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Examing Social Work and Technology:

A Cross-Disciplinary Analysis of Technology Issues in Violence Against

Women Shelters in Ontario, Canada

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PhD in Social Work
University of Edinburgh
2015
STATEMENT OF AUTHORSHIP

In conformance to University regulations, I hereby declare that:

(a) the thesis has been composed by me,
(b) the work is my own, and
(c) the work has not been submitted for any other degree or professional qualification.

Janan Dean Date: ________________
ABSTRACT

Social service organisations have integrated information and communications technologies into their daily work in many different ways. Yet, social work literature has tended to frame technology as an externally created driver of neoliberal values and goals that are not necessarily in the best interests of service users or the professional values base. This thesis seeks to expand this narrow framing by reflecting on the mutually shaping relationship between technology and society, which includes social service organisations and social work, using cross-disciplinary perspectives from Science and Technology Studies (STS) and other relevant fields. This thesis begins with a review of existing social work literature, highlighting the fragmentary state of current research. Cross-disciplinary research is used to identify and reframe gaps as potential areas for future collaboration, including examining issues in specific practice contexts, incorporating relevant critical theory, and collaborating with like-minded communities of practice in the IT field.

Based on these recommendations, the thesis explores issues in one specific practice context – violence against women shelters – using case study organisations in Ontario, Canada. A discussion of the research design ensues. Two cases studies were researched using critical ethnography methodology. Data was collected using multiple methods, including participant observation, unstructured interviews and documents; and, grounded theory was used to identify key themes. This is followed by a discussion of the history of the shelter movement, and the policy and social contexts impacting shelters’ use of technology.

The data is organised according to the guiding research questions, in four analysis chapters. First, the technologies being used in the shelters are discussed. Although social work research suggested technology use was largely caused by external policy and social factors, the data suggested that the shelters actively made decisions about their own use and were engaged in this process for many years. This is followed by a discussion of internal issues within the shelters related to technological values and knowledge, and finally, a discussion of technological issues relevant to their work with service users.
This thesis concludes by discussing the benefits of using cross-disciplinary approaches to reframe technology use in social service settings. Throughout the thesis, three broad concepts – the shelters’ agency in the processes of technological decision-making, the materiality of shelter practices and social work, and the changing nature of ‘presence’ in service delivery – are the focus of discussion. This analysis suggests that technology should not be treated, theoretically or practically, as an external force over which social work has no control.
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Secondly, I acknowledge my supervisors, Dr. Viviene Cree and Dr. Jen Ross. This has been an intense, but immensely rewarding experience for me because of the thoughtful feedback and guidance you were willing to provide every step of the way. I could not have asked for better supervisors and I will always cherish our inspiring and thought-provoking conversations.

Thirdly, I acknowledge the shelters and shelter staff members involved in this research. Without your willingness to participate, none of this would be possible. I appreciate your time, honesty, openness, and flexibility throughout this entire process.

Finally, I acknowledge the many friends and extended family members who helped me laugh, cry, and dance my way through this process. You made the inevitable rainy days brighter, and the sunshine feel a little bit warmer. You will still be by my side after this process is over, and that makes me smile.
DEDICATION

This thesis is dedicated to my grandmothers, Mukhtar Dean (née Begum), and Edna Marcotte (née Somersall) and my grandfathers, Meraj Dean and John Marcotte. Although none of you were able to see me to the end of this process I started four years ago, I recognise that choices and sacrifices you made in your own lives have helped me pursue this opportunity in all its beautiful shapes and forms, and for that I will always appreciate and thank you.
## LIST OF ABBREVIATIONS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>(VAW)</td>
<td>Violence Against Women</td>
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<tr>
<td>(STS)</td>
<td>Science and Technology Studies</td>
</tr>
<tr>
<td>(OCSW-SSW)</td>
<td>Ontario College of Social Work and Social Service Workers</td>
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<td>(OASW)</td>
<td>Ontario Association of Social Work</td>
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<td>(CASW)</td>
<td>Canadian Association of Social Work</td>
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<td>(NASW)</td>
<td>National Association of Social Work</td>
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<td>(ASWB)</td>
<td>American Association of Social Work Boards</td>
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<td>(SDOT)</td>
<td>Social Determination of Technology</td>
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<td>(SCOT)</td>
<td>Social Construction of Technology</td>
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<td>(MIZ)</td>
<td>Metropolitan Influence Zone</td>
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<td>(DVAP)</td>
<td>Domestic Violence Action Plan</td>
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<td>(DVAC)</td>
<td>Domestic Violence Advisory Council</td>
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<td>(OSVAP)</td>
<td>Ontario Sexual Violence Action Plan</td>
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1 Chapter One: Introduction

Many disciplines have theorised about, and conducted researched on, technological issues that are relevant to the heart of social work practice, such as how individuals and groups communicate, build relationships, create identities, gather information and knowledge, seek help, and, ultimately, create meaning from these experiences. Social work itself, however, has not examined these issues in relation to technology in a holistic way. During my own social work education, these ‘bigger picture’ changes were not discussed in depth; information and communications technologies (ICTs) were framed as the medium through which services could be offered, but broader social changes related to technological development were not discussed amongst social workers that intended to practice ‘in the real world’. Despite the relevant cross-disciplinary literature, most individuals (myself included, prior to conducting this research) tended not to consider where ICTs came from, how they had been developed in a broader, historical sense, or why this might be relevant to the profession as a whole. It seemed that social work had positioned itself outside of technological change, looking in, as if the profession was not also embedded and implicated within these broader changes. This thesis aims to tackle this gap in the social work research and literature, by exploring the relationship between ICTs, social work, and social service organisations in the 21st century, generating what I believe to be one of the first critical ethnographies on ICTs in social work, in one area of contemporary practice – Violence Against Women (VAW) shelters in Ontario, Canada.

The context of the research is that in urban areas around the world, ICTs have become ubiquitous in the daily lives of those who can access and afford them. They
have enabled new ways of communicating, working and relating to others, and continue to evolve at a rapid pace. However, critical analysis of this ubiquity has highlighted that many marginalised individuals and groups do not have equal access to ICTs, nor do they use or adopt ICTs in the same way (see Gunkel, 2003; Livingstone & Helsper, 2007; van Dijk, 2006). Although mindfulness of these discrepancies is relevant to social work in terms of understanding how service users access information and services, discussions on access and technological literacy issues do not address the profession’s own relationship to technological (and social) changes, or how technologies are used to ‘do’ social work.

When I began practising social work, I found there were tensions amongst the staff in the organisations I worked about whether technological development was a relevant professional issue, and in what ways. Direct service staff and management did not always have the same views, and this created stress and miscommunication on both ends. These experiences have formed the basis for this research project.

Using a case study approach informed by Science and Technology Studies (STS) research, I gathered ethnographic data from two VAW shelters and analysed this data using cross-disciplinary theories and concepts. Although the findings from the shelter case studies are not necessarily applicable to all social work contexts, my findings highlight theoretical and practical issues in social work which have wide relevance and which need greater scrutiny. The thesis also makes a methodological contribution to the field by exploring how the ethnographic case study approach commonly used in STS can enable social work researchers to examine technology issues from different perspectives, bringing forth new ideas and recommendations.

There are three key findings from this research. The first finding is that, similar
to other types of organisations, the shelters exerted agency in their relationships with ICTs, mostly visibly through technological decision-making processes. Rather than passively consuming technologies available to them, the organisations both made strategic decisions about how technology would be used to support daily work. Often these decisions were not in spite of neoliberalism, but aligned with the neoliberal values of efficiency and accountability. These values have typically been portrayed as bureaucratic, ‘top-down’ expectations forced on social service organisations, rather than in competition with other values and priorities held by the organisation and by individual staff members.

Neoliberalism is a political ideology supporting a market-based economy, not only for goods and services, but also ideas and knowledge (Lave, Mirowski, & Randalls, 2014). The suspected long-term impacts of neoliberal social policy have been a growing concern in the social work research agenda as market-based approaches tend to prioritise fiscal accountability above service user outcomes (Reisch, 2013). However, I will argue that it is problematic to claim that technological change happens \textit{to} social service organisations \textit{because of} neoliberalism, and ICTs are oppositional to social work values and practices. Both shelters chose to implement particular ICTs based on organisational strategies. This agency must be acknowledged and critically examined to prevent perpetuating a false binary between social work and technology.

The second finding builds on this argument. Because both shelters chose to use particular technologies strategically to facilitate daily work and these ICTs were embedded into their practices, the concept of ‘materiality’ is relevant to understanding service delivery. Materiality refers to “the material artifacts, bodies,
arrangements, and infrastructures through which practices are performed” (Orlikowski, 2007, p. 1436). I do not argue that this concept has only become relevant since the implementation of ICTs in the shelters; the shelters used many different types of materials in their work and had been doing so before ICTs. But, like many types of organisations (see Orlikowski & Scott, 2008), social service organisations, and social work in general, have not developed a strong understanding of materiality, or how materiality relates to their practices. This is despite the fact that recent research has argued for greater social work involvement in decision-making about the material aspects of ICTs. Incorporating the concept of materiality into social work discussions is needed in relation to ICT issues, but also social work more generally, because it draws attention to the way organisations choose to enable their practices through strategic material choices.

The final key finding of this thesis is a call to address the changing nature of ‘presence’ in service delivery. The extent to which the service user needs to be physically present in order to access services has changed due to ICT developments that enable remote connections, but these types of approaches were not incorporated into the shelters’ service delivery models. Instead, new forms of mobile communication were often seen as problematic to traditional notions of boundaries between shelter staff members, service users, the shelters themselves, and the violent perpetrators. This raises questions about why the relationship between social and technological change may be framed as problematic in social service organisations, despite the fact that it may also provide opportunities to offer new services and reach service users that face barriers to accessing services in other respects. Further research is necessary to understand this tension.
These three key findings suggest that ICTs have a complex relationship with social work, but also that new issues continually change this relationship. While case study data cannot be straightforwardly generalised to the social work profession overall, it does suggest that a cross-disciplinary, ethnographic approach can provide different perspectives on important professional issues. In the remainder of this chapter, I examine some key issues and concepts that are foundational to the following chapters. This includes an examination of the definition of technology, a description of my social work research orientation and the cross-disciplinary approach, and the organisation of subsequent chapters.

1.1 Definition of Information and Communications Technology

There is no universally accepted definition of technology; diversity exists at both the conceptual and practical levels. For example, one basic definition states that technology simply refers to “the use of artifacts by human beings” (Derksen, Vikkelso, & Beaulieu, 2012, p. 141), whereas the National Association of Social Work (the accrediting social work organisation in the United States) more specifically defines technology and social work practice as “any electronically mediated activity used in the conduct of competent and ethical delivery of social work services” (National Association of Social Workers, 2005, p. 3). In his discussion of different types of technology, Aunger (2010) acknowledges this variety and poses the question: “[Is technology] a body of knowledge, the application of that knowledge to some domain of action (e.g. arts and crafts), the results of a particular kind of action (e.g. tools), or all of these?” (p. 763), eventually asserting that the “one thing which unites most of these highly disparate designations is the involvement of artefacts” (Aunger, 2010, p. 764).
There have been various types of technology developed throughout history, including military, transport, educational, and more recently, digital, assistive, and nano-technologies. According to Barley (1998), technological development has often been conceptualised as a series of discontinuous stages demarcated by revolutionary discoveries rather than incremental additions to, or new ways of assembling, the existing technological landscape. By framing technological development as a series of revolutions, it becomes easy to assume that the newest technologies we have personally witnessed transforming society have had the most significant impact on society overall. It is difficult to imagine the scope and scale of the impacts of previous technological developments within their original historical contexts. According to Barley (1998),

> [f]rom our position in time it is easy to underestimate the way in which electricity and automobiles, in particular, changed social structures, family structures, temporal structures, patterns of mobility and ultimately the tenor of everyday life and people’s images of themselves (pp. 243-244).

