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Community organizations and ICT Service/information delivery

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Abstract

This paper assesses to what degree providing on-line employment resource and health and wellness services at the community level achieves the Canadian communication policy objective of an inclusive knowledge society. Over a two-year period (2004-6) the authors conducted an empirical research study at four non-government community-based organizations (NGOs) that deliver social services and information. The purpose of the study involved investigating the specific communication practices of these NGOs, located in different parts of Canada, which act as intermediaries delivering federal, provincial and/or municipal government services and information to clients. The researchers examined the community context in which the intermediaries operate, the challenges, opportunities and problems they face, and the means by which they use ICTs for services and information delivery.

Introduction

The research discussed in the paper is based on the authors' Community Intermediaries Research Project (CIRP) two-year study and subsequent final report *Community Intermediaries in the Knowledge Society* (2006). The primary objective of the study was to investigate the opportunities, challenges and problems facing four community intermediaries (non-government organizations) as they deliver employment resource services, health services/information, as well as general community information and development activities to citizens. These organizations are called "community intermediaries" because they act as links between the various levels of government (federal, provincial, and municipal) and citizens, providing social services and information to their clients and respective communities. One community organization

was selected each from the provinces of Manitoba, Ontario, Quebec and Newfoundland and Labrador.

The authors investigated the specific communication practices of the intermediaries, the community context in which they operate, and the means by which they provide electronic client services and information. The study was guided by the following questions: What are the means employed by community organizations to successfully provide education, skills, literacy, health information and other resources for citizen engagement? How do these organizations use information and communication technologies (ICTs)? What are the opportunities, barriers and restraints for using electronic technology to deliver client information and services?

A mixed methods approach was used to gather data¹ from in-depth staff interviews, client and staff focus panel discussions, as well as client and staff surveys. A representative sample was chosen for the client survey that reflected income levels, gender, ages and languages spoken. Staff information environment mapping (IEM) interviews were also conducted². Using the data from the 2005 Canada Census demographic profiles of the geographic area where each organization is located were created. Data was also collected and analyzed from the organizations' documents and web sites.

This paper assesses to what degree community level provision of on-line employment resources and health and wellness services achieves the objectives of the Canadian Government On-line Initiative. As policy advancement, Government On-Line

¹ Thirty-three staff interviews and eight focus group panel interviews (36 staff members and 39 clients) were conducted. Survey questionnaires were distributed to 50% of the clients at each organization. The completed survey response rate for the clients was 45% (n=514) and 62% (n=38) for staff members, *Community Intermediaries in the Knowledge Society*, 2006, p.16.

² IEM interviews were conducted with 40 staff members.

(GOL) has not only standardized electronic public services provided by federal government departments and agencies it is also the preferred means of accessing and using public services. As noted in the GOL report:

Designed to ensure that all Canadians, regardless of ability, geographic location or demographic category, are given equal access to information on Government of Canada Web sites, information is made accessible in such a way that a wide range of technologies, including personal computers, assistive devices, and advanced technologies can be used. Content on Government of Canada must be easy to acquire through a modem or an older browser version, as it is through a screen reader or voice activator.... The Common Look and Feel of the Internet is an enabler for the Government On-Line initiative as it supports the client-centred approach that lets Canadians acquire information and services on their terms, and according to their needs (GOL, 2006:61).

The authors argue that these community organizations do not have the financial, human or technological resources to deliver existing client programs, let alone more advanced electronic government public services and information. This serious problem combined with inadequate communication infrastructure and client barriers, helps to perpetuate social exclusion in the Canadian knowledge society.

Section one of the paper reviews the research on the technology approaches various governments have implemented to deliver public services and information to citizens. The section also analyzes the authors' research findings related to organization funding and its impact on client service delivery. Our analysis reveals that the three employment resource organizations without core funding do not have the capacity for on-line government information and service delivery. Relying on program, contract and fee-for-service funding meant the organizations were under great pressure due to inadequate financial, human and technological resources, both to sustain their organizations and to

adequately provide electronic client services. The health and wellness organization with core funding, however, was organizationally stable, with the capacity for successful program development and electronic service delivery.

Section two examines the organizations' internal out-dated IT networks and their access to inadequate local communication infrastructure (high-speed service). This section also discusses the range of barriers clients face using on-line government services. These barriers include: low education and literacy levels; disability and aging; on-line privacy concerns; fear of electronic technology; inadequate staff and client information technology training; living in a rural or remote area; and language barriers for minority language groups, First Nations people, new immigrants and people with disabilities. Our findings reveal that existing social, cultural and technological problems need to be resolved in order for citizens to be included in a knowledge society.

Government technology public service approaches

With few exceptions, relatively little critical research has been conducted on the technological approaches taken by governments to deliver government services to citizens. The research that has taken place notes that governments' intended policy outcomes for using the Internet and ICTs to deliver services/information are intended to facilitate social inclusion and develop human capital (McQuaid, Lindsay, and Greg, 2004; Selwyn, 2002; Borgida, Sullivan, Oxendine, Jackson and Reidel, 2002; Haddon, 2000).

