

Sm@rtCapital: Kick Starting Ottawa's Smart Community

Lac Carling Governments' Review, Special Edition: Smart Communities,
Vol. 3, Issue 5, June-July 2001:13-16

by
Christopher Wilson and Sandra Huntley

While often confused with simple technology initiatives that seem to benefit only the technology producers, smart communities can offer much more. In particular, they have the potential to equalize the playing field among a community's diverse constituencies. Smart communities can create productive spaces in which the ability of community members to work together is extended and optimized over public networks like the Internet and they can enrich the quality of human interactions, particularly at the local level. Ottawa's smart community project, *SmartCapital*, is one of those that hopes to demonstrate this potential and to change the way smart communities are viewed.

If used intelligently, the technological infrastructure that underlies the building of smart communities can enable those who may have been disenfranchised to some degree by a limited access to information -- whether it be for education, training or something else -- to acquire that access. The connectivity this infrastructure engenders fosters equalization, not in the regressive sense of redistribution of wealth but in the sense of extending people's knowledge, including how to apply knowledge so that anyone can have the same degree of opportunity. As a consequence, the primary challenges for smart communities seem to be putting that infrastructure in place and creating the mechanisms that will allow people make use of that infrastructure, with the latter being the most critical. Like Industry Canada's SchoolNet project, the real gains from smart communities will come from the investments made in encouraging and helping people to make use of the technological connectivity and not in the presence of the technology itself.

To the extent that they can expand a person's scope of knowledge and extend their range of influence, smart communities are about raising the potential for individual and collective action. Our knowledge-based economy clearly endows knowledge as any community's most valuable asset -- pushing talent, people and human relationships into the central focus of modern economic development. When effectively applied, a smart community infrastructure can contribute to that development by linking individuals and organizations more quickly and more frequently, resulting in an increasing the density of human conversations and exchanges. That network exchange process tends to spread knowledge in a cascading chain, with further knowledge the inevitable result. In an ideal sense, an effective smart community would enhance the quality of a community's collective culture while improving its collective decision making and action.

The broad access that smart communities foster can empower community members to share knowledge, to engage in dialogue, to learn together (creating new rules for working together in the process) and to create new foundations for change. The emergence of virtual communities of interest within smart communities can provide their members with an access to financial and political power that has in the past always been a necessary step in influencing change.

In the industrial era of big business and bigger government, ordinary citizens have become accustomed to perceiving themselves as being too small or insignificant to influence the corporate giants or government bureaucracies. Their rights as citizens or customers were regularly traded for convenient services and promises of future quality while their obligations to challenge and question were either demeaned or outrightly ignored in complex organizational systems.

Conceptually at least, smart communities offer an opportunity to demystify the formal processes of public and private sector change through expanded participation in a wide variety of public and private Internet-based forums. By providing a mechanism for people to compare price, quality and delivery mechanisms, the Internet has been contributing to the improvement of customer and citizen choice and through the collective voice of its numerous virtual communities, the opinion of the everyday person is being heard more clearly today than ever. One only has to think of the Net's influence on the shortcomings of Intel's early Pentium chip or its influence on the Multilateral Agreement on Investment to realize how loud and how rapid those opinions get heard.

Enough said about what smart communities should be doing. How does Ottawa fare? The recent downturn notwithstanding, there continues to be tremendous excitement in Ottawa both about the technology sector and about its contribution to the community.

Ottawa is a global leader in a number of industries, particularly telecommunications and photonics, and local companies account for a majority of all private R&D conducted in Canada. Just as significant, even if less well known, is Ottawa's leadership in public and community innovation. The federal government's investment in projects like Canarie, SchoolNet, the Community Access Program, government online, not to mention the Smart Communities Demonstration Project itself, have made Canada and Ottawa a well respected global leader in public sector innovation. On the community side, a collaborative mindset seems to pervade many of the city's leaders as demonstrated by a history of cooperative activities including, the Ottawa Centre for Research and Innovation, the Entrepreneurship Centre, the Access to Opportunity Program, Ottawa's Dark Fibre Build, Partners for Jobs, TalentWorks and of course SmartCapital. Each of these cooperative projects has or is using innovative approaches to deal with local challenges. The impact of this combined private, public and community innovation is not going unnoticed. Ottawa's booming hi-tech sector has been the centre of attention in recent editions of *Time Canada* and

the Italian paper // *Sole-24 Ore*, Europe's largest financial newspaper.

As Ontario's Smart Communities Demonstration Project, SmartCapital is building on this solid base of technology infrastructure and community collaboration. Through its many partners, SmartCapital will establish and integrate a suite of technologies and advanced online applications. These services will touch potentially every local citizen and transform the way in which they interact with one another, with public and private institutions, and with the world.

There is no "build it and they will come" philosophy at work here but one founded upon grassroots support and established relationships of working together. As a result, SmartCapital will demonstrate how technology can be used to attract people, to help them discover and share knowledge and to help engage people in community dialogue and conversation.

As its port of entry, SmartCapital will establish a SmartCapital Portal as a gateway to all public online services in the community. This portal will be a one-stop shop for citizens to easily access timely local information and transactional services provided by government, education, healthcare, business, tourism, and community agencies.

