



## *Doing IT Better* project Final report

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Please note that American spelling is used in this report, except when quoting directly from project participants, as a courtesy to funding arrangements.

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A three-year project to build information and communications technology (ICT) capacity in the Victorian community service sector in order to improve organizational efficiencies, enabling more resources to be directed to the sector's core business of providing direct service delivery and advocacy for vulnerable and disadvantaged Victorians.

*Doing IT Better* is a social justice initiative of the Centre for Community Networking Research (Faculty of Information Technology, Monash University) and the Victorian Council of Social Service, generously and anonymously funded by a foundation. A reference group, comprising community sector workers and specialists from the ICT industry, has guided the project's work.

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## INTRODUCTION

We are very pleased to present and endorse this report of the *Doing IT Better* project. As a group of people who are both committed to the work and welfare of the community service sector and cognisant of how information and communication technology (ICT) can support and improve the sector's effectiveness, it has been an honour and a privilege to have contributed to the work of the project by serving on the Reference Group.

One of the most significant aspects of the project has been its breadth: rarely have we have seen research and capacity-building work operating on so many fronts. This multi-faceted approach has been one of the hallmarks of *Doing IT Better* and, by linking research findings and community-building with action and advocacy, has been a key part of the project's success.

As the Overview shows, it is difficult to summarize the work and outcomes of the project in a paragraph or two. Rather, by considering each key element of the project in turn, along with feedback from staff of community service organizations (CSOs) that participated, a multi-dimensional picture emerges that reveals both the remarkable ground covered by the project and the real impact it has had on the sector.

All of this activity has brought considerable benefit to individual organizations and the sector as a whole. At the same time it has enabled the project team to very clearly understand the obstacles between the CSO sector and ICT sustainability, and envision what must be put in place to overcome them. The project recommendations outline these necessary initiatives in broad terms, and the project team continues to flesh out the details and explore opportunities to secure resources for the work that needs to be done.

All in all, we consider the project to have been a significant success in terms of achieving concrete outcomes and laying the groundwork for future work. It has been a privilege to participate in this landmark project and we look forward to future work in this area with Monash University, VCOSS and the Victorian community sector.

***Doing It Better* Reference Group.**

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# EXECUTIVE SUMMARY

## GOAL

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### Project goal

To enable community service organizations (CSOs) to significantly improve their organizational technological expertise and their ability to transmit that expertise to their clients—ultimately empowering both.

*Doing IT Better* was a three-year project conducted by Monash University, in partnership with the Victorian Council of Social Service (VCOSS) to build information and communications technology (ICT) capacity in the Victorian community service sector. It was established in recognition that CSOs are now dependent on ICT systems — in the same way as government and commercial organizations — to support basic organizational functions and service delivery. However, limited financial resources and a shortage of ICT skills and know-how in the sector have left most agencies struggling. The project was premised on the understanding that improved ICT capacity will improve organizational efficiencies, enabling more resources to be directed to the community service sector's core business of providing direct service delivery and advocacy for vulnerable and disadvantaged Victorians.

## OVERVIEW

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This report documents the progress and evolution of the *Doing IT Better* project. It identifies key issues that affect how the community service sector uses ICT and suggests how, with appropriate support, it can use ICT more effectively to both improve internal processes and support the provision of better services — and, ultimately, outcomes — for its clients. Its findings and recommendations are based on a number of sources of information and activity:

- case studies undertaken by the project with different types of CSOs;
- feedback and appraisals from workshops, seminars, and conferences conducted by the project;
- input from the *Doing IT Better* Reference Group; and
- review of scholarly reports, government publications, and reports and studies from community sector organizations.

### Seminar series

The information seminar series that ran from early 2008 to the end of 2009 had an enormous impact. The 13 seminars on topics as diverse as disaster recovery, information management, innovative technologies, needs assessments, and strategic planning addressed most of the key ICT issues that CSOs struggle with in their daily work. Feedback from those who attended was not only overwhelmingly positive, it also indicated that the seminars had been particularly empowering, often playing a key role in informing CSOs' planning processes and purchasing decisions. The fact that most seminar presenters were drawn from the target group added further value and impact.

*I found the recent seminar presentations on IT Innovations in the Community Sector very informative and the ideas presented will help our organisation form ideas as we move forward.*

Geoff Willett, Manager Corporate Services, Quantum Support Services

*Virtualisation and reducing carbon footprints is critical to all organisations, so the seminar in August was very beneficial. Knowledge Management (KM) is our first priority and we are about to formally 'kick-off' our KM Project for this year, so the seminar in October will be invaluable for many in the Project Team.*

Rod Rankin, IT Services Manager, St Luke's Anglicare

*I just wanted to pass on my personal thanks to you for organising such an interesting and informative seminar. It is the first we have attended and, as a small Neighbourhood House, we don't usually have access to such thorough information. We have already started thinking about our IT Plan since Thursday and I am feeling more secure that we are reasonably prepared and can now formalise our plan in writing.*

Marilyn Pelman, Manager, Mt Eliza Village Neighbourhood Centre

### Case studies

Intensive case studies were carried out by the Monash University team with a diverse range of CSOs, operating in urban and regional settings. They included:

- the Victorian Alcohol and Drug Association (VAADA), a small peak organization;
- the Springvale Community Aid and Advice Bureau (SCAAB), a generalist social services organization which serves large numbers of recent arrivals;
- Women's Health Loddon Mallee (WHLM), a women's health information service in regional Victoria;
- Northcote Community Information and Support Service (NCISS), a community information centre in the inner northern suburbs of Melbourne;
- Travellers Aid, a service that provides unique and vital services at Southern Cross Railway Station, City Village on Bourke Street and at Flinders Street Railway Station;
- the Regional Information and Advocacy Centre (RIAC), an organization serving disabled people and their carers across north-western Victoria; and
- Baywest Youth Housing Group (BWYHG)/Latitude, an organization serving vulnerable young homeless people in the western suburbs of Melbourne.

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These case studies have had far-reaching benefits for most of the agencies involved, with an inclusive process enabling them to build on the work undertaken and take a more proactive and clear-sighted approach to integrating ICT into their work. In many cases new projects and successful funding applications have followed their engagement with the case study team. Findings from the case studies also guided the project's choice of topics for the seminar series, and may explain the much higher attendance rates (average of about 50 people) in the second series.

*The process used by the Doing IT Better team in the case study was very empowering and inclusive. It was not a group of experts trying to impose their ideas — it was a process that started from trying to understand our issues and involving people all along the way in coming to solutions with the team sharing their knowledge with us. This has led to a very positive change management process.*

Jinny McGrath, Program Manager, Springvale Community Aid and Advice Bureau

*The Doing IT Better project has helped us connect with knowledge and ideas to build our organisational IT capacity; that in turn enables us to deliver better services to travellers in need. The seminars have provided us with the opportunity to network with other not-for-profits and IT professionals, and to consider solutions that fit our budget and needs.*

Jodie Willmer, Chief Executive Officer, Travellers Aid

## Conferences

The annual *Doing IT Better* conferences have been fundamental to the success of the project. The first, in 2007, attracted the attention of many IT-savvy people in the sector and thus served to build a core interest group that was instrumental in bringing the project to the attention of the wider sector. It also set the scene for the rest of the project by identifying the issues that needed to be addressed.

The second conference enabled rich discussion of emerging ideas about how best to support the sector's ICT needs — providing a framework for future projects. It also served as a catalyst for comprehensive and focused work on interoperability and data exchange issues.

The 2009 conference highlighted the critical issue of IT education for community service workers and has initiated a dialogue between the education and community sector that is still ongoing. It also played a significant role in engaging the Neighbourhood House sector with the project.

## Driving systemic change

One of the most significant achievements of the project has been to highlight and make progress on the problems of multiple data entry and lack of data interoperability. These problems have plagued the community sector for decades — and become worse in recent years as data collection and quality assurance moved more fully to an electronic framework — but, prior to the *Doing IT Better* interoperability project, there was no sector-focused analysis or cohesive voice on the issue. The project's Interoperability Working Group has



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not only described the problems in detail and devised practical solutions; it has also proactively engaged government and the academic sector to begin making those solutions a reality. While there is still quite some way to go, the fact that the issue is on the map at all in the sector is testament to the effectiveness of this aspect of the project.

*[The] Interoperability Working Group ... has played a catalytic role in highlighting some of the complex information and data management problems confronting Community Service Organisations and the Community sector as a whole. ... I was particularly grateful for the support levelled by [Doing IT Better] when the Victorian Government's Office for the Community Sector decided to follow up some of the ideas [from] the Interoperability Forum held on the 5th March 2009.*

Richard Vines, Quality/Knowledge Manager, Children's Protection Society

*It is comforting to know that there is finally some support within the sector to deal with the major issue of multiple funder data reporting frameworks and the limitations in being able to use that information for internal evaluation and planning purposes.*

Geoff Willett, Manager Corporate Services, Quantum Support Services

*In regard to the interoperability issue, the thinking and work that was done was a terrific foundation from which to clarify the state of play of this issue in Victoria.*

Rendle Williams, Social Programme Information Management (SPIM) Project Manager, Salvation Army (Australia Southern Territory),

## Networking

One of the more enduring outcomes of the project looks to be the Community of Practice that has formed around it. The numerous activities and events that *Doing IT Better* has convened have brought together people from across the community sector who have either expertise in or consciousness of the value of ICT. This network is beginning to have a life of its own as a facilitator of knowledge sharing and alliance building, and is now well placed to support future ICT initiatives in the sector.

*The Doing IT Better project gives us access to affordable information and resources — including people — that we don't have the time, funds or networks to find for ourselves.*

Angela Savage, Executive Officer, Association of Neighbourhood Houses and Learning Centres

*Doing IT Better has put me in touch with great contacts and they are very supportive and welcoming to me. All of my career had been spent working in global commercial organisations and these contacts have made my transition into the community and social sector a lot easier. I have been able to quickly 'switch-on' to important issues for our organisation and help to prioritise them properly.*

Rod Rankin, IT Services Manager, St Luke's Anglicare

*We have found the information, support and networking provided by the Doing IT Better project to be extremely useful for our not-for-profit community organisation. It's the kind of practical, tailored support service that the Victorian NFP sector needs.*

Liz Morgan, Manager, Public Interest Law Clearing House

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## Vision

It was clear that greater discussion and awareness of ICT issues around the sector had an impact on the way the sector views ICT, with growing recognition that ICT infrastructure is fundamental, not incidental. Engagement with *Doing IT Better* clearly led to increased readiness to embrace new technologies as well as greater awareness of the technologies and of forums in which to seek advice and support — both of which, in turn, were facilitated by the project.

*ANHLC's involvement in Doing IT Better has given us a vision of how our organisation can become more effective and efficient — for example, by implementing systems to enable streamlining and/or automation of mundane tasks and freeing up staff time for more interesting and strategic work.*

Angela Savage, Executive Officer, Association of Neighbourhood Houses and Learning Centres

*As an IT practitioner with 25 years commercial experience I view this project as one of the most important influences on improving IT practice within the not for profit sector. Keep up the good work.*

Peter Anderson, IT Consultant, Centacare Catholic Family Services

## Raising the profile of issues with government

*Doing IT Better* has made considerable progress toward raising the profile of community sector ICT issues with government. This has been most evident in the area of information and quality systems — the Office for the Community Sector undertook a quality assurance data mapping pilot project as a direct result of issues raised at the *Doing IT Better* Interoperability Forum in March 2009 — but there are a number of other indicators, including:

- Multimedia Victoria launching its Collaborative Internet Innovation Fund (clIF) at a *Doing IT Better* event, and subsequently sponsoring the 2009 seminar series;
- Office for the Community Sector staff attending numerous *Doing IT Better* events as well as other community ICT-focused events such as the Making Links and Connecting Up conferences; and
- Department of Planning and Community Development indicating an interest in funding ICT-capacity building work in the Victorian community sector.

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## RECOMMENDATIONS

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<b>1</b>	That the Victorian Government provides five years of funding to establish and operate a Centre of ICT Excellence in Community Services. The Centre will undertake the following activities:
1.1	Strategic planning in relation to the use of ICT in the community services sector.
1.2	Expert advice for community services organizations (for example, in relation to knowledge and information management, change management, interoperability, and ICT requirements elicitation).
1.3	ICT operational support for those CSOs that wish to outsource some or all of their ICT operations.
1.4	ICT education and training for CSOs.
1.5	Advocacy and representation in relation to ICT matters affecting the community services sector at the local, state, and national levels.
<b>2</b>	That all levels of government and other funders adequately fund sustainable ICT systems (which constitute people and computer skills, assets and support networks) when funding CSOs. As part of those commitments:
2.1	All funding and service agreements to include allocations for the true costs of ICT infrastructure and development.
2.2	The formula for determining ICT support to be developed in conjunction with the Centre of ICT Excellence in Community Services.
<b>3</b>	That further research be funded on the measurement of ICT outcomes and impacts, including the development of industry tools for assessing the relationship between ICT investment and improved client outcomes and opportunities.
<b>4</b>	That partnership with higher education, government, and other interested parties be encouraged and supported.

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## FINDINGS

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### **1. The community services sector needs ICT leadership in order to take on the programs that allow it to become a 'smart' sector.**

The increasing sector engagement with the project—growing from small meetings of interested people to large, well-attended professional development seminars—demonstrates a hunger for knowledge and information about how to best use ICT for improving community services. The result of the ongoing participation of many people is a Community of Practice around ICT issues for the sector. This is now well established, but requires support and leadership to remain active and focused. VCOSS is the obvious body to provide that leadership and the development of a representative specialist group within VCOSS to carry forward a dedicated program of improvement will be critical to meeting future ICT challenges. However, VCOSS needs direct support from its partners in the sector and government in order to properly represent the diversity of technological and services interest in the sector.

### **2. Government should develop public policy and investment that support ICT solutions for the community sector.**

Government needs to be prepared to invest significantly in policy development and people-technology solutions with the community services sector because all indications are that these solutions will produce a social and efficiency dividend in the long term. Such a conclusion is supported by both the project's research

and the findings of the Productivity Commission Research Report (Jan 2010): *Contribution of the Not-for-Profit Sector*. However, the policy and formulae for supporting the community services sector must be developed in conjunction with the sector.

### **3. A major opportunity exists for those engaged in research and development, such as universities, to help develop mechanisms, information processes and, potentially, products to support the ICT needs of the community services sector.**

The project has greatly increased awareness at Monash University about the needs of the sector and possibilities for working with it. Monash is increasingly applying the principles of social justice and social inclusion to its work, and recognizes this is an opportunity for mutually beneficial activity.

### **4. Individual CSOs will have their own circumstances, opportunities and limitations which determine how they can take advantage of ICT for the betterment of their client base.**

Collaborative case studies that initiate change are a journey embarked upon in partnership with an organization: there is a great need for researcher fluidity and responsiveness when negotiating where you go on the journey and where it ends. The inappropriateness of 'cookie cutter' solutions quickly became clear.

Case studies looked at a diverse range of CSOs, operating in urban and regional settings. They included:

- the Victorian Alcohol and Drug Association (VAADA), a small peak organization;
- the Springvale Community Aid and Advice Bureau (SCAAB), a generalist social services agency which serves large numbers of recent arrivals;
- Women's Health Loddon Mallee (WHLM), a women's health information service in regional Victoria;
- Northcote Community Information and Support Service (NCISS), a community information centre in the inner northern suburbs of Melbourne;
- Travellers Aid, a service which provides help to needy travelers and disabled people located at Flinders Street and Southern Cross Station;
- the Regional Information and Advocacy Centre (RIAC), an organization serving disabled people and their carers across north-western Victoria; and
- Baywest Youth Housing Group/Latitude, an organization serving vulnerable young homeless people in the western suburbs of Melbourne.

The case studies, particularly, illustrate different needs, capacities, and approaches to ICT issues in a changing physical and electronic environment. Baywest/Latitude spoke of the 'evolving' environment in which they worked, with ICT very much part of this evolution. In each of these studies, while there was a similar series of action research 'steps' for problem diagnosis and action, different solutions were adopted. Thus, the SCAAB case study required attention, on and off, for many months, while the studies involving WHLM and RIAC were limited to two meetings, phone calls and emails, though significant work was conducted with each.



*Developing an information flow*

## **5. More information, education and networking on ICT opportunities and issues are needed within the sector.**

The numerous activities and events conducted by the project, including a yearly conference, have brought together people from across the community sector who have either expertise in or understanding of the value of ICT. This Community of Practice is now of a significant size and has been a key part of the project's success. The email announcement and discussion list continues to grow (currently it has 340 subscribers) and the project is also in regular communication with the almost 2,000 subscribers to the VCOSS Training and Development Clearinghouse's PIECES eBulletin. The Community of Practice is beginning to have a life of its own as a facilitator of knowledge sharing and alliance building, and is now well placed to support future ICT initiatives in the sector.



Information seminar 2009 (photo: Queen Victoria Women's Centre)

Greater discussion of and engagement with ICT issues has led to a noticeable change in the way the sector views ICT. It is no coincidence that the highest seminar attendance and greatest follow-up discussion was to do with ICT strategic planning. There is a growing recognition in the sector that ICT infrastructure is fundamental, not incidental, and this has coincided with the growing engagement of the sector with *Doing IT Better*.

Similarly, the increased incidence of and readiness to embrace new technologies within the sector appears to be connected with greater awareness of the technologies as well as the existence of forums in which to seek advice and support — both of which were facilitated by the project.

The two information seminar series (2008 and 2009, the latter sponsored by Multimedia Victoria) have had an enormous impact, demonstrated by the many

comments received by the project. Thirteen seminars on topics as diverse as disaster recovery, information management, innovative technologies, contact databases, needs assessments and strategic planning have drawn over 450 people from across the community services sector (involving around 200 different CSOs) as well as from government and the ICT industry. Topics were initially based on the project team's pre-existing understanding of projects or issues that were relevant or useful to the CSO sector. As the project unfolded, the seminars, aimed at building expertise and capacity, began to respond to emerging issues. Early in 2009 the Reference Group nominated topics for the last six seminars based on findings from the case studies and insights gleaned from interaction with the Community of Practice. Unsurprisingly, this last phase of seminars was the best attended.

The high level of interest in the seminars demonstrates a significant need for this type of information and guidance in the sector. That the project received many requests for sessions to be repeated, held regionally, or released as video podcasts affirms this demand. Some issues in particular attracted enormous interest, suggesting that there are great needs in the sector for information around:

- information, knowledge, and records management;
- ICT strategic planning;
- interoperability;
- social media; and
- contact management.

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## **6. The changing operational focus of CSOs is delivering opportunities for better service delivery but also producing tensions as organizations seek to meet reporting and accountability requirements while lacking resources to do so.**

There is a shift in the nature of welfare and community work, from the previous focus on social or relational practices that centered on the 'story' or narrative of an individual or family. Now the focus is more on the 'management' of a case, through planning, information provision, and data collection, where substantial data sets are often captured in large information systems used for accountability purposes by funding agencies. Agencies are often faced with the need to report to multiple sources, creating the burden of duplicated data entry (and the potential for error). Interoperability—systems able to talk to each other and exchange information—is underdeveloped, despite various initiatives within the social support bureaucracy. With governments far better resourced than the community services sector, this has created a significant technological imbalance. Data sharing problems are also discussed at length in the Productivity Commission report.

In addition, there is a move to what Harry Ferguson, professor of social work at Bristol in the United Kingdom, calls 'practice on the move'; that is, a 'flow of mobile practices between public and private worlds, organizations and service users, the office and the home' (Ferguson 2008). Thus, in the case studies of SCAAB, RIAC, and BWYHG/Latitude, mobile phones and applications that can be run through mobile phones are all part of the future for both workers and clients in

exchanging information or providing then-and-there service. Even in a relatively small state like Victoria, the size of Melbourne and the dispersed nature of the regional population both mean that mobile and related broadband solutions are bound to become increasingly important.

## **7. A non-alignment of philosophies of service and operations is contributing to ineffective use of ICT in CSOs.**

If technology is meant to benefit clients, the sector needs support in developing the means to demonstrate the social and economic return on investment in ICT, even if outcomes are long-term and not amenable to simple causal models (a problem which the Productivity Commission has also recognized). The project's case studies produced strong indications, which require more partnership research to confirm, of an efficiency dividend in social, service and financial terms though effective investment in the people-technology mix.

However, the non-alignment of service and operational philosophies means that reporting and accountability systems can be perceived as a 'bogeyman'. In fact, an intelligent and informed dialogue between the sector and government bureaucracy could overcome problems and enable further efficiencies though the intelligent and strategic use of data to improve services.

## 8. Data duplication is a burden on the sector.

CSOs involved in the *Doing IT Better* project, as part of case studies or through representation at workshops, seminars or conferences, all identified data management, including duplication of data, as a key issue. This finding is also supported by the Productivity Commission report.

CSOs generate and collect different types of data and information for a range of purposes including:

- reporting to funders on service delivery and against quality benchmarks;
- reporting to boards of management on activities;
- appraising staff performance;
- evaluating service model effectiveness;
- identifying service system trends; and
- organizational strategic planning.



*The Interoperability Forum in 2009 played a key role in raising government and sector awareness of the impacts of multiple information systems on the sector.*

Because most organizations receive funding via multiple programs, they are increasingly required to feedback evaluation data into multiple information systems. The lack of harmonization and exchangeability between different information systems and quality frameworks leads to a disproportionate administrative burden and limits organizations' capacities to make good use of the information they collect.

These problems have plagued the community sector for decades and become worse in recent years as data collection and quality assurance have moved to an electronic framework. However, before the *Doing IT Better* project, there was no sector-focused analysis or a cohesive voice on the issue. An Interoperability Working Group associated with the project has not only described the problems in detail and devised practical solutions, but has proactively engaged government and the academic sector to begin finding and delivering solutions. This has already yielded fruit: the Office for the Community Sector undertook a quality assurance data mapping pilot project as a direct result of issues raised at the *Doing IT Better* Interoperability Forum.



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### **9. Knowledge and information management skills are critical for frontline workers and managers of CSOs, and need to be taken into account by boards and funders.**

One of the key messages of the *Doing IT Better* project is that funding of basic IT infrastructure (PCs, servers, databases) will not automatically lead to efficiency savings and better management of data and information. Organizations and community service workers repeatedly expressed difficulties in understanding and managing the flows of information and knowledge around their organizations. For example, organizations frequently do not have the human and technical resources to manage client and operational records according to legislative requirements and standards.

When it comes to local information — a critical issue in service provision — CSOs have difficulty in locating or even managing the information they have, whether on paper or a computer. Small to medium sized CSOs often lack the resources to source and employ records, information and knowledge management experts, and therefore rely on volunteers or administration staff to serve this function. The mission-critical knowledge held by individual staff in their personal information systems (and, often, in their heads) is often not recognized until a staff member departs.

Consequently, there is a pressing need to provide expert support to CSOs that goes beyond basic IT maintenance to encompass the assessment and design of information systems that can provide real ease of use and reduce repetitive information seeking. Keeping good records, maintaining access to service information and focusing on sector-friendly forms of knowledge management is vital to organizational memory. Information systems (such as databases) to support these activities need to be implemented in concert with awareness training, policy and procedure development, and regular access to expertise. This expertise need not be ongoing or expensive — organizations could explore the use of students on placements, trained volunteers, or corporate or institutional partnerships.



A service map of people-technology relationships produced during a workshop.

#### **10. CSOs lack substantive and sustained ICT infrastructure support.**

There have been numerous initiatives over the past ten years that focused on one-off provision of ICT to CSOs. However, the planned deployment of this technology, including maintenance schedules, training, and ongoing proactive IT support, has been lacking. This means that organizations have not been able to maximize the full potential of their ICT. Organizations may become reliant on volunteers or ad-hoc IT support, which often can only provide emergency repairs rather than ongoing maintenance. In these circumstances, the ability of CSOs to respond to emerging trends in ICT (such as the use of Web 2.0 technologies and social networking) is reduced. CSOs have identified the need for access to regular proactive IT maintenance, planning, and training, and a trusted online list of providers and resources. The Second *Doing IT Better* Conference also identified a number of different business structures that could be established to support the sector.

#### **11. Developing ways to measure the impacts of ICT on organizations and clients is needed and will build the case for further investment.**

While it is possible in the business world to directly measure financial impacts (cost/benefit analysis), this is an extraordinarily difficult task for the community sector, as the Productivity Commission review highlighted.

The most difficult task of all—and one which was a primary aim of the project — is to document and change the impact of ICT on clients through their interactions with agencies, as well as how people used ICT to effect what might be called ‘citizenship transactions’, or other forms of non-formal social engagement and communication.

CSOs indicated that substantial direct cost savings could be produced through more effective use of and investment in ICT, and that these cost savings could be directed at client support in particular (for example, more front-line case workers).

It also became apparent that researchers have not yet developed a practical, ethical, and effective means of demonstrating long-term client impacts on interactions with ICT. As a result, the project relied on the informed and valuable assessments of community sector workers. It is significant that organizations such as SCAAB and Travellers Aid, which deal with large numbers of clients in need, speak of ICT outcomes and impacts which preserve and enhance the ‘dignity’ of the client, whatever the contact point: through in-house ‘once only’ client records, or better use of mobile technologies to enhance face-to-face or other services.

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Developing ways to demonstrate how ICT positively affects people's lives while giving better value for taxpayer or donor dollars will build the case for further and particularly programmatic investment in ICT.

## **12. Sector innovation is possible.**

From a situation of uncertainty and lack of knowledge, strong visions can emerge — as can particularly be seen in the cases of SCAAB and Travellers Aid, where this has led to major government and philanthropic funding for future ICT projects to improve different aspects of their operations. While the leadership of the organizations already had some ideas in mind for technological process, case studies became a method for internally consulting and building capacity for decision-making based upon internal and external knowledge.

Baywest/Latitude, a small organization working with homeless young people, has demonstrated that changes do not have to occur at a grand scale to have a profound impact. Since our work with them, it has transformed its internal and external communications through use of Huddle, an online workspace containing powerful project and collaboration tools (at no cost due to the organization's philanthropic status), and the engagement of an IT volunteer via Monash University. According to the Coordinator: 'Use of the online system has changed our world, and different workspaces have been set up... we managed to get it up and running effectively by the time our Accreditation Review occurred and it's fair to say the reviewers were impressed with Huddle!!! We have a Latitude Team Workspace, A Committee of Management Workspace... and additional sub-committee workspaces as needed. It has increased accountability and transparency.' This is a remarkable

outcome for an organization that was struggling to communicate effectively when we first met them, having only a whiteboard to coordinate its difficult work with young homeless people. The change—and enthusiasm for it—demonstrates the power of effective problem diagnosis and consultation through a bottom-up approach.