Increasingly rural communities in the United States have established community electronic networks that provide electronic access to government information and employees, education and training services as well as access to the Internet. But as

Borgida *et al* argue not all rural communities see technology access as a community responsibility, but rather as a matter that should be addressed by the private sector (2002:138).

Scotland's government policy takes a techno-optimistic view that having Internet access to electronic government services will reduce geographic barriers to health, education and employment services (McQuaid et al 2004:369). However McQuaid et al maintain that while on-line job searching is a useful additional tool, it should not be seen as a replacement for local services. In many of the European Union countries the low take-up and use of government on-line services has occurred in part because of a lack of public awareness about this mode of delivery. But as Servaes and Heinderyck argue the larger problem is the result of digital divide income issues and geographic barriers in accessing technology-based services (2002:109).

The United Kingdom's Modernizing Government strategy offers electronic access through television, telephone or a computer. The official line from the Blair government is that access to on-line employment services is a more democratic approach to inclusion for previously socially excluded citizens. Yet Selwyn argues that the government's primary focus has been with education and learning activities rather than employment. He also maintains that the reconfiguration of the workforce by ICT policies obscures the deeper structural inequalities of the capitalist system (2002:8).

Similar to the governments of other developed countries, the Canadian government has made a series of investments in information and communication technologies (ICTs) and Internet infrastructure (Rideout, 2003/2). The recent investment of 880 million dollars was provided for the design and development of electronic

government public services under the Government On-Line Initiative (GOL). Successive government on-line reports emphasize that the primary objective of the service transformation initiative was to provide clients with more accessible, efficient electronic services and information, based on clients' needs, using a model that is referred to as client-driven services and citizen-centric service delivery (Canada 2006:1-2).

Government On-Line's overarching strategy included building the required communication infrastructure, updating policies and standards related to privacy, security, identity authentication and information management. Another important aspect of the initiative included managing federal human resources more effectively to deliver on-line services. Approximately one hundred and thirty public services are now available electronically to complement traditional delivery channels such as in-person, telephone and mail services; described as multi-channel service delivery. The most commonly used on-line transaction services permit clients to interact with the federal government, for: business and individual taxes; passport services; Canada pension and old age security; employment related services; employment insurance services and health services and information, among other (Canada, 2006: 74-78). The Deputy-Minister of Public Works and Government Services Canada has declared that the on-line services 'mission [has been] accomplished' (Canada, 2006:I).

Section One: Community organization funding, staffing, clients and content

The four community organizations that took part in this study have historically had highly effective records of providing relevant services to meet the core socio-economic needs of community members. The roles of community intermediary

organizations, to provide information and services to local citizens, have become increasingly important as citizens' needs change in the emerging 'knowledge society'.

These organizations are also very important resources for governments to meet policy and program objectives. The community intermediaries act as partners, sub-contractors and surrogates in the delivery of government information and services. In many instances, citizens seek and use information and services from a community organization, rather than directly from a government department or agency. The continually expanding mandates and activities expected of these community intermediaries in providing government services have not, however, been sufficiently supported by the various levels of government. The weakness in this virtuous circle of information and service delivery is at the level of resources: community intermediaries do not have the resources that they need, either to meet the demands of citizens, and to manage and distribute continually changing or inadequately developed government services and content. Resources that are required to effectively provide program and service delivery are: staff resources; tools and expertise for information and service content development and dissemination; technology maintenance and upgrades; staff IT training; human resources development and support, and effective communication infrastructure (e.g., access to high speed internet services, multi channel service delivery, etc.).

Where formal relationships already exist, governments are increasing the demands upon, responsibilities of, and accountability by community organizations. However, these organizations have not received commensurate support with the required resources to be effective and, in some instances, sustainable over the longer term. With

community intermediaries essentially doing the ‘work’ of government, financial support should be provided to assist with at least some of the core operating and personnel costs of these organizations. Without funding, the risks increase that service delivery will not be effective; the ability of the community intermediaries to adapt and change to meet the evolving needs of the public will be limited; and the sustainability and prospects for continuing operation of these organizations becomes a growing concern.

Funding

The authors found that the funding arrangements of each of the organizations have a major impact on the delivery of services and information to clients. Funding for the three employment resource organizations is a mixture of core, fee-for-service and program funding. Such funding arrangements are contingent, variable and not sustainable either for program delivery or for offering new programs in this or other service areas. At the employment resource organizations federal and provincial core funding is being phased out, or has been drastically reduced. What it has been replaced with is fee-for-service, short-term program and project funding. These types of funding are inadequate to cover the current operating costs of each of these organizations. To make up core funding shortfalls, the organizations have also engaged in extensive fundraising, which in most cases does not result in funding increases. Moreover, short-term, fee-for-service and project funding is inadequate to cover the current operating costs of each of these organizations. Securing sustainable funding for these organizations is a major problem. Funding arrangements also impact technological and human resources.