Furthermore, he states,

> At present, we have very little data on what computers and other digital technologies are doing to our lives or our sense of self. It may be that the computer will be as revolutionary or even more revolutionary than the automobile, but it may also be that the computer will turn out to be no more subjectively transforming than the telephone (p. 244).

While the exact transformative power of a particular technology is difficult to quantify, new technological innovations inevitably reflect the capabilities and choices enabled by previous innovations.

Prominent theorists on technology in the 21st century have focused on the significant impacts of technological networks and systems – the interconnection of different types of technologies to create new configurations that have functionality
both at the individual and aggregate levels of the parts (Aunger, 2010; see also Castells, 2007; Reed, 2006). However, networks, again, are simply new ways of assembling existing technologies. They too may be replaced by newer innovations or may become the foundation upon which another unprecedented technological development is based in the future. This does not diminish the impact of networks in our daily lives, but simply highlights the historical context of the relationship between technological and social change that has enabled the capacity for networks, and therefore networked living, to come into being.

In this thesis, I focus on ICTs within social work; however, other types of technology were pervasive within the shelters as well. For example, surveillance technologies, such as cameras, industrial fencing and secure entry procedures were used in both case studies to protect the safety of residents and staff. Exploring these types of technologies could have produced a different thesis altogether. I chose to focus on ICTs as this was the most commonly discussed type in my lived and practice experiences and made the research more manageable (although this turned out to be a large undertaking itself). ICTs enable organisations to access, store, communicate and analyse information in new ways; but they have also created tensions. I explore ICT issues while remaining mindful of the historical context of the relationship described above.

1.2 Social Work Research Orientation

Social work encompasses many different epistemologies and ontologies in research and practice. Social workers work in a variety of settings, including child welfare, healthcare, gerontology, housing, and immigration/settlement organisations, but they can often be found in any context that involves working with individuals,
group or communities who are perceived to be vulnerable to social exclusion, marginalisation and/or oppression. However, particularly in Canadian history, this has not always been the case. Social work has a contested history in Canada due to links between the ‘civilising’ missions of colonisation and assimilation that coincided with the development of the social work profession (see Alston-O’Connor, 2010; Bohaker & Iacovetta, 2009; Dumbrill & Green, 2008). This continues to shape the context of social work practice in Ontario and Canada, where this research was conducted, and my own understanding of social work as a ‘profession’ due to my own social work education and practice experiences in Toronto, Canada.

Presently, the pervasiveness of the neoliberal paradigm, heavily critiqued in social work literature in relation to negative impacts on service users, is one driver of the on-going, increased professionalisation in Western contexts where social work is practised (Kuhlmann, 2013). Rather than reifying ‘social work’ (or ‘technology’ or ‘shelters’) as naturally occurring, static concepts, in this thesis I recognise that social work itself is a social construction, infused with its own assumptions about power, knowledge and competency, and has been created to provide structure and definition to a fluid concept. The social work profession need not exist in order for social justice work to be done, nor does social work always reduce oppression. Without acknowledging the historical context of the profession – both triumphs and challenges – there is a risk we assume, and teach new social work students, that social work education is a finite experience that does not require on-going critical reflection and personal development. I recognise that ‘social work’ uses the legitimacy of its professional status to make knowledge claims strategically, and seek to be mindful of these instances to mitigate the harm I may cause in my own
knowledge claims in research and practice.

In order to further locate myself in this research, I have reflected on my own experiences with technology, having grown up in the urban, developed context I mentioned above. My social work experience has always involved various forms of technology; however, my experience with ICTs began long before my social work career. I have spent the majority of my life surrounded by computers, both at home and in my educational journey. I grew up in a middle-income family in Ontario, Canada, that was able to afford a personal computer in the home since 1995. I took typing and computers courses as part of the required public school curriculum, and have been expected to complete assignments using word processing software since 1999. I became a member of various social media networks starting in 1998, acquired my first mobile phone in 2001, and purchased my first laptop computer in 2004. I have been an ICT user in various capacities for the majority of my life and am comfortable using it, although I have no specific technical knowledge of how it works internally.

I developed an interest in the relationship between social work and technology before I began studying social work. I first completed an undergraduate degree in social anthropology in Ontario, Canada. During that time, I was considering a career in social work and began volunteering with the local child welfare agency. I was given the task of helping social workers transfer extensive, paper-based social histories of ‘children in care’ to the newly implemented electronic database system. This was not a smooth transition; many staff told me they felt the system was not user-friendly, and created more administrative work for them that ultimately did not benefit the service users. On the other hand, the organisation’s managers were
frustrated that they had limited training and resources, and direct service staff
members were constantly behind on their electronic ‘paper work’. Despite the
negativity, this volunteer experience did not deter me from pursuing postgraduate
education in social work; yet, I often reflected on the tensions I witnessed between
the social workers and the database, including why the social workers did not feel
supported by the technology or management despite the goals of the database
implementation to make the work more efficient and effective. I have since noticed
similarities between this experience and my own practice experiences in other
settings, as new technologies continue to be implemented in social service
organisations. My interest in this topic has developed through my volunteer and
work experiences in child welfare, community health, and psychosocial
rehabilitation practice settings, and through innumerable conversations with
colleagues, researchers and service users about technology as it relates to social
work.

Despite my own technology-infused experiences, I recognise that social work
practice has not always involved or required ICTs in order to conduct its services
effectively, and in many settings, such as in rural and remote communities, it still
does not for various reasons. Through reflection on my past practice and lived
experiences, I was motivated to explore the following questions:

- Does being a social worker in the 21st century mean I must use ICTs in
  practice?
- Does being a social worker in the 21st century mean I must enjoy using
  ICTs in my practice?
- Must service users consent to and/or enjoy the use of ICTs in order to
access services?

My reflections on these questions throughout the research process are woven into each chapter of this thesis, and I refer back to them in the conclusion.

Based on my education, lived experiences and professional training, I have come to identify as a critical social work researcher. Critical theory is “a macro theory that examines social structures, institutions, policies, practices and process with respect to how they treat all groups in society” (Mullaly, 2010, p. 16). In addition to providing structural analysis, critical theories propose that research and knowledge should be created for liberating and emancipatory goals. Critical theory has been adapted and applied to many disciplines within the social sciences and humanities, including social work (Denzin, 2002).

The early, traditional practice base of social work developed during the period of Enlightenment and Industrial Revolution in the late 19th century. During that period, rapid changes in technology and economy created new forms of social oppression and unequal distributions of resources. Early charitable organisations focused on helping individuals adapt to oppression in their daily lives, rather than resist and challenge the broader social conditions (Pozzuto, Angell, & Dezendorf, 2005). Over time, it became apparent that this approach did not address underlying social conditions leading to individual and groups challenges. Critical social work developed in the early 20th century in response to these critiques (Denzin, 2002). By incorporating the theoretical perspective that broader social structures perpetuate inequality and create individual and social problems, social workers gained new ways of conceptualising social issues and creating strategies to address oppression and suffering (Ferguson, 2004). Instead of focusing on how individuals could better
adapt to inequalities, critical social work advocated for change amongst other groups and institutions. Although more traditional forms of social work also incorporate structural understandings in work with individuals and groups, critical social work argues that advocating for this type of macro-level change is an integral part of social work practice (Pozzuto et al., 2005). Since the initial development of critical social work, social work has also been influenced by various critical areas, such as feminism, postcolonial studies and postmodernism, which continue to expand the profession’s ideas about social oppression and change.

Whatever the epistemological or methodological choices, social work research is often applied in nature as it blends theory, data and reflection to create practice or policy recommendations. In this thesis, I not only present findings and analysis, but also relate them to contemporary social work practice; however, this goal of applicability also inevitably presents challenges because, as Hammersley (2003) states, “research often ‘complexifies’, so that what it presents are not clear-cut and simple findings, but conclusions that are necessarily fallible and to which a range of qualifications must be attached” (p. 27). This was certainly true in my experience.

The applied nature of social work may also be informed by other research approaches. In this thesis I have focused on the paradigms of ‘evidence-informed practice’, anti-oppression, and reflexivity. Evidence-informed practice refers to the way social workers are encouraged to be knowledgeable about findings coming from all types of studies and to use them in their work in an integrative manner, taking into consideration clinical experience and judgement, clients’ preferences and values, and context of intervention (Nevo & Slonim-Nevo, 2011, p. 1193).

This approach therefore proposes that although social work research is often
designed, conducted and disseminated with the goals of creating new knowledge for practitioners, and informing future professional, organisational and social policy, practitioners have discretion in how they use this knowledge in their own practice (Nevo & Slonim-Nev, 2011; Shaw, 2003; Shdaimah, 2009). The operationalisation of evidence-informed practice can be different, depending on the practice orientation of the researcher, the organisation and the practice setting. For example, clinical social work is more likely to value knowledge created through rigorous, quantitative research that evaluates a specific intervention strategy, whereas critical social work is more likely to value narrative and qualitative approaches that provides contextualised and descriptive details (Denzin, 2002). Because I identify as a critical social work researcher, I employ a critical ontology and epistemology that values qualitative inquiry and reflexivity, rather than the systematic, controlled design approaches often found in clinical social work research. I discuss this further in my discussion of research design in Chapter Three.

The second approach to this research is anti-oppression. Anti-oppression highlights that, despite best intentions, power differentials and structural dynamics also exist between social workers and service users and social work researchers and service users and must be mindfully considered and mitigated. Creating knowledge through research is a powerful act; historically, by failing to reflect on this power, the research process has contributed to or replicated structural conditions that create oppression in daily life. According to Strier (2006),

[the power exercised by those who initiate a particular research project can be immense if they conceptualize a project in ways that affirm their position as those in charge. The power that accrues to those who bring a research project into being as well as funding agencies’ control on setting research priorities cannot be ignored… the principal beneficiaries of the
An anti-oppressive approach to research challenges researchers to consider: the overall goals of the research; the immediate and long-term needs of the populations being researched; the potential outcomes of the epistemologies and methodologies employed; the safety and security of the participants in the environment the research will be conducted; the role of the research participants in the process overall; how to negotiate researcher-participant relations; and, ownership, dissemination and accessibility of the research knowledge (Strier, 2006). In this thesis, although I researched service providers rather than service users, I reflect on the dynamics of the research process itself and discuss how I attempted to mitigate the power differentials and oppressive dynamics in my relationships with the participants and organisations involved in the ethics section of Chapter Three.

The final additional aspect of this research is reflexivity, which I have already begun to discuss in relation to the other aspects above. In social work, reflexivity is an on-going process to understand how one’s values, beliefs and lived experiences impact work with diverse service users; social work researchers attempt to understand how these factors impact the research process, both generally speaking and during each individual project they are involved with (see White, Fook, & Gardner, 2006). In sociology, this approach is known as standpoint epistemology, where the researcher’s lived experiences, and the meaning derived from these experiences, are seen as unavoidable factors that must be acknowledged and deconstructed during the research process (Fawcett & Hearn, 2004; Heron, 2005).
uncertainty in social work practice (White, 2009); therefore, the goal of reflexive practice is to identify biases or gaps for the purpose of improving one’s ability to work with service users effectively or to create knowledge that is relevant to anti-oppressive work (Fook & Askeland, 2007). Reflexivity can be incorporated into any research methodology, although it is more commonly used in critical approaches that value lived and practice experience as valid forms of knowledge. Overall, reflexivity is seen as a professional strength in both research and practice. I have incorporated reflexivity in the research process in order to remain mindful of and focused on the applied goals of this thesis to my own practice model, and the professional knowledge base more generally. I now discuss how I incorporated a cross-disciplinary approach into this process.