In the case of RIAC, a regional-rural advocacy service, the car is often the mobile office, and advanced mobile technologies offer a huge potential for cost savings and better one-on-one service, but such innovations require significant support from external funders who are prepared to take risks and experiment with different technologies.

Innovation can also occur through the development of a community of practice. The strong interest shown in new ideas at the workshops, and in the idea of a new support structure for the sector auspiced by VCOSS, shows that there is potential for the generation of new ideas and methods to support the smart use of ICTs.

## **13. A structured and sustainable program of skilled volunteers and industry placements could provide essential support to the sector, particularly to smaller CSOs.**

The experience in the UK, outlined at the project's second annual conference, could be adapted for Australian conditions. An ICT-specific pro bono brokerage service could be developed in partnership with large corporations (via their corporate social responsibility programs) and community-oriented ICT service providers to connect skilled volunteers with small organizations that cannot afford commercial or available discount rates for essential ICT work.

Modeled on both the Clearinghouse's pro bono service and iT4Communities in the UK, it would predominantly provide developmental and assessment type services to help cash-strapped organizations make effective decisions and economical purchases for ICT infrastructure and services.

An IT student placement program in partnership with one or more universities' Information Technology faculties could be developed (arrangements are being put into place with Monash University, but this program should include a full range of institutions). A range of projects could be undertaken, depending on the different needs of students from particular courses. A community-based facilitator would serve as an intermediary between CSOs needing assistance and the universities, ensuring that expectations were reasonable, project progress satisfactory, and necessary follow up undertaken.



*Documentation and discussion of detail is essential*

#### **14. Continuing research and development relationships would benefit both the community services sector and higher education development.**

The project has demonstrated, through the involvement of Monash University and input to the Interoperability Working Group by the e-Scholarship Centre at the University of Melbourne, that partnership with academic researchers provides significant and useful information for different sector constituencies, as well as engaging academics in work that is aligned to their social justice missions. Such work also has the capacity to influence the development of curricula in higher education.

Possible future areas of research and development include:

- research into the social return on investment in ICTs and industry tools for assessing ICT impacts; and
- interoperability projects for the sector.

Further relationships should be developed with sustainable, long-term funding support from both government and philanthropic sources.

## Findings Matched to Original Project Aims

Original Project Aims	Findings
<p><b>Aim 1.</b> To improve advocacy at the case level, enabling individual clients to acquire technological skills and to become independent and take control of their lives.</p>	<p><b>Primary target: clients</b></p> <p>The project was unable, for practical and ethical reasons, to directly involve vulnerable clients in our research, but relied upon informed opinions of client workers. There is a willingness in organizations to embrace new ICT and work with clients to provide dignity in interactions, subject to appropriate support and resourcing. ‘Dignity’ was a word that came up in discussions with a number of organizations.</p> <p>We learnt that the mobile phone is the key point of contact with CSOs for certain groups in the population, such as new arrivals or young people, and there is potential for use of mobiles as a communication tool, as well as enhanced internet services.</p> <p>An unintended and significant finding was the significant concern raised by workers (particularly data specialists and managers) about the impact of the burden of reporting, particularly the collection of the same data multiple times for different departments and problems with data interoperability.</p> <p>There is a shift in the nature of community service work, from a focus on social or relational practices to the ‘management’ of a case, through planning, information provision, and data collection. This has led to substantial data sets being captured in large information systems used for accountability purposes by funding agencies. The lack of interoperable data systems is a burden on the sector (and a potentially disempowering outcome for clients) that detracts from the resources that can be devoted to service delivery.</p>
<p><b>Aim 2.</b> To lead to better support of people in their interactions with government agencies such as social security agency Centrelink or in teaching them how to apply for jobs online.</p>	<p><b>Primary target: clients</b> <b>Secondary target: workers and agencies</b></p> <p>As previously noted, the project was unable to work directly with agencies and clients in their interactions with government agencies.</p> <p>However, there is no doubt that the establishment of a Community of Practice and other activities through VCOSS to advocate for electronic resources for the sector would result in service innovations which can directly benefit clients.</p>
<p><b>Aim 3:</b> To help organizations to overcome client and worker fears of technology and aversion to acquisition of computer skills.</p>	<p><b>Primary target: clients and workers</b> <b>Secondary target: agencies</b></p> <p>As outlined in Aim 1, the project focused on worker issues and succeeded in documenting the cultural and resource issues which constrain effective use of ICT (understood as the knowledge and information systems constructed by people as they interact with technology, including specialist areas such as electronic records management or records and archives management).</p> <p>Raising general awareness on a personal level through the case studies appears to have been an effective strategy. The manager of VAADA spoke of the project ‘opening his head up’ on ICT possibilities.</p> <p>Skilled advocacy work is a ‘craft’ (the term used by workers at RIAC), and cannot be completely captured by ICT systems. Face-to-face interaction is still critical with many clients. Having ICT as a tool to support but not impede face-to-face welfare work needs to be considered in ICT planning, particularly if ‘accountability’ becomes an interruption, burden or replacement for case work.</p>

## Findings Matched to Original Project Aims (cont'd)

Original Project Aims	Findings
<p><b>Aim 4:</b> To set in place mechanisms to train organizations to better manage the computer facilities they have.</p>	<p><b>Primary target: clients and workers</b>  <b>Secondary target: agencies</b></p> <p>The workshops held during the life of the project about information and knowledge management, interoperability, and other sorts of social-technical issues demonstrated a huge 'market' for education of middle management in the sector.</p> <p>The case studies have resulted in a positive attitude toward undergoing change to develop and manage ICT infrastructure (people and machines) more effectively. The development of an Interoperability Working Group demonstrates the capacity of the sector to engage in high-level technical discussions and advocacy on a significant service issue.</p> <p>Secondly, the case studies demonstrate the importance of also discussing these issues at the coal face with workers and the development of policy advocacy towards government.</p>
<p><b>Aim 5:</b> To help to make people who work and volunteer in community organizations better users of the technology themselves, and to pass on their knowledge to other people, so that their learnings are not lost.</p>	<p><b>Primary target: workers and agencies</b>  <b>Secondary target: government</b></p> <p>Through the activity of the project overall, this will be one of the strongest outcomes of the project in the long-term because VCOSS is well placed to convene an ongoing ICT-oriented Community of Practice in the sector to support this (so long as sufficient funding is secured).</p> <p>The project has established a strong Reference Group, which, together with the working groups, can become the core of a Community of Practice to communicate and document information, knowledge management, and ICT-technical issues for the benefit of the sector.</p> <p>Additionally, incorporation of ICT-related training into formal and informal learning at all levels of adult education (including university education) has the potential to improve the quality of knowledge and practice in the sector.</p> <p>Regular conferences and events are another significant means of attracting management to events where new ideas are shared and relationships built. Emerging relationships with higher education will also improve the quality of advice and practice in the sector.</p>

Original Project Aims	Findings
<p><b>Aim 6.</b> To enable community organizations to use new, timesaving forms of communications such as video conferencing or internet phone services which can bring together workers and clients who may be scattered across large distances—effectively expanding services to those who may not otherwise have access.</p>	<p><b>Primary target: clients and workers</b>  <b>Secondary target: agencies</b></p> <p>There is an increased awareness of the potential of mobile or internet phone services and communications, but the project has demonstrated that a priority of organizations is to get their internal information and knowledge management services in order, before embarking on new technology projects.</p> <p>In addition, web or mobile phone cannot replace all forms of personalized service in the sector.</p> <p>Web 2.0 increasingly came into the public eye during the life of the project, but there are similar concerns about the capability and capacity of organizations to embark on new ventures without internal skills and capacity.</p> <p>The case study with RIAC demonstrated the huge potential for mobile technologies to assist with geographically and car-based services or home-visits through use of 3G conferencing as well as video-conferencing, but a high level of resourcing and internal technical expertise is required to make this happen. The work with BWYHG/Latitude also demonstrated the increasing importance of mobile communications with young people, but agencies do not yet have the capacity to take advantage of the many opportunities this offers for innovative forms of communication.</p>
<p><b>Aim 7.</b> To raise awareness by government, business and philanthropic foundations of the importance of supporting effective use of technology for the benefit of disadvantaged people and their support organizations. This will lead to better resourcing of the community services sector.</p>	<p><b>Primary target: government and philanthropic agencies</b>  <b>Secondary target: agencies</b></p> <p>A significant finding of the project, supported by the findings of the Productivity Commission's recent review of the not-for-profit sector, is that ICT is a significant part of sector activity, but quite under-resourced by government.</p> <p>While further research needs to be undertaken, it is clear that there is a productivity dividend as well as a social dividend to be achieved through more effective resourcing, particularly of skills in information and knowledge management, as well as in decision-making for ICT futures. Answers can only come through close and collaborative work with the sector, rather than the imposition of solutions and products that derive from for-profit service models.</p> <p>One of the perceived difficulties, however, is for philanthropic donors to move from a more traditional understanding of donor support—for direct client support—to understanding that support for information, knowledge, and technical capacity will also lead to direct benefits to clients.</p> <p>A positive and unintended consequence of the project was the increased awareness at Monash University of the nature of work carried out by the community sector and the potential for long-term collaborative community engagement.</p>

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## FUTURE ACTION

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The findings and recommendations of the *Doing IT Better* project can be used by:

- community service organizations (CSOs) to guide their own strategic use of ICT;
- generalist policy makers and funders to develop innovative and responsive policy, strategies, and funding to support information and knowledge management practices in the sector, ultimately leading to better outcomes for clients;
- those who work with the sector in Information Systems and Information Management, as a guide to using community-based research.

We also hope that this work will be of interest to funders from government and industry, as well as philanthropists who are seeking new and creative ways to build capacity in the community sector. ICT is fundamental to the way in which the community sector now works, and should be supported so that their services become more effective.

Project recommendations will not just benefit individual agencies, but also result in a shared body of knowledge for the sector as a whole. In the changing knowledge and information environment, the cost of effective inclusion and consultation is low compared to the cost of systemic failure which can only increase if the digital divide grows between community agencies and government.



*Considering options using the Making the Network Planning tool*



## ACRONYMS

<b>ACOSS</b>	Australian Council of Social Service	<b>NPR, NFP</b>	Non-profit organization, not-for profit
<b>BWYHG/Latitude</b>	Baywest Youth Housing Group (now known as Latitude)	<b>SCAAB</b>	Springvale Community Aid and Advice Bureau
<b>CCNR</b>	Centre for Community Networking Research, Faculty of IT, Monash University	<b>RIAC</b>	Rural Information Advocacy Service
<b>CSO</b>	Community services organization	<b>YHAW</b>	Youth Homelessness Alliance (Western)
<b>ICT</b>	Information and communications technology	<b>VAADA</b>	Victorian Alcohol and Drug Association
<b>NCISS</b>	Northcote Community Information & Support Service (now DIVRS — Darebin Information, Volunteer & Resource Service)	<b>VCOSS</b>	Victorian Council of Social Service
		<b>WHLM</b>	Women’s Health Loddon Mallee

## KEY TERMS

<b>Community Development</b>	Community Development involves building or supporting the capacity of people to problem-solve independently. It is thus a field of research and practice concerned with change and empowerment at the local community level, particularly of people and communities who are in some way, seeking improvement to their lives.
<b>Community Informatics</b>	A field of research and practice devoted to promoting the use of ICTs for social change and development with CSOs and local communities, particularly using community development techniques.
<b>Community of Practice</b>	As defined by Etienne Wenger, a key proponent of this way of sharing knowledge, a community of practice is ‘formed by people who engage in a process of collective learning in a shared domain of human endeavour: a tribe learning to survive, a band of artists seeking new forms of expression, a group of engineers working on similar problems, a clique of pupils defining their identity in the school, a network of surgeons exploring novel techniques, a gathering of first-time managers helping each other cope’. Communities of practice are found across many sectors, including government.
<b>Community Service Organization</b>	Not-for-profit organizations that are directly engaged through both paid and non-paid (volunteer) activity in the provision of community advice and information, community services, and related services for people in need. Part of the not-for profit sector.
<b>Digital Divide</b>	This is a widely used term to refer to the gap between ICT haves and have-nots, whether through lack of direct access to infrastructure such as computers or adequate connection, cost of equipment, or sufficient skills and training to take advantage of ICTs. Disability or cultural and linguistic factors such as the lack of support or content in minority or national languages, can also contribute to the divide. A further refinement would be to add the lack of the ‘soft skills’ which permit the effective use of ICTs.

<b>Efficiency</b>	The measure of outputs that give the greatest benefits for a given level of inputs available. Efficiency can be interpreted in social terms (that is, the extent or degree to which social outputs are well-invested), or in a strict monetary sense (value for money).
<b>Effectiveness</b>	The extent of achievement of the stated objectives in a social or economic sense.
<b>Impact</b>	The broader effects of an activity, taking into account all its benefits and costs to the community.
<b>Information and Communications Technology</b>	The 'basket' of both hardware and software that results in computers and telecommunications (including mobile) systems. In addition, ICTs also involve the softer set of skills, knowledge, information, and relationships that people use to build 'information structures and services' in community services organizations and in their communications with other organizations and increasingly, clients.
<b>Information/ Knowledge Management</b>	These terms are often used interchangeably, and sometime separately. They are used to refer to the processes and techniques by which organizations characterize, organize, preserve, and transmit formal and informal knowledge, whether it is what people say, put on paper, or enter into electronic records. Specialist fields, such as Archives and Records Management are also part of this field.
<b>Interoperability</b>	A quality of an information system that allows data collected for one particular set of purposes to be exported, transformed and re-presented for another set of purposes. Interoperability allows a user (such as a community services worker) to easily access and use data from multiple sources concurrently and seamlessly, or use elements from one set of data for different purposes.
<b>Outcome</b>	The effects on a participant during or after their involvement in a program or activity conducted by a community services organization in a not-for-profit activity. Outcomes can relate to knowledge, skills, attitudes, values, behaviour, condition or status. Outcomes can be positive (deliver a benefit) or negative (impose a cost) on individuals.
<b>Output</b>	The product of a community services organization's activity (for example, the number of people trained in a program or the number of performances of a community orchestra). Outputs lead to outcomes and longer-term impacts.
<b>Social Return on Investment</b>	By Social Return on Investment (SROI), we mean the social outcomes that affect the social well being of communities and the quality of life for individuals and families in them as well as social capital effects. Such outcomes are the result of investment in human, social, and business processes.
<b>Web 2.0</b>	The worldwide web as an interactive medium, with web applications that facilitate interactive information sharing, interoperability, user-centred design, and collaboration on the. Examples of Web 2.0 include web-based communities, hosted services, web applications, social-networking sites, video-sharing sites, wikis, blogs, mashups and folksonomies (user-generated taxonomies). A Web 2.0 site allows its users to interact with other users or to change website content, in contrast to non-interactive Web 1.0 websites where users are limited to the passive viewing of information that is provided to them ( from Wikipedia). It extends not only to internet content, but to hand-held, mobile, wireless devices.

Note: Definitions have been adapted from a variety of sources, including the Productivity Commission.

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## FULL REPORT

# Project design

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### RATIONALE

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The rapid spread of information and communications technology (ICT) into every facet of work and social life threatens to increase the divide between the 'haves' and 'have nots' of Australian society. People in need depend upon information and knowledge held and transmitted by community sector organizations (CSOs). If the sector's ICT capacity is not supported, then the digital divide between government and the disadvantaged or vulnerable people it serves will increase.

ICT is increasingly part of the way that CSOs work; the provision of information and support to clients and the accountability and funding relationship between CSOs and government are dependent on good electronic services. Thus their inability to use ICT effectively leads to waste and inefficiency that affects their capacity to provide quality services to clients. Given that these organizations play a critical role in direct support to marginalised and disadvantaged people (who may be homeless, unemployed, under-skilled, chronically ill, or otherwise in need), the ICT skills gap has serious social justice ramifications. This view is confirmed by research by other sector organizations (NCOSS 2008; Infolchange Australia 2009).

Early this year the Productivity Commission published its research report: Contribution of the Not-for Profit Sector. Much of the report is very relevant to problems taken up in the *Doing IT Better* Project, and key issues are discussed here. The Commission is alert to the way that ICT underpins sector productivity, but also that significant investment is required to bring the sector up to standard, suggesting that:

To take advantage of ICT opportunities NFPs need the resources — funding and skills — to develop, purchase and implement ICT solutions. They have to see that such investments will bring about not just productivity improvements but better outcomes for workers, members, participant or clients. (Productivity Commission 2010: 231).

However, the Productivity Commission report still takes a traditional view of technology, providing only a limited focus on the web of cultural and informational interactions (sometimes called 'soft technology' (Simpson 2004)) that is as significant as access to the technical artefacts (the 'boxes and wires').

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Thus, while the report talks about the importance of 'knowledge systems', and the need for what it calls a 'shared client management and record management system' (ibid., 232), there is an unstated assumption that the problem is 'just technological'. In fact, the problem is as much about how to provide a sustainable skills base in information and knowledge management or ICT planning in the sector.

A broader understanding of how ICT 'works', informed by internationally-recognized research into socio-technical problems around information, knowledge, and technology (Orlikowski 2000), would have helped the Productivity Commission appreciate that the problem is not just about 'boxes and wires' and more funding, but also the articulation, understanding, and support of the complex ways in which new forms of information and knowledge management are an essential part of community service work. Today this includes the creation and distribution of information for client service, reporting, policy and procedure development, and other purposes.

Through that perspective, the project has highlighted the role of the community service worker as an information mediator or knowledge and information worker, whose skills will be enhanced by familiarity with the principles and practices of information and knowledge in addition to more 'conventional' hardware issues.

However, there is a difficulty in assessing, at least in the short term, the impact of investment in such things as information management skills, because community outcomes and impacts are often intangibles, such as social engagement, confidence, or perceptions of living better. Thus, how do you measure 'happiness'?

The Productivity Commission takes up the issue of what it calls impacts, as distinct from outcomes, based on OECD research (Appendix B to the Productivity Commission Report); these are longer-term and feedback effects of activities that are not always 'trackable' or subject to evaluation through a discrete measure. In fact, the desire for single 'magic bullet' measures, complete sets of social indicators, or perfect causal pathways can lead to quite erroneous findings based on imperfect or incorrect assumptions. The report notes that impact is hard to meaningfully measure because of the difficulties of demonstrating cause, the diffuseness of data, and the absence of concrete units or benchmarks. Unlike controllable survey research, there is no 'gold standard' (such as well-funded medical trials) for this type of work.

But surrogate indicators can be used. This is why good case studies, as reported upon here, are so important, particularly if the sector has the opportunity to engage in rigorous and intelligent discussion and learning. To again quote the Productivity Commission:

Case studies provide insights into the contribution of NFPs activities to outcomes and impacts. Meta analysis of a range of such studies improves confidence in the conclusions drawn and can provide benchmark measures that are representative of the sector more generally... many of the sector's contributions are intangible in nature and hence not readily amenable to quantification, so only a subset of outcomes and impacts may be able to be 'valued' in dollar terms. As a result, a range of qualitative and proxy measures must be accommodated in the framework (ibid. 36).

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This is an important counterpoint to some of the somewhat naïve economic rationalist and utilitarian approaches to understanding and measuring social and human capital. This is an approach which has been influential in government, though based on narrow modelling of human behaviour. Amartya Sen, the Nobel Prize winning economist, has clearly established that this approach excludes highly relevant information from its calculations of human action and outcomes, including the considerations of people in need (Sen 2001). Thus careful use of case studies and accompanying data can provide rigorous information about a new approach to understanding investment and outcomes for sceptical government funders and others, such as philanthropic donors, who are concerned that their valuable financial investments are productively and responsibly used.

The complexity of demonstrating impacts in welfare and community work also affects how ICT investments in the sector can be assessed. As Allen Consulting also made clear in a recent report for VCOSS, further productivity gains for the sector—already difficult in the provision of people-centred services—require further investment in ICT. However, the program-centric funding model that predominates in the CSO sector does not adequately fund whole-of-organization technology or the people-systems and knowledge to support that technology. Ultimately, as Sen suggests, such a pervasively narrow approach constricts policy and practice supporting human development. Indeed, the requirement to conform to industry standards, as well as mandatory electronic reporting, means that many organizations have to sacrifice funds from other

areas of operation (such as direct client service), thereby negatively impacting their capacity for effective service delivery (The Allen Consulting Group Pty Ltd 2008; Victorian Council of Social Service 2009).

VCOSS, supported by the Monash research, argues that community sector strengthening is dependent upon the effective use and the sustainability of ICT infrastructure in the sector; this is a finding paralleled in a recent report of the New South Wales Council of Social Service (NCOSS), where issues such as shared training and support, data sharing and interoperability, assistance with contracting support services, and the need for realistic ICT infrastructure support, are part of a series of recommendations for the sector in NSW.

The recently published report of Infoxchange Australia, based on an audit of 120 small-to-medium sized funded organizations funded by the Victorian Department of Human Services (DHS), also confirms many of the findings and recommendations of this report. Remarkably, only two out of the 120 organizations were currently working on an ICT plan, and 84 per cent reported that they had no plan at all. It also found many organizations underestimate their ICT spend or do not take into account additional costs such as that of telecommunications (Infoxchange Australia 2009: 14).

It is clear from the information and management aspects of the effective use of ICT and the cultural issues around ICT adoption and adaptation that long-term investment in the 'soft' end of ICT—people and machinery—is critical for sector sustainability in this time of increased demand for social services.

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As the Productivity Commission has also suggested, governments and other funders need to invest long-term to underpin the transformation of the sector. Governments have an additional responsibility, given they require so much reporting and accountability from organizations delivering social programs on their behalf.

The project also highlights the potential for fruitful and cooperative research between the community sector and higher education. This brings a high level of expertise and funding together to support the community sector, not just in Victoria, but nationwide, and in many areas other than IT. This point has also not been lost by the Productivity Commission, saying in its report that a Cooperative Research Centre program:

[S]hould facilitate applications by collaborations of not-for-profit organizations (including universities), government agencies and businesses in the areas of social innovation by:

- actively promoting the opportunities that are now available
- providing specialized advice and facilitation support to organizations expressing interest but lacking the knowledge and resources to develop the partnerships required.

(Productivity Commission 2010: Recommendation 9.4) Partners

The Centre for Community Networking Research (CCNR), Faculty of Information Technology, Monash University in Melbourne, Australia, is an academic research unit engaged in community-based action research. It aims to understand how communities and community sector organizations are using new technologies. In the past it has undertaken several

projects concerned with improving the capacity of communities and community sector organizations with regard to ICT, including work with low-income and disadvantaged communities, and community service organizations. The principal investigator for *Doing IT Better* was Dr Larry Stillman, with the assistance of Dr Stefanie Kethers, and Rebecca French, a PhD student and researcher.

The Victorian Council of Social Service (VCOSS), established in 1946, is the peak body of the social and community service sector in Victoria, Australia, with a mission to pursue just and fair social outcomes through policy development and collaborative advocacy. VCOSS has a long history of close engagement with a broad range of community service organizations (CSOs), with a dual focus on consolidating practical knowledge and expertise from the sector, and building capacity among CSOs. VCOSS convenes numerous committees, working groups and partnership networks focused on resourcing and strengthening the sector and facilitating the input of members and other constituents into the policy process. Its strong connections with a diversity of community organizations and recognized position as a sector-wide facilitator made VCOSS an ideal community engagement partner in the project. The lead worker at VCOSS for *Doing IT Better* was IT Project Coordinator Dean Lombard.

Both CCNR project workers and VCOSS developed work plans that were submitted to the Steering Group (project managers) and Reference Group (project advisors) on a regular basis for feedback (see Project Management for further information). Public reports were also published in VCOSS's member newsletter Noticeboard and on the *Doing IT Better* website.

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## AIMS

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Community service organizations (CSOs) provide direct and indirect support to the hundreds of thousand Australians facing homelessness, poverty, unemployment, and other forms of disadvantage, playing a critical role in helping them move from dependency to independence, and from marginalization to more positive participation in the wider community.

These organizations face a number of challenges in fulfilling this important work. A significant obstacle is their limited ability to keep pace with the technological revolution.

CSOs, therefore, need help in order to:

- keep pace with the needs of clients to acquire technological skills to help facilitate situational and personal change, and to meet government and prospective employer expectations and requirements;
- maintain reliable and functional links with government agencies and other funders which increasingly require electronic communication; and
- capitalize on opportunities for communication, engagement, networking, and collaboration with other CSOs.

### Project goal

To enable community organizations to significantly improve both their organizational technological expertise and their ability to transmit that expertise to their clients — ultimately empowering both.

### Specific aims

1. To improve advocacy at the case level, enabling individual clients to acquire technological skills and to become independent and take control of their lives.
2. To lead to better support of people in their interactions with government agencies (such as social security agency Centrelink) or in teaching them how to apply for jobs online.
3. To help organizations to overcome client and worker fears of technology and aversion to acquisition of computer skills.
4. To set in place mechanisms to train organizations to better manage the computer facilities they have.
5. To help people who work and volunteer in community organizations to become better users of the technology themselves, and to pass on their knowledge to other people so that their learnings are not lost.
6. To enable community organizations to use new, timesaving forms of communications, such as video conferencing or internet phone services, that can bring together workers and clients who may be scattered across large distances — effectively expanding services to those who may not otherwise have access.
7. To raise awareness in government, business, and philanthropic foundations of the importance of supporting effective use of technology for the benefit of disadvantaged people and their support organizations. This will lead to better resourcing of the sector.

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## METHODOLOGY

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The project used a number of key strategies to meet its aims of research, capacity-building, advocacy, and community development. Significantly, prior to the project, there was no sector-focused analysis or sector-based group to provide a cohesive voice on the issues. *Doing IT Better's* approach has enabled this to occur.

The primary strategy was action research via in-depth case studies with a range of community service organizations (CSOs), each developed with the close collaboration of the target organization's workers as research partners. The case studies illuminated the different effects of ICT on Victorian CSOs. The range and depth of evidence they collected is highly illustrative of problems in information and knowledge management and planning for ICT change and education.