The current funding situation affect the organizations’ ICTs resources in all areas, be it software, hardware, training, access, or maintenance and upgrades, because most of

the federal, provincial and municipal grants and programs received by the three employment resource organizations exclude necessary supportive funding for technologies and electronic services. These include such essentials as computers, access to the Internet, high-speed internet services, IT maintenance and upgrades and integration of IT systems, along with client and staff ICTs training. These generally unsustainable and inadequate funding situations, and the subsequent effects on staffing, mean that ICTs and Internet services have a negative impact on the capacity of these intermediaries to deliver existing and on-line information and services to clients.

Staffing

The short duration of project funding at the employment resource organizations has resulted in widespread job insecurity and working short-term contracts for the staff.

When staffing decreases, so too do services to clients.

Whenever our contract is coming up you are getting a little stressed because you haven't heard anything and they won't tell you until the day of, like your last day, whether or not you are going to be renewed. ... You are worrying about all your clients, you are worrying about yourself. What types of supports can you provide referral wise? (Job placement organization, SI-4).

There is also inconsistency in salaries as a result of how the government funds are allocated to different geographical areas; some staff members are receiving less pay than others for doing the same work because of where they are located. Low staff salaries have contributed to a rising rate of staff turnover and salary increases are rare. At one of the employment resource organizations, staff has not had a salary increase for the past six years; at another organization, staff received their first small increase in ten years. Staff members put in long volunteer, unpaid hours. As well volunteers to help paid staff are

rare, preferring to seek paid employment.

In contrast, the health and social services intermediary receives annual core funding from the provincial health department. However, while this secure funding arrangement provides the organization with a significant advantage over the three employment resource organizations, there are still significant funding challenges. Although organizational funding is secure, the upcoming integration of its IT systems with those of its program partners will require staff ICTs training to ensure that the new systems are adequately and properly used. Another ongoing challenge related to staff ICTs training is the lack of funds to replace a staff member in training.

Client composition

The composition of the clients at each community organization is an important factor in delivering services and information. A majority of the clients have low- income levels of five to fifteen thousand dollars per annum. Two organizations serve clients who are young adults between the ages of 19 and 35. Many of these clients have basic needs, including income, food, shelter and clothing. Numerous challenges and barriers to delivering client services and information include: low education levels, high illiteracy levels; learning difficulties; mental health problems; physical disabilities; visual, hearing or cognitive impairments; no fulltime work experience; and technology intimidation.

The authors found that the composition of the clients at each community organization is an important factor that has to be taken into consideration when delivering services and information. Also, how a community intermediary is funded has a major impact on client services and information delivery.

The community intermediary client composition and funding arrangements are discussed below in terms of their impact on the services and information delivered to clients by each of the job placement, the skills and training, the community development and employee resource, and the health and wellness organizations.

Content/language

A combination of language and aging creates additional barriers. For clients 65 years of age and older, receiving health services in one's first language, helps to ensure that diagnosis, treatments and services are understood. Particularly as a person ages, a lack of support or knowledge about health and wellness services often contributes to further isolation.

... I really think that ... provincial governments need to play a more prominent role in the development of linguistic minority services (Health and wellness centre SI-6).

Services and information cannot be delivered the same way to clients with a mix of English speakers, Aboriginal peoples who speak different native languages, and recent immigrants to Canada. Currently, none of the organizations have the capacity to address the needs of either these or other non-official minority language speakers. The organizations provide many services as well as information to help address social and economic needs, but the study found that these cultural needs has to be addressed as well.

The authors also found that clients served by community intermediaries value the importance of the employment resource services, adult life-long learning services, as well as health and wellness information they receive. The clients are also very interested in receiving online services such as skills upgrading, lifelong learning, computer literacy and numeracy upgrading and health information and services.

Section Two: Organization ICT and electronic service delivery

On-line capacity

The role of the four organizations as intermediaries in government on-line services and information is specific to the particular social, economic, cultural and political contexts of their communities and the types of information and services they deliver. The one organization studied with adequate and sustainable core funding, the health and wellness centre, is the best prepared of the four to deliver public information and services using the Internet. The centre also receives provincial funding for ICTs. At least one staff member has an older computer, but in general the organization's ICTs meets its current needs. To date, resources have been adequate for computers and other ICTs for its staff and operations.

The centre accesses many web sites to locate minority-language material and health resources for clients, which can then be developed and delivered in information sessions to the staff. The centre is linked to the provincial government health network database so it can receive client referrals from hospitals, physicians and the community health and social services centres. Overall, the organization is well prepared and well placed in its intermediary role. However, this situation could change if e-government becomes a more common delivery channel, and if/as clients need more support to use ICTs to access health information and services.

The organization does not provide client access to the Internet in order to ensure that private health records remains confidential. The centre's approach has been to empower clients, but in cases where the capacity of clients to use ICTs is low, it is often easier to intervene, for example, by printing out a complimentary web page for a client

rather than talking a client through the process of dealing with an automated government information telephone service. As more government services are delivered electronically, it is possible that more staff time will be required to assist clients to access these services.