1.3 Cross-Disciplinary Analysis

Social work practice is influenced by many disciplines, therefore using a cross-disciplinary approach in research is not uncommon (Bronstein, 2003; Sharland, 2012). It is, however, fair to suggest that the cross-disciplinary connections are strongest with psychology, sociology, and health sciences, whose subject matter more explicitly relates to individual and community level practice issues. In this research project, I chose to explore disciplines with weaker formal links to social work, primarily Science and Technology Studies (STS), and also organisational studies and critical feminist studies of technology. Incorporating theories and concepts from these fields has added richness and depth to the analysis in ways that would not have been possible had I conducted this research strictly from within social work; however, I had not intended to use a cross-disciplinary approach prior to beginning the research. My first encounter with the STS discipline was by chance
during my first year of the PhD when I chose to audit a taught Master’s level course entitled ‘ICTs for Development’ simply because it appeared to address my emerging interest in the relationship between technology, power and globalisation. This introduction led me to pursue a more formal cross-disciplinary research approach as I began reading within STS more broadly and increasing felt it related to my research interests.

Although I had not encountered this literature during my academic time in social anthropology or social work, as early as the 1950s, social science and scientific researchers have explored the relationship between human development, behaviour, and technological systems (Leonardi & Barley, 2008). These early studies indicated the relationship between the social and the technical worlds was an important area of study as technology was developing at a rapid pace (Marker, 1978). The 'first wave' of STS research from the 1970s focused on qualitative analysis of research sites where technology was explicitly present and scientific knowledge was actively being created (Leonardi & Barley, 2008). Latour and Woolgar (2013) employed an anthropological approach to their study of laboratory culture, originally published in 1979:

Whereas we now have fairly detailed knowledge of the myths and circumcision rituals of exotic tribes, we remain relatively ignorant of the details of equivalent activity among tribes of scientists, whose work is commonly heralded as having startling or, at least, extremely significant effects on our civilization (p. 26).

Yet, in the 1990s, the research focus shifted to other sites of interaction between society, science and technology, such as the dissemination of scientific knowledge to the general public and narratives of technologies that had failed to become mainstream (Introna, 2007). This shift reflected emerging beliefs that rather
than limiting the study of science and technology to areas explicitly inhabited by scientists, it could be conducted anywhere (Eisenhardt, 1989; Williams & Edge, 1996). Since this time, various theoretical and methodological frameworks have developed in STS, each highlighting different aspects of this relationship. STS has developed a vast amount of research on technological development and technical cultures. Organisational case studies exploring the relationship between technology and work are a growing sub-section; however, as Woolgar, Coopmans, and Neyland (2009) note, much of this research has focused on technology use in for-profit organisation case studies, which have their own specific values, goals and needs. I explore the importance of organisational structure and context on ICT issues in more detail in Chapter Four.

Like other social science disciplines, critical theory has also been applied to STS research. Critical STS researchers examine how power, control, and knowledge creation relate to the epistemic cultures of science and technology in the current global context. This is similar to critical social work researchers who analyse power, control and knowledge creation in relation to global social issues (Fook, 2003). This shared critical research orientation in social work and STS was the initial common ground for my cross-disciplinary approach, and helped guide and focus data collection and analysis throughout the process of my work.

As mentioned above, STS was not the only source of cross-disciplinary literature I found relevant and useful in this research; additionally, organisational studies and critical feminist studies of technology were used in the data analysis phase to provide further clarity to the themes. Organisational studies examined the economic, social and political structures that led to increasing administrative,
bureaucratic, and organisational complexity during the growth of capitalism in the late 19th and early 20th centuries. Since this time, the field has expanded to examine the social functions of organisations in modern society, internal issues within organisations, interactions between organisations, and structural and global issues affecting or managed by organisations (Reed, 2006). Critical organisational studies emerged later in the 20th century to explore power differentials between management and employees, organisations and the maintenance of social order, managerialism and control and the use of “technical rationality over competing forms of reason” (Alvesson & Deetz, 2006, p. 261).

Although originally I did not intend to explore organisational studies, this discipline has links to STS as the history of organisations has also been linked to technology; for example, the importance of the scientific method was partly the rationale for incorporating more administrative structure into civil organisations in the 19th century (Reed, 2006). While there is overlap in the types of issues examined by STS and organisational studies, they use different lenses of analysis that proved equally relevant to the social-work-specific issues that arose in this research. I found that incorporating organisational studies has added a deeper understanding of the environments in which practice (and technology use) occurs, whereas STS has provided a stronger analysis of technology itself.

The third area of cross-disciplinary theory used in the analysis in this research is critical feminist studies of technology. While STS and organisational studies supported the practical themes in this research, gender issues related to technology arose in the research findings, which led me to seek out gender-specific cross-disciplinary literature to help in the analysis. Critical social work acknowledges that
social locations and identities mediate experiences and knowledge; gender is one of these mediating lenses. Although critical feminist theory have been explored in social work literature (see Gringeri & Roche, 2010; Mehrotra, 2010; Morley & Macfarlane, 2011; Orme, 2003), I expand this understanding by including areas of critical feminist studies not commonly referenced in social work, such as techno-feminism, and cyber-feminism, and feminist STS. These ideas helped me fully articulate the findings and analysis in this thesis by expanding on the conceptual and analytical tools available within social work literature. These three areas were not and are not the only relevant possible areas for cross-disciplinary collaboration available to social work researchers; they were chosen based on their relevance to the emergent themes in the literature and findings.

1.4 Organisation of the Thesis

This thesis is organised into eight chapters. Following this introduction, I review social work perspectives about the profession’s relationship to technology in Chapter Two. This review highlights existing frameworks and approaches to conceptualising the relationship between technology and society as it relates to social work. Much of this literature has positioned social work in opposition to technology, or as a separate entity operating outside of technological development. I also discuss relevant professional policies and guidelines available to social workers by professional organisations. Gaps in the literature are discussed in relation to existing STS theory and research and recommendations for the research design are presented.

Chapter Three discusses the research design; the recommendations of the preceding literature review were used to design a critical ethnography involving two Violence against Women (VAW) shelters in Ontario, Canada. Ontological,
epistemological and methodological choices are reviewed, and the methods of participant observation, documentary analysis and non-structured interviews are discussed in addition to ethics, access and dissemination of findings. This is followed by Chapter Four, which critically discusses the historical development of the social issue of VAW and the shelter movement in Canada, and the competing social, economic and political structures in which shelters currently operate. These structures impact the operational contexts in which the shelters make decisions about technology. The case studies are introduced by providing details of their organisational structure, services and funding contexts.

Chapters Five, Six and Seven present the findings and analysis from the ethnographic fieldwork. These chapters are organised around three broad research questions:

- Chapter Five: What ICTs were the shelters using?
- Chapter Six: How did ICTs impact the VAW shelters internally?
- Chapter Seven: How did ICTs impact service delivery in the VAW shelters?

Chapter Five discusses three key ICTs that were being used and how they came to be in the shelters. Four different ICT issues are discussed: computer use, ICT infrastructure and internet access, electronic record keeping, and social media presence. By analysing multiple ways ICTs were used in the shelters, I was able to develop a more holistic view of overall technology use in day-to-day operations. The key finding in this chapter is that the shelters engaged with technology; they were not ruled by it. The shelters were active agents in making complex decisions about technology rather than static or resistant entities being changed by technology in a
deterministic manner. Rather than being forced to use technology due to external factors, the shelters had their own motivations for implementing technology. This finding highlights that further research about how social service organisations make decisions about technology use is needed to prevent false assumptions positioning them as inherently resistant to technology. The on-going nature of decision-making throughout fieldwork also suggests that social work analysis of technology in the implementation phase limits our understanding of how organisations interact with technology over time. The Social Shaping of Technology framework is used to articulate the importance of these key findings.

In Chapter Six I explore the contradictions in the data related to ICT use in the shelter. While the observational data suggested ICTs were invisibly embedded in shelter operations, document analysis made any type of ICT use invisible. Conversations with shelter staff demonstrated this relationship was more complex than either of the other accounts, but also that staff members did not acknowledge how much they relied on ICTs to do shelter work. Two dominant beliefs are interrogated: that work involving technology is not ‘real’ shelter work, and that shelter staff members are not “tech people.” STS, postcolonial, and critical feminist theories on technology, work and gender are used to explore why the staff wanted to maintain these conceptual divides, but I challenge these assumptions based on the findings from my observational data. The key finding is that the shelters had no concept of the materiality of their work and thus were able to avoid acknowledging how embedded ICTs really were in the shelters. I discuss implications for the shelters moving forward.

Chapter Seven discusses the relationship between ICTs and service delivery in
the shelters. Three different types of boundary issues faced by shelter staff members are discussed: with service users, with the shelters themselves, and with the perpetrators. The key finding highlights that the concept of ‘presence’ has and is changing in service delivery. The long-standing preference for face-to-face communication is brought into questioned as it relates to service provider preferences compared to service user preferences.

Finally, in Chapter Eight, I conclude with a summary of the key findings and implications of the thesis theoretically, methodologically and practically for social work. I also reflect on how this research process has impacted my own practice model and research interests, including new questions about the relationship between technology and social work it has raised for me. As this is exploratory work, throughout the thesis I prioritise breadth of cross-disciplinary ideas over in-depth discussion of one particular concept, theory or discipline. I believe this reflective approach has enabled me to pose new questions about how and why social work has developed its existing relationship with technological change.
Chapter Two: A Review of Social Work Literature on ICTs

This literature review explores how social work has conceptualised the relationship between the profession, society and technology, and how it has applied this understanding to social work knowledge. The majority of this chapter comprises an analysis of the relevant academic social work literature reviewed during the first year of the PhD, up to and including July 2012. At the end of the chapter, I discuss other relevant literature that has been integrated into the analysis chapters as new themes arose in the data. As social work practice is a regulated profession in Canada, and many social workers rely on professional organisations for official guidance on practice issues, grey literature produced by the regulating organisations contributing to knowledge for practice in Ontario was also included. This provided a thorough understanding of the readily accessible knowledge social workers had access to in relation to technology.

This review revealed that the available literature was broad in both scope and theme, and there were no dominant or preferred epistemological or methodological frameworks grounding the research agenda. Instead, a variety of different research approaches and conceptual frameworks have been used, resulting in diverse practice recommendations. The epistemological and methodological orientations tended not to be explicitly stated; yet, I identified four different ways social work researchers have described this relationship, which in turn impacted their findings and recommendations:

1. Technology as the driver of change;
2. Social context as driver of change;
3. Collaboration as the driver of change; and,
4. Critical analysis as a driver of change

Each of these approaches had epistemological and analytical similarities with an existing STS framework, which I then discuss in relation to social work:

1. Technological determinism
2. Social determinism of technology
3. Social construction of technology
4. Critical information systems theory

Due to the lack of explicit attention to epistemology and methodology in the body of social work research, the cross-disciplinary approach enabled me to make new connections with STS, using existing conceptual and analytical tools in new ways. Finally, I discuss gaps in the social work research by using existing STS research themes to identify relevant, but under-researched, issues. These gaps highlight possible areas for future research and formed the basis of the research design choices outlined in Chapter Three.

2.1 Relevant Professional Literature and Guidelines

In Ontario, the Ontario College of Social Workers and Social Service Workers (OCSW-SSW) regulate the social work profession, and any individual using the job title of ‘social worker’ or ‘social service worker’ must be registered with the OCSW-SSW. Despite sharing a governing body, in this thesis I focus specifically on the professional context of social work, rather than social service work, as the scope of practice is different. In Ontario, social work and social service work are distinguished by the scope of practice enabled by the level of education. Social service workers typically hold a two-year college diploma from a recognised institution whereas social workers hold a four-year Bachelor of Social Work degree.
or a two-year Master of Social Work degree from a recognised institution. Registration with the college is based on the highest level of degree or diploma held by the member.