Numerous other strategies were used to pursue the capacity-building, advocacy, and community development objectives, including:

- workshops, seminars and specialist workshops for the community sector on a wide range of issues to do with ICT and community services;
- the formation of a working group concerned with the systemic problem of data interoperability issues in agencies, particularly those in the human services area;
- annual conferences focusing on particular issues emerging from the project;

- publication of reports and academic papers about project outcomes;
- advocacy to government, other funders, and higher education about sector needs; and
- development of funding applications for innovative projects with individual organizations, as well as for academic research funding.

A key guiding principle of the project has been that of collective 'Open Knowledge'—as distinct from individualistic private or corporate knowledge. The principle of Open Knowledge is like that of the Open Source Software movement: that collaboration and knowledge sharing is the most effective way to build robustness. It is particularly relevant to the community service sector because collaboration is a key value and a common way of working.

### **Participatory research**

The project employed a participatory (also known as 'community-based') research approach to accomplish its aims. Traditional social research identifies a problem, investigates it, and proposes a solution that is usually delivered in a report intended for an academic audience. Participatory research, on the other hand, values the engagement of the community or people being researched at every stage of the research process



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and produces outcomes that directly impact them (and the people they serve) on a daily basis. It is a dynamic, iterative form of research with the following characteristics:

- Community partners are involved at the earliest stages of the project, helping to define research objectives and having input into how the project will be organized.
- Community partners have real influence on project direction — that is, enough leverage to ensure that the original goals, mission, and methods of the project are adhered to.
- Research processes and outcomes benefit the community. Community members are hired and trained whenever possible and appropriate, and the research helps build and enhance community assets.
- Community members are a part of the analysis and interpretation of data and have input into how the results are distributed. This does not imply censorship of data or of publication, but rather the opportunity to make clear the community's views about the interpretation prior to final publication.

- Productive partnerships between researchers and community members are encouraged to last beyond the life of the project. This makes it more likely that research findings will be incorporated into ongoing community programs and therefore provides the greatest possible benefit to the community from research.
- Community members are empowered to initiate their own research projects which address needs they identify themselves.

Adapted from University of Washington, School of Public Health (<http://sphcm.washington.edu/research/community.asp>)

	2007			2008				2009				2010
	Apr-June	Jul-Sep	Oct-Dec	Jan-Mar	Apr-June	Jul-Sep	Oct-Dec	Jan-Mar	Apr-June	Jul-Sep	Oct-Dec	Jan-March
<b>Commencement &amp; "Ideas' Conference</b>												
<b>Steering Committee (tri-annually)</b>												
<b>Working Party</b>	Formative stage											
<b>Case Studies</b>	Formative stage											
<b>Formative &amp; Final Evaluation/Report</b>				Ongoing (formative) evaluations								Final Reports

Project timeline

## Timeline

The project ran for three years from 1 April 2007. Such a lengthy process was needed because:

Participatory community-based research takes some time to gather momentum. Time also must be allowed for ongoing planning and consultation, as well as adjustment of strategies, so that the maximum impact can be achieved.

Rather than taking short-term 'snapshots', the project used medium-term studies to enable long-term planning and sustainable results. This is especially important in community and technology projects, which bring together very different perspectives and practices. Elements must be conducted sequentially as new knowledge and insight is gained. Some of the

case studies required considerable time and effort because they needed to uncover and develop new understandings and skills that would otherwise have been lost.

Monash University's ethics requirements stipulate that each discrete research activity must be passed by its Ethics Committee, and all participants must provide informed consent, before fieldwork commences. This takes a minimum of eight weeks.

Adequately evaluating and writing up such a project for different audiences (e.g. community service sector newsletters as well as academic papers) takes considerable time and effort. There was also, due to the innovative nature of the project, some demand for speaking and presentation engagements.

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Time was needed to seek further resources from government, philanthropic trusts and the private sector for the future sustainability of the project's outcomes.

The project timeline illustrates the major components of the project, as submitted to the funding body in late 2006. Over the three-year period the various stages and activities largely aligned with the timeline. However, as with any such project, there was some variation as the project team responded to the realities of action research within community service organizations.

Factors which led to an alteration in the time line included:

#### **Developing institutional and staffing arrangements between CCNR and VCOSS**

Having two workers based in different organizations meant that there had to be a careful division of tasks. The CCNR part of the project focused on the case studies, while VCOSS focused on workshops and seminars, data interoperability issues, building the Community of Practice, and general awareness-raising and communications in the sector.

#### **The complexities of recruiting organizations to participate in the project**

The recruitment process for case studies was conducted by word of mouth, including the self-nomination of organizations that were part of the Community of Practice. However, it became obvious that a wider group of organizations should have the opportunity to participate as case studies, and feelers were put out by VCOSS in order to increase the diversity of participants.

#### **The effect of different organizational priorities**

The reality of matching project aspirations to the actual capacity of community service organizations also led to a reduction in case studies from a rather ambitious target of 15 to seven over the three years. Organizations need to work according to their own timelines and preferences, and *Doing IT Better* had to recognize the needs and priorities of partner organizations. From a project management perspective, this meant that the sequence of actions (for example: initial consultation - workshops - report writing) was most often a drawn-out process.

#### **The emergence of particular specialist interests via the Community of Practice**

By late 2008, a small working group developed which focused upon data interoperability, a significant technical problem that has important implications for how the sector interacts with funders, such as the Victorian Department of Human Services (DHS), as well as with clients. This added appreciably to the workload of the project at VCOSS and thus impacted other project activities.

#### **The use of additional research staff**

CCNR was able to employ limited but essential research assistance (Dr Stephanie Kethers, Rebecca French) to provide significant project support for the case studies.

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## GOVERNANCE

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As an action research project, the success of *Doing IT Better* hinged on the participation of its target group — CSOs — and other key stakeholders. At the same time, decisive leadership, and flexible decision-making was required. Accordingly a three-layered structure was used to maximize participation while allowing for transparent, accountable decision-making, leadership and planning.

### Community of Practice

The Community of Practice was the primary stakeholder group. It comprised people from CSOs (its primary constituency), as well as the private sector (such as community-oriented ICT service providers), government departments, academics, and other interested parties. Members were involved to different degrees according to their preference and capacity. Some were active in many aspects of the project; others just kept themselves informed about what was happening. Some became more involved as issues of particular relevance arose.

The Community of Practice was somewhat loosely defined, but is considered to have comprised the 370 or so people who subscribed to the email list over the life of the project.

### Reference Group

By late 2007 there was sufficient interest in the project to form a reference group, comprising senior CSO staff, representatives from CSO-oriented ICT service providers, and high-level representation (the Dean) from the Faculty of IT at Monash University. (Reference groups are often used by VCOSS as a way to maintain an accountability link and feedback loop with a project's primary stakeholders.) Its role, defined in its Terms of Reference (see Appendix I) was to act as a sounding board, advisory group, and bank of community sector practice wisdom. Meeting bimonthly with the project team, it discussed project progress, planning, and issues. In this way, the project team remained accountable to its primary stakeholders. The Reference Group also became a resource in itself as it developed over the life of the project into a collaborative knowledge-sharing, problem solving, and advocacy body on issues concerning CSOs and their use of ICT.

The group provided invaluable assistance in the following ways:

- suggestion of case studies;
- feedback on methodological issues, including the case study method;
- contacts and advocacy, e.g. within the Victorian State Government and throughout the community sector;
- input into the recommendations for this report; and
- input into future directions.

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The Reference Group comprised: Pere Ruka (Mackillop Family Services), Elaine Cope (ICT Matters), Jason King (consultant), Professor Ron Weber (Monash University), Michelle Alchin (City of Port Phillip), Jinny McGrath (Springvale Community Aid & Advice Bureau), Matthew Colledan (Norwood Association), Monique Cosgrove (City of Port Phillip), Natalie Collins (Infoxchange Australia), and Carolyn Cartwright (City of Hobson's Bay).

### **Steering Group**

The project Steering Group was responsible for overall project management: securing funding, managing the budget, authorising expenditure, approving and monitoring the workplan, and making major decisions. The Steering Group considered the advice of the Reference Group in decision-making — recognizing the Reference Group's practical expertise and understanding of the environment in which CSOs operate.

The Steering Group comprised the two core project workers (Larry Stillman from CCNR and Dean Lombard from VCOSS), as well as the CCNR Director (Graeme Johanson) and the VCOSS Sector Development Manager (Marina Henley). Cath Smith (VCOSS CEO) and Tom Denison (CCNR) also participated from time to time.

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## Research review

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This review examined relevant research and activity since the 1990s to demonstrate considerable interest in the effective use of ICT by the sector. There is a long-term, unresolved issue about ICT support for community service organizations that will only increase in time as ICT becomes more and more important for knowledge creation, management and client contact <sup>1</sup>.

While there is a body of research from the United States, this cannot be easily translated to describe the Australian experience, primarily because of the close relationship between community service organizations and government in this country, and different philanthropic traditions (DiMaggio, Weiss et al. 2002; Frumkin 2002; Denison 2003). Consequently, while there is considerable enthusiasm in the US not-for-profit sector for Web 2.0 as a means to connect with donors and constituencies, Web2.0 is less relevant from a service perspective to the internal knowledge management and support needs of Australian community service organizations (Stillman and McGrath 2008).

Looking at the United Kingdom, the National Council of Voluntary Organization's ICT Development Services, and its predecessor, the ICT Hub, have conducted considerable research and activity documenting and attempting to bridge the skills gap (Ticher and Eaves 2007). Due to many similarities between the two countries, comparisons are possible. The ICT Hub project implemented initiatives including direct mentoring and technical support for the community sector through what are known as 'circuit riders' ([www.ictHub.org.uk](http://www.ictHub.org.uk)). Similar schemes have been implemented in the US. In addition, ICT Hub produced many 'how to' and advice manuals that are ripe for adaptation in Australia, as part of a support program.

From the perspective of the major source of sector funding, Australian governments, particularly in the 1990s, had continuing concerns about the adoption of technology in some community organizations. While the literature is not extensive and almost entirely from the Commonwealth, concern about positive outcomes for client service delivery in community services already existed in the mid-1990s (Australia. Information

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<sup>1</sup> One of the difficulties in conducting a sector research review is the 'fugitive' nature of much research, which is often not widely published, stored in libraries, or well-archived on line. This is a problem which not only affects the community services sector, but is a growing problem for the preservation of online materials. They get 'lost' when sites are rebuilt and so on. Some materials were consequently not available to the project.

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Technology Review Group 1995). A decade later, another Australian government study spoke of the need for a 'supportive organizational culture, complemented by an understanding of the organization's business needs as well as those of major stakeholders', based upon case-study research (Department of Communications Information Technology and the Arts, 2005). The same department produced many other original studies, but the issue appears to have dropped off the policy and funding agenda in recent years.

The same needs have been found in research by the sector. For example, the Australian Council of Social Service (ACOSS) conducted a survey of 209 community service organizations in 1996 to gauge their existing and expected communications usage patterns (Australian Council of Social Services 1996). The report concluded that, as at March 1996, 96.2 per cent of CSOs had at least one computer. However, at that time, only 58 per cent had modems, although a further 16 per cent expected to get one within a year. Further, only 38 per cent of organizations surveyed were connected to the Internet, with 36 per cent using email and 34 per cent accessing the World Wide Web. Only 14 per cent reported that they had their own website. The barriers reported were: affordability of equipment, followed by affordability of equipment for members/clients, cost of online charges, difficulties for users (due to disability, language etc), and lack of staff time.

These findings were broadly in line with those of the VCOSS study undertaken in 1997 as The Bridges and Barriers Research Project, commissioned by Multimedia Victoria (Victorian Council of Social Service 1997). This study surveyed 1,500 organizations, aiming to assist decision-making by identifying those communities most in need, and which had the potential and capacity to sustain the use of information technology. Reaching back into pre-electronic history for nearly all CSOs, the Victorian Community Information Network had emphasized the importance of collective action and support on information management and training for the sector (Victorian Community Information Network, 1991).

Another later academic study of ICT and the 'third sector' (the larger non-profit and independent services sector, of which community-based organizations are part), also observed how little grounded empirical evidence there was about the impact of ICT on third sector organizations in Australia, despite their importance for improvements to service delivery, overall organization performance, capacity building, and citizen participation and engagement (Stewart-Weeks and Barraket 2002).

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In 2002, the Centre for Community Networking Research (CCNR) received major support from the Monash Research Fund to undertake research about the uses of ICT by community and third sector organizations within Australia (Centre for Community Networking Research 2003; Denison 2004, published Monash Community ICT Index (CICT)).

Furthermore, in 2005, the Commonwealth Department of Information, Communications Technology and the Arts (DCITA) funded a group of organizations to conduct a national study of ICT needs and options for the formation of a national ICT advisory council. The consortium included Community Information Strategies Australia Inc (CISA), CCNR, WorkVentures Australia, Albany Consulting, Energetica Consulting, and the Non-profit Roundtable, represented by ACOSS. While the advisory council was not established, the research had some valuable, confirmatory findings, including a general recognition that the application of ICT has enormous potential not only to contribute to administrative efficiency but also to transform service delivery. That potential, however, was not being realized because:

- the sector lacked a co-ordinated approach to the adoption of ICT, which impacted on its ability to contribute to policy development, standards setting, and a range of other activities that share and reduce the costs of adopting ICT; and,
- organizations at the individual level were unable to think strategically in relation to the application of ICT, and lacked funding, skills and resources, and sources of advice (A National Non-Profit IT Coalition 2006; Denison, Stillman et al. 2007).

Denison observed that:

An examination of the research surrounding the nature of the Internet and the pressures on community sector organisations suggests that, in apparent opposition to its potential, the Internet is more likely to reinforce, and perhaps exacerbate, existing patterns of activity, increasing the importance of place and the benefits of size. While failure to make effective use of the Internet in response to those pressures will weaken their position, attempts to use it in at least a partial response to those pressures may well reinforce the general thrust of those pressures, and at a general level may well contribute to a delocalization of the sector, with consequent losses in social capital. At a practical level— specifically in terms of the use of the Internet— this has implications for the effectiveness with which Web sites can contribute to the goals of their organisations, and presumably the levels of satisfaction with their performance (Denison 2004: 77).

While Denison's remarks focused around Web and Internet issues, the conclusion can also be drawn that, because online services are dependent upon internal organizational capacity and local networks, support for internal development is critical. Other research in the mid-2000s, such as that by Stillman and Stoecker, also highlighted the need for information sharing and structures to support the particular service culture and local base of the sector (Stillman 2004; Stillman 2006; Stoecker and Stillman 2007).



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In 2008, the New South Wales Council of Social Service (NCOSS) also conducted sector research and observed, in making its recommendations for sector support, that:

Let us be clear however, that ICT is not going to solve poverty, structural discrimination, poor management practices or inequitable relationships with funding bodies. It is important to be realistic about our expectations of ICT and acknowledge it is a critical enabling tool with the potential to maximise the effectiveness of the sector in meeting its primary objectives. The significance of ICT will also often depend on a person's role within an organisation: those working in policy, administration and research positions have a different relationship and dependence on ICT than carers, counsellors and community development workers (NCOSS 2008).

The eight major recommendations which came out of the report were:

1. Shared service model of ICT support.
2. Substantially increased ICT training provision.
3. Feasibility study and trial of aggregated ICT services.
4. An 'NGO specific' ICT guide for negotiating and contracting ICT services.
5. Comprehensive adoption of common data sets.
6. ICT specific NGO and government consultation mechanism.
7. Greater awareness and utilization of HS (Net Human Services Network).
8. Realistic ICT component in funding formulas.

The Infoxchange report of its ICT audit work also supported the need for comprehensive training (Infoxchange Australia 2009) and the South Australian-based study from CISA emphasized the lack of sector training and low take-up of newer forms of technology for client services or relationship-building (Connecting Up Australia 2008).

The findings of NCOSS, Infoxchange, Connecting Up and the *Doing IT Better* project are confirmation of common problems across three States and of the earlier work of CCNR and others on a national ICT advisory council. National sector conferences such as Connecting Up , (organized by Connecting Up Australia (formerly Community Information Strategies Australia or CISA) since 2004) and Making Links (organised by the Australian Federation of AIDS Organisations (AFAO) since 2004) also reveal the extent of the need and the interest in problem solving and development for the sector.

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## Case studies

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The seven case studies of different types of community service organizations present important evidence about different relationships and needs with different sorts of ICTs and are rich evidence to supplement aggregated evidence presented in surveys. In addition, they highlight issues which are not always captured in survey instruments.

The case studies are presented in rough chronological order. It should be remembered that not all contact was continuous and depended upon the availability of both project team and case study organization staff members.

In an ideal world, it would have been best to choose one or two 'critical' case studies, which were representative of the entire sector, to study in depth and work with over several years. Of course, this was impossible amid such widespread sector diversity. Instead, the project looked to work with diversity on the basis of what was practical, and what would be of most relevance to the project and its extended community. Case studies, as the unit of analysis, were initially chosen from among volunteers or through personal contacts of the advisory committee, with a concerted effort to focus on rural and regional issues so further diversity in the sector could be covered.

The following sequence of steps was developed for work with organizations. Other methodological details concerning the case study method are detailed in Appendix VI.

1. Initial contact with the organization.
2. Short introduction at a staff meeting (optional).
3. In-depth interviews with staff members, often using Co-MAP as a comprehensive methodology for capturing, modelling, and analyzing information and transactional processes (see Appendix VI) to model interviewees' work situations.
4. Transcription, ordering, and analysis of the interview data and additional documents, taking a Grounded Theory approach, resulting in rich data for analysis and decision-making.
5. Staff workshop in which findings were discussed and modified as necessary. Staff had the opportunity to comment on and add (or subtract) from our tentative results. Various techniques, such as using Making The Net Work tools (Appendix VI) or other interactive strategies, were used to encourage participation and feedback.
6. Internal reporting to different constituencies, including staff, and committees of management.
7. Final report to organizations. In some instances, such as with the Springvale Community Aid and Advice Bureau (SCAAB), there was sufficient time to develop a public version of the report for the project website.

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## VICTORIAN ALCOHOL & DRUG ASSOCIATION (VAADA)

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The Victorian Alcohol and Drug Association (VAADA) is the peak body representing alcohol and other drug (AOD) services in Victoria. It provides leadership, representation, advocacy and information to both the AOD and non-AOD sectors.

VAADA's purpose is to ensure that the issues for people experiencing harm associated with alcohol and other drug use, and the organizations that support them, are well represented in policy and program development and public discussion.

At the time the case study was conducted, VAADA had three paid staff (including its CEO) - a very small organization that served many members.

### Process

VAADA was the first case study under the project. The key parts of the research took place from August-October 2007.

Interviews were conducted with staff as well as two board members, and a staff workshop was also held to bring together the different perspectives. The Making the Net Work format was used for the work (see Appendix VI), helping to draw out key priority areas, as outlined below.

**Advocacy**-how ICT could help 'knit' the drug and alcohol sector together more effectively. Further engagement with ICT would take careful planning and decision making, as well as specialist knowledge.

**The e-bulletin/newsletter**-its importance to communication and consultation with members of the sector. Communication appeared to be primarily (at the time of the case study) around the e-bulletin, the hard copy newsletter, and policy/submission development (formulating, communicating, and making available policy/submissions).

**Electronic records management**-a need for more skills to manage electronic records and archives developed by the organization. Better records management could also assist with the development of submissions and policy documents.

The project also provided some specific suggestions for short- and long-term change around VAADA's use of ICT and direct assistance with records management that was an important awareness raiser for them. However, a key constraint for VAADA, as with many small organizations, was the lack of program funding to put in place most of the suggested strategies.

### Outcomes

Internal ICT change has been hampered since the case study because of the lack of resources, but one unanticipated outcome was the development of a specialist website, supported by Australian Government funding, for improved services for people with drug and alcohol problems and mental health issues ([www.comorbidity.org.au](http://www.comorbidity.org.au)). The chief executive officer of VAADA reported that the way he went about developing the website was directly due to the project 'opening his head up' about the possibilities for greatly improved services to health professionals.

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## SPRINGVALE COMMUNITY AID & ADVICE BUREAU (SCAAB)

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The Springvale Community Aid and Advice Bureau (SCAAB) case study became the most intensive in the project for several reasons, including:

- the organisation fortuitously wanted to undergo an ICT transformation to improve its services and wished to share its experiences with the wider community service sector; and
- the timely availability of additional project assistance allowed three Monash-affiliated staff to develop strong, long-term relationships with the organization.

The SCAAB case study became the focus of a number of presentations at difference conferences and meetings (ConnectingUp, Linking Up) as well as the subject of academic publications and presentations (Stillman, Kethers et al. 2008; Stillman and McGrath 2008; Stillman, Kethers et al. 2009).

Consequently, the SCAAB experience became a major influence on how the rest of project research was carried out. Many issues which arose with this case study around information and knowledge also came up in the other studies.

The Springvale Community Aid and Advice Bureau (SCAAB) provides information, support and targeted community services for around 15,000 clients a year in the City of Greater Dandenong and surrounds. It has been in operation since 1971 across two major sites and outposts.

SCAAB believes client dignity can be enhanced by the effective use of ICT but that developing such a response needs planning, skills, and particularly long-term support.

During the project involvement with SCAAB, its primary data collection system was DOS-based and over 20 years old, with a limited capacity to provide the data needed in a now complex social policy environment. There were also a variety of other systems for electronic data collection, case management, and reporting, which were provided to specific programs by funders, as well as paper-based records. These systems varied widely in their capacity to provide internally useful reports to SCAAB.

### Process

After initial contact with SCAAB through meetings of the Working Group, further discussions were held with the organization's manager about developing strategic options. A workshop was held in February 2008 to brief staff about the project and to allow them to voice any issues and concerns. Management also felt it important to secure staff 'buy-in' to the project to ensure active and open collaboration. Thus, a quick round-table exercise was conducted to collect and categorize staff members' responses to four questions that were sent to them prior to the meeting, namely:

- What are your biggest needs with the management of information and knowledge?
- What do you think are problems that hold SCAAB back from using IT better?
- What would really benefit SCAAB and its programs?
- How could clients benefit from a better use of IT?

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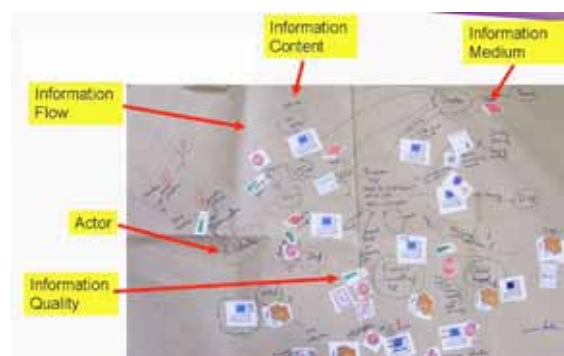
An internal staff survey was conducted, as well as 13 in-depth interviews with SCAAB staff members, including the Executive Director, program managers, and administrative staff using the Co-MAP methodology, described in further detail in Appendix VI.

A longer workshop was held to present preliminary findings and collect more staff input, feedback and comments, and further discussions (in person, by phone, and emails) were held with the management team. Annual reports, internal documents, and other relevant literature were reviewed and a separate consultancy on the development of a client registration system undertaken by SCAAB also provided useful information.

A presentation was made to the Committee of Management which suggested that efficiency could be improved by investment in an information and knowledge strategy. Staff interviews suggested that many case workers lost at least five hours of work time every week in information duplication, searching, and inefficiencies stemming from the lack of an integrated system. This produced an inefficiency flow-on that not only affected other workers, but the quality of direct client service. While it was not possible to quantify the time or efficiency loss, the multiplier effect of five hours a week across 30 or more workers amounts to quite a large cost burden.

Below are some diagrams which illustrate key parts of the research process.

The first presents a Co-MAP diagram constructed with one of the interviewees during the actual interview. It is a way of illustrating activities and processes that might otherwise not be captured in a verbal interview. It illustrates the connections between the relevant worker and other workers and agencies. For the sake of privacy, some of the identifiers have been blocked out. The icons represent different actions and qualities (for example, a stop sign represents an information blockage), media (for example, a shelf represents storage, a sheaf of papers represents a report) or tools (for example, icons representing computers or printers). The flowing lines represent information flows.



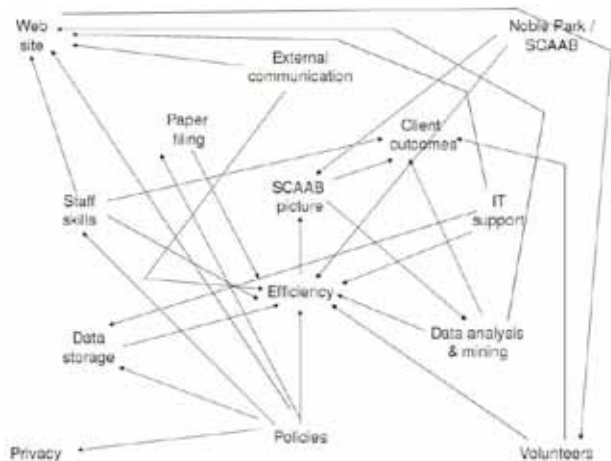
*Explanation of Co-MAP*

Transcripts of interviews were then carefully analyzed, and summaries made of pertinent points, grouped as in the diagram below, using sticky notes.



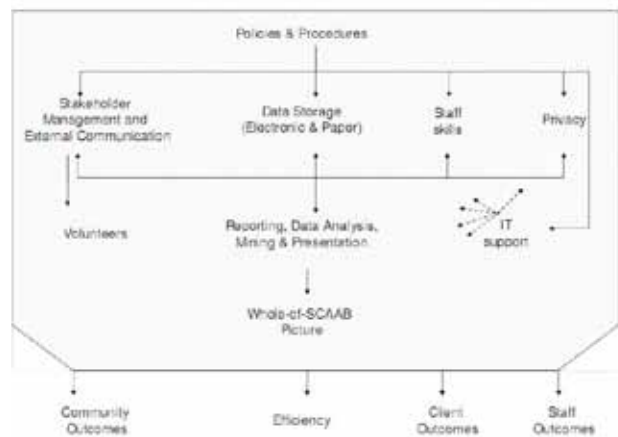
*Categorizing key statements from interviews*

The following diagram was a first attempt at delineating the 'parts to the whole' in terms informational and process relationships. While useful to a researcher, it makes little sense to others and is difficult to explain.



*Complex version of service and information relationships*

A simplified diagram was consequently developed for easier comprehension. Processes were simplified as a way of demonstrating key information flows that could underpin changes in institutional behaviour and culture around ICTs, leading to improved outcomes across community, client, and staff domains, as well as an overall efficiency or productivity gain. This was used to explain the project's work to SCAAB's board, and was used in academic and other presentations, as well as academic publications.