The three employment resource organizations do not have the capacity to be effective e-government intermediaries. Building their capacities will require significant and ongoing funding and other resources in all areas of the organization including staffing, training, core overhead costs and ICTs.

The job placement organization is located in a large city, and delivers employment information and services to clients with mental health challenges. The authors found that the job placement organization plays a supporting, rather than a leading, role as an intermediary for government on-line services. It lacks both the staff and the financial resources to champion electronic delivery of employment information and services. Most staff members did not think the organization is very well prepared to deliver e-government services and information. As one staff member said: “Well if this was on a scale of 1 to 5, probably about a 2” (Job placement organization SI-1).

The reasons the organization is not better prepared are primarily due to its unsustainable funding situation, including a lack of capital investment for computer equipment, a shortage of staff with IT skills, and the need for staff IT training. Before the organization invests in computer hardware and software and training, it must upgrade its current electrical power service and put a reliable LAN system in place. Another major deterrent to government on-line services is that clients need considerable support to access and use ICTs effectively. Many clients are just learning how to use technology and need a lot of guidance.

Similar to the job placement organization, the skills and training organization is also struggling with its role as an intermediary in e-government. The organization delivers information and services to clients living in more than 90 small communities dispersed throughout a rural and remote geographic area. Most of the organization's staff members believe that it does not have the human, technological or financial capacity to use ICTs to deliver either the services that they already provide, or additional government services. In order to deliver government on-line services more effectively, the organization would need reliable and affordable access to high-speed Internet service, as well as new computers. It would also need additional trained staff and training for the existing personnel, all of which would necessitate additional financial support.

The high-speed infrastructure is uneven over the area served by of the skills and training organization. In some locations, there is adequate high-speed and cell phone coverage, while in other locations; neither is locally available. One of the satellite offices does not have access to broadband. Dial-up Internet is adequate in some areas and slow in others. Dial-up in general is a constraint to delivering services and information because it ties up a telephone line; as one staff member described, using the Internet to do research meant that she could not receive phone calls. Once on-line, the out-dated computers, combined with the existing dial-up Internet service, are slow and often crash. One of the offices with satellite Internet service explained the situation:

I tried to download government files before; I had to step away from the computer for an hour to let them download. That's ... an hour of your workday (Skills and training organization - SF).

Clients in some of the communities served by the organization experience considerable difficulty using on-line services because of the lack of access to high-speed Internet infrastructure. As an example staff member described the difficulty for clients attempting to complete on-line applications for Employment Insurance (EI) in an area without high-speed Internet:

Right now there is no such thing as completing an application form to apply for EI anymore, everything has to be done on-line and with the service out in [one of the satellite offices], clients have gone in there and they have been trying to complete their application forms and there have been some of them who have been booted off the Internet probably a half dozen times before they could get the process completed. ... There have been some [that] ... just couldn't do it all and they just had to give up and walk out. So it is causing a big problem in that area (Skills and training organization SI-1).

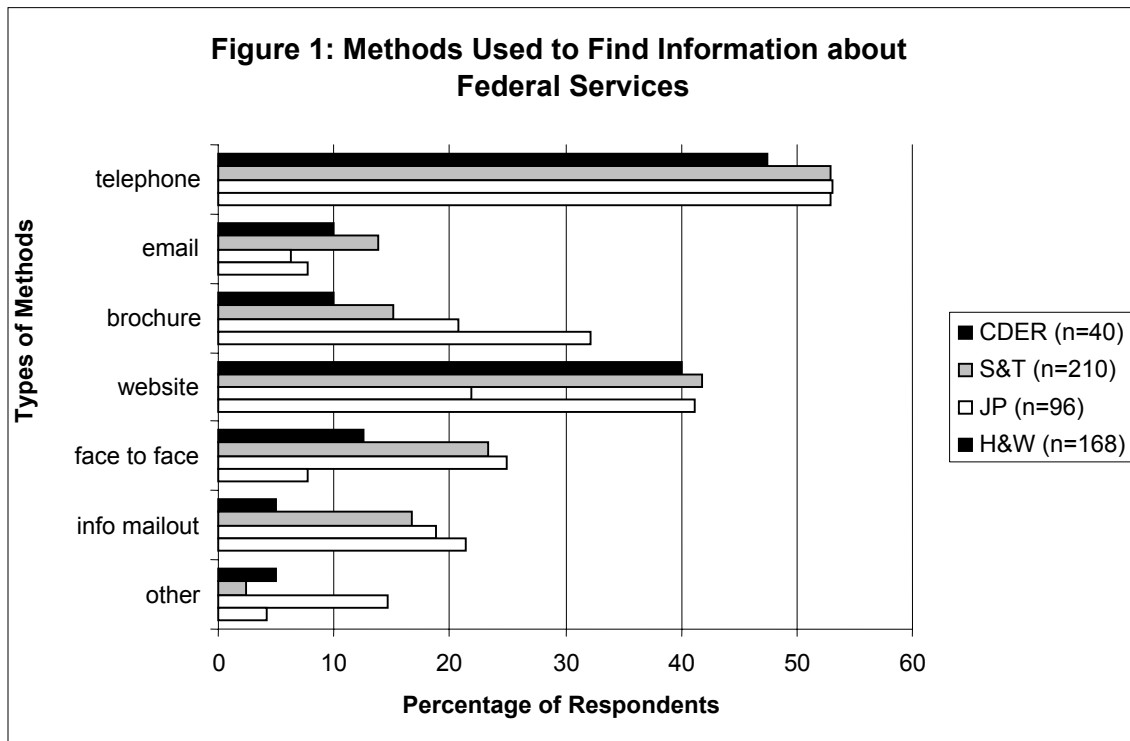
The final organization studied for the CIRP was the community development and employment resources organization, which provides information and services to inner city residents in a community with one of the lowest incomes per-capita in Canada. Innovative programs and services developed by the organization reflect basic community needs such as housing, food security, green spaces and gardening. The healthy food club and farm volunteers offer economic benefits (food in exchange for labour) as well as social benefits. Of the four organizations studied, it is the most challenged in its role as an intermediary for e-government.