In addition to the OCSW-SSW, social workers are able to voluntarily join the Ontario Association of Social Workers (OASW) and the Canadian Association of Social Workers (CASW). These bodies operate as professional development networks and advocate for social work interests in other diverse forums. The CASW and the National Association of Social Workers (NASW), the accrediting body of social work in the United States, also have a formal collaborative relationship that facilitates greater communication about social work issues in the North American context (Canadian Association of Social Workers & National Association of Social Workers, 2012).

These bodies primarily produce reports and policy statements outlining voluntary practice guidelines, but the OCSW-SSW also creates and regulates the formal requirements of the profession. However, not all individuals working in the social service sector have social work training, nor are all individuals with a social work degree required to register with the OCSW-SSW (Swain, 2001). Conversely, for many registered social workers, the OCSW-SSW may be one of the most important and accessible ways to stay informed about professional issues. This makes it difficult to generalise the perspectives on technology provided by these organisations despite the fact that this literature might be widely read amongst their member bases. This is further complicated by the fact that many social workers work in organisations that employ individuals from various professional and educational backgrounds, all
of whom have different mandates and values (Sharland, 2012); therefore, organisational policies may not reflect the same guidelines as professional social work organisations. Although the documents outlined below provide insight into current professional discussions on technology, they are not definitive for social work or social service organisations overall.

Currently, the OCSW-SSW has printed articles on several technology issues in a re-occurring column titled *Practice Notes* in its bi-annual members e-newsletter. *Practice Notes* is a four-to-five page section seeking to help members “gain a better understanding of recurring issues dealt with by the Professional Practice Department and the Complaints Committee that may affect everyday practice” (Betteridge, 2014, p.21). Topics have included *Communication Technology & Ethical Practice: Evolving Issues in a Changing Landscape* (Betteridge, 2012); *Social Media and Practice: Protecting Privacy and Professionalism in a Virtual World* (Betteridge, 2011); and, *New and Improved? Making the Shift to Electronic Records* (Betteridge, 2014). These articles use practice scenarios to illustrate common issues related to technology use, followed by recommendations and references to relevant legal and ethical considerations. However, as stated at the beginning of every *Practice Notes* article, the recommendations for best practice are not professionally binding and the OCSW-SSW urges that individual consultation should be sought out for specific inquiries. None of the articles in *Practice Notes* address broader issues related to technological and social development.

The OCSW-SSW has also used the e-newsletter to document technological changes occurring within its own policies and procedures, such
as how increasing organisational capacity has enabled online registration. When outlining their own organisation’s use of technology, the OCSW-SSW consistently framed new uses of technologies as developments that enabled more efficient and effective communication to members. Increased technology use in organisational procedures was also framed as an environmentally responsible approach. For example, online membership renewal is described as inexpensive and green because digitisation reduces the need for paper, mailing and file storage. No statements about the historical relationship between social work and technology were found in publicly available communications to members; therefore, it appears that while the OCSW-SSW acknowledged the importance of technology issues to its members as evidenced by the Practice Notes columns, it has not contextualised these issues or addressed any potential challenges that may be associated with increased reliance on technology for organisational matters.

As a voluntary advocacy organisation, the OASW seeks to be “the voice of social workers in Ontario” (Ontario Association of Social Workers, 2011) and advocates for improved social policies and programs impacting service users and the profession overall. Although the website also states that the OASW often “develops role statements and position papers related to professional practice” (Ontario Association of Social Workers, 2011), technology is mentioned only briefly and descriptively in relation to special events at the annual provincial conference. There was no specific content on the website related to technology as it relates to social work.

The CASW is an active member of the International Federation of Social
Workers (IFSW), and is internationally recognised for its valued contributions about North American social policy (“Canadian Association of Social Workers,” n.d.). However, unlike many other provincial social work associations in Canada, the OASW is not a member of the CASW; therefore social workers in Ontario must purchase an additional individual membership for the CASW rather than be automatically enrolled through the OASW. In relation to technology, the CASW has developed *Social Media Use and Social Work Practice* (2014), a document that examines ethical issues and seeks to provide guidance on best practices for members. However, given that the CASW is not a regulatory body, this guidance is prefaced with the disclaimer that regional guidelines and regulations regarding social media use should always take precedence. The information within this document is broad, and lacks specificity, as specific issues related to different types of social media platforms are not discussed. This was the only document related to technology available.

The NASW “is the largest membership organization of professional social workers in the world, with 132, 000 members” (“About NASW,” 2015) in 55 regional chapters across the United States. As mentioned above, the CASW and NASW work collaboratively, and in addition, the American Association of Social Work Boards (ASWB) also works with provincial regulating bodies to help ensure consistent education standards across North America. Given the scope of this organisation, it is not surprising that the NASW has created the only professionally binding document on technology for social workers. The *NASW & ASWB Standards for Technology and Social Work Practice* (National Association of Social Workers, 2005) is a guidance document describing professional expectations of technology
use, seeking to ensure that technology use is in line with social work values and ethics. The document highlights that the NASW and ASWB are both in favour of greater technology use in social service organisations, stating that the ability to use technology is an expected professional competency (National Association of Social Workers, 2005). Furthermore, it sets the expectation that social workers should be up to date with technology issues throughout their career. The document describes potential issues associated with technology use in practice related to ethics and competency, rather than providing guidance on any specific forms (such as databases or mobile devices). The document is the most concrete set of guidelines produced by a social work association relevant to the Ontario context of practice that could be found in this review, but as it is an American document it is not formally enforced by the OCSW-SSW.

It is clear from a review of these various organisations that technology use has been framed as a recent development in social work practice and very little literature reflects on the relationship between technological development and social issues. The OCSW-SSW and CASW have provided descriptive articles, while the NASW has made technology use a formal social work competency. However, although the CASW and the NASW work collaboratively, these standards are not enforced in Ontario. No Canadian social work organisations have produced any other literature either supporting or critiquing the NASW standards and their potential impact on social work education and practice in the North America context and beyond.

2.2 Academic Literature Review Methodology

In the academic literature review, social work literature was located from
September 2011 to July 2012 using the University of Edinburgh library catalogue, which provides access to several online databases, including Applied Social Science Index and Abstracts, International Bibliography of Social Science, PsycINFO, Social Sciences Citation Index, and Social Services Abstracts. The databases were searched using four search strings:

1. “social work” AND “information technology” AND organization*
2. “social work” AND “ICT” AND organization*
3. “social work” AND “information technology” AND organisation*
4. “social work” AND “ICT” AND organisation*

The results were then filtered by language to include only English sources, and by source type to exclude news and magazine articles, trade publications and book reviews. This resulted in 362 remaining citations. Once the citations were filtered for relevance¹, this number was reduced to 40. Additional resources were identified through citation searching using relevant sources and investigating key authors where appropriate. In total, 44 articles and books were reviewed. I have continued reading and searching relevant literature published after this time, which is discussed throughout the analysis chapters.

### 2.3 Four Theoretical Frameworks in Social Work Literature on ICTs

In STS research, it appeared to be more common to explicitly identify assumptions about technology underpinning the research or analysis; however, I did not find this to be the case in the social work literature. Given the lack of explicit theoretical grounding, the literature reviewed here is organised and analysed based

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¹ Research regarding technology use in social work education, the research process, or specialised direct service interventions were omitted.
on my own identification of how the relationship between social work and technology is conceptualised (as show in Table 1): technology as the driver of change; social context as the driver of change; collaborative practice as the driver of change; and, critical analysis as a driver of change. I am aware that categorising the research in this manner may not reflect the authors’ original intents, and may oversimplify the diversity of findings; however for the purposes of this thesis, by categorising the dominant threads of each study I was able to find some commonalities within social work and in relation to STS frameworks with similar conceptual underpinnings: technological determinism; social determination of technology; social construction of technology; and critical information systems theory. I now explore each of these frameworks, and how they have impacted the resulting practice recommendations in social work in turn.

<table>
<thead>
<tr>
<th>Relationship Between Social Work and Technology</th>
<th>Corresponding STS framework</th>
<th># of Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Technology as the driver of change</td>
<td>Technological Determinism</td>
<td>14</td>
</tr>
<tr>
<td>2. Social context as the driver of change</td>
<td>Social Determination of Technology (SDOT)</td>
<td>4</td>
</tr>
<tr>
<td>3. Collaborative practice as the driver of change</td>
<td>Social Construction of Technology (SCOT)</td>
<td>12</td>
</tr>
<tr>
<td>4. Critical analysis as a driver of change</td>
<td>Critical Information Systems Theory</td>
<td>12</td>
</tr>
</tbody>
</table>

Table 1: Social work assumptions about technology and corresponding existing STS frameworks

2.3.1 Technology as the Driver of Change

Fourteen articles of social work literature framed technology as the driver of change, comprising approximately one third of all the reviewed literature. This frame was apparent when the research assumed that: the relationship between social work and technology begins when a technology is implemented in an organisation;
technologies impact organisations in similar ways; barriers to technology use or implementation are caused by external factors; and, technologies are always made ‘fit-for-purpose’. This literature framed the entire concept of ‘technology use’ in social service organisations as a best practice, arguing it would lead to greater organisational efficiency and accountability as long as unnecessary external barriers were eliminated. The first group of sources using the ‘technology as a driver of change’ frame discussed why technology use was important for social service organisations, whereas the second group attempted to identify strategies for overcoming ‘barriers’ to technological implementation.

This frame was apparent in many of the articles in one of the earliest special edition journal issues dedicated to technology issues in social work in the *International Journal of Sociology and Social Policy* (see volume 10, issue 4/5/6, 1990). This issue discussed technology in European social work contexts, including four articles relating technology use to best practices in social work. Bendel (1990) provided a largely descriptive account of the development of a computerised database for rehabilitation services in Israel, including the coding system used to categorise service user data. He claimed the system helped service providers locate the best available services for service users, and helped policy makers identify gaps in service, although no formal evaluation had been conducted on the system. In a similar fashion, Rosenholm (1990) described how a computerised database had been integrated into Finnish social welfare systems to assist with social welfare payment calculations. Rosenholm (1990) stated the benefits of computerisation included reduced redundancy of data collection from service users and more efficient calculations for payments. He acknowledged that during the process questions arose
with respect to confidentiality and training needs for the new system but did not explore these issues any further in the article. Again, no formal evaluation of the system had been conducted nor was the previous system from which they had transitioned described, making it difficult to contextualise his findings, or determine the extent to which a similar transition might be beneficial in other circumstances.

Also in the same issue, Kenis (1990) and Rabinowitz (1990) examined the potential uses of technology-based case modelling for the purposes of increasing and making appropriate referrals, and identifying gaps in intervention service networks. Kenis (1990) argued that social workers resisted the case modelling program due to resistance towards computer-mediated interventions in general. Furthermore, he claimed that in some instances service users had been found to be more honest when interacting with a computer rather than another human, implying that computer-mediated interventions may be more effective than person-centred ones in some situations, although no data is provided to support this assertion. Rabinowitz (1990) described a specific example of case modelling involving a computer simulation program designed to assist mental health officers in the Israeli Defence Forces make accurate diagnoses of Combat Stress Disorder. The case simulator was designed to reduce diagnosis errors caused by the judgemental nature of mental health diagnoses in this particular context. The programme appeared to be well received by the mental health officers in the study although limited empirical data was presented in the article.

Other literature in this group focused on evaluating specific systems used in social service settings. One such system was the Homeless Management Information System implemented in the United States in the 1990s and early 2000s. The
Homeless Management Information System was a range of “highly distributed client and case management applications that support the provision of housing and other services to individuals and families experiencing homelessness” (Gutierrez & Friedman, 2005, p. 514). It was an increasingly popular data management software choice amongst shelters once the US Congress began requiring annual reviews from shelters in 2000. Two sets of researchers have written about this system – Gutierrez & Friedman (2005) in the International Journal of Project Management; and Cronley & Patterson (2010) in Administration in Social Work. Both research teams began their analyses by acknowledging the challenges encountered in the organisations during the implementation of the Homeless Management Information System, but then focused on how the organisations were able to overcome these challenges by using project management techniques, and strengthening organisational culture, respectively.

