborn said, “Broadband access, including one of the first rural wireless mesh networks in Canada, will enable Chapleau to connect, and compete, with other communities throughout the world, positioning us as a centre for innovation and change.”

The results

Advancing the health of health care — The broadband network makes enhanced videoconferencing a viable option for providing medical assessments and consultations with specialists who would not otherwise be available in a remote area like Chapleau. Meanwhile, nurses at the Chapleau hospital can be in almost two places at once, relying on the Nortel wireless local area network and wireless IP Telephony handsets to keep them in touch anywhere, anytime — even at the patient’s bedside.

The world is your classroom — High-speed access to the Internet can help to level the playing field for school systems with schools widely dispersed or located in remote areas, providing a wealth of current curriculum materials and learning aids at students’ fingertips. A partnership among Nortel, Bell and area school boards has put laptop computers and wireless local area networks into the classroom. In addition, Nortel’s renowned LearnIT program is helping teachers build their own computer skills, develop their students’ proficiency with standard computer applications and effectively integrate technology into their curriculum. Adults benefit too, from online degree programs and distance learning opportunities with nearby colleges. In the upcoming school year, videoconferencing, multimedia and collaboration software provided by the Nortel Multimedia Communication System (MCS) through a unique partnership with Bell will enable Chapleau’s students to participate in projects with organizations and schools in neighbouring towns and around the globe.

A virtual “Town Centre” — Not only does the broadband network connect Chapleau to the world, it connects the area’s residents with each other and provides a central way to disseminate information via the community’s flexible, collaborative web portal — www.chapleau.ca. An online business directory, employment listings, a community calendar and information resources from the local government and public utilities are just a few of the portal features designed specifically for Chapleau’s residents, visitors, businesses and institutions. Families can enjoy banking and shopping online.

Putting Chapleau on the ‘commerce’ map — Whether promoting the game preserve to tourists over the Internet or selling local artists’ wares online, the expanded fibre network provides significant bandwidth opportunities to current and future businesses. In conjunction with Project Chapleau, the Chapleau Regional Development Corporation has incorporated technology and applications into the community’s strategic plan and is exploring additional ways to leverage technology to fuel economic growth.



“The initiative in Chapleau is not just about deploying technology, it is about learning from this community and about looking at new models for the provision of health care, education and commerce. Access to new resources and services enables Chapleau’s residents and businesses to participate in and build a broader concept of community.”

– Michael Sabia, President and CEO of BCE and CEO of Bell

Conclusion

Through Project Chapleau, Nortel and Bell are once again demonstrating a commitment to understanding their customers' goals and identifying the right solutions to help achieve them. The two technology leaders have deployed teams from five universities to conduct independent research that measures the effects of the program on Chapleau's socio-economic profile, health care and educational environment. With this knowledge, Nortel and Bell will help other communities find ways to leverage technology for economic growth and enhanced quality of life. And Nortel will continue to extend the valuable lessons learned in Chapleau about profitable, effective network deployments to service providers, municipalities and enterprises everywhere.



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– Earle Freeborn, Mayor of the Township of Chapleau

Connecting Chapleau with Nortel solutions

- > Nortel Municipal Wi-Fi — Wireless Mesh, WLAN 2300
- > Nortel Multimedia Solutions — IP Telephony, CallPilot, MCS 5100
- > Nortel Ethernet Routing
- > Nortel Optical Solutions
- > Nortel Security Solutions — VPN

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