Aside from the considerable human, financial and technical constraints faced by the organization, its client base has very low levels of access to, and understanding of, ICTs. As one of the staff members explained:

... I meet with neighbours here in the block who wouldn't have a clue when I was talking about e-mail. What's that? ... Never seen a computer, what is a computer? So that would be completely out. So I am talking almost half the population wouldn't know what a web site is, they'd think about spiders (Community development and employment resources organization-SI-5).

Multi-channel service delivery

Community intermediaries take a multi-channel approach to delivering services and information. All the organizations have developed a wide range of communication channels – from posters, pamphlets, and sidewalk chalk messages to websites – to inform and provide services to clients and potential clients. The organizations provide most information and services by telephone and in-person, and these channels provide the personal contact preferred by most clients as indicated in Figure 1.



Community Development & Employment Resources (CDER),
Skills & Training (S&T), Job Placement (JP), Health & Wellness (H&W)

Although all the organizations use ICTs for operational use and delivering services and information, not all are doing this effectively. All four organizations have a website, but only two use them strategically and keep them maintained. Three of the organizations provide computers for clients to access information and services online, despite considerable challenges. Lack of high-speed infrastructure is a barrier to service delivery for the skills and training organization providing government on-line services in rural and remote areas.

On-line service benefits and challenges for staff

Benefits for staff and organizations using ICTs vary among the organizations. They include easier access to information, getting information for and to clients more quickly, and networking more effectively with funders and partners. The organization with adequate and sustainable core funding, the health and wellness centre, has the

highest level of effective ICTs use and the most successful outcomes with program and service delivery of the four sites.

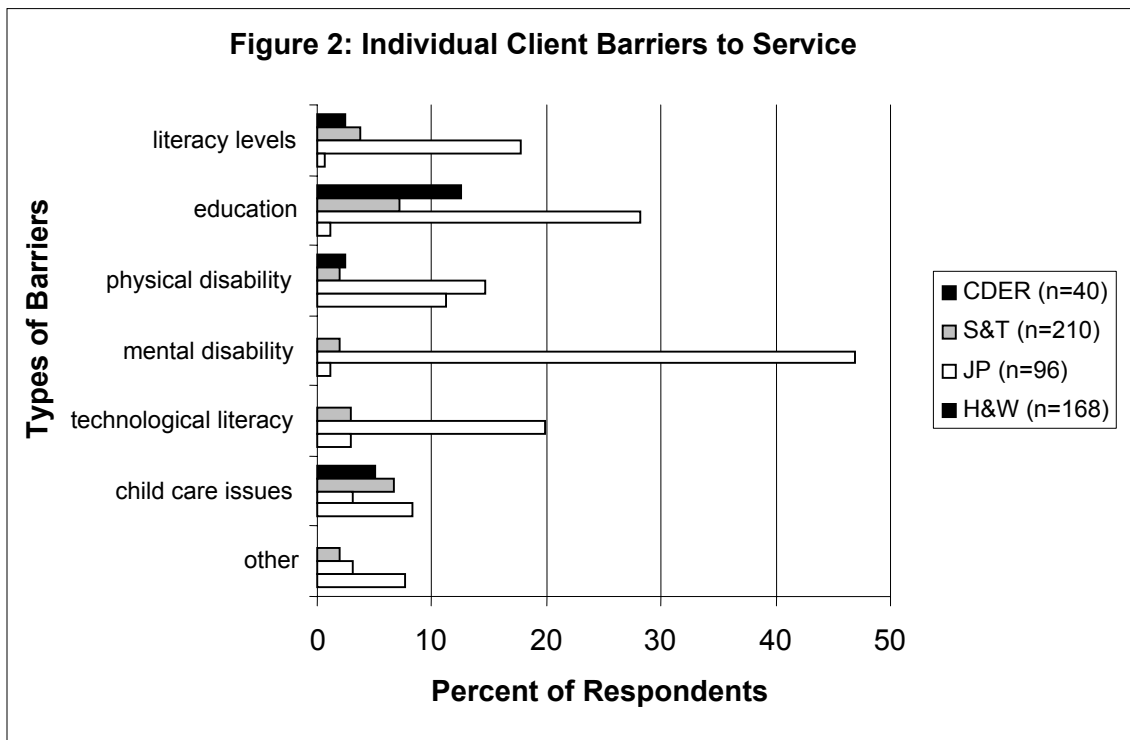
Using ICTs effectively presents very significant challenges for the other three organizations. Troubleshooting and ongoing maintenance is a common problem. Challenges include using and maintaining ICTs software, hardware and internal networks, software glitches that no staff member can fix, not having enough computers or Internet connections, having old computers that crash often, and assuring an adequate electrical supply for ICTs. Two organizations experience significant challenges with their internal phone systems that impede service delivery. The other organizations face significant challenges ensuring adequate staff ICTs capacity, primarily because their reduced funding also limits their ability to fund staff ICTs training. Furthermore, none of the organizations have a staff ICTs training policy in place.