Gutierrez and Friedman (2005) argued that the shelters faced an increased need to collect data based on the governmental expectations, which then made technology use relevant to their work. They argued the first version of any information system will not meet all the needs and expectations of different stakeholder groups, but through compromise this is possible. Therefore, their critique of the challenges faced by the shelters during the Homeless Management Information System implementation focused on the project management skills of the teams involved. Few descriptive characteristics of the Homeless Management Information System itself were presented. Instead, Gutierrez and Friedman (2005) focused on the context in which it was implemented, highlighting the assumption that the Homeless Management Information System was fit-for-purpose at the time it was implemented.
By focusing on the culture and staff in the shelters, they individualised the implementation challenges and ignored the design, goals and rationale of the Homeless Management Information System itself. Gutierrez and Friedman (2005) suggested that multiple stakeholder groups must be ready to compromise to achieve a system which meets the needs of all involved, but did not critically examine how to achieve this compromise or why this particular program was the desired solution for the organisations.

Using the same example, Cronley and Patterson (2010) examined the implementation of the Homeless Management Information System using an organisational culture framework. Their findings suggested that the organisational culture within each shelter impacted whether staff used the Homeless Management Information System or not, and that organisations with more ‘rigid’ cultures had higher rates of Homeless Management Information System use overall – ‘rigid’ defined as a higher degree of order, and lower degree of flexibility. This data supported their hypothesis that technological diffusion, or successful uptake of new technologies by users, is a complex process requiring a specialised approach from each organisation. However, they also framed the challenges in this case as caused by the organisations and staff rather than providing any details of the software itself. They suggested that if organisational leaders take the norms and values seriously in the implementation process, successful technological diffusion would be achieved.

Reilly, McKelvey-Walsh, Freundlich, and Brenner (2011) discussed the use of electronic methods to create and manage case plans in the American child welfare practice context. They argued that both the quality and timeliness of service plans were improved at a multi-state agency using the newly implemented electronic
system. The research specifically focused on case plan quality and therefore did not discuss any practical implementation issues; such how social workers and service users felt about the system. It also did not present any longitudinal data; therefore, it is impossible to assess if the system needed to be changed based on competing stakeholder perspectives, as was argued by Gutierrez and Friedman (2005).

Schoech, Basham, and Fluke (2006) reviewed the Data Enhanced Management Online Support System developed for child welfare agencies in the United States – a system allowing users to filter select national and regional data sets and aggregate information to better meet established performance standards and increase service quality. The system presented the data in graphs and tables for easy comparison, and users could sort information by a number of variables. Schoech et al. (2006) argued that social service organisations were severely under-funded in terms of technological capacity compared to the level of responsibility required in the job, and greater investment in technological capacity could significantly increase an organisation's ability to integrate evidence-based practice, ultimately producing better outcomes for service users. They argued that the success of the Data Enhanced Management Online Support System highlighted the potential implications of greater technology use in social service contexts: “agencies must keep current with technology and examine the advances for business technology for decision support applications” (p. 68). Although they discussed technology costs broadly in the article, Schoech et al. (2006) did not provide information regarding the cost of the Data Enhanced Management Online Support System itself; therefore, it is difficult to determine the resources that were needed for this project, and whether it could be applied in other instances.
Perron, Taylor, Glass, and Margerum-Leys (2010) asserted “that ICTs are of critical importance to advancing the field of social work” (p. 69), and ICT competencies should be a top priority for social work education. They focused on the potential benefits of ICTs to practice, and referred to statements by the United Nations and the World Health Organization that state ICTs are important parts of the global strategies to reduce poverty and improve health outcomes. Perron et al. (2010) further argued that as technologies become cheaper and more accessible, technology would continue to shape global and local communities, leaving social work with no choice but to engage.

Finally, Dunlop and Fawcett (2008) discussed the opportunities presented by online advocacy. They stated that traditional forms of advocacy in social work, such as demonstrations and political action committees, have not received adequate attention in the literature with regards to measuring their effectiveness. However, they claimed that technologies could enable new forms of advocacy that could ultimately help social workers in their social justice work. Understanding new technological approaches to advocacy, via blogging, e-mailing lists, and social networking, should, they assert, be a key research priority, and actively integrated into existing advocacy work.

All of the articles in this body of literature focused on technology as the driver of change within the practice contexts being examined. Humans were most often presented as hindrances to successful technological diffusion in the organisations rather than equally important actors in the relationship. This resulted in recommendations that focused on changing human behaviours to eliminate resistance, so that technology could work as effectively as possible, and help
improve service user outcomes as it was designed to do. Therefore, technology use in general was assumed to be a ‘best practice’ in all of these instances, because it was always assumed to be fit-for-practice. However, given the lack of critical examination of the characteristics of the systems being implemented, or description of service provider or service user perspectives, there was no way to determine if any of the technologies were fit for purpose from the perspectives of the staff or service users. By framing the leadership and staff as the challenges or barriers hindering the potential effectiveness of the systems, technology is conceptualised as the driver of change in service delivery.

These sources also employed the concept of ‘best practices’ strategically, to convince social workers to use technology and reduce their resistance to technological diffusion. Dunlop (2006) argued that “challenges to implementing evidence-based practice in social work include resistance by professionals” (p. 227) but does not elaborate on why social workers might be resistant. This ‘resistance’ may be caused by tensions in prioritising service user preferences, organisational requirements, and practitioner experience in the context of the practice setting and the lack of research available on technology in social work. However, without sufficient research to provide guidance on the tensions in practice, social workers may choose to err on the side of caution. This research, which frames technology as the driver of change, does not provide any critical examination of the relationship between social work and technology, or any guidance that social workers can use in their own practice beyond changing their own attitudes towards technology use.

This leads to the second theme within this group of articles: rather than simply identifying that technology is important or beneficial, this research identified
practical ways to reduce barriers. Zhang and Gutierrez (2007) conducted a qualitative study to identify factors that increase social worker motivation to use IT. They identified organisational barriers, which they described as unique to social services: “highly limited resources coupled with the mandatory acceptance of organizational IT” (p. 221); and that “staff members at such organizations often view IT deployment and usage as a burden that interferes with their core mission” (p. 221). Zhang and Gutierrez (2007) suggested these organisational barriers could be addressed using strategies commonly found in business contexts, such as highlighting the personal, organisational and service user benefits of the IT to staff, showcasing management and supervisory support for the IT, and promoting the potential for increased self-efficacy via IT use. Again, the research framed the barriers to successful technology diffusion as the social workers themselves, who are perceived to be resisting beneficial technologies because they do not understand how it can help them. A discussion of the ICTs in question was not included in this article.

Choi, Ligon, and Ward (2002) also focused on individual social workers in their research on computer anxiety. Using the Computer Anxiety Index, social workers in the southern United States were assessed on their level of computer anxiety, referring to negative emotional reactions individuals may feel when interacting, or anticipating interaction, with a computer. This form of anxiety was framed as a barrier to the organisation’s overall functioning because it prevented staff from fully engaging with the tools deemed necessary to complete their daily tasks. The researchers ultimately suggested that increased levels of IT training could reduce computer anxiety amongst social workers and that social service
organisations should consider increasing training opportunities. However, given Zhang and Gutierrez's (2007) claim that social service organisations face challenges to securing resources in order to meet their technology needs, the practical challenges of providing increased training opportunities need to be addressed in order for this recommendation to be feasible.

Carrilio (2005, 2007) also attempted to identify barriers to staff technology use. In both articles, Carrilio explored internal barriers, arguing that “[d]espite the ever-increasing ‘user-friendliness’ of the systems available to capture program and service data, they are not always embraced by social workers or social service agencies” (p. 42); and “[t]he reasons that social service organizations do not use [management information systems] are not well understood” (Carrilio, 2005, p.43). Using survey and case study approaches, Carrilio (2005, 2007) suggested that organisations can increase IT acceptance by ensuring the system is easy to use, staff have the proper skills and experience to feel comfortable using it, the system provides staff with useful data (not just the management), and the organisation itself is ready to support the use of IT. Similarly to Zhang and Gutierrez (2007) and Choi et al. (2002), Carrilio (2005, 2007) advocated for greater training opportunities and internal support to increase IT use but does not address how practical issues facing these types of organisations may have prevented their ability to implement these recommendations in the first place.

In all of these instances, technology was conceptualised as a pre-existing force brought into the organisation to improve practice, usually based on its perceived ability to increase organisational efficiency and effectiveness. While minimal descriptive detail was provided about the technologies themselves, the potential
impacts on the organisations were portrayed as universal and predictable. Any barriers were framed as individual resistances to organisational change that could be overcome by changing the implementation strategy rather than attributing any of the barriers to the technology itself. This is problematic because it positions social workers as the causes of problems within their own organisations while failing to provide any critical analysis of the profession’s or organisation’s overall relationships to technology. Positioning technology as the driver of change in social work and social service organisations minimises the importance of any other factors. I now relate this literature to the technological determinism framework in STS that highlights how and why these embedded assumptions are out-dated and problematic for social work.

Technological determinism is the belief that technology is “an objective, external force that would have deterministic impacts on organizational properties” (Orlikowski, 1992, p. 398); in this framework, technology is seen as an independent driver of change rather than operating in relation to other social structures or actors. In this framework, the belief that technology is deterministic is reinforced by the assumption that technology is both neutral and inherently innovative despite the lack of critical analysis the technology itself (Williams & Edge, 1996). Technological determinism was a frequently used as a conceptual framework in STS in the 1980s, but has since been critiqued in many ways. This framework ignores the fact that humans are responsible for designing and creating technology in the first place, long before the end users encounter it. Assuming technologies exist naturally, appear ready to be implemented and used in pre-defined ways, and have no temporal context is referred to as 'black boxing' technology: “One need not understand anything about
what goes on inside such black boxes. One simply brackets them as instruments that perform certain valuable functions” (Winner, 1993, p. 365).

Technological determinism also fails to critique the overarching belief that technology is the inherent answer to all social problems (Williams & Edge, 1996; Winner, 1980). Yet, deterministic assumptions, such as those found in this framework, have been used in social work to encourage greater use of professional resources on technology implementation and use as forms of ‘best practice’, without providing evidence to support this broader claim, or critically analysing the technology itself. This was apparent in the majority of the articles in this group. Given that STS researchers have moved away from using this framework in favour of more critical approaches, it seems feasible that social work could do the same. It is likely this has not occurred yet because social work researchers have not been as forthcoming in stating their theoretical orientations, making it difficult to identify weaknesses and move beyond these determinist accounts. By framing technology as the driver of change, this body of social work research has implicitly argued that technologies are ‘black boxed’ and have deterministic impacts, social workers themselves present the barriers to successful implementation, and specific technologies do not need to be critically examined because technology as a whole will lead to more effective social work practice, ultimately reducing social problems. This is inevitably a very restricting approach.

2.3.2 Social Context as the Driver of Change

Four articles were classified in the second group of sources; therefore, it was substantially smaller than the first group. I identified in this group a shared assumption that the social context in which technology was implemented was the
driver of change as opposed to the technology itself. This literature shared the
assumption of the literature in the previous section, that the technology itself was
neutral, but differed in that it assumed the ideology of the social context determined
the impacts and consequences of technology. In a critical commentary, Rafferty
(1997) summarised several issues related to technology in social work, and the
globalisation and marketisation of social services and social work education. Her
commentary discussed how neoliberal policy-making in Western countries has
impacted social welfare globally, and technology’s role as an enabler in this process.
Throughout this article she highlighted the importance of understanding the context
in which IT is being implemented. For example, Rafferty (1997) is one of the few
writers who has suggested understanding “gender differences in approaches to
information and communication technology” (p. 964) could be fruitful in
understanding technology issues in social work, although she does not provide more
detailed information about what this could potentially entail. She suggested
 technological implementation in social work thus far has been far from seamless, but
concluded that “[i]t is clear that social welfare work requires the support of ICT to
progress in an information rich environment” (p. 964). However, as this is a
commentary, she does not provide theoretical or research evidence to support this
claim. Therefore, although Rafferty (1997) provided recommendations, she did not
offer an analysis of why these issues were not discussed in the past, prior to the
dominance of neoliberal policy-making, thereby reinforcing the notion that
technology issues became relevant to social work because of the neoliberal context
driving their implementation.