*Relationships simplified, emphasizing the importance of policies and procedures*

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### Major issues identified

Multiple and cumbersome data systems, some of which were imposed by government for reporting and monitoring purposes, hindered a holistic approach to problem solving at times and impeded a whole-organization approach.

Having a better overall picture of the client and what the organization does would help to generate a model to which information management techniques and technologies could be applied.

Policy development and leadership, whether for information management or the management of the physical system, would provide a strong basis on which to implement change into SCAAB's planning and evaluation cycle.

SCAAB needed to incorporate awareness and skills of information management into all its practices.

### Outcomes

#### Key recommendations

1. In developing information management systems, it is all too easy to get subsumed in the technical detail. The fact that the organization's investment in IT is ultimately about positive outcomes for clients needs to be emphasized when working with technology professionals who may not understand the community sector. Of equal importance is the efficiency and ease of use of the proposed system.
2. Desired client outcomes and requirements linked to information processes should be made concrete and quantified as far as possible so they can be easily and clearly communicated and evaluated by information systems specialists for system design purposes. For

example, that personal details should be securely recorded once only, and only updated if necessary, or that staff should only need to spend a maximum 30 minutes a day updating data so that other time can be spent in direct support or other duties.

3. A specialist position should be designated for technology change management and support. Such a position could be shared with other organizations. This position requires both an understanding of technical issues and the cultural style that characterizes the form of service conducted by SCAAB.
4. ICT change, because it is so resource intensive, needs to be regarded as a business change rather than just a practice change with short-term help. This does not mean that the service values which SCAAB holds dear should not influence how ICT is implemented, but that tools and methods from the business sector can be fruitfully adapted with a 'human' twist.

Key internal changes to underpin implementation changes were suggested, including to:

- policies, procedures, and privacy;
- stakeholder management, external communications, and community outcomes;
- data management;
- practices at the different sites;
- IT infrastructure support;
- staff issues and outcomes; and
- client outcomes.

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A presentation for the 2009 Making Links Conference observed that a number of other actions had been undertaken by SCAAB, including:

- working with the sector;
- active membership of the Advisory Committee of *Doing IT Better* project;
- exploring with Adult Multicultural English Services (AMES) opportunities to use Web 2.0 as a way of improving settlement outcomes for new arrivals; and
- sharing knowledge and learnings.

#### Lessons Learned

- Reflecting on its engagement in the case study, SCAAB highlighted the need to:
- recognize that its concerns and issues are common in the not-for-profit sector;
- understand the distinction between technology and information management;
- explore the potential for ICT to make significant improvements to work within the organization, with clients, and with the community;
- implement a quality assurance process;
- have access to people with ICT expertise who understand the sector and are able to assist not-for-profit organizations;
- hear from as many people as possible;
- develop an ICT strategic plan before rushing to change things;

- communicate regularly with key stakeholders;
- have champions within the organization at all levels; and
- understand that action and outcomes take longer than might be expected.

Jinny McGrath, then Program Manager with SCAAB, provided the following assessment:

As a result of participating in the *Doing IT Better* project as a case study, SCAAB has increased its knowledge of the distinction between technology and information management and how both are important elements that need to be planned for and managed if the organization is to make the most effective use of its resources. In addition, SCAAB's participation has broadened its horizons, sparked curiosity and encouraged exploration of the potential of new ways of working with our clients and community to achieve our social justice vision.

SCAAB has also, as an outcome of this project, made a successful application for significant funding under the Collaborative Internet Innovation Fund program of the Victorian State Government to undertake Web2.0 initiatives with AMES, the largest provider of English language and settlement services in Victoria, with new arrivals and refugees in its service region.



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## WOMEN'S HEALTH LODDON MALLEE (WHLM)

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Women's Health Loddon Mallee is a regional women's health service based in Bendigo, in regional Victoria, with an outreach service based in Ouyen, on the Mallee Track. Its vision is to support the goal of optimal health and well-being for all women in the Loddon Mallee region, through innovation and excellence in health promotion.<sup>2</sup>

### Process

WHLM engagement with the project was limited to two workshops held in Bendigo, phone discussions, emails, and participation in the June 2008 *Doing IT Better* Conference by the Centre Manager. Contact was initially made with the Centre in late 2007, with an initial exploratory visit held in February 2008. A workshop was organized for staff from several locations in Bendigo in May 2008, reflecting the logistical complexities for small organizations. The workshop was the first time the organization had considered IT as an outreach tool and what was needed to use it.

The workshop considered all the different technologies that were considered relevant (radio, phone, internet) to outreach on women's health issues, and the use of an active Web 2.0 website with secure interactive web forums and multimedia was considered an option, should further resources become available, for communicating and educating a dispersed community of women. Given that most staff had no idea before the three-hour workshop about Web 2.0 technology, being able to come to such a decision by listening, discussing, explaining, and then voting on strategies can be considered a major achievement in awareness-raising and decision-making.

Being spread across two sites 300 kilometres apart and covering an enormous geographic area across Victoria, WHLM's financial resources must stretch a long way and they have fewer computers than staff who need to use them. A lack of affordable broadband coverage outside of Bendigo also means that many rural women still rely on dial-up services, which is increasingly unsuitable for today's demands. Together with the dearth of ICT expertise that is common in the sector, this amounts to a range of ICT constraints at odds with the organization's vision to integrate ICT tools into its work—especially for building connectivity among a widely dispersed client base, whether women isolated on farms or living in small rural towns.

WHLM's engagement with *Doing IT Better* helped it to begin 'learning the language of ICT', and identifying technologies that could offer solutions to problems in reaching out to dispersed and often isolated women, young and old, in rural and regional communities. The project also provided the organization with direct assistance in application writing.

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<sup>2</sup> Derived from Women's Health Loddon Mallee's website [www.whlm.org.au](http://www.whlm.org.au)

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## Outcomes

In early 2009, the Centre's director told the project in an email that:

Women's Health Loddon Mallee did not get either of the grants we submitted for. We have however progressed with a staff training program. For two hours a week every staff member will progress along an individual learning plan (we are calling it 'My Learning') with support from Continuing Education Bendigo. We may be setting up a computer lab for this and future training that we or others do with an aim of having a facility that will help us with interactive computer based health promotion in our region. There are a few steps to take for that vision to become a reality but the initial steps of some capacity building are already quite exciting. Who knows what will eventuate.

These first steps could not have happened without the project's support and the project team has committed to supporting the organization as much as possible in the future.

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## TRAVELLERS AID

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Travellers Aid has delivered travel related emergency relief in Melbourne for over 94 years. It provides unique and vital services at Southern Cross Railway Station, City Village on Bourke Street and at Flinders Street Railway Station. Travellers Aid is well known within the community service sector for its knowledge and expertise in travel related issues for people in need, and is the largest provider of travel related emergency relief in Australia. In 2008-09 it provided direct assistance to over 165,000 people, including travellers with disabilities, regional interstate and international travellers to Melbourne, or people in crisis and emergencies.

### Process

Discussions were initiated with the Travellers Aid CEO in early 2008 about assisting the organization's ICT direction, in line with the development of its strategic plan.

With the aid of the project, Travellers Aid began investigating how to expand and streamline the delivery of its services to clients and external referring agencies via an online platform.

The Travellers Aid management team strongly believed that the emergency relief sector needed new ways to better manage the issues of transport related poverty and crisis. It saw an IT based solution as offering real potential for sector-wide improvements to service delivery and efficiency.

The organization thus proposed the development of an online application, targeting community agencies working in emergency relief. This project would give agencies the capacity to meet their core mission of offering a service to people in crisis while preserving their dignity during an information gathering process.

Travellers Aid also does considerable work, at railway or bus platforms, with people with a disability and their carers. As with the Rural Information Advocacy Service (Case Study 7), there is potential, should funding become available, for innovations in communications and data management through hand-held devices, an area of innovation that has been neglected in studies of social work but is an increasing feature of work for many agencies (Ferguson 2008).

The project had also intended to directly interview a number of clients who used Travellers Aid services, because this case study was an opportunity to see a 'service in action'. However the formal and complex ethics forms required by Monash almost certainly made people reluctant to be interviewed and, in fact, only two interviews were conducted. This is a difficult issue which deserves to be considered at a university ethics committee level to ensure that the process for obtaining informed consent does not impede social justice support work.

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Interviews were conducted with six Travellers Aid staff in November 2008, and a staff workshop followed on 12 August 2009. While the main focus was on the service booking system and travel related online booking service, other ICT-related issues were also discussed.

The main issues that emerged were:

- what types of booking services Travellers Aid should provide to its clients, for example, via Web forms, SMS, email;
- how to process bookings and communicate with clients to confirm, or modify bookings; and
- how to reduce the staff workload due to reporting requirements.

A major issue with the current booking system was that, due to a lack of interoperability of the software systems, all data had to be typed into one computer system, then printed out and manually transferred to another system to produce the required report, all within two weeks of the end of a reporting quarter. This was a tedious, labour-intensive, and time-consuming exercise, which detracted from time spent assisting clients.

### **Outcomes**

Travellers Aid has used its work with the project for policy development and submissions for funding, and to network more effectively with other organizations.

As with the other case studies, the action-research process value-added to knowledge and skills. It allowed Travellers Aid to crystallize and prioritise problems and solutions.

To quote directly from their press release of March 2010:

Once completed, this online solution will provide community agencies with a web portal capable of linking key travel services that connect suburbs, towns, regions, and states across Australia in one easy to use/navigate online environment. This will offer community ER (Emergency Relief) agencies the capacity to coordinate their client related travel activities while also collecting data, nationally, on the issue of transport poverty that government can use to create better policy.

This project will also roll out a one year action research project in conjunction with the Department of Transport aimed at coordinating community transport efforts in regional areas, to make cost savings and optimize use of community vehicles.

Low income and disadvantaged Australians along with community organizations nationally addressing issues of transport related poverty will win through this project. Travellers Aid formally acknowledges funding provided by the Lord Mayor's Charitable Foundation through the Eldon and Anne Foote Trust and the Department of Transport, in addition to the in-kind support of our many community partners in making this possible.

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Travellers Aid also acknowledges the 2009 Commemorative Grants Program funding awarded to us by the Sidney Myer Foundation. This funding has provided us with the opportunity to review our internal processes and contribute resources to more focused initiatives in line with our 2008-2013 Strategic Plan. The Commemorative Grants Program gift has also assisted in funding an upgrade of Travellers Aid's website and general IT capacity. This funding enables Travellers Aid to operate more seamlessly and to improve the sustainability of the organization through such projects as the development of the online ER application.

Of particular interest to the project was this information, also contained in the press release:

This project is a timely response to research conducted by Travellers Aid that found that ER services spent significant time, money and resources seeking ER travel booking information and funds when assisting vulnerable and disadvantaged people.

Agencies participating in this research confirmed that, dependent on the nature of ER assistance requested, 20 to 44 per cent of all distress ER requests they received went unmet due to the lack of one system that has the capacity to coordinate and harmonize agency response efforts.

This confirms the need to develop interoperable and 'harmonized' systems from both financial and 'dignity of service' perspectives.

From an action research and organizational development perspective, the work with Travellers Aid has two aspects:

1. It was an example of an organization with a mix of quite personalized service with disabled clients, yet enormous through-traffic of people with all sorts of travel needs. Having a good database system that can track people with 'dignity' and provide aggregate information for policy development and reporting purposes is critical for both the effective use of staff time and the personalized treatment of clients.
2. It showed that small numbers of staff do not necessarily reflect complexity or translate into a simple organizational structure or operations, and that 'cookie cutter' solutions cannot be imposed. It is very important to get to know organizations and for them to get the confidence to talk about technology issues in their own way.

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## NORTHCOTE COMMUNITY INFORMATION & SUPPORT SERVICE (NCISS)

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Northcote Community Information and Support Service (NCISS), in the inner northern suburbs of Melbourne, is a community organization committed to resourcing and empowering the local community. Founded by community-minded residents in the late 1970s as the Northcote Citizens' Advice Bureau, it is a council-funded, community-owned and managed organization, providing access to information. It aims to encourage participation and self-determination for all members of the community. Key parts of its service include Emergency Relief and a Volunteer Resource Service. Due to an amalgamation of two previously independent services, it started to operate out of two locations in 2008.

NCISS is almost entirely run by volunteers of all ages and backgrounds, with some part-time paid staff who provide overall coordination and ensure that a quality service is being provided. Northcote CISS is accredited by Community Information Victoria (CIVic), and funded by the City of Darebin as well as the Federal Department of Family and Community Services.

### Process

Ten interviews were conducted in August and September 2008, one with a board member, and nine with NCISS staff (paid and volunteers) from both sites, including the executive director and Preston coordinator. Each interview canvassed the interviewee's role and program area, including the capture, management and storage of client data, interactions with other programs and agencies, use of computers, mobiles, and other ICTs, and current gripes and issues with ICT. CO-MAP was also used to map informational relationships. All participants except one agreed to their interviews being audiotaped; however, one recording was lost due to technical problems.

During the analysis phase, more than 200 issues were extracted from the interview write-ups and Co-MAP diagrams. These were written on sticky notes, grouped, and organised in categories and sub-categories, and later typed up using Freemind, a free mind mapping tool. The use of Freemind represented a further modification of research methodology, based on a serendipitous discovery of its utility for this sort of work (see Appendix VI). The analysis of issues which arose and the findings from a staff workshop in October 2008 identified the following key issues:

- **Service model** - NCISS was changing its core focus from providing emergency relief (ER) to being a volunteer resource service (VRS).

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- **Policies and procedures** – given the merger of the two services, and the move towards more electronic data management, there was a need for developing and aligning existing policies and procedures.
  - **Data management, including community information** – moving from a mixed (paper-based and electronic) system to more electronic data management created issues around staff skills, databases, and policies and procedures. Maintenance of leaflets and brochures was time-consuming, but important when one-to-one advice was still important.
  - **Reporting to funders and others** – a need for good information about client trends.
  - **Workforce** – how to find and retain volunteers, in particular, volunteers skilled in IT, who were in relative short supply.
  - **Planning** – little time or opportunity for reflection and planning when the focus was on direct service.

### **Outcomes**

Key future actions were identified as:

- continue on the current work being done on funding arrangements;
- develop an IT plan;
- network with other Community Information Centres;
- share notes on moving forward with ICT with fellow case study organization, the Springvale Community Aid and Advice Bureau (SCAAB); and
- explore possible workshops and training with Privacy Victoria, and training opportunities regarding search strategies.

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## BAYWEST YOUTH HOUSING GROUP (BWYHG)

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The BWYHG/Latitude case study is of particular interest because it captures the problems faced by many smaller organizations involved in important frontline work with vulnerable populations such as young homeless people or young people coming through the criminal justice system. Mandated accreditation via the Homelessness Assistance Service Standards (HASS) program and legal reporting requirements also drive the need for information accuracy, in addition to frontline advocacy work.

Workers in organizations like BWYHG/Latitude are involved in extensive phone (mostly mobile) contact with their clients, for case management, but also must undertake case and data reporting activity to funding authorities. As noted with the case study with Travellers Aid and RIAC (below), 'mobility' is an increasing part of community service work and interaction with clients, but little researched or understood. Such work requires effective cross-site information management skills. At the same time, BWYHG/Latitude is part of a service network for youth homelessness, which relies upon face-to-face meetings for case allocation.

Staff are specialists in youth issues rather than information management, and therefore have limited skills in information management or planning, even though information transactions and, particularly, electronic transactions are an important part of their work. While there are occasional information management workshops from the Department of Human Services, there needs to be a much more comprehensive support strategy involving training, information, and person-to-person contact for small agencies, not just for 'tech' problems but for information management support.

BWYHG/Latitude is small organization that provides personalized services, including emergency housing, to young people who are, or are in danger of becoming, homeless. It is currently located at Westona, but is merging with other services into a distributed service network called Latitude.

### Process

In early 2009, contact was made with the BWYHG/Latitude manager, and a joint consultation plan was developed.

After a brief initial meeting with the organization's coordinator, three in-depth interviews were held with five staff members from Bay West Youth Housing and Essendon Youth Accommodation Group (EYAG), followed by a staff workshop using framework outlined at p36.



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A key question became clear for BWYHG/Latitude: 'How can we make an evolving system more secure and organized?' The idea of evolution was brought up because of the profound changes that the organization was going through. To explore the implications, issues and questions which arose from the interviews and workshop were outlined. They were:

- audit – a review of the physical (network/hardware/software) structure;
- synergies with the HASS (Homelessness Assistance Service Standards) accreditation process;
- review of how electronic files can be included for more effective interaction with case-management systems such as SAAP (Supported Accommodation Assistance Program);
- relationships with other organizations;
- cultural change, including the effect on staff roles, managing files/data, and using common tools;
- policies, procedures and practices: how to implement changes without pain; and
- how does BWYHG/Latitude manage and lead the change process?

Staff members were asked to edit and comment on the categories and descriptors. Staff agreed that many of the changes that the organization faces would require more resources, mainly in terms of time, skills, and money. The main question was how to obtain funding to set up and develop systems that support the required changes. The project suggested that information created in the course of the case study could be used to apply for support to different charitable funds as the need to improve ICT use

directly affected the quality of direct services to clients and reporting to agencies. In addition, BWYHG/Latitude could fruitfully recruit an IT volunteer or volunteers.

Potential quick fixes for existing problems were also discussed; for example, official email addresses for staff, the use of Google calendar and/or Timebridge ([www.timebridge.com](http://www.timebridge.com)) to coordinate meetings, and a possible social networking tool, Ning ([www.ning.com](http://www.ning.com)), for a future website. A sophisticated website was identified as a low priority until other informational and resourcing issues were resolved.

Furthermore, the project suggested that BWYHG/Latitude could ask for feedback and help from the *Doing IT Better* Reference Group, e.g. the provision of an organizational mentor during its metamorphosis into a network.

### **Change management**

The service amalgamation and Homelessness Assistance Service Standards (HASS) accreditation means complex changes concerning policies and procedures, work procedures, and practices around things such as information management, ways of communicating, and the tools used in daily work. For example: a big whiteboard was, at the time of the case study, being used at the Westona office to show where staff were during the work day and to coordinate meetings. However, this tracking tool will not work across sites where the same information is needed 'instantaneously' as meetings and other arrangements are made. The project suggested some 'free' tools that could be used to familiarize staff with new ways of working while more permanent and customised solutions are sought.

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## IT infrastructure

**Hardware and software** – The project suggested that BWYHG/Latitude contact Infoxchange for a MeasureIT audit. The main software used for the SAAP work was the SMART database, which contains client data and case notes. One major issue, especially with regard to the future work, was that the different sites' infrastructures, at the time, were completely separate from each other. A Virtual Private Network (VPN), with broadband connectivity, and common email addresses and directories between the different sites, could allow workers to securely share and exchange files based on a common directory structure, instead of dispersed between individual computers. As with many other organizations, there was an inconsistent software suite from computer to computer.

**Backups** – At the time of the case study, not all computers and/or data was backed up. Once a month, the coordinator sent a SMART extract to the National Data Collection Agency in Canberra.

**Phone** – Staff members mainly used mobile phones and all clients had at least one. At the time SMSes were sent using mobile phones, not via computers. This meant that there were no permanent records of SMSes sent and received. Some staff members thought that such a record would be useful, whereas others said that the SMSes they sent were more of the 'running 5 minutes late' variety and did not need to be recorded permanently. From a research perspective, the pervasive use of mobile phones as a mutual contact point was another affirmation of the 'mobility' factor in the development of new forms of community services work (Ferguson 2008).

## Communication

**Website** – There was, in the project's timescale, no real website for BWYHG/Latitude. Having a site was considered a useful future tool, for exposure and branding, letting young people know about BWYHG/Latitude in its service region, and as a reference point for funding stakeholders. However, as previously noted, a website was a further step once other issues were resolved.

**Client interaction** – BWYHG's clients found out about its services through referral networks and, especially, word of mouth. Interaction with clients mainly happens through face-to-face meetings.

Workers often see more than ten clients in a given week, with further interaction by mobile phones and SMSes. A few clients, mainly those with work or school, use email as well. Because of affordability issues, clients will often contact workers by ringing and then hanging up before the phone is answered (the number remains on the called mobile so the call can be returned), or reverse charge calls, both of which add to the organization's phone bills.

Formal notifications to a client are mainly sent by letter, for legal reasons. However, because they might be disregarded, SMSes with a reasonably strongly worded message are also sometimes used.

## Data and Information Management

**Filing** – BWYHG/Latitude and EYAG use paper and electronic data/information management. With paper, storage space is an issue. A common folder structure and shared drives or folders with common documents and templates for different forms of communication

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through an intranet might help to simplify finding things. Files are archived, disposed of or otherwise dealt with, according to legal requirements, but the management of electronic data and information across the sites requires the development and implementation of more consistent and more comprehensive IT policies and procedures, including backups, information management, and electronic data management. Good folder management also means that backups are easier to make and, in the case of disaster recovery, reinstallations easier to do.

**Sharing information** – The new BWYHG/Latitude network will also require policies and procedures on data and information sharing across sites. For example, documents, templates, forms, or other information resources need to be shared across sites. Furthermore, a staff member should be responsible for making sure that the directory system for documents and information infrastructure is maintained and updated. A number of other options could be considered:

- Information could be maintained on a wiki, an intranet, or similar. This would work best if Latitude wanted to set up an intranet or wiki, which could then contain policies and procedures, forms and other documents. If workers are expected to maintain information on such a site, they would need to see a clear value, and maintaining the information would have to be simple and quick, and not seen as a chore. An intranet or wiki would also need a dedicated person responsible for overall maintenance, staff training on how to use it, (some) content provision, and a system for chasing up people for their content contributions.

- A lightweight solution would be to use a tool such as Google Notebook ([www.google.com/notebook](http://www.google.com/notebook)). This works like a 'bookmark list' in a browser, but allows clippings and comments to be made, and can be shared with others.
- SMART is the database used in the SAAP program and is mandatory for SAAP agencies. It contains client information and all case notes for BWYHG/Latitude site clients. For outreach clients, case notes are mainly on paper. Additional client-related files are also kept on paper.

#### **Relationships with the Youth Homelessness Alliance (Western) (YHAW)** – BWYHG/Latitude and EYAG

are part of YHAW, a network of about eight emergency support and housing support agencies designed to give an immediate response to young people in need. YHAW forms a structure to get the agencies together so they can provide an immediate response and access to a range of services, without the young person having to ring around for support and tell their story to every agency. This also tends to eliminate 'service shopping'.

Once a client contacts BWYHG/Latitude or EYAG, the worker fills in the (paper) YHAW referral form. The client gives verbal consent to having his or her case presented at the weekly YHAW meeting. This gives the client access to the whole network. YHAW meetings run about 2.5 hours, with about 40-50 clients being discussed. Clients are then contacted by phone to keep them informed. This meeting also has a knowledge sharing aspect, and members note down bits of relevant information in their (paper) notebooks.

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Currently, the hardcopy YHAW form is taken to the meeting, and someone then types the data into the YHAW database. After the meeting, email updates are sent out to members. Some of the information (e.g. the client form) could be shared via email, and other information (currently noted down on paper) could be shared via a YHAW intranet, wiki, or a mobile-based application.

### Outcomes

Baywest/Latitude, a small organization working with homeless young people, demonstrated that changes do not have to occur at a grand scale to have a profound impact. On the basis of *Doing IT Better's* diagnosis and advice — as well as confidence-building — BWYHG/Latitude has taken an independent technological leap by locating and implementing an online collaboration system that meets its needs and has transformed its internal and external communications.

It made a decision to use a UK-based online system called Huddle (<http://www.huddle.net>), and also work with a Monash IT volunteer and mentor who was put in touch by the project. The manager negotiated a free site licence by contacting Huddle directly—a great step for a small community service organization. According to the Coordinator:

'Use of the online system has changed our world, and different workspaces have been set up... we managed to get it up and running effectively by the time our Accreditation Review occurred and it's fair to say the reviewers were impressed with Huddle!!! We have a Latitude Team Workspace, a Committee of Management Workspace... and additional subcommittee workspaces as needed. It has increased accountability and transparency.'

The coordinator added that 'it does everything but make the coffee!!'

This is a remarkable outcome for an organization that was struggling to communicate effectively at the beginning of the project, having only a whiteboard to coordinate its difficult work with young homeless people. The change—and enthusiasm for it—demonstrates the power of effective problem diagnosis and consultation through a bottom-up approach.

It is interesting that the organization was confident enough to make independent decisions for an outsourced, rather than in-house information service. It was able work to independently decide what suited their needs best.

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## RURAL INFORMATION ADVOCACY COUNCIL (RIAC)

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The work with RIAC was the final case study undertaken by the *Doing IT Better* Project. It is of significance because it provides details about a service that is committed to high needs clients scattered across a very large geographic area in the state. RIAC needs to find a way to use newer ICT to improve communications with clients and keep down costs without affecting the quality of service. Its service also epitomizes what Harry Ferguson, professor of social work at Bristol in the United Kingdom, calls 'practice on the move', in which there is a 'flow of mobile practices between public and private worlds, organizations and service users, the office and the home' (Ferguson 2008). However, being physically mobile is expensive. The cost and time spent driving to clients and distant locations is a real financial and staffing burden, and anything that could reduce or improve how 'field time' is spent would be of great help.

The case study became an example of an organization which, if resources and opportunities became available in the future, could greatly benefit from experimenting with leading edge mobile technologies.

It was also interesting because its workers were so articulate about the type of relationships they have with their clients – an insight that helps to understand the culture of many community service organizations. They also helped to clarify the nature of client-based advocacy, which is not necessarily adversarial, but rather acting as a skilled voice for clients in difficult circumstances.

The Regional Information and Advocacy Council (RIAC) is headquartered in Shepparton, in the Hume region, with branch offices in Bendigo and Mildura, and at Swan Hill for the Loddon Mallee Service region, with plans to expand in the future. Much work is also conducted off-site by advocacy workers who spend considerable time travelling to meet clients at their homes or other places; some work is conducted by staff from home as 'telework'. RIAC was recently funded by the federal government to extend its service catchment to two local government areas in neighbouring south-western New South Wales.

According to its mission statement, RIAC 'encourages achievement and acceptance of all individuals, irrespective of age, religion, culture or disability, through the provision of quality services.' This occurs through individual client advocacy, funded through a number of state and Commonwealth departments.