Staff ICTs training is an ongoing issue for community intermediaries because of new ICTs and evolving requirements for service and information delivery. An ongoing challenge related to staff ICT training is the lack of funds to replace a staff member who is in training, with the result that staff members are expected to undertake training while also doing their jobs:

You cannot have training while you're doing something else. So the person has to be replaced and that ... incurs costs. They expect you to do the job, and then you know... you learn at the same time. As the phone rings five times and then, you know, you answer a whole bunch of other things, so that is not a good way to learn (Health and wellness centre SI-4).

Client on-line service benefits and barriers

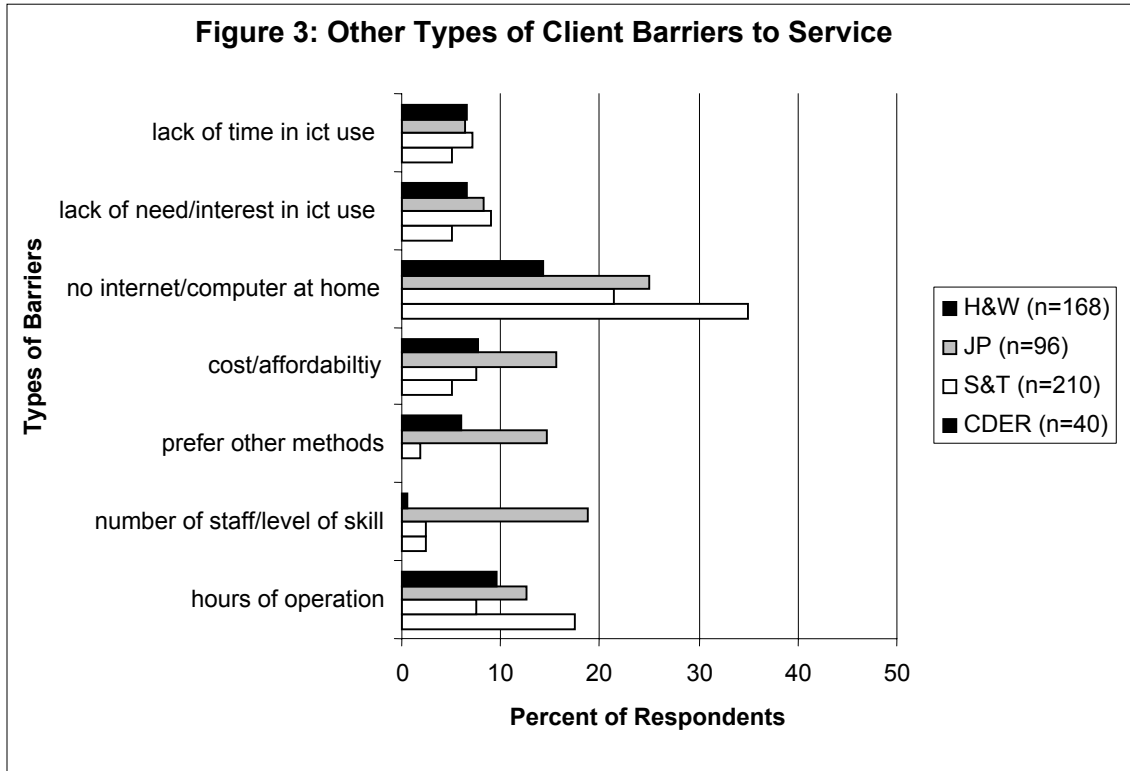
Benefits for clients using ICTs for information and service delivery include easier access to information and services, increasing their ICTs skills for employment, and increasing their social capital when using computers in community settings. However, the barriers to using ICTs outweigh the benefits for many clients.



