USING INFORMATION COMMUNICATION TECHNOLOGY TOOLS TO FACILITATE COMMUNITY ECONOMIC DEVELOPMENT NETWORKS

Social Sciences and Humanities Research Council of Canada

January 2006
Rural Development Institute, Brandon University

Brandon University established the Rural Development Institute in 1989 as an academic research centre and a leading source of information on issues affecting rural communities in Western Canada and elsewhere.

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Submitted to:
Manitoba Research Alliance on Community Economic Development in the New Economy

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Executive Summary

Community economic development organizations are located in communities across Canada. Over the past ten years, these isolated and independent communities have increased the level of communication and collaboration between organizations by forming networks. Typically community economic development (CED) organizations establish networks to learn from one another, to share information, to improve practice and to coordinate around policy and funding initiatives.

Due to the size of Manitoba, the coordinators of networks and associations in this province face the challenge of coordinating a membership located great distances from one another. While most networks or associations hold one or two events a year so their membership can meet face to face, most of the time it is necessary for the network coordinator must find ways to overcome physical distances. Therefore, the network coordinator must develop and use Information Communication Technology tools to facilitate communication and collaboration between members.

CED networks typically use information technology tools such as websites, email applications, list-serves, telephone conferencing and online surveys to help members develop a collective vision, facilitate sharing and learning, and to build productive partnerships.

The researcher interviewed staff members of national and regional CED networks to learn how they used online surveys, websites, extranets, listserves, email and teleconferencing to support communication between network members. This report details how Canadian CED coordinators use these six ICT tools and determined which ones were best suited for particular tasks. The theoretical and practical understanding developed through the research will assist the members of CED networks and their staff to develop better modes of collaboration and communication.
Introduction

Community economic development (CED) organizations are located in communities across Canada. Over the past 10 years, the level of communication and collaboration between these isolated and independent community groups has increased due to the formation of networks. Community economic development organizations join networks to learn from one another, to share information, to improve practice and to coordinate around policy and funding initiatives.

Relevance of the Research to CED in the New Economy Project

The research conforms to the Manitoba Research Alliance’s second research goal by documenting the current practice of CED networks and evaluating the potential of ICT to facilitate the strengthening of CED organizations and groups through CED networks in Manitoba.

The theoretical and practical understanding developed through the research will assist the members of CED networks and their staff to develop better modes of collaboration and communication that encourage community economic development.

The lessons learned and evaluation framework will be useful to many networks operating in Manitoba and across the rest of Canada.

Why is this Research Important?

The proliferation of CED networks in Canada is likely a direct result of innovations in Information Communication Technologies (ICT) that facilitate such networks. Due to the size of the province, CED networks operating in Manitoba face the challenge of coordinating members located great distances from one another. To overcome physical distances, CED networks use new information technology to facilitate communication and collaboration. National CED networks face even greater communication challenges. New information communication technologies such as websites, email applications, listserves, distance training courses, telephone and video conferencing and online surveys reduce the expense of running networks as they facilitate communication that fifteen years ago would have had to take place with in-person meetings or through relatively expensive long-distance telephone calls.

This study assesses the current use of ICT tools to determine which ones best facilitate specific CED network activities, as well as, how to monitor the effectiveness and efficiency of the ICT tools on an ongoing basis.
**Sharing the Research with Community Stakeholders**

This research is very timely as many CED Networks have recently emerged in Manitoba and in the rest of Canada. These networks may have a provincial, regional or national focus and bring together groups spanning the entire field of community economic development or a particular sub-sector such as community investment or youth. Examples include:

- The Canadian Community Investment Network
- Manitoba CED Network
- Canadian CED Network and its regional hubs
- Canadian universities involved in SSHRC Community-University Research Alliances working to conduct research on the Social Economy and disseminate results

**Research Methodology**

The researcher conducted a literature review on lateral learning networks and knowledge networks of community economic development organizations and community financing/microfinance organizations. This review includes network development and evaluation literature.

The researcher then created a list of active and established networks and associations in Canada and conducted web-based research on each one to establish if they use ICT tools. The researcher identified six networks operating nationally or regionally in Canada. She used semi-structured interviews to gather information. Five out of the six staff of networks agreed to be interviewed. Each network staff person was asked which ICT tools facilitate the best outcomes and if they have a monitoring and evaluation process in place to judge effectiveness and efficiency.