Other work is funded by government for specific projects, such as Home and Community Care (HACC), as well as the Strengthening Parents Support Program (SCAFFALD). These programs assist parents and carers who have a child with a disability or developmental delay to connect with other families and the community.

### Process

Contact with RIAC was made in June 2009 on the suggestion of the *Doing IT Better* Advisory Committee. RIAC's CEO raised, as a key issue, the ways ICT could help to reduce time spent on the road, or to create other information exchange efficiencies. This helped frame some of the questions posed during the workshop.

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Due to time constraints and the need to bring together staff from regional locations of the organization, only two face-to-face activities were undertaken with the RIAC Advocacy Team in Bendigo: two very productive half-day workshops with staff in July and August 2009.

Unlike other organizations studied, the key issue identified as difficult was not one of internal information or knowledge processes, but rather, the challenge of dealing with high-needs cases that are solved with much 'face work'—as well as the driving to get to places. A particularly pertinent phrase used by one of the interviewees was 'it's always important to keep communication lines open', primarily referring to people-to-people communication. ICT can help this to happen more effectively.

The craft in this service is passed on between workers as specialist and generalist knowledge about a range of areas—for example, from autism services to wills. It is very difficult to formally detail such knowledge in writing when workers are not necessarily documenters—instead, verbal communication appears to be key.

Future expansion of the organization in other regional locations will raise issues around:

- maintaining a quality personalized service;
- preserving and transmitting the 'craft' of disability advocacy, of working with clients and on a client's behalf;
- increased difficulty and expense of holding staff meetings; and
- easy access and communication with corresponding services.

The organization already has an effective case management database system (called IVO) that was specifically designed for the sector and well-supported by the developer, and issues around the system were more about speed of connection and use from home, rather than around information management.

Two workshops were held with RIAC staff.

- At the first workshop, different teams (representing the Shepparton, Bendigo, Mildura and Swan Hill, and SCAFFALD staff members) were asked to describe their work, in order to find out what work was done, how they did it, and the sorts of issues that arose. A memo was circulated on the basis of this workshop.
- At the second workshop, a spreadsheet with some key statements was circulated to participants, in order to generate some further brainstorming about solutions to uses that were raised. Additionally, a very large 'service map' was created with butcher's paper, using the Co-MAP method, in which staff from each site collaboratively viewed and talked about their work and communication. The recording of the session was used to create a set of recommendations and observations.

Key points arising from the discussions in the workshops

Major issues that emerged in the first workshop and were discussed in the second can be grouped under the following headings:

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### **Advocacy as a form of craft**

- Advocacy is a form of craft passed on from one worker to another. It relies upon a high level of skill to work with clients in often difficult and isolated circumstances. There have been recent attempts to identify more formally accredited training for advocates – this trend has not been universally supported within the sector.
- Craft cannot be easily turned into formalized procedures or documentation.
- Empathetic support of clients is as important as the information you provide.

### **Personal communication is fundamental**

- Phone work and face-work is very important with clients and thus travel is unavoidable.
- Reliable phone communication is very important on the road.
- Internet access, skills or capacity can't be assumed for clients or be a replacement for personal service.

### **Distributed location of services**

- The service is distributed in nature. RIAC has its head office and branch offices, but work out of home is important, as well as work on the road (literally, talking while driving) and face-to-face with clients in their homes or other places.

### **Outcomes**

The primary outcome was the potential role of technology as a linking and efficiency tool in, for example, the following ways:

- Coordination of work flows, information, and knowledge is possible and essential, but with expansion into new regions, tasks like data management, data analysis, and reporting could become more problematic.
- RIAC would benefit from a Virtual Private Network or VPN that allows work with its IVO database and other applications, such as intranet, internet, and email, whether at the office, at home, or on the road.
- There are possibilities for a pilot project using video-conferencing for staff purposes (such as staff meetings, as well as remote, personalized interactions between clients and other services), including wireless laptop access on the road to the VPN.
- Videoing could also be a way of capturing and sharing workers' verbal and tacit knowledge, linked to a knowledge database.
- Telephone services (landline, mobile, SMS) are essential, and could develop further in the future as new applications become available. Voice over Internet Protocol (VoIP) could cut down costs for office/home-based communications.
- Achieving such technological capacity demands skills and resources that can only be provided by funders willing to invest in experimentation.

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## Project activity

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The numerous activities and events convened by the *Doing IT Better* project have served as a catalyst to connect people in the community sector who have expertise and understanding about the value of ICT. This Community of Practice is of significant size and has been a key part of the project's success.

Members of the Community of Practice made up the majority of attendees at *Doing IT Better* meetings (though some became participants through other channels — most often through VCOSS's PIECES eBulletin, with a readership of around 2,000). These people often subsequently joined the *Doing IT Better* email list, judging by the surge in subscriptions immediately after each event.

Meetings were of two main types: workshops and conferences. Workshops — later rebranded seminars as the format changed and attendance grew — were held every two months on average and typically went for one to two hours, with one or two presenters addressing a specific topic or issue. Conferences were held annually for half a day and were positioned around broader themes.

A discussion of the problem of multiple data entry at the 2008 conference led to the formation of a working group to investigate the issue. This evolved into a significant sub-project concerned with data interoperability and information systems reform, which is ongoing.



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## THE COMMUNITY OF PRACTICE

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The Community of Practice was conceptualised as a dynamic panel of community-based expertise, to produce a 'shared repertoire of communal resources— language, routines, sensibilities, artefacts, tools, stories' (Wenger 2000), similar to other such communities formed around ICT issues in government and other industries. Originally envisaged as 'The Working Group', it was anticipated to form organically around a series of meetings focused on key emergent issues and themes, becoming the locus of the project's 'Open Knowledge'. This would then be disseminated through VCOSS newsletters, conferences, and a web presence, and both lead to and be further fed by changes in organizations' practices.

This proved to be a somewhat ambitious aim. Attendance varied considerably from meeting to meeting, probably because of the limited ability of most CSO staff to devote very much time to 'non-core' activities. The few who were able to make such a commitment became members of the sector-based Reference Group. Everyone else constituted a much more loosely defined group — still understood as a community of practice — that comprised primarily CSO employees but also included people from philanthropic organizations, government, the IT industry and the private sector generally. Using subscription to the *Doing IT Better* email list as an indicator, this group numbered around 340 people by the beginning of 2010. As the project approached its conclusion, it began to have a life of its own as a facilitator of knowledge sharing and alliance building, and is now well placed to support future ICT initiatives in the sector.

### Outcomes

Greater discussion of and engagement with ICT issues has led to a noticeable change in the way the sector views ICT. It is no coincidence that the highest seminar attendance and greatest follow-up discussion for project activities was to do with ICT strategic planning. There is a growing recognition in the sector that ICT infrastructure is fundamental, not incidental, and this has coincided with the growing engagement of the sector with *Doing IT Better*.

Similarly, the increased incidence of and readiness to embrace new technology within the sector appears to be connected with greater awareness of the technologies as well as the existence of forums in which to seek advice and support—both of which were facilitated by the project.

*ANHLC's involvement in Doing IT Better has given us a vision of how our organization can become more effective and efficient— for example, by implementing systems to enable streamlining and/or automation of mundane tasks and freeing up staff time for more interesting and strategic work. The Doing IT Better project gives us access to affordable information and resources— including people—that we don't have the time, funds or networks to find for ourselves.*

Angela Savage, Executive Officer, Association of Neighbourhood Houses and Learning Centres

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*Doing IT Better has put me in touch with great contacts and they are very supportive and welcoming to me. All of my career had been spent working in global commercial organizations and these contacts have made my transition into the community and social sector a lot easier. I have been able to quickly 'switch-on' to important issues for our organization and help to prioritise them properly... Being in Bendigo has not precluded us from gaining good value from this group.*

Rod Rankin, IT Services Manager, St Luke's Anglicare

*We have found the information, support and networking provided by the Doing IT Better project to be extremely useful for our not-for-profit community organization. It's the kind of practical, tailored support service that the Victorian NFP sector needs.*

Liz Morgan, Manager, Public Interest Law Clearing House

*As an IT practitioner with 25 years commercial experience, I view this project as one of the most important influences on improving IT practice within the not for profit sector. Keep up the good work.*

Peter Anderson, IT Consultant, Centacare Catholic Family Services

## WORKSHOPS AND SEMINARS

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Beginning in June 2007, meetings were concerned with a general clarification of what the project was about, and what organizations would like to discuss in the future.

Workshops were held on:

- information and knowledge management for the community sector;
- introduction to social software; and
- content management principles and systems.

During early 2008, 'working group meetings' were held monthly with the dual purpose of engaging CSO workers in the developmental work of the project, and building knowledge and expertise on specific issues in order to equip CSOs to better deal with them and more productively engage with ICT service providers when required. As the intermittent nature of the target group's engagement with the project became apparent, the focus shifted more fully to capacity-building and information-sharing. Topics were initially based on the project team's pre-existing knowledge and ideas of projects or issues that were relevant or useful to the CSO sector. As the project unfolded, the seminars began to respond to emerging issues.

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A turning point came when Multimedia Victoria approached the project seeking assistance in publicizing the new Collaborative Internet Innovation Fund (cIIF), a program to resource innovative web-based projects in CSOs as well as private and public sector organizations. The resultant seminar on ICT project funding for community organizations had an overwhelming response (86 people registered, 63 attended) that necessitated hiring a large venue (previous workshops had been held in cafés or small meeting rooms), providing catering, and shifting to an online booking system ([www.trybooking.com](http://www.trybooking.com), a free service brought to our attention via a member of the Community of Practice). Sector engagement with the project remained at a higher level after this and subsequent seminars were on a similar scale.

Early in 2009 the Reference Group nominated topics for the last six seminars based on findings from the case studies and insights gleaned from miscellaneous interactions with the Community of Practice. This last phase was aimed squarely at building expertise and capacity in the CSO sector. Recognizing that resources were insufficient to run six more events on such a scale, but unwilling to charge a fee, sponsorship was successfully sought from Multimedia Victoria.

All in all, 13 workshops and seminars were held in 2008 and 2009. Total attendance was 463 (bearing in mind that many people attended more than one), with 191 different organizations represented (most being CSOs, along with some government departments, private companies, and philanthropic trusts).

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## The seminars

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### 1. Community ICT support: overview of UK Circuit Rider program

21 February 2008  
Attendance: 6

Jason King (community sector IT consultant) shared his experience as a Circuit Rider (mobile ICT support worker with a caseload of community organizations) with the ICT Hub in the United Kingdom. Discussing the successes and failures of the program helped bring to light significant issues and considerations for supporting CSOs' ICT needs. This helped the project team refine its approach.

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### 2. Knowledge management: undertaking an information audit

13 March 2008  
Attendance: 9

Rebecca French (Monash University) presented a step by step process for undertaking an organizational information audit.

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### 3. Community ICT support: implementing a Circuit Rider-type program in Victoria

22 April 2008  
Attendance: 8

Drawing on Jason King's discussion of the UK Circuit Rider program and the evaluation reports of the program published by the ICT Hub, Dean Lombard (VCOSS) chaired a discussion about how a Circuit Rider type program could be implemented in Victoria.

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#### **4. Disaster recovery: fire, floods, security and just common sense!**

17 July 2008

Attendance: 16

Sherynne Smith (Sentry Networks) talked about different approaches to IT system security, backup and management, and discussed the benefits (especially for small organizations) of a managed service approach.

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#### **5. Technology donations –an introduction**

11 September 2008

Attendance: 15

Doug Jacquier (Connecting Up Australia) outlined the DonorTec technology donations program, which facilitates hardware, software and service donations from companies such as Microsoft, Cisco, and Flickr to CSOs. Participants also shared their own knowledge of other sources of IT donations. This was followed by a discussion about the rapid growth of Web 2.0 (the social web) and mobile applications, and the need for CSOs to understand and keep abreast of these changes.

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#### **6. Finding funding for ICT projects**

10 December 2008

Attendance: 63 (86 registered)

Peter Ziebell (Multimedia Victoria) introduced the Collaborative Internet Innovation Fund (CIIF), a new program designed to help resource innovative ICT projects in CSOs. Information about other funding opportunities for community sector ICT projects was also given.

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#### **7. Integrating records, information, quality and knowledge management in the community sector: a case study**

19 February 2009

Attendance: 61 (140 registered)

Knowing how best to invest in and apply new digital technologies within the community sector is always a significant challenge. However, the growing need to work with multiple quality assurance frameworks within the sector provides an opportunity to establish new and innovative approaches to records and information management that can substantially improve quality and knowledge management practices.

Richard Vines (Quality Manager, Children's Protection Society (CPS)) shared some outcomes from CPS's collaboration with the University of Melbourne's eScholarship Research Centre to find ways of reducing the burden and cost of quality compliance. In particular, he demonstrated an information and records management system being developed specifically to address the fragmenting impact of multiple quality assurance frameworks on CSOs. Looking forward, the benefits of such an approach can extend to enhanced support systems for governance, operational and client support systems and services.

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## 8. Measuring up: assessing your ICT needs

20 May 2009

Attendance: 22 (30 registered)

This seminar discussed different approaches to ICT needs assessments and how CSOs could choose the one appropriate to their needs. Larry Stillman and Stefanie Kethers (Monash University) described the action research approach being used successfully in the *Doing IT Better* case studies. Jason King (Infoxchange) discussed the ICT audit methodology being used in the Infoxchange's MeasureIT project.

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## 9. Building the future: how to develop an IT strategic plan

16 July 2009

Attendance: 70 (84 registered)

Most CSOs now develop strategic plans to guide their work and ongoing development. But ICT systems are rarely included, making it difficult to ensure that critical infrastructure can grow with the organization.

In this seminar Pere Ruka (IT Manager, MacKillop Family Services) and Elaine Cope (IT consultant, ICT Matters) gave a practical demonstration of how to develop an ICT Strategic Plan that dovetails with an organization's role and strategic direction. By working through real-life examples, Pere and Elaine showed how ICT strategic planning based on qualitative principles and reflecting key organizational activities and directions is essentially similar in both large and small organizations, and yields far greater value than the resources needed to develop and implement it.

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## 10. The Leading Edge: innovative IT in the community sector (part 1)

20 August 2009

Attendance: 71 (95 registered)

Pere Ruka and Elaine Cope returned to describe and demonstrate some cutting edge technologies they were using to improve, streamline and simplify organizational systems while saving money and reducing energy consumption.

Pere demonstrated the virtual network (powered by Citrix) he had set up at MacKillop, complete with virtual desktops hosted on thin clients that have replaced desktop PCs. Energy consumption and maintenance costs (not to mention space taken up on everyone's desks) have been dramatically reduced, office flexibility increased, and system management vastly simplified. He also discussed other virtualization platforms.

Elaine demonstrated SharePoint, a web-based intranet from Microsoft that can facilitate collaboration and boost efficiency by streamlining the management of and access to data. It can be used to host web sites that access shared workspaces, information stores and documents, as well as host applications such as wikis and blogs.

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## 11. The Leading Edge: innovative IT in the community sector (part 2)

15 September 2009

Attendance 39 (27 registered)

In this seminar Nicole Aebi-Moyo (consultant, QVR Global) and Karalee Evans (communications and partnerships manager, Headspace) described and discussed some social and technological transformations that are only in their infancy now, but will have a huge impact on the way we live and work in the very near future.

Nicole discussed the concept of Cloud Computing—software and processes located online and accessed from a web browser. She gave examples of non-profits around the world using the web to help run their organizations and reduce costs, administration time and infrastructure needs.

Karalee demonstrated how social networking can extend organizational capacity in a range of areas including fundraising, awareness-raising, stakeholder engagement and internal communications. She also discussed important considerations that organizations need to explore before embracing social media, and presented some thoughts on how the growth of social networking will change the way we communicate during the next decade

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## 12. Getting IT together: information management for community organizations

27 October 2009

Attendance 54 (63 registered)

Community service organizations collect and record huge amounts of information for performance reporting and quality assurance, as well as for managing and informing service delivery and evaluating their programs. Too often, it is all either an administrative nightmare that pulls resources from service delivery, or an elusive critical resource that often can't be found when it's needed. The purpose of this seminar was to introduce participants to key concepts and practices for information management. It looked at two particular elements: data interoperability and digital information systems.

Rendle Williams (Salvation Army) demonstrated how well-planned IT systems and interoperable data can tell the story of what an organization does and show how it is making a difference, leading to best practice evidence-based case management to maximize client outcomes.

Richard Vines (Children's Protection Society) discussed some of the information management challenges for the community service sector, and showed some of the techniques necessary to move an organization to a digital workflow that, when integrated with an information management system, can yield huge benefits that significantly outweigh the cost and hassle of change.

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### 13. Keeping in touch: choosing a client records system

3 December 2009

Attendance 42 (48 registered)

Community service organizations need to keep on top of their connections with many different people: clients, staff, supporters, donors, funders, and so on. Electronic databases (CRMs: customer—or client—relationship management systems) offer great power and flexibility, but choosing between the many different CRMs is a daunting task.

Nicole Aebi-Moyo (IT consultant) described a step-by-step process to best identify specific needs and thus help guide the choice of CRM, before profiling four of the most popular: Raiser's Edge, iMIS, Salesforce, and Microsoft CRM.

Rebecca French (Monash University) demonstrated through the process used recently (as part of a *Doing IT Better* case study) to choose a CRM for Springvale Community Aid and Advice Bureau, including some discussion of the differences between a number of the free and commercial CRMs they considered.

### Findings

The high level of interest in the seminars demonstrated a significant need for this type of information and guidance in the sector. That the project received many requests for sessions to be repeated, held regionally, or released as video podcasts affirms this demand. Some issues attracted enormous interest, suggesting that these are great needs in the sector, in particular:

- information, knowledge, and records management;
- ICT strategic planning;
- interoperability;
- social media; and
- contact management.

The project team hopes to secure the resources to continue running seminars in 2010 and beyond.

Formal and informal feedback from those who attended was not only overwhelmingly positive but indicated the seminars been particularly empowering, often playing a key role in informing planning processes and purchasing decisions of community organizations.

*I found the recent seminar presentations on IT Innovations in the Community Sector very informative and the ideas presented will help our organization form ideas as we move forward.*

Geoff Willett, Manager Corporate Services, Quantum Support Services

*Virtualization and reducing carbon footprints is critical to all organizations, so the seminar in August was very beneficial. Knowledge Management (KM) is our first priority and we are about to formally 'kick-off' our KM Project for this year, so the seminar in October will be invaluable for many in our Project Team.*

Rod Rankin, IT Services Manager, St Luke's Anglicare

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*I just wanted to pass on my personal thanks to you for organizing such an interesting and informative seminar. It is the first we have attended and, as a small Neighbourhood House, we don't usually have access to such thorough information. We have already started thinking about our IT Plan since Thursday and I am feeling more secure that we are reasonably prepared and can now formalize our plan in writing.*

Marilyn Pelman, Manager, Mt Eliza Village Neighbourhood Centre

*I have been meaning to write and thank you for the way in which your info is available for those of us rural agencies that can't always make it down for the short seminars. We appreciate your good work on our behalf. And I do find the info useful as we are now tackling many of these very IT issues.*

Judi Fisher, Quality Assurance Officer, Centre for Non-Violence

*Over the last two years while working for Centacare Catholic Family Services I have attended numerous (around 8) seminars held under the auspices of Doing IT Better. The seminars have been thought provoking, provided new ideas and skills and established new links to industry colleagues. These have impacted short and medium term decisions at Centacare. Less tangible, but of great importance, is the improved morale arising from discussions with colleagues who have or are addressing the same or similar problems.*

Peter Anderson, IT Consultant, Centacare Catholic Family Services

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## CONFERENCES

### First Conference

17 April 2007

The first conference in April 2007 was an exploratory event at the earliest stages of the project. It was facilitated by Professor Randy Stoecker of the University of Wisconsin, with about 40 people attending, including one participant from New Zealand, and others from interstate.

It was hoped that the workshop would secure sector 'buy-in' to the project, participation in working groups, and help to identify potential case studies. Rather than being directive, the project team was looking for indications of sector concerns.

Through a participative workshop format (see [www.theworldcafe.com](http://www.theworldcafe.com)), a number of key issues for the project were prioritized by participants, out of a much longer group of topics that had been generated. These included:

#### Priority 1: Challenges in managing information

This theme was considered a priority by participants. Establishing, maintaining, retrieving and disseminating current and accurate client and service information (including information for culturally and linguistically-diverse communities) is absolutely critical to organizations. Information stored sometimes remains with collectors, rather than being distributed. There is also a high need for feedback loops about information. Collaboration with other organizations in the sector is very important, as is access to up to date, affordable technology. Contractors need to understand the sector's needs, and complexity needs to be balanced with user friendliness.



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### Priority 2: Challenges in delivering services

Training and resourcing are extremely strong challenges to the delivery of services because they underpin effective delivery. These needs overwhelmed all the other issues in delivery, including knowing who to contact for support, the maintenance of one-on-one client service and support, or corporate support for filling the gaps.

### Priority 3: Challenges in collaborating with other organizations

Collaboration and trust on IT issues is important in the sector, but small organizations feel vulnerable, and have less bargaining power in determining their choices, including decisions about funding requests. There needs to be an ICT network, as well as champions for the sector. However, collaboration can be imposed for reasons that have more to do with government agendas and needs to be carefully developed, rather than imposed because of government demands. In addition, there is a lack of service protocols, and knowledge on what technology to source. And what are the benefits of collaboration in the life-cycle of organizations?

### Priority 4: Challenges developing staff and leaders

Balancing short and long-term priorities and finding the time to plan are major issues, as are meeting regulatory obligations—balancing these with demands for services and core business. Getting people to take on responsibility in the context of clearly articulated goals, based on workable and dynamic strategic planning, are also significant challenges. Other related factors include problems with professional development, and adequate public liability insurance for activities and engagement.

### Priority 5: Challenges in doing advocacy work

Advocacy needs to be credible, based on detailed research, including the experience of people actually affected or in need. This advocacy can take different forms, as stories, events, and forums for shared experiences.

### Priority 6: Challenges in communicating the work you do

Effective evaluation, which communicates actual outputs against prescribed measures, is a great challenge to the communication activity of organizations. The resources available for such work are affected by the size of the organization. There is a concern about the dominance of 'economic' criteria in evaluations, and there is a need for negotiated evaluation plans with funders. Furthermore, because of the competition for funding, there is a reluctance to share 'secrets' despite the desire for communication.

### Second Conference

17 June 2008

Forty people attended the one-day conference held to report and reflect on the first year of the *Doing IT Better* project and develop strategies for future action. Attendees also showed strong interest in using project findings to advocate to government about the community sector's need for support and resources to develop sufficient ICT capacity. The following is a summary of the event. The full conference report can be downloaded from [www.doingitbetter.net.au](http://www.doingitbetter.net.au).

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The keynote address was delivered by John Davies of iT4Communities ([www.it4communities.org.uk](http://www.it4communities.org.uk)), a British non-government project facilitating structured volunteer support of the community sector. John shared his considerable experience of engaging IT professionals in voluntary work with community service organizations. As corporate volunteering is often seen as a solution to ICT capacity constraints, John's story of the situation in the UK was an important illustration of the complexities and challenges involved. The feasibility of volunteering programs is contingent upon numerous factors, including the level of commitment and support from government and the corporate sector. His message was that blind implementation without adequate infrastructure will not work.

The speakers from agencies which had been involved in the project's case studies included: Chris McDonnell (Victorian Alcohol & Drug Association (VAADA)), Jinny McGrath (Springvale Community Aid and Advice Bureau (SCAAB)), Jody Willmer (Travellers Aid), Linda Beilhartz (Women's Health Loddon Mallee (WHLM)). They each spoke of their experiences with *Doing IT Better*.

The following are the most relevant issues that they raised:

- There are fundamental ICT planning, capacity, and implementation issues in smaller and medium-sized community service organizations. These include knowing how to ask the right questions and who to turn to for advice; access to appropriate 'how-

- to guides'; capacity to periodically update ICT infrastructure; and the skills and resources needed to enable basic and essential organizational knowledge functions, such as effective and versatile filing systems and databases.
- The failure of most funding agreements to adequately allocate resources for such needs contributes to the problem. One of the strongest learnings to emerge so far from the case studies has been the critical need for ICT to be integral to organizational roles, not 'tacked on' or marginal. Related to this is the need for ICT to be a key aspect of organizational strategic planning. Ultimately, ICT needs to be considered and integrated in the community sector the same way it is in the corporate sector.

The *Doing IT Better* project is well placed to look at some of the big issues in the sector that are related to or could be addressed with ICT. For example:

- exploring the possibilities for agencies to share 'back-end' ICT infrastructure;
- developing strategies to address the rural-metro 'digital divide';
- looking at using ICT more directly in client service delivery; and
- showcasing successful techniques and strategies in order to facilitate their wider adoption.

There was also interest in the sustainability of the *Doing IT Better* project.

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The workshop session sought insights and responses from participants in relation to the following proposed initiatives:

### 1. A shared ICT support service

This proposal is for a community-based service that supports ICT use and development in the community service sector. This would be similar to the 'circuit riders' program in the UK<sup>3</sup> (and Wellington ICT's 'e-rider' project in New Zealand<sup>4</sup>). Its purpose is to assist community-based organizations with ICT related projects and developmental work. It could also incorporate a helpdesk or systems maintenance and repair function. Additionally, it would be well placed to be an advocate for the sector on ICT-related issues, such as: appropriate funding for infrastructure and maintenance, improving accountability, reporting and evaluation systems, and so on.

#### What could be the strengths of such a service?

A sector-wide organization has numerous advantages over a piecemeal approach. Its scale and scope would make it ideally placed to:

- be sustainable in the long term;
- improve service quality through access to a greater range of technologies and associated technical skills and expertise;
- share lessons and proven solutions right across the sector;
- make service provision more affordable, especially for smaller community service organizations, using its large customer base to encourage an innovative approach to cost recovery; and

- build a detailed knowledge base to share lessons and proven solutions, assist with benchmarking, and develop best-practice frameworks.

Such an organization would have credibility and legitimacy from its establishment as an independent body with a governance structure that includes appropriate sector representation. Successful examples are already in existence (e.g. the UK and NZ programs mentioned above), and they provide a foundation of practical wisdom that would help the Victorian sector to 'get it right the first time'.

#### What could be the weaknesses of such a service?

Placing the organization fully on a commercial footing could be difficult due to the limited capacity of the sector to fully fund appropriate levels of ICT service and infrastructure. Analysis of the viability of community sector IT support social enterprises in the UK supports this conclusion.<sup>5</sup>

There is a danger that, over time, the service would come to rely on a limited range of ICT solutions, failing to either take full advantage of emerging technologies or discern when an unconventional or more innovative solution may be called for.