Community Development and Employment Resources (CDER), Skills & Training (S&T), Job Placement (JP), Health & Wellness (H&W)

Clients of all four organizations face a myriad of barriers, or challenges, that make it difficult for them to access or use the government on-line services and information provided by the respective intermediaries. The most common individual barriers among all clients are low education and literacy levels as indicated in Figure 2. Mental and physical disabilities present major problems for the job placement

organization clients, whereas barriers for the clients at the health and wellness centre are mostly physical disabilities.



Community Development & Employment Resources (CDER), Skills & Training (S&T), Job Placement (JP), Health & Wellness (H&W)

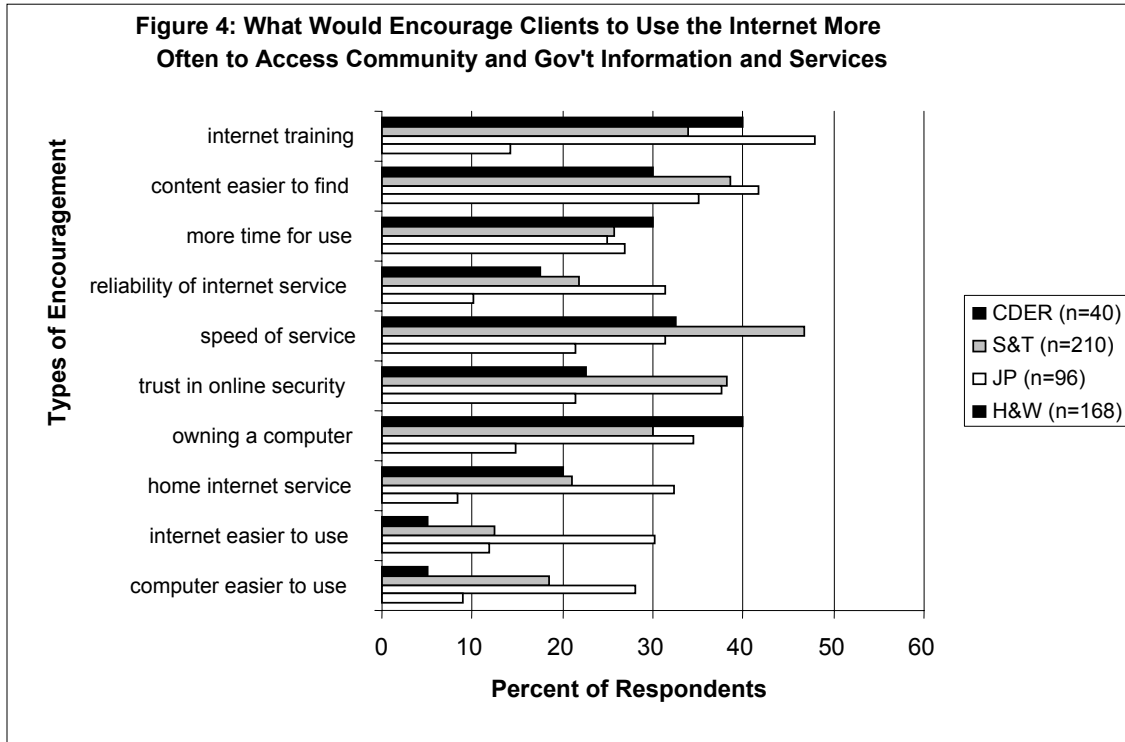
As indicated in Figure 3, client barriers also include no Internet or computer at home, cost and affordability, and the hours of operation for computer access sites. The health and wellness centre clients had the highest level of home ICTs access, with 70.6 per cent having a computer and 61.9 per cent having Internet access at home. The skills and training organization clients had the next highest level of home ICTs access, with 63.8 per cent having a computer and 50 per cent having Internet access at home. Of the job placement organization clients, 54.3 per cent have a computer at home, and 33.3 per cent have Internet access at home. At the employment resources and community development organization clients, 38.5 per cent have a computer at home, and 30.0 per cent have

Internet access at home. Clients without home computer and Internet access can - in theory - use public access sites. However, the free computer access points in the communities studied are heavily used, sometimes making it difficult for clients to access the Internet at all. In the employment resources and community development organization, there is no public Internet access set up for the visually impaired. Staff at the job placement organization explained that public Internet access points are not often appropriate for their clients who have mental health issues.

Clients may not be able to access computers in libraries because libraries do not provide appropriate support. For minority-language clients of the health and wellness centre, although Internet access is available at local libraries, these computers have keyboards and operating systems in the language of the majority, and the library staff may not be willing or able to assist them in the minority language.

Three of the employment resource organizations – the job placement organization, the skills and training organization, and the community development and employment resources organization – provide client access to dedicated computers and the Internet to conduct job searches and research information for skills upgrading and training. However these organizations do not have sufficient capacity for ongoing maintenance of these computers, as will be discussed later. At times, there are not enough computers available in these organizations to meet client demand, resulting in long waiting times and frustration for clients. Clients of the community development and employment resources organization line up at 10 a.m. to use the computers and Internet. The skills and training organization has so many clients who use the GOL job search data

base and the employment insurance web site they are considering requiring clients to book appointments to use a computer and to access the Internet.