Each of the networks selected for and interviewed for this study operate as lateral learning networks. They have a membership that is diverse in its target clientele and methodologies. These network members operate independently of one other. What brings them together is an interest in sharing information, improving practice and coordination around policy and funding initiatives.

**Literature Review**

**What are networks?**

There are two types of commonly used network structures serving members in the community economic development sector in Canada: lateral learning networks and operating alliances.

As defined by the Small Enterprise Education and Promotion (SEEP) Network in *Building Lateral Learning Networks: Lessons from the SEEP Network*, lateral learning networks are associations of organizations “focused on improving the capacity of their members. Commonly, members are diverse in their target clientele and methodologies: they operate independently of each other. What brings them together is their interest in improving practice, sharing information, and coordination that will enhance the policy and funding environment for the sector…. Networks of this type are operating at the international, regional and national levels” (p.2).
Examples of lateral learning networks in Canada include the Canadian Community Investment Network, the Canadian Community Economic Development Network and the Manitoba CED Network.

In contrast, the SEEP Network defines operating alliances as “formal affiliations of NGOs that share a common mission and are focused on a common clientele. As the name implies, an operating alliance constitutes a more tightly knit group whose members have brought their operation strategies in line to achieve a common purpose. In many cases, they implement the same methodology and use the same systems. Often they are led by an apex institution that provides technical guidance and resources, as well as enforces adherence to the principles and goals set by the alliance” (p.2). In Canada, examples of these types of operating alliances include the Pan Canadian Community Futures Group and the National Aboriginal Capital Association.

All the networks interviewed for this research are classified as lateral learning networks.

What is the role of a network?
The SEEP Network’s Technical Note 2 (February 2005) describes the typical role of the network which is to:

- Help members improve their performance
- Help members face challenges
- Create forums for members to engage in joint learning and training
- Share information
- Collaborate in related issues
- Develop consensus on and advocate for policies to promote an enabling environment for members
- Enhance or encourage professional standards
- Defend their interests

Typically, networks of organizations operating in the community finance sector have more specific roles. They are to:

- Develop a financial services sector with inclusive services
- Contribute to the standardization of the multiple approaches within the community finance sector
- Give guidance as it becomes integrated into the financial sector (p.2)

Network Communication
Networks, like any other type of organization, need to have a communication strategy. When networks are made up of members living in different regions of a country, the members will need to communicate with staff and with other members using ICT tools.

Ideally network staff and members will be able to meet in-person periodically. Face-to-face meetings are a great forum for interaction and collaborative work. In the report *Helping Knowledge Networks Work*, Terri Willard stresses the importance of in-person networking and meetings. “They allow for the most direct resolution of conflicts and miscommunications. Unfortunately, knowledge networks rarely have the travel funds to do all
the work in person… some degree of electronic communications will therefore have to be used at various points…” (Willard, p.17).

However, due to the size of Canada, it is impossible for members of provincial or national networks to meet in person every time they need to communicate and collaborate. New ICT tools such as websites, extranets, email applications, listserves, telephone and video conferencing and online surveys allow people to communicate as often as necessary even if they live in different time zones.

People working within national or regional networks in Canada must work across “space, time, and organizational boundaries with links strengthened by webs of communication technologies. Working across numerous boundaries, however, brings with it challenges to effective and efficient project management” (Willard, p. 2).

Networks operating in Canada have a few distinct challenges. They must operate across five time zones and members usually communicate in French or in English.

These ICT tools are still relatively new and not everyone possesses the computers, software or knowledge to use each of them. There are also certain ICT tools that are more appropriate for one function than for another.

Willard identifies the two primary factors that help a network to assess the effectiveness of one technology over another. The first factor Willard calls ‘social presence.’ “Social presence is the degree to which the technology facilitates a personal connection with others. Synchronous (same-time) communications have higher social presence than asynchronous (different time) communications because they enable a spontaneous, back and forth exchange” (Willard, p.17).

The second Willard calls ‘information richness.’ “Information richness has to do with the amount and variety of information flowing through a particular communication media. High information richness helps to accurately transfer clues to the meaning of the communication, thereby reducing confusion and misunderstanding” (Willard, p. 18).

**Research Results**

The researcher interviewed five staff of lateral learning networks. During the interview, network coordinators were asked about their experiences using websites, extranets, listserves, emails, teleconferencing, and online surveys. Interviewees were asked how they used each of these tools to encourage communication with their members and between members to meet their goals and objectives. The cover letter is attached as Appendix A, and interview questions are in Appendix B.