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3 See [www.lasa.org.uk/circuitriders](http://www.lasa.org.uk/circuitriders)

4 See [www.e-rider.org.nz](http://www.e-rider.org.nz)

5 See Hilary Chisnall Exploring the Social Enterprise potential for Superhighways, 2005 ([http://www.ictHub.org.uk/research/EXPLORING\\_THE\\_SOCIAL\\_ENTERPRISE\\_POTENTIAL.pdf](http://www.ictHub.org.uk/research/EXPLORING_THE_SOCIAL_ENTERPRISE_POTENTIAL.pdf))

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Staffing presents its own challenge. Some balance between core in-house staff and use of contractors will probably be required and is completely appropriate, especially if the service is to be responsive to changes in levels of demand. Judicious use of external expertise would also help mitigate the already mentioned risk of curtailing innovation. On the other hand, significant reliance on contractors can have implications for the consistency of service and work, and dilute the intimate knowledge of the sector and of specific organizations that is a strength of a dedicated service.

#### **How would it be managed?**

The service would need a governance model that facilitates and ensures its ongoing independence and gives it credibility and legitimacy in the eyes of both the sector and any project partners or external bodies that may be funding. A governance board with a majority of sector representatives, as well as members from the ICT industry (or private sector generally) or philanthropic sector, could be a good approach.

In the interests of continuity and consistency of service it was agreed that a 'caseload' approach (where each worker has a caseload of organizations for which s/he is the primary contact) would be the most appropriate. But on what basis should community service organizations be clustered? While a case can be made for grouping agencies by specialty or sub-sector (e.g. housing organizations, disability services, etc.), the observation that there are more similarities than differences among different types of agencies with regard to ICT needs

suggests that a more pragmatic approach based on geographic proximity might be most appropriate. Using existing networks and relationships (which are often geographical) as a basis for clustering could also be a useful starting point.

#### **What is the best financial model?**

The great diversity in levels of need and capacity to pay — especially when considered alongside the under-budgeting for ICT expenditure that is widespread in the sector — makes developing an appropriate financial model a challenge. If the service charges standard industry rates, affordability will be a problem for some of the neediest agencies; but keeping it cheap could undermine the service's own sustainability, and miss the opportunity to put gentle but constant pressure on management boards and funding bodies to properly fund ICT in the sector. A middle ground is required.

A mixed funding model may well be the optimal solution, with an appropriate cost-recovery service model (perhaps a subscription framework scaled to organization size or fee-for-service on a sliding scale?) supplemented by funding and in-kind support from government, philanthropics and the private sector.

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### What are sector priorities?

While individual agencies' needs vary according to their specific circumstances, there are a number of key ICT issues that are widely recognised as overall sector needs:

- overhauling admin systems and records management;
- improving ICT infrastructure;
- knowledge management and sharing;
- planning and budgeting adequately for ICT needs; and
- customized software development (e.g. client data systems).

But strategic ICT planning is probably the most significant need, as its absence is a key factor in the existence and urgency of the other needs.

### 2. A corporate ICT volunteering program

This proposal is for a skilled ICT volunteer matching service implemented as a partnership with the private sector. It could be modelled on iT4C's program and also draw from existing local models, such as the VCOSS Clearinghouse's skilled volunteering program. Its purpose is to assist CSOs to complete specific projects or fulfil specific roles that cannot be purchased commercially due to funding constraints. There is potentially some overlap with the shared ICT support service discussed above — skilled volunteers or 'circuit riders' could undertake specific projects — but, in the context of the sector's financial constraints, this would be complementary rather than a duplication.

### What could be the strengths of such a service?

Building a relationship with the private sector is a fantastic opportunity, especially given the need for the community sector to start considering and using ICT as core productivity tools — just as the private sector does. In addition to receiving the benefit of specific project work, agencies will be exposed to different ways of looking at ICT and valuing what supports and enables their core work.

The other great benefit is the in-depth exposure of IT professionals to the community service sector. As CSOs increasingly require core staff with skills in organizational development and systems management, they are more often looking outside the sector, but have difficulty finding suitable skilled people who understand the community service environment. Acquainting ICT professionals with the sector will build this understanding and increase the capacity of the industry to work more effectively with CSOs.

### What could be the weaknesses of such a service?

One concern is that a program such as this could reinforce the piecemeal approach to ICT that is already far too common in the sector. Time-limited and targeted skilled volunteer placements are great for undertaking specific tasks but many CSOs' needs are more complex and require a more developmental approach. If, however, skilled volunteers were called on to undertake specific tasks as part of broader developmental work (for example, a project undertaken by the sector-based ICT support service discussed above), this risk would be obviated.

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The level of commitment of volunteers is also considered potentially problematic, along with the impact of volunteer turnover. Some existing corporate volunteering programs operate by giving each employee one day per year paid time to volunteer in a CSO. This arrangement doesn't suit many of the types of tasks CSOs need assistance with, as even a small project often requires at least a few days — and having a different person each day is far from optimal. One volunteer for ten days is far preferable to ten volunteers for one day each. This kind of flexibility will be important if the program is to be successful.

A third concern is maintaining a consistent quality standard. The poor state of ICT infrastructure in some CSOs is often attributable to having relied on technicians with insufficient or inappropriate skills, and it would be unfortunate if this were replicated within a skilled volunteer program. Some form of accreditation or compliance to minimum standards would be needed; perhaps also some assessment of completed work.

Related to this is the risk that organization needs are not fully understood. Though many of the ICT needs of corporations and CSOs are similar, they operate in quite different circumstances and with fundamentally different priorities and goals. Bridging this gap will be critical. Once again, using skilled volunteers strategically as part of a larger project that has defined the necessary tasks will minimise this risk.

### **How would it be managed?**

Some sort of central facilitation or brokering would simplify access (a 'one-stop-shop') and maximise the capacity to match specific tasks with appropriately skilled volunteers. This would also simplify some of the issues around quality control and project definition, as volunteer training (including codes of conduct and an introduction to the community sector context), assessment and accreditation, mentoring and project oversight could all be handled by the coordinating body. Prior work with the CSO or their agent to determine the nature of the need and clarify the outcomes required would mean the volunteer could work with a clear brief (this project definition process is a fundamental part of iT4C's skilled volunteer program); it could also form the basis of a 'memorandum of understanding' between the CSO and the volunteer placement service that defines the nature of the relationship and specifies the outcomes.

The central body could offer ongoing support during placements — acting, for example, as a mediator if difficulties arise; or providing independent advice if required — and even facilitate mentoring between similar or neighbouring CSOs, matching up an organization with well developed ICT infrastructure or strategies with one in need of significant development.

Many projects may not necessarily require site visits — this opens up greater possibilities for volunteering, as geographical proximity in these cases will not be so critical. Additionally, some projects may be less demanding of experience and expertise and could be undertaken by ICT students under appropriate supervision.

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There was a sense that some form of financial contribution from CSOs would be beneficial in facilitating their commitment to the project.

#### **What is the risk of conflict of interest?**

While genuine corporate goodwill does undoubtedly exist, it must be recognised that corporations and CSOs are pursuing fundamentally different goals and that these goals cannot help but colour every area of activity — including what activities are undertaken and how priorities are set. Accordingly, it is critically important that the nature and objectives of partnerships are made clear, outcomes and outputs are predefined, and open and honest communication is maintained.

CSOs may also want to consider the ethical implications of the corporations they partner with. For example, some would prefer not to give implicit endorsement of the alcohol, tobacco, gambling and pharmaceutical industries by partnering with them. This is an issue on which different organizations are likely to have diverging views.

#### **What are sector priorities?**

Areas that would most benefit from corporate volunteer placements include:

- ICT strategic planning;
- on-the-job training and skills development;
- help with information management;
- ICT budgeting; and
- advice and problem-solving — sharing of knowledge about untapped possibilities.

Many CSOs will also need assistance developing procedures for handling volunteer placements, including celebrating volunteerism and giving volunteers due recognition.

#### **3. Demonstrating improved client outcomes from ICT investment**

Anecdotal evidence and simple common sense suggest that improving the ICT capacity of CSOs heralds efficiencies that must translate into improved client services — if through nothing else than freeing up time and resources to dedicate to core work. Developing a methodology to qualitatively and quantitatively demonstrate this flow-on effect would help CSOs convince management boards and funding bodies of the benefits of spending money on ICT projects to overcome systemic constraints and adopt new tools to improve the reach and effectiveness of their work.

#### **What outcomes are being sought?**

Funders are predominantly concerned with service throughput and quality. The accountability reporting systems they use are better at measuring throughput, and throughput ('outputs') is generally used as a proxy measurement. But there is clearly some potential in using a verifiable client outcomes measurement methodology to supplement existing reporting — especially if, by demonstrating the positive impact of ICT infrastructure, training and planning investment on client outcomes, it can leverage better support from funders for CSOs' ICT needs.

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Program managers are concerned with quality assurance and improvement and would value an instrument or methodology that could reliably evaluate client outcomes — especially to help assess the efficacy of different models of service delivery.

Frontline staff are interested in ongoing evaluation of their work as a way to analyse the usefulness of different practice approaches in different circumstances.

### **How do we measure these things?**

Measuring the impact of direct service work on clients' lives has always been challenging for number of reasons. On the one hand, every situation is different and the value of a situation or life change is dependent always on unique circumstances; on the other, there are always other factors in clients' lives that impinge on their situation, and it is sometimes difficult, if not impossible, to identify the efficacy of any one factor.

Qualitative research should be combined with personal stories to best assess client outcomes — narrative is probably the only way to adequately articulate the client situation and client-organization interaction. Qualitative data plays a supporting role.

Assessing the impact of an organization's work on clients' lives is not the only way to evaluate the positive impact of ICT development on a CSOs core work. The experience of the client in the interaction with the organization is equally significant and, usefully, much easier to evaluate. Many of the issues addressed by

the *Doing IT Better* case studies so far have a direct bearing on the client experience in the organization and are readily assessed quantitatively, for example, waiting times. Finding out what the clients value in their experience with an organization will help.

Feedback from both clients and staff about their perception of the impacts of changes in ways of working can be useful. Well-designed surveys or interview formats can yield detailed qualitative information and useful narrative. It must be recognised, though, that vulnerable people who come to an organization seeking urgent assistance often feel they shouldn't complain even if they have cause to — this can compromise the integrity of surveys and interviews about the quality of an organization's work. Instruments that allow anonymity can overcome this.

For agencies whose core work includes disbursement of information, evaluation gets a little simpler. It's fairly straightforward to measure website 'hits' and to track downloads of electronic publications. However the limitation of quantitative data — its inability to explore the question of quality — remains.

Probably the most important thing to consider when seeking to evaluate the efficacy of ICT development on an organization's services — whether using surveys, interviews, or other qualitative or quantitative instruments — is to ensure that good baseline data is collected first. All in all, the development of a comprehensive methodology to assess the quality of client outcomes and their connection with organization practices will be a challenging but immensely valuable piece of work.



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Although this discussion was primarily about measuring positive impacts on client outcomes, it should be remembered that another way to make a case for the value of investment in ICT systems is to look at the cost benefit. Both direct cost savings and the cost implications of time-savings can make compelling evidence to present to funders.

#### Using ICT for measurement of outcomes

ICT is an invaluable tool in any kind of evaluative process. The capacity to integrate analytical tools with existing datasets enables ongoing evaluation with relatively low overheads. If client records, for example, are stored in an electronic database, the data can be mined to extract the relevant information to conduct assessments. Of course, this presents a great irony — that we may need more sophisticated ICT systems to make a case for getting sufficient funding to implement the system in the first place.

Some of the most significant ways that integrated ICT data and analytical systems can be used include:

- collating pertinent information and identifying significant correlations for use in advocacy on social issues;
- tracking usage of resources;
- tracking measurable client outcomes;
- identifying trends in service demand, to aid planning and development;
- staff performance management; and
- tracking longer term changes in connection with community development work.

#### Third Conference: 'Things they never taught me about IT' - integrating IT 'know how' into community services education

18 June 2009

It had become apparent through the life of the *Doing IT Better* project that one of the great gaps was opportunities for formal and informal education about ICT in the community sector and it was felt worth exploring this issue as a conference theme.

For this event, a panel discussion was arranged, with presentations by Ron Weber, Dean of Faculty of IT at Monash, Margaret Alston, Head of the Department of Social Work at Monash, Brian Spencer, CEO Optin Solutions, and Andrew Clark, an academic researcher from the University of Newcastle, who also had considerable experience in the community sector in New South Wales. The day was formally opened by Lily d'Ambrosio, the Parliamentary Secretary for Community Development.

A USB stick with about a dozen free Open Source applications from portableapps.com was also handed out to each person attending so they could try different applications at their leisure and get used to the idea of a 'portable office' which included applications such as Open Office.

It was apparent from the discussion that the time was ripe for considerable cross-fertilization on ICT issues. The 40 or more people present represented a considerable body of knowledge which could help to develop new strategies to assist the sector with issues ranging from knowledge and information management to interoperability.

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Round table discussion developed responses to five key questions below:

### **1. What are the key education needs of the sector?**

All the workshop groups emphasized the need to train for, and maintain skills in the sector, but this required resourcing. There is a need for very basic entry-level skills, but some staff would also benefit from knowledge of Web2.0 technologies. At least for the basic levels, training could be linked to vocational training and core competencies, though, as with any form of training and education, this can put additional workloads and expectations on staff.

Some participants distinguished between 'hard' and 'soft' skills: there is highly variant knowledge of both. Hard technical skills are about the 'boxes and wires', ranging from elementary problem-solving to advanced network management, as opposed to basic software skills and others such as planning for IT or information and knowledge management, or more specialized fields such as paper and electronic records and archives management. This issue was lucidly described by Simpson at the Search Conference in 2002 (Simpson 2004).

This issue is linked to the fact that many people still have a very limited conceptual understanding of 'IT', so it becomes a question of 'how do you know what you don't know if you don't know what you don't know', and this can become a self-fulfilling problem, particularly in a changing environment. People are unaware of, or

don't know how to ask the right questions and where to ask or find out about good and best practices. There is also a continuing issue of how to locate and trust a reliable source of support and information, particularly from commercial organizations. There has to be, in the provision of educational and other support, a separation between commercial interests and objective advice, whether about 'technical' or 'soft' matters.

Additionally, there is the issue of the 'relative advantage' of ICT knowledge: some organizational committees and managers do not see the benefit of investment in ICT systems and knowledge (including education), or their priorities are focused on direct service, rather than longer-term investments. This is understandable, particularly when there is a high staff turnover and, for many organizations, funds are not available for non-priority activities. On the other hand, boards and committees need to come to terms with the need for an ICT-savvy organization to meet increasingly demanding reporting and accountability requirements.

### **2. What is the role of formal and informal learning?**

Many ideas were generated in this discussion and it was clear that many participants had considerable knowledge of and experience in workplace training and learning.

Internships and placement of students in the technology field are important ways to recruit a younger, IT-savvy workforce. Many students do not realize that there are a wealth of opportunities in the community sector for innovators, and the style and value set of organizations may suit many people more than 'corporate settings'. This is an important means by which to engage with Gen X and Gen Y, and recognition that they expect to move between jobs.

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Beyond the direct relationship between students and organizations, internships and placements are an opportunity for academics to develop long-term collaborative partnerships in terms of: higher and practical research in the sector's interests; the dissemination of accurate information; the promotion of social justice engagement in universities; and advocacy.

Tertiary and Further Education (TAFE) institutions could offer certificate courses for technical specialties, as well as areas such as information and knowledge management, or records and archives management in the following ways:

- technical skills level;
- customized courses;
- accredited courses;
- workplace delivered courses; and
- online learning.

The Adult and Community Education (ACE) sector, as a more informal provider and with its strong links to Neighbourhood Houses, many of which have computer labs, has a more flexible and adaptable environment for non-threatening and highly-affordable learning.

There also needs to be a place for the recognition of prior learning as well as task-based learning.

Higher level formal learning could occur, including the development of a cohort of community-sector people with PhDs obtained through industry funded scholarships with matching Commonwealth or other funding. They could become an important source of ICT leadership and wisdom for the sector.

### **3. What current programs do or do not meet these needs?**

There was less discussion on this issue than other topics, reflecting the general underdevelopment of ICT education to the sector and underlining the need for appropriate research into training needs.

Again there was a lack of knowledge about what was 'out there' or how to tailor accredited or non-accredited learning packages that do exist for the community service sector.

Workplace education could also take place through train-the-trainer techniques and enhanced informal learning. 'Catch-up' education could allow those past being involved in formal education to improve skills.

The direct and indirect cost of education programs was also mentioned. Affordability—both in direct financial terms and the staff time lost—is especially an issue for smaller community service organizations.

### **4. Who should be involved in developing these programs?**

The conference supported a collaborative approach, involving all stakeholders: VCOSS, IT specialists (whether technical or information and knowledge management, records specialists), the formal and informal information sectors, and higher education, as well as active engagement with ends-users in the sector.

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## INTEROPERABILITY

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Funding agencies such as federal Department of Health or Department of Family and Community Services should also be involved, as well as local government. But it was also important to identify priority issues, given the lack of specialist knowledge by many in the sector. Volunteers, including professional or retired IT volunteers, could play an important role.

### 5. How should such educational programs be resourced and made sustainable?

It was agreed that the sector itself had an important role in making such a project sustainable in the long-term, through resource sharing but, at the same time, government had a resourcing role to play as well. Sector champions could take an active role in delivering support and training locally, or brokering support relationships. Group purchasing models of training and support were also an option.

The role of corporate volunteers was also raised, as at the second *Doing IT Better* Conference, if joint-partnerships could be developed. There was seen to be a role for specialist ICT placements.

Community service organizations (CSOs) generate and collect different types of data and information for a range of purposes. The lack of harmonization and exchangeability between different information systems and quality frameworks leads to a disproportionately high administrative burden and limits organizations' capacity to make good use of the information they collect.

To address these issues, an Interoperability Working Group (IWG) was formed in 2008 to clarify the specific issues around data and information systems and work with government to implement appropriate reforms. Interoperability refers to a practice that enables information captured for one particular purpose to be subsequently exchanged and/or re-used for other purposes. The IWG operated according to its Terms of Reference, approved by the Steering Group. Membership of the group was:

- Richard Vines (Children's Protection Society)
- Pere Ruka (MacKillop Family Services)
- Rendle Williams (Salvation Army)
- Elaine Cope (ICT Matters)
- Greg Brady (Connections Uniting Care)
- Dean Lombard (VCOSS)

The IWG documented the nature and scope of the problem in its 2008 discussion paper *The Interoperability Challenge*. The *Addressing the Interoperability Challenge* forum held in March 2009 built upon this work by bringing together 46 key people

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<sup>6</sup> The IWG's terms of reference and papers can be accessed via <http://doingitbetter.net.au/issues/interoperability.htm>

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from the government, community, and academic sectors to explore possible solutions. This was followed in May by Addressing the Interoperability Challenge in the Victorian Community Sector, a short paper mapping out some concrete next steps that community sector peak bodies could undertake.<sup>6</sup>

### Findings

The Interoperability Challenge identified seven core challenges facing the community service sector:

#### 1. The fragmenting impact of multiple client data collection systems

A typical Victorian CSO might be engaged in a number of different service system contracts with different funding stakeholders — sometimes including both state and federal governments. Each funding body specifies what output data must be reported from the delivery of services. So each CSO needs to log performance-related data into several different data management systems. This is not only an administrative inefficiency; the resultant de-integration of performance data actually undermines the capacity of the CSO to create its own approach to data management and evidence-informed decision-making.

#### 2. The fragmenting impact of multiple quality assurance frameworks

Quality assurance frameworks are established through the overall policy environment and program management objectives for each funding body. These policy objectives can shift quite regularly with changing government priorities, turnover of ministers or senior

bureaucrats, and change of government. Funded agencies are required to demonstrate their compliance through different quality assurance frameworks and independent audit functions, each system being a discrete information schema in its own right. For CSOs to link the evidence of day-to-day activities multiple times with the different elements that make up each quality assurance information schema is an excessive demand on resources that reduces their capacity to deliver core services and address other urgent challenges.

#### 3. The lack of protocols and systems to support e-referrals

Modern community service practice to consider 'whole of situation' factors when working with vulnerable people has significantly increased the need for cross-sector referrals. Lack of interoperable data systems prevents the simple transmission of data between services from different sub-sectors (for example, from drug and alcohol service to housing service). This has a range of impacts, including the need to manually re-enter data from faxes or printouts (an administrative burden that also increases the likelihood of errors) and the client having to tell his or her story over and over again.

#### 4. The absence of a shared vision with respect to interoperability

Beyond the challenge of complying with privacy legislation, a significant technical constraint associated with the cross-sector data sharing is that different professional groups describe the elements of their

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schemas (and standards) in different ways. An interoperability framework or architecture, developed through collaborative research and community debate, is desperately needed to lighten the data management burden on CSOs by enabling the semi-automated and seamless transformation of content from one form of representation to another.

#### **5. The lack of agreed protocols to publish sector and program-specific standards**

CSO data and information management challenges are further complicated by the absence of agreements across different program domains about the need for formal publication of different schemas as standards. At the present time, these schemas are becoming manifest through the publishing of different data dictionaries. However, the practical difficulties still faced by ICT managers within CSOs highlight the need for a more comprehensive approach. Guidelines are required to ensure consistency and appropriate coverage when publishing sector standards, including quality assurance standards.

#### **6. The absence of content sustainability strategies**

Community sector archivists have for some time been concerned about the shift towards electronic records management. Contemporary content management information warehousing systems provide access to content in current formats; but changing technology platforms that make these formats obsolete could compromise future access. Systematic agreement on content sustainability strategies is desperately needed to secure continued access to information into the future.

#### **7. The lack of effective governance and partnership arrangements**

To develop more effective data and information management within the Victorian community sector, better governance arrangements must be established between all stakeholders, including government. Appropriate governance arrangements would do much to address the challenges outlined above.

The interest generated by The Interoperability Challenge led to the Addressing the Interoperability Challenge forum in March 2009. Forum participants strongly favoured continuing work on the issues via a VCOSS-convened Community of Practice and suggested a paper proposing concrete actions be tabled at a quarterly meeting of the VCOSS-convened Peaks and Statewide Networks Forum. This paper, Addressing the Interoperability Challenge in the Victorian Community Sector, was published in May 2009 and tabled at the Peaks Forum in June. Its six recommendations were:

##### **1. Support and advocacy for current reforms within the Department of Human Services (DHS)**

DHS, the most significant funder of CSOs, was working towards establishing common datasets across the department, an important and preliminary foundation for addressing interoperability challenges. However it was not clear that the work was sufficiently resourced to meet its objectives.

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## **2. Facilitate preliminary reform through supporting innovative projects**

The Addressing the Interoperability Challenge forum showcased a number of projects developing innovative ways to address interoperability problems. Partnership between researchers and CSOs is essential to ensure real world suitability.

## **3. Develop leadership and governance systems incrementally**

Current information systems do not meet the real world needs of CSOs. Involvement of all key stakeholders in the development and management of information and interoperability frameworks is essential to ensure that they meet the actual needs of all parties.

## **4. Incorporate a 'Design for Interoperability' imperative into all program management frameworks**

This would ensure that all data and information systems that relate to or support funded programs are conceived within a broad systems framework that supports CSOs' needs to interoperate across multiple service systems. It would also build a foundation for compliance with future records archiving requirements.

## **5. Support coordinated involvement of multiple universities in research**

An annual meeting could be set up of representatives of CSOs with relevant faculties or research units of Victorian universities to discuss and coordinate research into aspects of interoperability challenges, including mechanisms to develop 'sector portals' enabling

access to evidence-based research related to specific practice challenges. The latter would capitalize on the opportunities offered by interoperable systems and facilitate a stronger evidence-informed decision-making culture within the sector.

## **6. Develop an integrated advocacy strategy**

Interoperability provides many opportunities for the sector to identify, analyse and advance evidence-based advocacy issues by simplifying access to a wider range of service data. Pursuing it as a strategic advocacy aim would empower the community sector to better address its interests and needs — and those of its clients — when negotiating with governments over funding and service agreements.

Most of these are ongoing medium term tasks that would benefit from the presence of a resourced Interoperability Reference Group within the sector. The IWG subsequently reviewed its work so far and identified three broad needs, each comprising two distinct elements that must be pursued to progress the work:

### **1. Information management reform**

- Performance data reform including standardizing data definitions and formats to enable full interoperability.
- Quality assurance reform to allow harmonization between different frameworks and streamlined reporting processes.

## 2. Leadership and coordination

- A governance group comprising government and community sector representatives to plan and oversee the implementation of the reforms.
- A research and technical forum to keep abreast of innovative work in the academic and ICT sectors that is relevant to information management and system integration.

## 3. Capacity building

- An affordable information and training program targeted to community sector needs in information management and ICT.
- A community sector ICT leadership group focused on facilitating technical sustainability and change management within the sector.

### Outcomes

Highlighting and making progress on the problems of multiple data entry and lack of data interoperability has been one of *Doing IT Better's* most significant achievements. These problems have plagued the community sector for decades—and become worse in recent years as data collection and quality assurance has moved to an electronic framework. Before the *Doing IT Better* interoperability project there was no sector-focused analysis of cohesive voice on the issue. The IWG has not only described the problems in detail and devised practical solutions, and it has also proactively engaged government and the academic sector to begin making those solutions a reality. This has already yielded fruit. The Office for the Community Sector undertook a quality assurance data mapping

pilot project as a direct result of issues raised at the *Doing IT Better* Interoperability Forum. Additionally, while it is impossible to draw a firm connection with the Interoperability project, the information systems reform process within DHS continues to be adequately resourced and is making solid progress.

While there is still quite some way to go, the fact that the issue is on the map at all in the sector is evidence of the effectiveness of this aspect of the project.