Students will be attracted by a variety of relevant online student services (**EduNet**) while parents will be attracted by the opportunity (**School Link**) to securely access students' marks, report cards, and home work. Entrepreneurs will be attracted by a single window convenience (**Entrepreneurship Centre**) that will enable them to quickly get their businesses established and operating. Residents will enjoy the convenience of a full range of interactive local government services (**Electronic Transactions**) delivered in both English and French through entry points tailored to a variety of constituencies including neighbourhoods, youth, parents, seniors and the international embassy community (**Government Information Services**). Health services too will eventually be added as security and privacy concerns are addressed and currently existing health care programs are brought online. Finally, the world will be attracted (**Ottawa Marketplace**) to view the city, its educated and highly skilled workforce, to connect with its most innovative technologies and technology companies and to its appealing, exciting and affordable lifestyle (**Ottawa.Com**).

Once hooked, SmartCapital will deliver new value to citizens by way of access to a rich knowledge base. Residents will be able to discover knowledge that can be simultaneously searched and retrieved (**SmartLibrary**) from multiple library databases, within the community or from around the world. Teachers and learners of all kinds will be able to develop and participate in online courses (**Leadership Online**) that will be conveniently accessible twenty-four hours a day, seven days a week. Life long learning and professional development in Ottawa need no longer occur at the expense of making a living because SmartCapital will begin webcasting (**Digital Media Platform**) the latest knowledge to everyone's

desk top. Businesses striving to compete in the increasingly fast paced global economy will be able to access the latest competitive intelligence (**The Ottawa Capital Network**) from critical economic and industry databases.

Given that some 40% of Ottawa residents have limited or no Internet access at this time, SmartCapital will also be enhancing the city's FreeNet services by adding features such as downloadable, on-demand software and web enabled e-mail while simultaneously creating hundreds of public Internet access points (**SmartSites**) for those without either computers or Internet service.

Ultimately, if it is to be successful in the opinion of the SmartCapital team, SmartCapital must go beyond attracting and learning activities to ones involving sharing and dialogue. Consequently, SmartCapital is being structured to enhance people's opportunity to share knowledge through the creation of virtual workspaces for any number of community groups, student associations, or other interest or affinity groups. In essence, SmartCapital will be creating an online community centre (**Smart Community Centre**). Dialogue will also be encouraged through the application of online technologies to traditional venues such as town hall meetings, zoning meetings and public consultations to help municipal government keep its citizens informed and engaged (**Electronic Democracy**). Finally, the sharing of knowledge will be further enriched by several multimedia showcase sites (**SmartLabs**) that will connect advanced research labs in business, government and academe over a high-speed fibre optic network. These sites will be available to local civic entrepreneurs to help them demonstrate how to exploit the new online technologies.

Given this infrastructure, we believe SmartCapital will be effective if it can continue to facilitate two types of exchanges. First, it must be able to facilitate numerous anonymous exchanges in which the local Internet portal is used to link people with common interests or to provide services. This type of encounter may not be all that personally rewarding but it will be the hook that draws people in. The more hooks, the more people participate. The more people, the more valuable the network becomes according to Metcalfe's Law postulated by 3-Comm's founder Robert Metcalfe. The more people involved, the greater the possibility of making useful or interesting connections. At this point, SmartCapital is seeding Ottawa's network with a dozen different 'hooks' to attract people to use it and more will be added over time.

The second type of exchange, however, may prove to be far more significant – particularly in the context of local learning. Once connections have been made between people, the local character of a smart community affords the possibility of non-anonymous exchanges. The possibility of face-to-face interaction means that a virtual relationship can be transformed into a personal one. As many technology companies have learned, virtual relationships alone are insufficient to deal with complex problems or collective learning, but virtual communication anchored in a personal relationship can be. If its virtual connections can be 'personalized', SmartCapital can encourage another level of interaction through its sharing and

dialogue modules. It can thus stimulate collective community engagement in ways that would not otherwise be available.

Because of the many avenues SmartCapital has to attract people, to allow them to discover new things and then share their ideas with others, we believe that SmartCapital will indeed lead to increased dialogue among citizens and between citizens and their institutions, including local government, businesses, schools and health authorities. SmartCapital will likely offer the community another vehicle for engendering mutual understanding and trust and for providing the kind of 'social capital' discussed by Putnam and in many communities across North America and Europe for the last decade. The growth of that trust will further bring down the barriers between different community groups, fundamentally altering local governance from its traditional 'stove pipe' orientation to a more collegial and collaborative one.

In conclusion, our description of SmartCapital is, without question, the description of a world class technology infrastructure. Yet beyond drawing people into its local version of cyberspace, SmartCapital is providing some initial modules to encourage social learning and engage people in issues. If these become effective, SmartCapital will become a network for connecting, for communicating, for learning and for trusting. Beyond the technology hype around more convenient services, SmartCapital's greatest promise rests with the value being created by virtue of the network itself and through the new people centred initiatives like the Ottawa Capital Network and the Smart Community Centre that may well help to catalyze a self-organizing capacity within the community. If so, if individuals and groups within Ottawa can be inspired to extend and expand upon what SmartCapital originally provides, this will be SmartCapital's greatest legacy.

###