McCarty and Clancy (2002) focused on the use of 'tele-health' in social work
practice, defined as “the use of modern information technology to deliver health
services to remote locations” (p. 153). They discussed contextual issues impacting
the widespread implementation of such practices, such as legality, ethics and access,
and argued for widespread redesigns of health service delivery systems to resolve
these issues so that the many benefits of tele-health can be realised. McCarty and
Clancy (2002) presented the practical challenges of implementing tele-health
descriptively, discussing factors such as ensuring confidentiality of service user
information and recognising many health insurance plans do not yet provide
coverage for tele-health services. By framing these issues as contextual concerns that
can be dealt with through profession guidelines or policy changes, the physical
challenges of using technology to mediate practice and perceived neutrality of the
technology itself are left unexamined.

Rather than focusing on a particular context, Derezotes (2005) analysed
technology within a holistic account of contemporary global social work issues. He
asserted that modern technologies could present both direct “global survival threats”
(p. 13), and opportunities for solving global challenges depending on how they are
used. Furthermore, he claimed that context and ideologies supporting technology use
are relevant to social work because any technology could have a positive impact on
social justice and change if used in the right way, but many more technologies have
been used to achieve negative ends compared to positive ones. Derezotes (2005)
linked technology to six layers of human experience – physical, emotional, cognitive,
spiritual/religious, local community, and global community; however, he did not
state whether he believed these layers were universal and constant, or if they
reflected the current context. Overall, he argued for greater inclusion of technology
in social work using examples of positive uses in practice, therefore focusing on the context of implementation and use rather than the technologies themselves.

Parrott and Madoc-Jones (2008) analysed tensions between social work and information technology by examining issues at the organisational level. They claimed that tension in the workplace might be caused by the limited way IT has been implemented in social work organisations. Staff and service users often perceive new technologies to be instruments of surveillance implemented to benefit management rather than promote better outcomes for service users. By claiming that technology has not typically been implemented with social work goals and values in mind, Parrott and Madoc-Jones (2008) reinforced the idea that the technology was neutral, and the context of implementation was the driver of change. They argued that if social workers were more involved in technological development processes they could help create better technologies that could improve practice empowerment in four ways:

1. Practical empowerment – The ability to connect with geographically isolated individuals and groups through greater access and use of IT

2. Social empowerment – The potential to communicate with others at their own pace

3. Economic empowerment – The ability to access and participate in the digital economy

4. Political empowerment - The ability to access e-government services and/or engage in political activity (Parrott & Madoc-Jones, 2008).

Parrott and Madoc-Jones (2008) provided an analysis of the socio-political context and advocated for greater social worker involvement, but in doing so avoided a discussion of technology itself. They do not address why social workers have not been involved in these processes thus far, or how social workers can become involved in them. Because IT was seen positioned as neutral, their analysis supported
the assumption that technology will improve practice as long as the context supports it.

In this literature, the authors assumed that technology was neutral and instead focused on the context in which it was implemented. These sources tended to conflate social work’s relationship with technology to social work’s relationship with neoliberalism, presenting technology as a recent phenomenon in social work. Once again, the technologies discussed in these articles are not subject to critical examination; the barriers to successful technological implementation reflected how the technologies were used in different organisational and social contexts. The majority of these articles were theoretical commentaries rather than empirically-driven, and the recommendations focused on encouraging social workers to actively shape their contexts to create more supportive technological environments. Further arguing that through this advocacy work, social workers might be able to shift the social context to better reflect their needs.

This approach has been subject to the same criticisms as the previous ‘technology as the driver of change’ group because it takes a deterministic stance towards the relationship between technology and social work. Although analysing the context of technology use provides a valuable macro-level perspective on the relationship between social work and technology that was missing in the first group of literature, it still fails to critically analyse the technology itself. I, therefore, related this group to the social determination of technology framework found in STS.

In the social determination of technology (SDOT) framework, “what matters is not technology itself, but the social or economic system in which it is embedded” (Winner, 1980, p. 122). This approach developed to address the critiques of
technological determinism’s over-emphasis on technology as the driver of change without recognition of the social context in which it was created and used. Both the social work literature in this group and the SDOT literature in STS highlight the importance of the social, cultural, economic and political contexts in understanding the relationship between technology and society; however, without incorporating any analysis of the technology, humans continued to be positioned as the barriers to successful technological diffusion. Even if social workers were to become more involved in the social contexts influencing technological development as was recommended by the research in this group, it would still be necessary to develop an understanding of what kinds of technology are used in social work and if and why they are the most suitable to meet professional and organisational goals.

2.3.3 Professional Collaboration as the Driver of Change

The third theme in the social work literature approached technology issues differently. Rather than focusing solely on the technology or the context, this literature recognised and examined ambivalence within social work about technology. A dynamic relationship was identified between technology and social work. In this group, this resulted in recommendations to collaborate with IT professionals to create more useful practice technologies, hence assuming professional collaboration was the driver of change. There were 12 articles in this group.

In an early commentary about the role of computers in social work practice in Germany in the aforementioned special issue of International Journal of Sociology and Social Policy, Dringenberg (1990) posed many reflective questions about technology use in practice, such as “what kind of tasks are done by computer
applications?” (p. 204); “[w]hich are the factors (in an institution and in persons) that lead to senseless use or lead to abuse?” (p. 209); and, “[m]ust mankind conform with computers’ needs or will computers be adapted to man’s needs?” (p. 210). These questions highlighted that he perceived critical analysis of technology to be a valid and relevant area of research, but also that technological development was connected to the development of the social work profession and vice versa. These questions also reflect issues that have continued to face social work today, such as challenges to confidentiality and privacy, and the shifting power dynamics amongst service users, social workers and organisational management. Ultimately, he claimed that social workers should be comfortable with and able to use computers, so they are “able to participate in decision-making process, e.g. when computers' introduction is discussed or purposes and limits of computer use in an institution are discussed” (p. 207).

In the same journal issue, Shapira (1990) described research conducted with the Jerusalem Probation Service to evaluate “computerized information technology, known as a Decision Support System” (p. 138) that assisted the decision-making ability of Youth Probation Officers. The project was deemed to be a success because of its ability to predict successful interventions based on the information provided by the probation officers, and research and legal considerations. Shapira (1990) credited the success of the system to the overall collaborative approach between the Research & Development team of engineers, management and the probation officers.

Sapey (1997) provided a theoretical analysis, arguing the need to develop the critical capacity of social work to understand the ways information technology impacts organisational and professional structures. Sapey (1997) discussed the on-
going tension between increased IT use in organisations and social workers' lack of technological knowledge or training. His argument was two-fold: social workers should not feel intimidated by their lack of technical knowledge compared to IT professionals, and they should strive to be more involved in IT implementation in the workplace so that changes do not continue to happen without direct social work input. While Sapey (1997) problematised the assumption that technologies are neutral entities, he did not explore why this might create tension between the profession and technology. His recommendation was that social workers should increase their involvement in IT development so that organisations do not “defer to the knowledge base of systems analysts, programmers or computer operators” (p. 813) to define effectiveness.

Johnson, Hinterlong, and Sherraden (2001) described the case example of a generic management information system developed in the United States to assist community-based organisations collect, manage and report information. The system addressed an identified need amongst community-based organisations for an up-to-date program, while minimising each organisation's individual investment and simultaneously creating a systematic data collection process. Johnson et al. (2001) stated the project was considered a success by the participating organisations due to the fact that they were involved in the process and felt the resulting system satisfactorily met their needs. However, they did recognise challenges throughout this process as well, specifically the sustainability of the collaborative approach in terms of resources:

A collaborative process requires balancing competing requirements. [The leadership team’s] open and inclusive approach was satisfactory until resources limited the amount of changes that could be made. A level of
expectation [of inclusion in the process] had been set that was difficult to alter…[r]equests for revisions exceeded the resources available to make changes (p. 17).

While Johnson et al.'s (2001) research supported the assumption that successful professional collaboration drives change in social service organisations, they also raised significant practical issues regarding the project’s overall sustainability that they did not fully reconcile in this article.

In the opening editorial of a special issue of the *British Journal of Social Work* entitled 'Social Work in the digital age,' Rafferty and Steyaert (2009) reiterated a similar sentiment as Sapey (1997), mentioned above: “[t]he use of technology for social progress will not happen appropriately and ethically without social workers working with others to mould technology developments and applications to their own and service users’ needs” (Rafferty & Steyaert, 2009, p. 590). The writers explained that despite the lack of literature available, these issues are not new to social work researchers: “[f]or much of the time, we have been saying it to each other at international conferences and in specialist journals” (Rafferty & Steyaert, 2009, p. 590), rather than disseminating and discussing the issues on a broader scale. Yet, despite advocating for a collaborative approach, they do not explore how to do this.

In addition, social work researchers Hill and Shaw (2011) wrote about a variety of issues related to social work and technology in their book *Social Work and ICT*. The book used the same ‘best practices’ framing discussed in relation to the first group of literature, but also incorporated a thorough discussion of why developing practice-led, as opposed to than technology-led, ‘best practices’ is essential, ethically and professionally. They argued that the relationship between the profession and
technology is complex and warrants serious discussion on how to maximize advantages and minimize disadvantages. The overarching assumption is that by engaging in these discussions, the profession will be able to move forward with collaborating on, and integrating, technology in practice in ways that are in line with professional values.

A second theme in this group of sources was the identification of barriers to technology use in order to guide future research and collaboration. In contrast to the technological determinism group that also identified barriers, these barriers were explored within the broader social contexts of the profession and organisation rather than framed as individual problems. O’Looney (2005) reflected on technological changes in social work compared to other professions, stating:

In other fields of endeavor, information technologies have been applied to whole-system transformations, involving process re-engineering, job and task restructuring, expert system support, customer management, and the emergence of matrix, network, and virtual organizational designs. Far fewer of such changes have occurred as a result of the introduction of IT into organizations dominated by professional social workers (p. 5).

O’Looney (2005) perceived social work’s limited analysis of technology as a problematic ‘lack of transformation’ compared to other sectors, and asserted that this problem could be remedied through greater social work involvement in technological development. He identified the potential barriers to this collaboration as undercapitalisation to fund development, the nature and complexity of social work itself as difficult to automate, the long cycle of service (which could potentially be the service user's entire lifespan in some settings), and fractured nature of social service organizations. He then discussed ways technology could help improve networked service delivery.
Although other social work researchers have also identified similar challenges faced by the profession, O’Looney (2005) produced by far the most technical account of these issues. He identified specific technical strategies that are not commonly referred to in social work literature, such as “Inter- and Intra-Agency Interoperability” (p. 15), “Extensible Markup Language” (p. 15), and “Semantic Web” (p. 16) that had limited explanation within the article. Unintentionally, he has highlighted a common barrier hindering inter-disciplinary collaboration – the need to translate discipline-specific language for various audiences – but he does not address this practical challenge within his recommendations.