*[The] Interoperability Working Group ... has played a catalytic role in highlighting some of the complex information and data management problems confronting CSOs and the community sector as a whole ... I was particularly grateful for the support leveled by [Doing IT Better] when the Victorian Government's Office for the Community Sector decided to follow up some of the ideas [from] the Interoperability Forum held on the 5th of March 2009.*

Richard Vines, Quality/Knowledge Manager, Children's Protection Society

*It is comforting to know that there is finally some support within the sector to deal with the major issue of multiple funder data reporting frameworks and the limitations in being able to use that information for internal evaluation and planning purposes.*

Geoff Willett, Manager Corporate Services, Quantum Support Services

*In regard to the interoperability issue, the thinking and work that was done was a terrific foundation from which to clarify the state of play of this issue in Victoria.*

Rendle Williams, Social Programme Information Management (SPIM) Project Manager, Salvation Army (Australia Southern Territory)



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# Communications

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## ONLINE PLATFORMS

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The domain name [www.doingitbetter.net.au](http://www.doingitbetter.net.au) was registered early in the project's life. There were high ambitions for the website to become the major communication hub for the project, publishing all reports on case studies, as well as help guides and a possible bulletin board. Achieving these goals, however, proved beyond the scope of the project due to limited staff time, and only a modest amount of original information was published. Publications included information and reports from the Interoperability Working Group, some case study reports, information about conferences, and information and resource material from seminars. At the same time, many people indicated that they preferred person-to-person contact to web-based interaction. This is a good reminder that, while it has a key role to play, a website is not the be-all and end-all of awareness raising, information, and education. There is no substitute for good person-to-person contact, including meetings, phone calls, and even personalized emails. Nevertheless, the *Doing IT Better* website proved to be extremely useful as an information resource, publication disseminator and gateway to online registration for workshop participants (via an online registration service, [trybooking.com](http://trybooking.com)).

In addition, the project experimented with a number of project management platforms, including Basecamp ([basecamphq.com](http://basecamphq.com)), in order to develop an open and inclusive system for the sharing of ideas and documentation between as many people as possible. There were two issues which arose with Basecamp. Firstly, some people found the actual system difficult to use; secondly, bulletin-board conversation was limited to very few people and then it dropped off. Once again, this is a known problem with online groups and collaborative systems: diffuse interests do not necessarily congeal through online systems.

In retrospect, the drop-off also reflected the tentative beginnings of the project. After some months, a much smaller group of active participants coalesced in an emerging Community of Practice, while many people were satisfied to be active participants in events rather than contributors to the Basecamp process.

The most successful form of communication turned out to be a predominantly 'one-to-many' email system through [freelists.org](http://freelists.org), maintained by VCOSS; this necessitated careful maintenance of an email database, reflecting the reality of good online communications management. The [freelists.org](http://freelists.org) system also allowed recipients to post to the list; this functionality, though not routinely used, was highly effective for information-sharing and advice-seeking.

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## PUBLICATIONS

Stillman, L. and T. Denison (forthcoming). The 'Good Society' and ICTs: an exploratory study. *Gunilla Bradley Festschrift*. A. Mirijamdotter and D. Eriksson. Hershey, PA, IGI Global.

Stillman, L. and R. French (2009). 'Doing IT Better': How does the welfare sector act with technology? *Community informatics-Prospekts for communities and action* L. Stillman and G. Johanson. Newcastle, UK, Cambridge Scholars Publishing.

Stillman, L., S. Kethers, et al. (2008). Representing practice wisdom: adapting corporate modelling for better welfare practice. *10th Australian Conference for Knowledge Management and Intelligent Decision Support*. Ballarat.

Stillman, L., S. Kethers, et al. (2009). 'Adapting corporate modelling for Community Informatics.' *VINE: The Journal of Information and Knowledge Management Systems* 39(3): 259 - 274.

Stillman, L. and H. Linger (2009). 'Community Informatics and Information Systems: how can they be better connected?' *The Information Society* 25(4): 1-10.

Stillman, L. and J. McGrath (2008). 'Is it Web 2.0 or is it better information and knowledge that we need? .' *Australian Social Work* 61(4): 421-42.

Vines, R., R. Williams and D. Lombard (2008). The interoperability challenge, VCOSS, Melbourne (report available at [www.doingitbetter.net.au](http://www.doingitbetter.net.au)).

Vines, R., K. Flanagan and D. Lombard (2009). Addressing the interoperability challenge in the Victorian community services sector, VCOSS, Melbourne ( report available at [www.doingitbetter.net.au](http://www.doingitbetter.net.au)).

Project updates and topical essays also appeared in VCOSS's monthly publication Noticeboard and were disseminated via a dedicated email list.

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## PRESENTATIONS

### Academic Conferences

Prato (Italy) Community Informatics Conference 2007, Larry Stillman.

10th Australian Conference for Knowledge Management and Intelligent Decision Support. Ballarat. Larry Stillman, Stefanie Kethers, Rebecca French.

### Sector Conferences

Making Links 2007 (Sydney), 2008 (Melbourne), 2009 (Melbourne).

Connecting Up 2008 (Brisbane), 2009 (Sydney).

Strengthening Disability Advocacy - Working Together 2009 (Melbourne).

Association of Neighbourhood Houses and Learning Centres (ANHLC) Annual Conference 2010 (Sale).

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## APPENDICES

# Appendix I: Initial project funding proposal

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Empowering community organizations and the people they serve through better use of technology

### Introduction

This is an application for support for a project of the Victorian Council of Social Service and the Centre for Community Networking Research at Monash University in Australia. The aim of the project is to address systemic inequalities in the use of Information and Communication Technology (ICT) by charitable/ community organizations in their work to enhance the well-being and independence of people in need.

Community service organizations in Australia play a critical role in the provision of direct support to the homeless, hungry, unemployed, under-skilled, and disadvantaged. As it is expected that people who receive public benefits develop social skills and seek paid employment, such organizations are critical for helping those on public assistance to become effective members of society.

However, these organizations are falling behind in their capacity to help those in need, in part due to their inability to keep pace with the technological revolution. In fact, the rapid advance of technology into every facet of work and social life threatens to increase the divide between the 'haves' and 'have-nots' of Australian society. It has reached the stage that for effective social functioning, both individuals and the organizations who help them need to have technological skills or risk marginalization from mainstream social and political life.

Community service organizations, therefore, need help in order to:

- keep pace with their clients' needs to acquire technological skills to meet government and prospective employer expectations;
- maintain clear organizational links to government agencies which increasingly require electronic communication; and
- capitalize on opportunities for communication with fellow community service organizations which increasingly use electronic means for networking and collaboration on projects of mutual value;

### Goal of the project

To enable community service organizations to significantly improve both their organizational technological expertise and their ability to transmit that expertise to their clients – ultimately empowering both.

### Specific aims of the project

1. To improve advocacy at the case level, enabling individual clients to acquire technological skill and to become independent and take control of their lives.
2. To lead to better support of people in their interactions with government agencies such as Centrelink (the Australian welfare payment agency) or in teaching them how to apply for jobs online.
3. To help organizations to overcome clients' and workers' fear of and aversion to acquisition of computer skills.
4. To set in place mechanisms to train organizations to better manage the computer facilities they have.
5. To help to make people who work and volunteer in community service organizations better users of the technology themselves, and to pass on their knowledge to other people so that their learnings are not lost.
6. To enable community service organizations to use new, timesaving forms of communications such as video conferencing or internet phone services which can bring together workers and clients who may be scattered across large distances—effectively expanding services to those who may not otherwise have access.
7. To raise awareness by government, business and philanthropic foundations of the importance of supporting effective use of technology for the benefit of disadvantaged people and their support organizations. This will lead to better resourcing of the sector.

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### **Project manager**

The Centre for Community Networking Research (CCNR), School of Information Management & Systems, at Monash University, aims to understand how communities and community service organizations are using new technologies. It is an academic research unit engaged in community-based research. In the past it has undertaken several projects concerned with improving the capacity of communities and community service organizations with regard to ICT, including work with low-income and disadvantaged communities, and social welfare organizations. Its familiarity with low-cost and innovative ICT tools and practical knowledge of the community sector make it an ideal manager of the project.

The principal investigator will be Dr. Larry Stillman. Dr. Stillman helped in founding CCNR and has been a Research Fellow at the Centre since 2000. He brings to the project his strong conceptual and communication skills which are applied to practical problem-solving. He has undertaken in the past small short-term pilot projects in selected communities to identify what possible problems exist. The present proposal is a large scale work with diverse organizations from both urban and rural communities not only to identify diverse problems but to implement appropriate solutions.

### **Project partner**

The Victorian Council of Social Service (VCOSS), established in 1946, is the peak independent coordinating body of the social and community service sector in the state of Victoria, Australia. VCOSS and its counterparts in other states form ACOSS, the national umbrella coordinating body. The existence of these bodies presents an extraordinary potential opportunity for this project to help community organizations nationwide to address the deficits they face in technological capability and expertise. By working with and through VCOSS, this project will be able to impact on hundreds of community-based organizations and the people they serve. More specifically, the project through its partnership with VCOSS will:

- Provide a trusted skills and knowledge base of people and documentation to which all VCOSS members can turn to find practical, sustainable, and meaningful solutions to their technological difficulties.

- Use the VCOSS network to replicate best practices in addressing the divide between the technologically proficient and technologically deficient groups and individuals in Australian civil society.
- Expand communication and collaboration among VCOSS members via a collective approach to solving problems and sharing solutions.
- Enhance funding opportunities for community organizations through providing the research base to justify the need for support from the government, business and the philanthropic sector.
- VCOSS would specifically provide a research assistant. The project also seeks additional funding support of this half-time worker at VCOSS for the life of the project. The project assistant would act as the direct support to the principal investigator, with specific tasks including:
  - Direct liaison with VCOSS members and other community based organizations, including optimising communication and information dissemination with the wider community, including presentations at VCOSS and community service organization meetings, conferences, and related events.
  - Development of awareness raising and publicity materials, website materials and project communication tools.
  - Development of funding and policy submissions to government, business, and philanthropic organizations.
- Assistance in the conduct and resourcing of the activities of the VCOSS Working Group (see item 3 under Project Description below).
- Assistance in the conduct and write-up of intensive field work with target organizations, including the development of solutions, problem solving, liaison with the VCOSS Working Group (see item 3 under Project Description below), and others.
- Assistance in the conduct and write-up of evaluations through the life of the project.

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## Project description

The project would encompass the following activities:

1. **A one day conference scheduled for 24 April 2007.**  
This is a one day 'ideas' event to introduce the project, gather ideas, and identify technology-related concerns from representatives from about 60 welfare organizations. Representatives from charitable foundations and government will also be invited to participate. This will be facilitated by Prof. Randy Stoecker from the University of Wisconsin-Madison, a community-based research and community development specialist with much experience in this area. A report for sharing these findings with the VCOSS constituents will be prepared and distributed. Feedback from all VCOSS members will be invited. This portion of the project is being currently supported through the donated time of Dr Stillman, and some paid time of VCOSS. The Victorian Department of Communities and CCNR are defraying the cost of food and facilities for the day. Prof Stoecker has received a travel grant from his university to support the workshop as part of a short trip to Australia. If the entire project is not funded, including follow-up to the conference, future stages will be put on hold until funding can be secured.
2. **The establishment of a CCNR/VCOSS Steering Committee** to oversee the project work plan and provide accountability. It will meet several times a year, commencing May 2007. Progress reports will be delivered to each of these meetings.
3. **The establishment of an ongoing Working Group composed of VCOSS members** to help develop a work plan for addressing the top priority issues that have been identified, and to establish an online resource base for community service organizations. Where possible, the Working Group itself, with the participation of Dr. Stillman, will develop and implement solutions and strategies for community service organizations. This Working Group will be convened and resourced by CCNR and VCOSS to meet at least monthly. The Working Group is expected to become a leadership group for the sector on these issues through developing solutions and projects for the sector as well as a skills and knowledge base.

4. **More in-depth research and development work** with a number of organizations to apply the strategies that have been identified in order to provide 'case study' material for the Working Group and also to be shared more widely as examples for the welfare sector. Participant organizations will be identified via the April 2007 Conference and recommendations of the Working Group. They will reflect a mix of geographic location, client type, service provided and organizational size to enable the development of strategies and support plans that will be relevant to a range of organizations.
5. **Evaluation.** An overall evaluation of the project will be undertaken in conjunction with the Working Group as well as ongoing (summative) evaluation activity. A schedule of reporting dates will be developed by the Working Group, based on key questions developed by them.

### Methodology: community-based research

The project will employ a community-based research approach to accomplish the project aims. Community-based ('participatory') research is different from traditional social research, which identifies a problem, investigates it, and proposes a solution that is usually delivered in report form that is intended for an academic audience alone. Community-based research values the engagement of the community or people being researched at every stage of the research process and the results will directly impact community service organizations and the people they serve on a daily basis.

Community-based research is a dynamic, iterative form of research, characterized by the following:

- Community partners are involved at the earliest stages of the project, helping to define research objectives and having input into how the project will be organized.
- Community partners have real influence on project direction — that is, enough leverage to ensure that the original goals, mission, and methods of the project are adhered to.
- Research processes and outcomes benefit the community. Community members are hired and trained whenever possible and appropriate, and the research helps build and enhance community assets.

	2007			2008				2009				2010
	Apr-June	Jul-Sep	Oct-Dec	Jan-Mar	Apr-June	Jul-Sep	Oct-Dec	Jan-Mar	Apr-June	Jul-Sep	Oct-Dec	Jan-March
Commencement & Ideas Conference												
Steering Committee (tri-annually)												
Working Party	Formative stage											
Case Studies	Formative stage											
Formative & Final Evaluation/Report												

- Community members are a part of the analysis and interpretation of data and have input into how the results are distributed. This does not imply censorship of data or of publication, but rather the opportunity to make clear the community's views about the interpretation prior to final publication.
- Productive partnerships between researchers and community members are encouraged to last beyond the life of the project. This makes it more likely that research findings will be incorporated into ongoing community programs and therefore provides the greatest possible benefit to the community from research.
- Community members are empowered to initiate their own research projects which address needs they identify themselves.

Adapted from University of Washington, School of Public Health

[<http://sphcm.washington.edu/research/community.asp>]

### Proposed timeline

The project is conceived as a three-year process, starting on 1 April 2007. Three-year support is called for because:

Participatory, community-based research, that is, research that works with people and seeks their knowledge and skills to frame questions and find answers, takes time to gather momentum.

There is a need for longer-term studies, rather than a short-term 'snapshot' which is inadequate for long-term planning and sustainable results. This is particularly needed in community and technology projects which bring very different perspectives and practices together. Not all elements can be conducted at once, but must be conducted sequentially as new knowledge and insight

is gained. Some of the in-depth studies may in fact require—and be worth—considerable time and effort because they will uncover new understandings and skills that would otherwise be lost.

Time is needed for planning and consultation and alteration of strategies so that the maximum impact on community service organizations and individuals can be achieved.

Additionally, Monash University has strict ethics requirements which must be passed by its Ethics Committee before field work commences. This takes a minimum of eight weeks to obtain and all participants must provide informed consent.

Time is needed to engage in work towards getting further resources for the future sustainability of the project's outcomes from government, philanthropic trusts, and business.

Adequately evaluating and writing up such projects for different audiences takes considerable time and effort (e.g. welfare sector newsletters as opposed to academic papers); it is likely that there will also be demand for speaking and presentation engagements locally, due to the innovative nature of the project.

### Proposed reporting schedule

- **Conference Report** May/June 2007
- **Progress Reports to Steering Committee** June 2007 (= Conference Report, above), Sept. 2007, Dec. 2007 (Similar for following years)
- **Final Report Draft** December 2009
- **Final Report & Evaluation** March 2010

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## Conclusion

Support of community workers and their organizations is critical to developing the well-being and independence of people in need. Most of the charitable/community service organizations that constitute the VCOSS membership operate on shoestring budgets. Thus, a critical dimension in successfully negotiating the modern working world—technological proficiency—has been sorely neglected. The result is that community workers lack the ability to cross this divide, as well as the expertise to guide the homeless, the hungry, and/or the unemployed to negotiate this divide for themselves.

This project engages community service organizations in overcoming the existing structural inequality that would relegate the people they serve to a technological underclass. It takes concrete and meaningful steps to empower disadvantaged people and provide access to the technological advantages of a privileged society.

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## Appendix II: Terms of reference for the Reference Group

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### **Doing IT Better Reference Group**

The role of the *Doing IT Better* Reference Group is to help the *Doing IT Better* project deliver on its objectives by ensuring it is responsive to the needs and serves the interests of community service organizations and the community sector as a whole. It is also a repository of community sector expertise that the project can draw from.

It is anticipated that the Reference Group will evolve into a community sector-based ICT working group that will continue to champion ICT issues beyond the life of the *Doing IT Better* Project, and pursue and engage with future funded programs to support the sector's ICT needs.

### **Terms of Reference**

The *Doing IT Better* Reference Group will:

- Formally represent the interests of community sector organizations and the community sector to the Steering Group.
- Provide feedback to the Steering Group on project implementation matters.
- Appraise the Steering Group of opportunities or obstacles afforded by the social, political or public policy environment.
- Communicate issues raised by community service organizations participating in the project — and the sector as a whole— to the Steering Group.
- Communicate issues raised by the Steering Group to community service organizations participating in the project and the sector as a whole.

### **Composition**

The *Doing IT Better* Reference Group will comprise 8-12 members drawn from community service organizations, local governments, and community-oriented it service providers, with community service organizations comprising at least half. Members of the project team and representatives of auspicing organizations are ex-officio members of the group.

### **Meetings**

Meetings will be held every second month, in alternate months to Steering Group meetings. Meetings will be held at VCOSS or elsewhere by prior arrangement.

Members of the Reference Group

#### **Current**

- Pere Ruka (Mackillop Family Services)
- Elaine Cope (ICT Matters)
- Prof. Ron Weber (Monash University)
- Michelle Alchin (City of Port Phillip)
- Natalie Collins (Infoxchange Australia)

#### **Former**

- Jinny McGrath (Springvale Community Aid and Advice Bureau)
- Carolyn Cartwright (City of Hobson's Bay)
- Monique Cosgrove (City of Port Phillip)
- Jason King (Consultant)
- Matthew Colledan (Norwood Association)



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## Appendix III: Defining the community sector

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By the community service sector—and community service organizations—we mean those non-profit organizations that are directly engaged, through both paid and non-paid (volunteer) activity, in the provision of community advice and information, community services, and related services for people in need. This is a purposely narrow definition<sup>7</sup>, which confined the interest of the *Doing IT Better* project to a smaller group of organizations within the larger overall not-for-profit (or NFP) sector, which includes 600,000 plus groups, including sporting clubs, religious organizations, cultural and recreation organizations, health organizations and so on (Australian Bureau of Statistics 2001).

In June 2000 there were 341,447 people working for what the Australian Bureau of Statistics (ABS) calls the community service sector, in a total of 9287 organizations. The sector engaged in \$10.7 billion of direct expenditure, with just over 2,000 organizations in Victoria (the focus of the project) expending over \$2.5 billion (Australian Bureau of Statistics 2001). According to another ABS definition of 'social services organizations', at the end of June 2007 there were 5,769 not-for-profit social service organizations in Australia. These organizations employed 221,549 people at the end of June 2007 and were characterized by a large part-time and casual workforce. Industry value added by these organizations was \$6.7 billion, though a state-by-state breakdown of figures is not available (Australian Bureau of Statistics 2009).

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<sup>7</sup> There are definitional issues which are complex but outside the ambit of this report Lyons, M. (2001). *Third sector : the contribution of nonprofit and co-operative enterprises in Australia*. St Leonards, N.S.W., Allen & Unwin.

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## Appendix IV: The Productivity Commission and ICT

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The recent Productivity Commission report *Contribution of the Not-for-Profit Sector*, which received submissions from many non-government organizations, has a number of recommendations and other findings of particular interest to the *Doing IT Better* project; for the sake of convenience, they are discussed here, in addition to some other relevant reports and literature.

To take advantage of ICT opportunities, NFPs [Not for Profits] need the resources—funding and skills—to develop, purchase and implement ICT solutions. They have to see that such investments will bring about not just productivity improvements but better outcomes for workers, members, participants or clients. While resource constraints explain slow adoption of ICT for many NFPs, some are reluctant to adopt new technologies where these alter control over information or valued traditional approaches. Training and support for implementation of ICT solutions should be part of capacity building programs, whether in governance, financial management or evaluation. Governments engaging in sector development activities should ensure that ICT issues are mainstreamed and that NFPs develop ICT strategies along with other business development planning. The choice of which systems to use should, however, be left to the NFP management to decide. The exception to this general rule is where adoption of a common system can greatly facilitate efficiency and effectiveness (Productivity Commission 2010: 231).

In addition, the Productivity Commission's five key aims for industry reform are ultimately based upon an assumed effective use of ICT for all manner of information and knowledge storage, retrieval and communication. The first point below, in particular, is an admission that information and knowledge management and data interoperability are essential for increasing productivity in the following areas:

- Knowledge systems that support understanding of the sector by itself, government and business, as well as building an evidence base for learning about effective social intervention and public policy measures.
- Clearer governance and accountability via a consolidated regulatory framework that provides a simple one-stop-shop for Commonwealth registration and tax endorsement for NFPs. The principles of proportionality and 'report once, use often' should underpin all reporting requirements. Further, regulation at State and Territory level could be more consistent and appropriate.
- Improving arrangements for more effective sector development to promote development of support services for the sector (intermediaries), stimulate cooperation, build skills in governance, business planning and evaluation, promote workforce sustainability, and enhance access to capital.
- Stimulus for social innovation to develop new and better ways of tackling social problems and other issues where the benefits are largely to the community, rather than financial returns.
- Relationships building to strengthen collaboration and effective engagement especially in the delivery of government funded services.

(Productivity Commission 2010: xxxiii-xxxiv)

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The Commission also notes that there has been a relatively low uptake of ICT in the sector (Productivity Commission 2010: lviii), but this contradicts the evidence of the recent Infoxchange study (Infoxchange 2009). What is probably closer to the truth is that there is a low effective use of ICT, for internal management, reporting, or service delivery, given the widespread presence of computers and other devices in Australian society.

Additionally, Recommendations 9.1 and 9.2 of the Productivity Commission's report also read as follows:

**RECOMMENDATION 9.1**

Information and communication technology has the potential to enable more cost-effective and higher quality human services. With due considerations to protocols for protecting privacy, in specific service areas, Australian governments should explore the potential for selective sharing of client information between agencies and not-for-profit organizations and other providers, through the utilization of enhanced information and communication technology.

**RECOMMENDATION 9.2**

State and territory governments should review their full range of support for sector development to reduce duplication, improve the effectiveness of such measures, and strengthen strategic focus, including on:

- developing the sustainable use of intermediaries providing support services to the sector, including in information technology;
- improving knowledge of, and the capacity to meet, the governance requirements for not-for-profit organizations' boards and management; and
- building skills in evaluation and risk management, with a priority for those not-for-profit organizations engaged in delivery of government funded services.

However, despite its important work, the Productivity Commission takes, overall, a rather narrow approach to the problem of ICT in the sector, because it does not appear to take into account the broader connection between social-technical capacity building through investment, rather than in more narrow issues of data-sharing, accountability and reporting. It is not just a matter of ICT 'solutions', but a more profound transformation of the sector to become effective innovators and users of ICT to improve internal and external information and knowledge activities.

As a first step, the *Doing IT Better* project has shown that it is possible to a) develop significant sector articulation on a broad range of ICT issues, b) set in place a process for effective dialogue, and c) develop sophisticated recommendations for consideration.

**Inputs, Outputs, Impacts**

The Productivity Commission said that:

Measuring the contribution of the sector gives rise to a number of challenges. These include the expense of undertaking measurement, the difficulty of measuring intangible contributions and producing comparable results, and the possibility that measurement may encourage organisations to focus on activities which are easier to measure rather than those which deliver the greatest social benefit (Productivity Commission 210: 32).

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As the Commission observes, community service organizations are focused on process as much as on what they do, to deliver the greatest 'social benefit'. A desire to engender trust, the use of volunteers, and a concern for capacity building are what distinguishes the sector from for-profit business or government. But measuring what are often intangible or complex social outcomes is very difficult, particularly when combined with a desire for efficiency and effectiveness. Accountability requirements from funders also increasingly require investment in ICT and people to manage data, even though organizations are not funded to do so, and 'overheads' are not recognized in funding formulae or as legitimate costs by boards. Many organizations have to sacrifice funds from other areas of operation such as direct client services in order to fulfil accountability requirements (Victorian Council of Social Service 2009).

#### **Are drivers of efficiency and effectiveness in the sector different?**

Understanding the motivations of the NFP sector and its limitations is essential to assessing what can be done to improve the efficiency and effectiveness of the sector and its scope for engagement with government and the business sector. Key features of the sector include the following:

- NFPs are established for a community-purpose.
- Many NFPs add value to the community through both the delivery of services and the nature of their production processes.
- Many of the activities of the NFP sector would not be undertaken by the for-profit or government sector.
- NFPs can be more effective than government or business in bringing services to marginal groups in society and in facilitating collective action where their non-profit character and centrality of relationships engenders trust.

- NFP activities may generate benefits that go beyond the recipients of services (spillover benefits or positive externalities), such as reducing social disadvantage, increasing social inclusion and facilitating a strong civil society, with smaller community-based bodies playing an especially important role.
- Overheads are seen as 'bad' by many uninformed donors. This has resulted in underinvestment in planning and evaluation of activities, and less spent on other administrative activities than is desirable.

(Productivity Commission 2010: xxix)

In order to provide evidence about real social outcomes and impacts as well as the link to good organizational investment, there has been increasing interest in what has become known as Social Return on Investment (SROI) as a means of developing better forms of accountability measurement around issues such as efficiency and effectiveness (Cabinet Office [UK]. Prime Minister's Strategy Unit 2009). However, because ICT is increasingly part of the work of many community service organizations, ICT also needs to be considered as an essential part of the SROI research agenda. If ICT is considered as part of the SROI 'bundle' this could then lead to the development of tools which offer CSOs a way to meaningfully demonstrate the social (and economic) worth of investment in ICTs and the way in which they add value to the capacity of organizations, communities, and individuals through such things as better data management or effective, ICT-linked forms of client service.

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## Appendix V: Project theory and concepts

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### OPEN KNOWLEDGE

Early on in the project, we developed the principle of ‘Open Knowledge’, akin to the principles that have emerged in the Open Software movement (Lessig 2005): that it would best benefit the sector to share as much information and knowledge as possible, whether in published reports such as those on the website, or the sharing of information between participants in workshops. This will then lead to further creativity and new solutions and initiatives. We believe that such robustness in practice is achieved through collaboration and information sharing among a community that embraces this principle.

### TECHNOLOGY IN COMMUNITIES

In this project, we have worked with the axiom that ICTs can benefit communities if used effectively, and that effective use can only come about through working with a community or community-based service organization.