The following is a summary of how the staff of networks described the purpose of each particular ICT tool.

**Teleconferences**

- to hold board meetings, meetings of committees of the board and for project support
- used when more than two people are in different locations
Email
- to communicate with board members or committees when their feedback is needed
- to coordinate upcoming meetings
- for notification of upcoming conferences, events, publications
- to send out electronic newsletters

Online survey
- to implement a short survey to evaluate an activity or to gather information

Listserve
- ideally to create lines of communication between members.
- often a listserve ends up being one-way communication from the network to its membership about conferences, job opportunities, newly released reports and upcoming events

Website
- to communicate basic information about the network, including its mission, goals and contact information
- to serve as a clearing house for shared information
- to serve as a communication tool to reach the general public.

Extranet
- to post the most current draft of project documents for Board members, a working group or committee in a shared web-space that is accessible to authorized people
- to provide historical reference for all members of the network

Interviewees were asked what they found effective about using each of the communication tools and which ones did not work for them. Follow up questions were asked to learn how the network coordinator used the tools, and to what degree it worked or did not work. Each interviewee was also asked if they monitored or evaluated the ICT component of their communication strategy.

The following table highlights the positive and negative characteristics of six ICT tools.
Table A: Positive and Negative Characteristics of ICT Tools

<table>
<thead>
<tr>
<th>ICT Tool</th>
<th>Positive characteristics for network communication</th>
<th>Negative characteristics for network communication</th>
</tr>
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</table>
| Teleconference | - High level of social presence and information richness so network members are able to discuss collaboration around high-level issues such as shared policy development.  
- Good for resolving conflict or sharing sensitive information.  
Voice lends sense of being a team and mutual responsibility and obligation.  
Facilitates learning as insights of one member can spark additional thoughts from the others.  
One network reported successfully having discussions with up to 15 people at once.  
Efficient communication as it is faster than phoning people individually. | More expensive than some other ICT tools.  
Can be difficult if participants do not speak a common language well.  
One network coordinator reported having technical problems with sound.  
Difficult when participants have not met face-to-face before. |
| Email        | Communicate when most convenient to each person.  
Communicate to one person or with a whole group.  
Network members tend to check email frequently so receive email on a timely basis. | Some network staff found sending out emails with information in a PDF file (such as an electronic newsletter) was futile as people would not open the email. If the information is more than one click away, readership drops.  
Sometimes people have too many emails and miss messages, sometimes key emails get deleted, and sometimes emails get misplaced in email folders.  
Email effectiveness depends on the person receiving the email to organize and manage their own email system.  
If documents are sent by email, the user may lose track of the latest version of a document.  
Low social presence. |
| Online survey | Quick way of collecting data. Easier for members to complete a survey online than to fill in a piece of paper and mail/fax it back.  
Reasonably cheap.  
Good for short simple surveys and evaluations.  
Network coordinators reported good response rates. | Not good for long or complicated surveys.  
No ability to clarify questions or interact with the respondent. |
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<th>ICT Tool</th>
<th>Positive characteristics for network communication</th>
<th>Negative characteristics for network communication</th>
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| Listserve | Good for sending or exchanging information on upcoming events, jobs conferences, etc.  
If the listserve has a clearly defined focus area, members can exchange high-level information on the particular topic. | Must be moderated. Members need rules explaining how to use the listserve.  
Rather than desired communication between members, network coordinators find it is mostly one-way communication from the network out to the members. Members tend not to ask one another questions or start new discussions.  
One network coordinator feels that, over time, as email becomes more common and people receive more emails each day, listerves are being used less for discussions.  
One network coordinator feels that listserves may be too formal a medium for open, honest communication between members. People on the listserve are very aware that their colleagues, possibly their boss, and certainly other people in the sector, are reading the listserve and may judge their submission to the listserve. They are worried about expressing an opinion as it is not anonymous. There is pressure to produce a very articulate view in perfect grammatical form. |
| Website  | Useful as a clearinghouse. Members can access information (reports, research, job postings, educational opportunities, media releases) at any time.  
Can place web forms on the website to collect data for conference registration or membership.  
Possible to design a secure/encrypted part of a website to take payments (such as member or conference fees). | Members are not aware when the website has been updated or a new section has been added unless they regularly visit the website.  
There is the challenge of bringing members to the website on a regular basis. |
<table>
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<tr>
<th>Non-members/general public can access open websites.</th>
<th>Easy to monitor the number of people visiting a website and which pages of the website are most useful.</th>
</tr>
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<tbody>
<tr>
<td>Extranet</td>
<td>Shared website for people working on a committee or project so they can share documents, post emails, host chat rooms, etc.</td>
</tr>
<tr>
<td></td>
<td>Able to ensure all the people working on a committee or project are using the most up-to-date draft of a document or most recent information.</td>
</tr>
<tr>
<td></td>
<td>Able to show threads of an email conversation providing historical context for discussion. An outsider who was not in an email discussion can read the emails and find out what is happening with another committee.</td>
</tr>
<tr>
<td></td>
<td>Provides a historical reference for the project.</td>
</tr>
<tr>
<td></td>
<td>Easy to monitor the number of documents downloaded, emails sent, and the nature of networking taking place within the group.</td>
</tr>
<tr>
<td>Networks found that the majority of members did not log onto a special website. There is the sense that members do not like to use passwords. One network coordinator reported that just 5 out of 30 members used the extranet.</td>
<td></td>
</tr>
<tr>
<td>Network members may need training to learn how to upload or download documents and navigate the extranet.</td>
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</tbody>
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During the interview, each respondent was asked if they used any additional ICT tools. Three out of five respondents said that they would like to explore the potential for Skype. Skype is a program for making free calls with up to 5 people over the Internet. Only one interviewee was currently using Skype to communicate with a research group.