Community Development and Employment Resources (CDER), Skills and Training (S&T)
Job Placement (JP), Health & Wellness (H&W)

The low capacity of clients for using ICTs is another significant barrier to computer service delivery. Although some clients were very proficient with computers, as Figure 4 indicates, many were not and would need extensive training in order to access and use ICTs more effectively. As discussed earlier literacy levels vary among clients so providing written instructions for using computers would not be adequate. Because of the stigma associated with illiteracy these clients tend to not self-identify the problem.

Many clients do not use computers, do not want to use computers, or are not familiar with computers. Clients who are interested in learning how to use computers need considerable support. A number of clients do not know how to type so they cannot

use a keyboard. Although the job placement organization has neither the funds nor the staff for client computer training, staff members try to make the time to provide ICTs support for clients. For clients with cognitive difficulties, learning computer skills requires a systematic approach, which takes time. Staff members pointed out that some clients are very afraid of computers and do not want to conduct an on-line job search. When this occurs, staff members try to introduce the client to the technology slowly, using a step-by-step approach.

Conclusion

As our research findings reveal, existing social, cultural and technological problems must be resolved to make sure that citizens are not excluded from Canada's transition to a knowledge society. Many of the clients of these community intermediaries are already on the margins of society due to their socio-economic circumstances. How ICTs are used for information and service delivery can contribute to these people's greater inclusion in society, or further marginalize them. Considered, carefully designed strategies and practices for different means of communication are required to achieve inclusion and meet their needs.

These community organizations have historically played a highly effective role of providing relevant services to meet core socio-economic needs of community members. The role of community intermediary organizations to provide information and services to local citizens, has become increasingly important as citizens' needs change in the emerging 'knowledge age.' In brief:

- These organizations are very important resources that allow governments to meet policy and program objectives.

- The continually expanding mandates and activities expected of community intermediaries in providing government services have not been sufficiently supported by the various levels of government.
- The weakness in this virtuous circle of information and service delivery is at the level of resources: community intermediaries do not have the resources that they need either to meet the demands of citizens, or to manage and distribute government services and content that are continually changing or inadequately developed.
- Many of the clients of community organizations are already on the margins of society based on their socio-economic circumstances.

Do the policy objectives and public investments by the federal government for on-line information and service delivery meet the needs of community organizations and individuals? In many respects, the evidence from these case studies leads one to conclude that the focus on ‘technological’ solutions should realistically only be considered for solving ‘technology problems’ such as the digital divide. Our evidence indicates that technological solutions do not effectively ameliorate social disparities or inequalities of unemployment, low income, low literacy or education, and so forth. The technical solutions address, with variable levels of success, the circumstances of many clients and greatly benefit them. The largest obstacle is financial. Cost is a barrier both to individuals for technology such as computer and on-line access, and to organizations for investment, equipment upgrades, staff expertise, and system sustainability. Without ongoing government support, these barriers may remain immutable.

As well, continued government support to address social inequalities will be needed extant of e-government or on-line policy and program initiatives. The Internet and ICTs need to be seen as a new additional tool, or a new layer, to help address these inequalities.

For the organizations, the Internet and ICTs serve as a complementary means for delivering services and information – an enhancement, as opposed to a displacement of other communication methods. This general intent about the benefits of using the Internet and ICTs to meet client needs is shared with governments but the most substantive component of the federal government’s long-term approach to on-line service delivery is to replace services available by traditional means. However, our research demonstrates that the clients and the community intermediary staff prefer traditional means of service delivery. The type of service delivery preferred depends on a number of factors, among which literacy, disability and language are important. Additionally, the proclivity for governments to continually adopt and deliver on-line services and information using state-of-the-art Internet conflicts in a number of ways, both with the capabilities of the community organizations to keep pace given their financial, human and technology constraints, and the social, cultural and economic circumstances of their clients. The goal for governments, intermediary organizations and citizens is to be included in Canada’s knowledge society. Yet, as our research demonstrates, despite great effort by these community organizations, citizens are in some cases either not well or barely served at all.

Selected Policy Recommendations

- The federal government should recognize the role of community intermediary organizations as providers of government electronic public services and information.
- Government programs should be flexible in order to accommodate community intermediary circumstances and needs to address organization sustainability issues.
- Community intermediaries should be consulted in the development of e-government public service and information delivery.
- Specific ICT policy issues:
 1. Re-establish community organization core funding for the intermediaries who deliver government electronic public services/information;
 2. Include ICT and internet related expenditures and internet maintenance and training expenditures in government grant applications;
 3. Electronic government service/information funding is required for different types of content such as language translation;
 4. Funding is required for community access to high-speed internet services (broadband);
 5. Government funding is required to support public Internet access centers to ensure government services/information is available for citizens without home access and computers.

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