There has been considerable research on ICT effects in business, government and other large organizations, but its effects on the community sector have been under-researched. While there have been surveys of ICT which provide broad statistics, there is little hard data on the cultural effects of ICT and contemporary information and knowledge processes in community service organizations and their client communities. Furthermore, researchers have focused on the identification and solution of problems or the creation of products for business or government, but the output and impact concerns of community service organizations are somewhat different. This is where a different perspective is required.

### COMMUNITY INFORMATICS

Community Informatics is a field of research and practice devoted to promoting the use of ICT for positive social change in local and linked virtual communities. It brings together academics and practitioners from fields as diverse as social work, community development, management, information systems, or education. Gurstein has provided the useful definition that Community Informatics has:

[A] commitment to universality of technology-enabled opportunity including to the disadvantaged; a recognition that the ‘lived physical community’ is at the very center of individual and family well-

being—economic, political, and cultural; a belief that this can be enhanced through the judicious use of ICT; a sophisticated user-focused understanding of Information Technology; and applied social leadership, entrepreneurship and creativity (Gurstein 2007: 12).

Community Informatics is not just an academic research field, but an attempt to engage ICT in social action and social change. The idea of ‘effective use’ for social purposes is also of strong concern to Community Informatics (Gurstein 2003) and ties in with the discussion of outcomes and impacts of investment in ICT, discussed previously (see Appendix IV).

Community Informatics also draws upon the theory and practice of Community Development, an area of theory, research, and practice which focuses on the fulfilment of three goals, particularly at the local level: self-help, the fulfilment of felt needs, and increased social participation in communities. The effective conjunction of these goals leads to social solidarity, personal and institutional organization, and personal and institutional capacity (Bhattacharyya 1995). Community sector organizations are particularly important in this process, because:

Community and voluntary sector groups and organizations form the bedrock of community life through the planning, organization, provision, and support of community activities and services. Although usually under-resourced and over-stretched the community and voluntary sector play a significant role in building and sustaining community. (Schuler and Day 2004: 13)

Additionally, in the human services field there is a small, emerging stream of writing and research which understands technology in a distinct way as a set of responses and a body of knowledge for working with ambiguous and equivocal situations, including the ‘head and heart’ work of community services, counselling, and community development (Stillman 2006). Artefactual technologies are drawn into this process, and the challenge is to integrate them in a non-prescriptive, rationalizing way. Such techniques cannot be easily codified or challenged through one-dimensional technology or imposed reporting systems (Harlow and Webb 2003). Research, planning and implementation needs to be much more attuned to the perspectives of significant and highly influential ICT researchers such as

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Orlikowski, who provide a rigorous means of analyzing interactions between people and technology in different organizational cultures (Orlikowski 1992; Orlikowski 2000) .

Orlikowski has suggested the suitability of her methods to non-corporate environments, as well as further study of the 'the meanings and emotional attachments that users develop for the technologies they use' (Orlikowski 2000: 423). This is because the approach which she and others have developed, drawing upon structuration theory (Giddens 1984), produces data that is far richer and useful than that found in conventional soft-systems approaches which, typically, have a too simplistic and underdeveloped approach to 'human factors' (Rose 1999; Orlikowski and Iacono 2001). This is precisely the kind of information that we have endeavoured to make known in this project.

### INSIGHTS FROM FEMINIST RESEARCH

Additionally, feminist research notes that social support, particularly in disadvantaged communities, is largely still women's work and many clients are women and their dependents (Hanson and Pratt 1995). There are core reasons for this place-based phenomenon. Locally-based community agencies can be seen as 'sites of enaction' (Permezel 2001: 57ff), in which the private world of home and care (overwhelmingly performed by women) is brought to bear upon the face of public citizenship and interaction. The Australian perspective developed by Permezel is one also supported by research elsewhere, such as that by Stall and Stoecker (1998), who argue that the role of gender in what they term 'community organizing' (the American term for community development), has been overlooked by scholars until recently, notwithstanding controversies about the danger of applying essentialist categories to gender (Martin 2002).

Much community service work is thus constructive around helping narratives and activities constructed by women, and these are far less amendable to being easily classified or analyzed in a causal way as one might consider processes in manufacturing, where dollar values are easier to impose. Furthermore, the causal effects of information on client behaviour can be difficult to demonstrate because the connection between most clients and the organization stops when the case is 'closed'. The client's life decisions are that person's decisions and in a democracy, by and large, we do not track people.

Additionally, despite the dangers of gender essentialism, the foundational work of such scholars as Carol Gilligan on how women communicate cannot be ignored in discussions of the interaction between ICT and community sector organizations. Women communicate in a different way to men. Thus, she writes:

The failure to see the different reality of women's lives and to hear the differences in their voices stems in part from the assumption that there is a single mode of social experience and interpretation (Gilligan 1982).

Technology is not a neutral thing, and system design, and the construction of work with technology, is particularly gendered, resulting in what Huws calls a 'cybertariat' (Huws 2003). Bringing the insights of how women communicate into considering how technology interacts with largely feminized settings, such as those considered in this project, is one of the tasks of Community Informatics.

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## Appendix VI: Project methodologies

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From the outset of the project, a participatory approach has been undertaken, in recognition of the fact that the successful adoption of technology by an organization depends to a large degree on the attitudes of workers towards ICT and their motivation to use it. Being able to capture those views and present them back as useful information to communities and other stakeholders is the task of the researcher. This is a somewhat different priority to that of much research, which is directed towards high-level research findings and peer-reviewed publications, rather than information for action. However, the two things need not be irreconcilable: the approach adopted in the *Doing IT Better* project has not hindered the creation of research knowledge and, in fact, only enriched the research agenda.

However, to study a local (and virtual) ‘community’—primarily through the window of knowledge held by its people and institutions such as community service organizations—has long been a controversial and intractable issue ‘because there is no way to disentangle the research method from the investigator himself (sic)’ (Vidich, Bensman et al. 1970: 345). We hold that much the same applies to the study of community service organizations because they are relatively unknown in advanced technology research. We also take an interpretive or interpretivist theory of research—that people’s views of the reality they deal with in the workplace are critical in understanding what the workplace ‘is’.

People are, by and large, experts in what they know and do in their everyday lives, so it is the job of the Community Informatics action researcher to help interpret what they say in a way that resolves ‘technical’ issues, through a socially-oriented lens. In fact, much of the time, the issue is far less ‘technical’ (in the sense of expertise with software or hardware), but more about developing a process to bring about the confidence to use skills and knowledge to solve a problem.

Thus, though engaging people in clarifying what they want to know, and how they want to know and record it, there is a better chance that valuable outcomes will be the result. People are experts in their own domain, and the aggregated information they provided allowed us to tell the story of each unit of analysis—the organization—as a distinct case study. While we can measure

particular identified variables through surveys and other quantitative means, there is often nothing as valuable and subtle as talking with people, though this approach sometimes mean a considerable learning curve for the traditional researcher who comes to a problem with preconceived solutions.

It should be emphasized that the case studies of the organizations themselves reflect varied circumstances, reflecting the different capacities of organizations to independently undertake change strategies. This is also a sign of the need to present to government a strong case to underpin the sustainability of very diverse situations in community service organizations to support effective client service outcomes that are also supported by the effective use of ICT.

### **PARTICIPATORY OR COMMUNITY-BASED RESEARCH**

Participatory or community-based research (Stoecker 2005), as a form of engaged action research, is necessarily adaptive and reflexive. This means that ideas and methods will change in response to needs and learnings from all parties, and this was a key principle that underlay the case studies.

In this project, methods of data collection and assessment of case studies changed; as the project team learned about the sector, it could be more directive and less tentative or exploratory in its activity. Thus, the project moved from using the Making the Net Work planning game at the very start, to focusing on adapting the Co-MAP tool for case work. Co-MAP became a highly suitable tool for with which to engage participants at the intersection of community service and support work in detailing information and knowledge processes.

The following section is derived from Stocker and Stillman (2007), and it highlights some of the inherent complexities in community or participatory research.

In reality, community-based research and participatory research are heavily reliant on the skills of the (paid) researcher to act out many roles: as scribe, organizer, broker, mediator, and coffee purchaser. The reality is that it is all too easy to have high expectations of people whose time and skills may not match what is being aimed for. There is a constant danger of the researcher engaging in vanguard activity and ‘knowing best’ for a community. In fact, technology may be the

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very last thing that a community wants addressed, frustrating as that may be for funders and workers on the ground. It is only through careful exploration with a [CSO] that the links between needs and possible (and often likely) ICT solutions can be found. It is a very delicate balancing act.

Of particular interest here is a form of participatory or community-based research referred to as the initiator model. In contrast to the consultant model where a researcher is brought in to conduct research defined by the community and used by the community, and the collaborator model where the researcher and community jointly define, design, and carry out a research project, in the initiator model the researcher attempts to organize the community around an issue that the researcher sees and thinks will be beneficial for the community (Stoecker 1999).

The potential colonization issues are likely already clear. If the researcher defines the issue and the process of information construction, can the community truly be empowered by the process? If the researcher controls the creation of the issue, the research question, and the research methods, how does the community develop the skills to control its own information production?

At the same time, many exploited and disinvested communities can't conceptualize a process for attacking their problems at all, much less develop the information construction processes needed to support acting on those problems. So it behoves those researchers who can see possibilities for such communities to empower themselves to not avoid them simply because they can't come up with their own research questions. In many cases no one has offered them any research support, they have no research training, and they have given up support from the outside.

It is important to understand, however, that community change processes require more than research. They also require people with community organizing skills, leadership legitimacy, and project management capacity. Researchers moving into communities

expecting to accomplish anything of consequence, and moving toward a transformation of the social relations of information production, need to make sure those other roles are also filled (Stoecker and Stillman 2007).

Because so much of what the researchers can discover is only found out through patient dialogue and observation, the project team developed a series of steps for engaging with the diversity of skills and opinions in organizations. While these steps may appear obvious, they are based upon a respect for the culture of each organization, rather than an 'expert knows best' approach. With obvious variations between each case study, these steps were:

1. Initial contact with the organization.
2. Short introduction at a staff meeting (optional).
3. In-depth interviews with staff members, often using Co-MAP, a comprehensive methodology for capturing, modelling, and analyzing cooperation processes (see below) to model interviewees' work situations.
4. Transcription, ordering, and analysis of the interview data and additional documents, taking a Grounded Theory approach, resulting in rich data for analysis and decision-making.
5. Staff workshop in which findings were discussed and modified as necessary. Staff had the opportunity to comment on and add (or subtract) from our tentative results.
6. Internal reporting to different constituencies: staff, committee of management.
7. Final report to organizations. In some instances, such as with SCAAB, there was sufficient time to develop a public version of the report for the project website.

Of course, in the work with SCAAB, it took some time to work out the relationship between action/research dynamic, and a way to develop a combined approach in the case studies. Sometimes it was hard to know when to stop—were we recommending or actually providing some simple solutions? That balance between practical assistance with empowering the organization is a difficult one.



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Our method bears a rough resemblance to the project-based action research cycle discussed by Stoecker and colleagues, in which the four stages include Diagnosis, Prescription, Implementation and Evaluation (Stoecker 2005). However, due to resource constraints, the *Doing IT Better* project emphasized the Diagnosis and Prescription parts of the cycle, leaving the responsibility for further implementation and evaluation of our work with the organizations themselves. Diagnosis used personal and group interview and workshop techniques to elicit information, though we also used internal organizational documentation such as annual reports for information.

A full *Doing IT Better* project cycle would have the capacity to take up the project recommendations, implement them, and develop appropriate evaluation processes to see the social, economic, and informational outcomes of the process. In turn, this would feed back into a new cycle that could occur as part of ongoing organizational strategic planning.

In line with the principles of participatory and community-based research, Stoecker has emphasized the importance of a core stakeholder group to take a leadership role in the diagnostic process with the organizations, as well as a stronger role in the selection of research techniques (Stoecker 2005, 91ff). In reality, while the *Doing IT Better* project team hoped to develop a key strategic group for case studies, the reality was that some organizations were too small to call for this sort of engagement. The actual process of having a workshop or discussions was as participatory and collaborative as we could get and the bulk of detailed work remained with the project team. In the case of a larger study like SCAAB, strong relationships were developed with a number of key individuals in the organization which provided an important feedback loop. With RIAC, to take another example, the distribution of workers across the state and the relatively short time available for direct face-work, limited this form of engagement, so the emphasis was upon trust building and relationship building via emails and during the critical time of the workshops themselves. Additionally, the use of exploratory questioning or Co-MAP helped to develop further questions and priorities for investigation, and drafts of recommendations and reports were shared with participants for their feedback.

## VALIDITY AND RELIABILITY OF FINDINGS BASED ON INTERPRETIVE RESEARCH

In the preface to his essay about asylums, sociologist of institutional behaviour Erving Goffman wrote:

‘My immediate goal in doing field work...was to try to learn about the social world of the hospital inmate, as this world is subjectively experienced by him [sic]’, and that ‘it is still my belief that any group of persons... develop a life of their own that becomes meaningful, reasonable, and normal once you get close to it, and a good way to learn about it is to submit oneself in the company of the members to the daily round of petty contingencies to which they are subject’ (1962).

Furthermore, he suggested that such a view could not be gathered by statistical methods and that it necessarily involves taking what he called a ‘partisan’ view. Subjectivity is admitted, subject to the skills of the researcher in recognizing the limitations of such an approach.

Of course, community service organizations are not asylums, but Goffman’s lesson about the need to understand the subject experience of people in organizations lies behind the reasoning for much interpretive research in organizations.

Getting to understand the ‘daily round of petty contingencies’ that constitute a lot of information and knowledge work that happens with and through ICT is a critical element in this report, because it is the little squeaks, bumps, and grinds at a micro-level of information, knowledge, or service interaction—how things work or don’t work—that provide vital data that can be used to build more effective organizations and client relationships.

However, how is it possible to assess the validity of evidence and the case studies, built on such principles or data collection? The validity of such research consequently needs to be considered in a different way to the ‘test’ applied to quantitative or numerical research such as surveys which, in any case, cannot capture such micro-level, often unanticipated interactions.

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The question to be applied is not whether or not the research was objective, the data collection rigorous, and the results statistically reliable: all these are impossible to achieve in responsive qualitative research in a way that meets quantitative standards. The measure for the development of good theory based on qualitative research is that it has good internal validity—that we can prove our case, based upon the explication of basic concepts, causes, processes, outcomes, and other effects, and the triangulation of different sources of evidence. Good internal validity will be matched by a confirming response on the part of the reader (Campbell and Stanley, in Shadish et. al, 1991).

What is looked for in qualitative research is a foundation in strong ‘constructs’ or concepts, a clear articulation of research methodologies, the ways in which data is presented and managed, and the strength of the story that is told. Strong research of this type builds on the ‘tacit knowledge’ of the reader and, as Stake has suggested in a widely-cited article, ‘When the aims are understanding, extension of experience, and increase in conviction of what is known, the disadvantage [of not having scientific proof] disappears’ (Stake 1978).

Giddens also suggests that the social sciences draw upon pictures of reality in the same way as novelists draw from reality (Giddens 1984: 285). Thus, we often have the phenomenon of being asked to (impossibly) quantify the social because of the fiction of objectivity through data, but the real interest is in the ‘stories’ that are embedded in real life. If the stories are strong, stakeholders, including the people about whom the ‘stories’ have been developed, know they are so. We are not looking for ‘cookie cutter’ models to be implemented unthinkingly, but strong indicators as guidelines for future action, information sharing, improvement, and utilization. The reader of a case study can draw upon his or her tacit and practical expertise—and conversations with others—to assess if a case study rings true or not. In interpreting case studies, a reader does not work according to objective ‘rules’; rather, he or she, based on substantial life experience, is a skilled interpreter (Flyvbjerg 2006) and, of course, the reader’s assessment of the validity of a case will be based on other facts such as work context (for example, in drawing up public policy or research agendas).

Another way to approach the problem of ‘proof’ in interpretive research is to consider Karl Popper’s principle of falsifiability. ‘Proof’ does not rest on verifiability (and often, in complex social situations, finding a scientific-like test to verify something is well nigh impossible). Rather, using the ‘principle of falsifiability’, we look for further evidence to disprove, or, in as should be the case in real world research, evidence to improve the case that has been presented, based on additional research and concept building (Schroeder-Heister 2001). Good qualitative work should be based on contestable evidence, not unreasonable hypotheses or woolly evidence that can be easily disputed.

#### **MAKING THE NET WORK PLANNING TOOL**

Making the Net Work is the outcome of collaboration between a number of consultants in the UK and US who work with community-based organizations. Their aim has been to develop ‘how to’ guidance for those aiming to get organizations or neighbourhoods online, or to create community technology or learning access centres. Planning tools are freely available online ([www.makingthenetwork.org](http://www.makingthenetwork.org)). Work has also been funded by a number of government agencies in the UK.

Rather than producing large and complex manuals that easily become a chore, or are not used at all, Making the Net Work emphasis has been upon ‘then-and-there’ facilitated processes and engagement to capture ICT needs, processes, and priorities in different areas of the community sector, such as with housing workers. Larry Stillman had worked with Making the Net Work in the US and UK, and had also used their strategic planning technique on a number of occasions in the past in Australia.

In the first two case studies, the Making the Net Work Strategic Planning Tool was used as a way of exploring ICT needs with organizations. In addition, the tool was adapted from some early meetings of the Working Group, including a workshop on Information Management.

Once Stefanie Kethers became involved with the project, it became clear that the Co-MAP tool could be productively adapted for individual interviewing, while simplified versions of the Making the Net Work tool were used in group sessions.

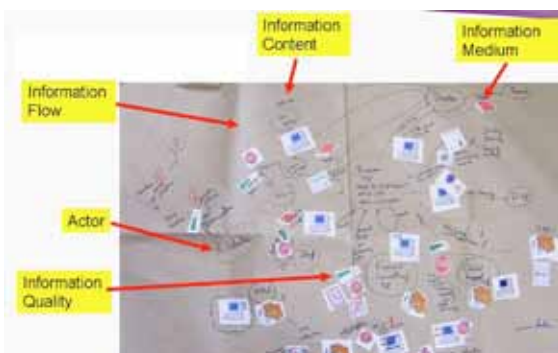
## CO-MAP

Co-MAP provides a formal, integrative framework that covers four relevant perspectives of a cooperation process:

- activity-oriented, based on the Event-driven Process Chain (Keller, Nüttgens et al. 1992);
- strategic, based on Yu's i\* framework (Yu, Mylopoulos et al. 1996);
- service-oriented, based on an Action Workflow-style approach (Schäl 1996); and
- information flow-oriented, based on the approach described in Nissen and Jarke (1999).

Co-MAP has been used in case studies in different contexts, e.g. small and medium enterprises (Kethers 2002), or healthcare networks (Kethers, Gans et al. 2005). Combined with a Grounded Theory approach, a considerable amount of rich data is collected for empirical analysis and concept or theory development.

Information flows between agents are captured as arrows between sender and receiver of the information, written down as role names (e.g. 'IT support'). Graphical symbols are used to represent the media for information flows (for example, phone, formal document, or meeting), and the recipient's perception of the quality of the information flow (e.g., a tortoise for 'too slow', or a stop sign for 'does not occur at all'). More details about Co-MAP in actual use can be found in the SCAAB case study.



*Explanation of Co-MAP*

One of Co-MAP's strengths lies in the fact that it combines seemingly informal process diagrams representing the information flows and interactions of the interviewee(s) with an underlying formal semantic that allows for mapping the process diagram into the different perspectives listed above, thus creating representations of the process from different angles. The kinesthetic process adduces interest and participation in a creative, cognitively rich, and recordable process, via text, video, audio, or other media. Furthermore, if the same process is investigated with different interviewees, the resulting process diagrams can be contrasted to uncover other viewpoints and interpretations.

The Co-MAP methodology is thus a means of identifying the core of mutual knowledge as well as gaps in mutual, systemic knowledge. Additionally, through the lens of structuration theory (Giddens 1984:40), Co-MAP is a means of representing institutional order (and disorder) as an emergent, fluid dynamic process of social reproduction and variation. Using Orlikowski and Giddens' language, social-technical networks can be understood as 'instantiated' and 'embodied' social products that are 'in use', in particular, reproduced cultures, in which multiple players (whether human or artefact) adopt different roles. The Co-MAP methodology is able to capture the embodied multiple roles and perspectives, providing a multi-levelled representation, akin to 3-D chess, which consists of both formal symbols (i.e. chess players or Co-MAP icons) that map conceptually and spatially to actions, roles, and the flow of information and knowledge across time and space. For example, in the SCAAB case study, we investigated how ICT assists information flows for a community service organization that supports 'solidarity and agency' (key principles of community development as discussed previously in Appendix V).

While the need to present complex work patterns or information flows in relatively simple process forms, such as flowcharts or diagrams, may not be considered a quantitatively accurate means for measuring and capturing information flows (and for which other, more resource-intensive means may be available), for the researcher engaged for a relatively short amount of time with in an organization that is strapped for time and money, the ability to capture and present in relatively simple ways key insights should not be underestimated.



Freemind categorization of Co-MAP data

In fact, the representation of findings in such a form for the active utilization of stakeholders has, for example, been a key interest in practice fields (Patton 1990; Patton 1997; Owen and Rogers 1999; Patton 1999). Managers, policy makers, politicians and others need 'action heuristics'; effective simplifications and communication of research and other conceptually-significant results (McClintock 1987).

Co-MAP is usually used in group meetings, where participants together develop a shared representation, and, through discussion, a shared understanding of the process in question. However, in the *Doing IT Better* project, diagrams were also created for individual interviews, with the following advantages. First, the method helped us to structure the interview. Second, we could see at a glance which areas we needed more information on and could ask additional questions. Third, we used the diagrams to summarize the interview with the interviewee, particularly with regard to 'bad' information flows, and received instant feedback on how well we had understood the interviewee. In addition, several interviewees liked the idea of having some graphical representation of their work—as one interviewee put it, 'yes, my situation is that messy, I wish my manager could see this'. Individual interviews also offered the opportunity to open up and document views which otherwise might not be expressed in a group setting.

An additional tool used to assist with the arduous process of data sorting through the Grounded Theory and Mind mapping process was the Open Source Mind Mapping Software called Freemind ([http://freemind.sourceforge.net/wiki/index.php/Main\\_Page](http://freemind.sourceforge.net/wiki/index.php/Main_Page)). The use of Freemind represented a further modification of research methodology, based on a serendipitous discovery of its utility for this sort of work. This allowed much more rapid, efficient, and particularly readable preparation of data for assessment, either in list form or regrouped as a diagram. For presentation and 'proof' purposes, the diagrams that are produced leave no doubt as to the logic trail in the construction of statements and propositions on the basis of the data.

The above screenshot of Freemind illustrates closed and open 'nodes', each of which can contain many items of data taken from interviews or other sources. Other images and diagrams can be inserted into the map. Data items can then be copied, sorted or otherwise moved around, and the whole 'tree' exported into an Open Office text document (and saved for Microsoft Word if required), for writing up as a sequential narrative.

A further step in the use of Co-MAP would be to map, through different questions, icons, and activities, what we can call the 'emotional geography' of community service work in its interaction with ICTs. This would help 'a theory of practice based on understandings of flows of information and practices' (Ferguson 2008: 571), whether in the fluid electronic environment of work, in outreach work with clients, or in the relationship between home and work or other environments.

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## GROUNDED THEORY

Grounded Theory aims to generate concepts and theory from a bottom-up natural setting of inquiry, through a rigorous and carefully articulated process of data creation, collection, management and interpretation, akin to an algorithm; that is, a regularized and successive process. The stimulus to the development of conceptual and theoretical insights is tested through what Glaser and Strauss call the 'constant comparative method': the rigorous testing of 'data slices' or the construction of categories, propositions and new theories (Glaser and Strauss 1967: 55ff).

Data slices offer meaning because they have conceptual and higher theoretical implications. However, not all slices of data will be equivalent in either word count or the quality of the discourse that they contain. In fact, in any qualitative process where the interview is the primary source of evidence, the quality of what is said will vary, notwithstanding any preparations or efforts to engender 'talk' put in place by the interviewer. The informants' mood on the day of the interview, ability to open up in an interview with a stranger, or capacity to describe complex detail or particular personal insights is inevitably variable. Some people, in their efforts to be helpful, may embellish reality, or tell stories. Furthermore, of course, some people are much better at abstracting, have better vocabularies, or are more skilled at explaining and describing situations than others, but it is the researcher's skill to interpret the data and develop representative categories and descriptions that adds value to the data (adapted from (Stillman, Kethers et al. 2009)).

For *Doing IT Better*, the key source of Grounded Theory was the interview—anything from 30 minutes to an hour in length, supplemented at times by Co-MAP data. Interviews recorded, with the permission of the interviewee and, depending on the nature of the statements made, were either transcribed or a précis prepared. This is quite a labour-intensive process. As discussed with the case studies, we used Free Mind to assist with the data sorting process in later parts of the project. Good team work also meant that we were able to work in pairs to rapidly read, annotate, check, sort, and clarify data analysis.

## EVALUATION

A structured, ongoing participatory formative evaluation had been intended to assess the value and worth of the entire project. The reality was that the project had too many dimensions dispersed between many players to enable a simple, ongoing, and parsimonious evaluation to be put into place. In particular, it was asking too much of the many stakeholders involved to be constantly reflecting.

In practice, we have produced a summative evaluation through the actual process of report writing, assessment of past materials, and discussions with the project team and Reference Group. The final project report itself can consequently be regarded as summative document with a set of findings and directed at providing useful and well-considered knowledge for public enlightenment and, particularly, public-policy decision-making and utilization to improve the capacity of the non-government sector (Patton 1997; Patton 1999). In addition, these 'practice' findings were not intended to preclude the creation of academically-relevant reports.

Furthermore, throughout the life of the project, there has been an ongoing and reflective approach through each case study. Thus, the project used both Grounded Theory and Co-MAP, both rigorous techniques for data collection and assessment with interviewees. They can be considered as micro-evaluations which occurred in important parts of the project and engaged in close evaluation of the quality of data in the preparation of conclusions.

Finally, the keen interest taken by many of those who participated in the case studies and other workshops also guaranteed that there was an ongoing culture of reflection throughout the life of the project. The 'summation' presented here, as the *Doing IT Better* project final report, represents, we hope, the apex of these reflections and will be of major interest to the community service sector, government, philanthropists, researchers, and others concerned with social justice outcomes with ICT.

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## Appendix VII: References

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