**Overcoming Challenges Associated with ICT Tools**

When the network coordinators interviewed identified problems with an ICT tool, they were asked if they had found ways to overcome some of the challenges associated with it. The following section details how respondents adapted their communication strategy to overcome problems they had experienced with particular ICT tools.

**Email and extranets**

As outlined in the table above, extranets are underused by members because they do not take the time to visit the online site. Network coordinators found that their membership was unaware of new documents or information posted to the extranet. Three network coordinators worked to overcome this barrier by emailing members when new information or documents were posted to the extranet. However, the members received the information by email, they had even less reason to check the extranet. Worse, the network coordinators now had to update information in two places; on the extranet and via email.

The solution identified by respondents was to send an email to members that contained a brief notification and a link back to the extranet. The email should not contain the actual document, just a link to its location on the extranet. This notifies the working group when new information is made available and ensures the most recent draft of a document is available to everyone the extranet. The extranet keeps project information organized in a central space.

One network coordinator found it was useful when biographies of the members of the working group using the extranet were posted. It made members feel more comfortable working with one another.

**Websites and emails**

Three of the network coordinators interviewed email their membership a newsletter. All three recommended a regular newsletter (between once a week and once every two months) that contains only two to four items. These items or stories in the newsletter should be linked back to the organization’s website. This helps to draw members to the website and makes them aware of updates or new sections of the website. It also helps the network coordinator monitor the popularity of particular pieces of information on the website by looking at the number of hits to a webpage in the days following the newsletter’s distribution.

Network coordinators cautioned against long electronic newsletters as members have to scroll through a great deal of information to find the pieces of interest to their organization. Members are less likely to read all the information and less likely to forward useful pieces to other people.

**Monitoring and Evaluating ICT Tools**

None of the network coordinators interviewed has a method for systematically evaluating their ICT Tools. Coordinators cited particular problems evaluating the success or failure of
sending out information by email or in the form of a newsletter. Communication and collaboration via a teleconference is also difficult to evaluate.

Coordinators do monitor how often their websites and extranets are used. Most web hosting companies offer clients a breakdown of the number of visitors to each page of the website.

The SEEP Network and the International Institute for Sustainable Development are two organizations that have researched and documented evaluation methods for networks. Both organizations have monitoring and evaluation guidelines available on their websites. Web links to these guidelines are available in the Reference section of this document.

**Conclusion**

Network coordinators use a variety of ICT tools to facilitate collaboration and communication within their provincial and national networks. These communications tools help members develop a collective vision, goals, programs and policy; build profile of members and the sector; facilitate sharing and learning; mobilize resources; and build productive partnerships.

In Canada, network coordinators have to keep in mind that members may speak different languages and negotiate communication over 5 times zones.

Members of networks also need to be mindful that ICT tools are just one part of a network’s communication strategy. Selecting useful tools is only half the battle in effective communication.