Kreuger, Stretch, and Kelly (2006) attempted to create a model of the factors influencing technological use leading to ‘fast practice’ – the “immersion by practitioners in the ramified electronic assemblage (Wise, 1997) of hypermodern equipment and applications” (p. 28). They surveyed Master of Social Work graduates from an American university about their experiences with technology in practice, which resulted in the development of the “Global Acceptance of Hypertechnology Scale” (p.33). The Global Acceptance of Hypertechnology Scale’s role was to measure the level of staff involvement in the processes of technological development, organisational policy-making and culture in order to assist organisations in developing successful technological strategies, and/or identify potential barriers to success. Rather than offering a deterministic view of technological implementation or social context, Kreuger et al. (2006) addressed both contextual and physical issues related to technology, ultimately arguing that a project's potential for success could be improved through collaborative strategies that share power with social workers rather than enforce it.
White, Wastell, Broadhurst, and Hall (2010) described the practical challenges of the government-initiated ‘Integrated Children's System’ in England and Wales. This system was created after the high-profile investigation of a child who died whilst known to the local authorities. The child’s death was attributed to fragmented communication between different agencies and the Integrated Children's System was developed to collect, store and share data between service organisations in an attempt to prevent subsequent deaths. The Integrated Children's System appears to be one of the most well-researched IT implementation case studies in the social work literature thus far. In this article, White et al. (2010) described the challenges faced by organisations due to, what were later determined to be, design flaws in the Integrated Children's System. The article advocated for a user-centred design approach in future projects, to enable collaboration between the designers, users and government officials who had ultimately determined the need for the system in the first place.

Further supporting the argument that professional collaboration is the driver of change in social work, Schoech, Fitch, Macfadden, and Schkade (2001) described the detailed specifications of a hypothetical system they believed would be useful in practice, incorporating concepts from business contexts. Rather than focusing on the potential use of IT for service user data collection, the authors argued a system that could aggregate the knowledge and collective wisdom of social workers and be used in a variety of settings based on the unique characteristics of individual cases would be more useful. They asserted this could be an inter-agency, global system that aggregated data and knowledge from various practice contexts and geographical locations and be made available to all social workers. They argued that as more information was added to the system, the system's ability to provide complex
analyses and generate successful intervention suggestions would improve. A timeline of 10-15 years was given as a reasonable framework to develop the system in a collaborative manner with technology professionals.

Fitch (2004) further expanded on these ideas in a related article, describing a vision for a shared information database housed on the World Wide Web that would enable service users to access their own data, consent to data sharing and approve referrals for services at their convenience. While this idea addressed the lack of transparency surrounding current client record-keeping practices, Fitch (2004) failed to address any practical issues related to confidentiality, identity verification, and access to technology that are currently issues for any other type of technology used in social work. He also failed to address resource issues or timelines, making this project idea difficult to support.

Another special issue on technology matters was published by the *Journal of Evidence-Based Social Work* in 2006, largely focusing on the theme that social work should make technological integration a key priority. In the introduction, Dunlop and Holosko (2006) identified seven key focus areas:

(a) the judicious use of technology, (b) the timely use of technology, (c) the simplification of technology, (d) the resource infrastructures necessary to support their implementation, (e) the systematic and stepwise introduction of their use and monitoring their efficacy, (f) customizing the technologies to the needs of clients or student learning objectives, and (g) reiterating how technology can make for better informed EBP (p. 3).

These focus areas suggest that Dunlop and Holosko (2006) support greater conversation between social work and technology fields in order to address many of these logistical challenges.

This group of literature appears to implicitly suggest that technological
development is an on-going process that social work has not actively chosen to be a part of thus far, which has led to its current disadvantaged position overall. However, although the assumption that collaboration with IT professionals is the driver of change is clear from the recommendations, the issue of why this has not happened already has not been addressed, despite the fact that this recommendation can be found as early as 1990. Research identifying potential barriers to collaboration was not present either; although one of the challenges of locating research on inter-professional projects involving social work is that this type of research is conducted in a variety of disciplines and may be located in journals for other audiences. Only Johnson et al. (2001) acknowledged practical challenges, but also did not provide possible solutions.

There are many other actors involved in technological development including computer programmers, engineers, software developers and designers. These groups create the technology currently being used in practice, but their professional roles and goals are not well understood in social work. This collaborative process could also involve other stakeholders, such as policy makers, government officials and service users; most of the research in this group fails to identify who might be the most beneficial or receptive to increased social work collaboration in technological development.

To encourage greater collaboration, professional social work organisations will either need to follow in the footsteps of the NASW and establish technological literacy as a core competency in social work training, or collaborate with professionals who understand and are sympathetic to social work needs and goals. Because technological development requires significant resources, and has its own
disciplinary-specific knowledge and language, it remains to be seen in what ways these types of collaborations could be formed with a social work sector that is highly under-resourced. This approach also fails to critically analyse technology or place its relationship with social work in a historical context; it continues to perpetuate the assumption that technology will be beneficial as long as the human actors figure out how to collaborate appropriately. This approach relates to the social construction of technology framework in STS because it accounts for the flexibility of technology while still assuming different groups can control technology equally.

The social construction of technology framework consists of four key components (Klein & Kleinman, 2002; Pinch & Bijker, 1987):

1. Interpretive flexibility – Technologies can be designed to solve identified problems in many different ways. Technological design is therefore not a static process, but rather involves on-going subjective decision-making by the designers who attempt to create technology that best meets the user’s needs.

2. Relevant social groups – Multiple social groups (i.e. users, designers, etc.) exist and are impacted by technological design and development. These groups must (eventually) share common interpretations of the function and purpose of the technology in order for the technology to be used in the manner for which it was designed.

3. Closure and stabilisation – Divergent interpretations about the design, function or purpose of a technology amongst the relevant social groups must be addressed and resolved in order for the technology to reach its end state. Usually at this point, design choices that prioritise certain functions over others are finalised, making it more difficult for the user to resist design
features they deem to be unsuitable or dysfunctional for their needs.

4. Wider context – Technological development is influenced by social, cultural, economic and political factors at all stages and in different ways by all relevant social groups.

Social construction of technology widens the scope of analysis found in the technological determinism and social determinism of technology frameworks to include different aspects of the technological development process, and draws attention to many different groups, not just users who engage with the technology after it has already been developed. It claims that technology is the product of social processes, and these processes are influenced by the values and goals of the broader contexts in which they are embedded. Therefore, technologies have particular social qualities embedded within them that reflect these contexts and constrain how they can be interpreted and used (Bijker, 2010; Winner, 1980).

This group of social work literature reflects all of these components. In recommending social work collaborate with IT professionals more explicitly this literature recognises that both interpretive flexibility and relevant social groups are important considerations in the profession’s future relationship with technology. The literature also advocates for greater collaboration specifically because it recognises the practical challenges of stabilisation and closure when they are not involved in these processes. Finally, the wider context of practice and technological development has been taken into account.

Yet, Winner (1993) has critiqued the social construction of technology for failing to deconstruct why there is a need to examine these processes, and what the potential consequences of these social processes might be for different groups. He
questions the significance and potential social impact of this information, which is a critique of the social constructionism paradigm more generally. The social construction of technology seems to suggest that all ‘relevant social groups’ have equal access to these processes and their preferences are considered equally throughout. Therefore, it fails to address how and why in reality certain actors and social groups are left out of the development process, which is the concern identified in the social work literature in relation to social work itself.

Williams and Edge (1996) have also highlighted social construction of technology’s inability to account for closure in relation to the way technological decision-making in the past limits future design choices. In the social construction of technology, the concept of closure is non-specific and does not explore the reasons behind why a particular group’s ideas might dominate in a given context. Technology is a cumulative process and we are both empowered and constrained by the environment created through design choices of previous generations (Aunger, 2010). Social construction of technology has therefore been critiqued for depoliticising the technological development process by ignoring factors that may increase one social group’s ability to dominate the process in comparison to the others. This ignores the motivations driving particular design choices preferred by certain social groups (Introna, 2007). Social workers using IT in practice can be considered one of these relevant social groups. However, without acknowledging why they have not been included in technological development historically or why the recommendation to be more involved has not been implemented thus far, the potential for professional collaboration appears limited.
2.3.4 Critical Analysis as a Driver of Change

The final body of social work research can be described as critical in nature. It was identified as such if it raised theoretical and practical concerns related to technology that questioned its assumed neutrality or inherent usefulness in practice. These sources were different from the other groups because they did not necessarily advocate for any particular course of action, but had a more complex view of the relationship between social work and technology; critical analysis of technology was viewed as both useful and necessary to better understand the relationship between the two, and move the social work research agenda forward. No direct causal links were made between technology, social contexts, social work or the organisations; therefore, critical analysis was not seen as the driver of change within the organisations themselves, but was used to examine and instigate broader reflection on these issues. The critical analyses covered many different aspects of technology, but the majority focused on macro-level issues, such as the overall role of computers in the profession itself. Twelve articles were located in this group.

Despite being one of the oldest located sources in this review, the aforementioned special edition of the *International Journal of Sociology and Social Policy* (1990) contained three articles highlighting critical issues that continue to be the subject of social work discussion today: “a great deal remains to be done in terms of evaluating past activities, planning for the future, encouraging the use of computers where desirable and possible, and avoiding pitfalls and traps in their utilization” (“Computers in the Social Services: Papers From a Consultation,” 1990, p.1). Hartmann (1990) focused on a nationwide database in Germany used to process social assistance applications. Although he was positive about the potential of the
system, he stated that the project was met with resistance by some staff and sought to understand why this had occurred. In his analysis of this situation he was critical of how the technology had been implemented, arguing the role of computers should not overshadow the goals of the work itself; and establishing computerisation should not in itself be the point of technology implementation in social service organisations if they are not shown to benefit service delivery.

Macarov (1990) discussed confidentiality and the ways technology shifts power relations based on who creates and has access to client records. For example, he argued that even the presence of a computer in the room during an intervention could impact the information the client feels comfortable sharing with the social worker: “For some people, the handwritten or typed record, kept in a file folder, is psychologically less threatening than the presumably omniscient, immortal and amoral computer memory bank” (p. 68). He also argued that even if technology helped improve efficiency and effectiveness in some areas, this improvement might countered by the loss of control over what information is deemed to be important and necessary to record by social workers and service users.

Phillips (1990) argued that social work discussions on technology have been held back by extreme opinions from different groups – those who wish to use technology for everything and those who resist any type of organisational change, including technological. He argued this was confounded by the fact that “the majority of social work practitioners have very limited understanding of computer technology and have received very little, if any, training on the subject, either in their agencies or in their accreditation courses” (p. 16). He stated that technological decisions have moral dimensions and was critical about the ability of technology to
handle the types of information dealt with in social work. Although technology has continued to develop significantly since the time this special journal issue was published, these articles sought to critically examine the technology at the time as well as the organisational and professional contexts in which it was implemented.

In another journal article, Campbell (1990) framed social work resistance to technology as resistance to 'de-skilling'. Based on the work of Braverman (1974), ‘de-skilling’ has been used to describe changes to workflow in other labour sectors and refers to “the ‘degradation’ of craft work through the extension of industrial management controls” (Campbell, 1990; p. 86; see also Vallor, 2015). Campbell (1990) suggested social workers had experienced this process of de-skilling as new technologies, striving to automate and standardise service delivery, were implemented in their organisations. Similarly to Macarov (1990), Campbell (1990) argued that any gains in efficiency might be offset by the fact that limiting staff from engaging in established, peer-supported case conferencing practices, which enable social workers to incorporate practice wisdom into decision-making, would ultimately result in equalised, or decreased, productivity.

Moses, Weaver, Furman, and Lindsey (2003) provided data from a natural experiment on worker satisfaction after the implementation of an electronic database in a child welfare agency in California. They reported that both positive and negative beliefs held by staff about the new system prior to the implementation were exaggerated compared to the actual changes that ensued. This article was one of the earliest critiques of a specific system that did not conceptualise the resistance from the organisation or individuals as barriers that could be overcome by using different implementation strategies. Instead, the barriers to successful implementation were
seen as inherent within the technology itself. The database they examined was seen as having inherent flaws; it was not assumed to be fit-for-purpose or neutral.