> “Joining a knowledge network entails a long term commitment to collaborative effort. In order for a knowledge network to exist at all, careful attention must be given to how staff from membership organizations will interact. This attention must go beyond what tools they will use to communicate. It must also include an appreciation for the varying communications styles of staff in member organizations. It must include the establishment of ground rules for responding to ideas and criticism. It must tackle the difficult issue of managing conflict. Without attention to these details, it is impossible to either achieve project objectives or to maintain the long term health of the network” (Willard, p.1).

**Recommendations**

1) Use the basic ICT tools that most people would have access to already. Don’t expect all your members to have special software. “In general, you have to be as compatible with everyone as possible. The simpler the tool, the better. Email is perfect because almost everyone has it” (Cameron, personal communication, November 18, 2004).

2) Be clear about the purpose of a particular communication strategy. Let members know how a particular tool is to be used. Let people know how to opt out.

3) Make appropriate adjustments if you have members who speak more than one language. In Canada you will have many members who speak French or English as a second language.

> “If some team members are less comfortable working in English, longer time schedules should be established for interaction to allow them to read through
documents and to respond. Additionally, text based modes of communication and collaboration should be favoured over teleconferencing… and they may be reluctant to speak if they cannot find the correct words to express their thoughts, especially if other team members are not well known to them. Text-based forms of collaboration permit people to reread both their own as well as other’s comments” (Willard, p. 8).

4) Create a biography and contact information for each group member available online if you are conducting a distance education course or have a group of people working together virtually. People feel more comfortable communicating if they have background information on the person who they are contacting virtually.

5) If your network uses an online shared workspace, alert members to new information on the extranet by sending an email. Otherwise busy people will not make time to visit the extranet regularly and they will not know new documents or information has been posted. It is best to send the email with a direct link to the extranet rather than creating a dual system by posting it both in an email and on the extranet.

6) Use email or a newsletter to make your members aware of major changes or updates to your website.

7) Remember that ICT tools never replace face-to-face communication. Rather, they are useful ways to work and communicate between in-person meetings.
References


Appendix A: Cover Letter

Dear ________________,

You are being asked to participate in a research project entitled Selecting and monitoring information communication technology tools to facilitate community economic development networks that is being conducted by the Rural Development Institute (Brandon University). The aim of this study is to assess information and communication technology tools to determine which ones are the most effective for facilitating Community Economic Development network activities. The research will also document how best to monitor the effectiveness and efficiency of the information technology tools on an ongoing basis.

Your participation in this project is entirely voluntary and you are welcome to refuse to participate in it, withdraw from it, or refuse to answer certain questions.

To conduct this research, the Rural Development Institute will be interviewing less than 15 key informants working at 5 different networks or associations in the community economic development sector. Therefore it is possible that your responses may be shared or presented in any way that would identify you as the source.

The results of this study will be used in the formation of a report that may be published online or in a journal. The findings will also be shared in presentations and at future planning initiatives. You will receive a copy of the final report when it is completed and we hope it will be of use to your own network or association.

If you have any questions or concerns about the project or the methods used, please contact myself.

Yours truly,

Robert C. Annis  
Director, Rural Development Institute  
Lower Level McMaster Hall Complex  
Brandon University  
270 18th Street Brandon MB R7A 6A9  
(204) 571-8515
Appendix B: Interview Instrument

1. Please state your name, position and network or association.

2. Who is your membership?

3. What is the geographical scope of your network or organizations?

Please indicate which of the following information and communications technology tools you use to communicate with your members?

4. **Website**
   - Yes
   - No

If no, proceed to question 5.
If yes, how do you use the website to communicate with members?

What works well about the website?

If you were building a brand new website, what would you do differently?

5. **Online survey**
   - Yes
   - No

If no, proceed to question 6.
If yes, how do you use the online survey to communicate with members?

What works well about the online survey?

What would you do differently?

6. **Teleconferencing**
   - Yes
   - No

If no, proceed to question 7.

What works well about teleconferencing?

What would you do differently the next time?

7. **Listserve**
   - Yes
   - No

What works well about using a listserve?

What would you do differently if you were starting again?
8. Are there other ICT tools that you use for communication?

What works well about _________?

What would you do differently if you were starting again?

9. Do you have a monitoring system in place to track the effectiveness and/or efficiency of your ICT tools?

If yes, would you be willing to share your monitoring system with us?
The role of the RDI Advisory Committee is to provide general advice and direction to the Institute on matters of rural concern. On a semi-annual basis the Committee meets to share information about issues of mutual interest in rural Manitoba and foster linkages with the constituencies they represent.