Parton (2008) focused on transformations at the professional level rather than within specific organisations or practice settings. He described technology as having changed the entire nature of the profession from 'social' to 'informational'. He related a shift in how the work itself was done to broader changes in the social and political context in which social work was embedded. He argued this shift had impacted the way that knowledge was handled; the focus had become “concerned with the gathering, sharing and monitoring of information about the individuals with whom they come into direct and indirect contact” (p. 254). The pace of change was the greatest concern to Parton (2008), who argued that critical reflection on the compatibility of narrative social work approaches and fragmented data collection was necessary to help highlight why current guidance on IT provided by various social work organisations may be unrealistic in practice. While Parton's (2008) analysis provided a much-needed critical perspective on the relationship between social work and technology, he did not offer many suggestions for future research other than:

it is also important that theory is 'slow' and 'detached' in order to try and make sense of the changes and thereby provide practitioners and those with whom they work ways of making sense of the world(s) that they inhabit and thereby engage with it in creative and critical ways (p. 266).

Garrett (2005) focused his analysis of technology use in England and Wales on the recent trends towards 'e-government' and 'e-practice'. He specifically linked technology implementation to the economic context, and stated that economic forces impact what technologies governments choose to invest in, and government
contracting has become a profitable market for IT developers. Although the UK government continued to heavily invest in providing services online and required agencies to keep electronic files, the fact that many communities were still unable to access the internet was under-researched and overlooked. Garrett (2005) argued that new forms of digital divides have continued to emerge as political and economic factors drive the types of technologies that are invested in, who can access them and for what purposes. He argued that changes in government priorities and requirements resulted in greater social work technology use and prompted the ‘electronic turn’ in social work. The UK government had encouraged the development of electronic records for various reasons; one of the main rationales had been to allow greater information sharing between agencies; however, Garrett (2005) also raised concerns about the proposed quantity of personal data being stored electronically and who may have access to this data. Many questions about these motivations and rationales for the proposed governmental uses of IT in social services remain unanswered in this critical analysis.

Burton and van den Broek (2009) used interview data from Australian organisations to discuss how work procedures have changed due to the implementation of IT. They argued that the concept of quality in service delivery has been conflated with documentation through the discourse of neoliberal accountability. Computer databases have enabled an organisation’s management, or the government, to request particular types of data and recordings and use these recordings as proof of competent service; however, Burton and van den Broek (2009) questioned whether documentation should be used as the primary assurance of high-quality service in social services and also questioned the perceived neutrality
of technology. Another challenge addressed in the article was the lack of additional funding provided to organisations by the Australian government despite increased expectations of technological capacity and literacy amongst staff. Yet, the limited amount of public funding for social services is a characteristic of the neoliberal climate that supports the use of technology for electronic recordings in the first place.

The remaining literature in this category focused on the critical evaluation of the Integrated Children's System (ICS) in England and Wales already mentioned above. The empirical research evaluating the database was funded by the ESRC's e-Society programme and raised concerns about “a complex set of funding, management, organizational and technical issues” (Peckover, White, & Hall, 2008, p. 381). These issues included design flaws, infrastructure logistics, functionality and on-going administrative challenges (Peckover, Hall, & White, 2009). The series of articles developed from this research (see Peckover et al., 2009, 2008; Pithouse, Hall, Peckover, & White, 2009; Pithouse et al., 2011; Shaw et al., 2009; White, Hall, & Peckover, 2009) are grounded in a critical perspective and the complexity of the issues is retained. The research was exploratory and sought to document the issues faced by social workers in their daily work; therefore, this research directly addressed the broader call in social work for more empirical contributions to support the existing theoretical literature on technology. It provided critical insights but also highlighted the need for more context-specific research in order to move the social work research agenda on technology forward in meaningful ways.

These critical analyses do not necessarily advocate for or against technology use; they are simply driven by the embedded assumption that technology should be critically analysed as part of a holistic analysis that includes the social and
organisational context as well. Articles in this group were located as early as 1990. Although not all the articles in the special journal issue mentioned above used a critical framework to assess technology, those by Hartmann (1990), and Macarov (1990), highlighted the fact that, contrary to the assertions of some recent literature in social work, critical questions about technology have been posed and discussed in social work for many decades. Yet, the question of why social work does not appear to be making progress in addressing many of these critical issues, or how to use these critical analyses to drive practice recommendations remains to be seen. Therefore, I now relate this critical literature to similar critical analyses of information systems.

Critical information systems research examines information systems and the organisations and societies in which they are embedded, with particular attention to the relationships between science, technology, social institutions, knowledge production, public participation, evaluation and expertise (Hackett, Amsterdamska, Lynch, & Wajcman, 2008, p. 3). The relationship between technology and the people who design, develop and implement it is seen as a political process; therefore power is enacted in all stages. Howcroft and Trauth (2005, pp. 2-4) identify five aspects of critical information systems research: emancipation; critique of tradition; non-performative intent; critique of technological determinism; and, reflexivity. Many of these aspects are evident in the social work sources in this group. They also align with my own research orientation and were discussed in Chapter One, as they relate to critical social work, such as emancipation and reflexivity. Critique of tradition and technological determinism also relate to the analysis of deterministic social work literature above that highlights the importance of theorising power relations, challenging relations that are framed as natural or unavoidable, and deconstructing
deterministic conceptualisations of technology in organisations and broader society. Non-performative intent brings attention to the discourse of managerial efficiency attached to technological development and deconstructs the argument that technology should always be used to achieve economic efficiency over improved human relations.

Critical information systems research is praxis-oriented and seeks to create knowledge that can be used to instigate social change. Hackett et al. (2008) state that critical information systems research will inform STS approaches to activism, engagement, social movements and empowerment (p. 5). These are the same activities discussed in critical social work research, which seeks to create knowledge to inform advocacy and empowerment approaches with service users. Yet, Kvasny and Richardson (2006) identify many significant barriers that need to be addressed. Some of these barriers are external, and relate to acceptance of critical theory in scientific fields more generally, such as “dissonance between critical theory and practice” (p. 197), and “actual and perceived barriers to publication in [information systems] outlets” (p. 197); other barriers relate to internal issues faced by the critical research community more generally, such as “establishing the legitimacy of critical study” (p. 197), and “lack of clarity of the aims” (p. 197). Other fields, such as business and policy, also continue to use deterministic rather than critical approaches to praxis and therefore perpetuate these paradigms despite much research to the contrary.

Critical social work faces similar challenges in establishing the relevance and usefulness of critical research in the growing culture of scientification of social work knowledge as well (Denzin, 2002; Fook, 2003; Longhofer & Floersch, 2012),

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however social work perspectives focus on technology and marginalisation in the lives of service users and lack detailed attention to technological theory at the moment. These fields may be a useful point of cross-disciplinary collaboration as each highlights different needs within the broader relationships between society, technology and power.

2.4 Gaps in the Social Work Literature

As I mentioned in the introduction, while conducting the social work literature review, I also read a broad range of STS literature. Not only did this enable me to see parallels between the two, but it also helped me identify gaps in social work based on existing work in STS that was relevant but did not seem to exist in social work. Given that similar questions posed in the social work literature of the early 1990s are still being discussed today, the cross-disciplinary approach provided new and different insights that, I believe, may help move social work discussions forward and provide new analytical tools to examine the relationships between social work, society and technology. Although this list highlights some gaps identified through cross-disciplinary comparison, it is by no means exhaustive. Other social work researchers may wish to pursue other cross-disciplinary connections they feel are also relevant to social work. I have identified the following gaps:

1. The definition of technology – Many researchers did not provide a clear definition of the term 'technology', making it difficult to track whether there is or ever has been any consensus on what is considered to be 'technology' in social work. This lack of clarity may indicate why few researchers explicitly identify their theoretical orientations in their research, and why there has been a tendency to conflate social work’s
relationship with technology to social work’s relationship with neoliberalism. In STS, some researchers focus on specific types of technology because the area is so broad, but researchers still also make substantial meta-level contributions to the knowledge base as they incorporate new knowledge about different types of technology. However, because social work does not have a well-developed meta-level theoretical framework about the relationship between technology and society, or the profession to refer to, I found it difficult to articulate my own critical analysis of the findings and practice recommendations without incorporating cross-disciplinary concepts and perspectives. Moving forward, it is crucial that the profession develop an understanding of technology more generally, so that ‘technology’ is not unintentionally conflated with the most recent developments in information and communications technologies. This will provide more temporal context to future research.

2. The physical nature of technology – Technology has physical qualities; therefore, not only does it take up a social worker’s limited resources in terms of time as was often the focus of social work research, but it also takes up their space – on their desks, in their offices and potentially at home depending on the nature of the practice setting – which has received far less attention. Macarov (1990) briefly discussed how the physical nature of technology might impact the nature of the work itself, or service users’ comfort level in accessing services, but very little social work research has focused on how the physical presence of
technology impacts social work spaces or the service user’s experience. This may be a useful consideration given that tele- and e-services are growing in availability in some settings.

3. The life cycle of technology – Particularly within the technological determinist and social determinist literature, technology was ‘black boxed’ as an object that simply appears in organisations, stripped of the historical process leading to its implementation or what might happen to it after it is discarded or becomes obsolete. However, in doing so, social worker researchers have limited the scope of their research unnecessarily, and to the detriment of a richer understanding of the issues. Technology is often commissioned, and then designed, manufactured, transported and sold before it is implemented and used. It is not stated in any of the articles, with the exception of those discussing the Integrated Children’s System in England and Wales, who commissioned the technology, who was then tasked with its design and what happened, or will happen, to it after it becomes obsolete. These questions help deconstruct the ‘black box’ and expand how to conceptualise the relationship between social work and technology.

4. Technology, exclusion and globalisation – The history of science and technology from a global perspective could be an important addition to a critical social work understanding of technology. Access and opportunity to use technology is not equal at a global level or within nations and communities. Marginalised groups, such as those with disabilities, low literacy, or unstable incomes, face additional barriers to
full participating in ‘e-society’. This has more commonly been framed as an issue of ‘digital divides’ (Steyaert & Gould, 2009), but as new technologies emerge this concept fails to encompass the multitude of ways individuals and groups use technologies in their local contexts. This may be of specific concern to social work as many service users are members of these marginalised groups.

5. Existing collaborative communities of practice – A number of the reviewed social work literature suggested that social workers become more involved with technological development, but these articles did not specify existing communities of practice that do seek to bring together like-minded professionals for this purpose. However, there are many inter-disciplinary communities that may be worth exploring further – participatory design (see Carroll & Rosson, 2007; Lee & Carroll, 2010); social informatics (see Kling, 2007); and community informatics (see Averweg & Leaning, 2011; Bishop & Bruce, 2005). Many of these communities of practice incorporate participatory design principles that value the direct involvement of end users to determine overall success and usefulness of an information system. Social work may find it useful to connect with participatory design researchers and professionals who are more sympathetic to the needs and challenges of their organisations.

These gaps identify possible areas for future research that may produce more theoretically grounded findings and analysis about the relationship between social work and technology. The may also help prevent unnecessarily limiting the scope of
research questions or data analysis by expanding current understandings through cross-disciplinary analysis. While not all of these connections may be relevant in all practice settings, they do identify many ways to continue moving the social work research agenda forward.

2.5 Other Relevant Cross-Disciplinary Literature

In addition to the STS literature reviewed above, during the data collection and analysis processes, it became apparent that drawing on further cross-disciplinary literature would help address some of the gaps mentioned above. Although these sources were not originally included in the scope of the literature review, I conclude this chapter by summarising the other areas of research I sought out to further develop my analysis based on the emerging research themes described in Chapters Five, Six and Seven: feminist perspectives on work, technology and cyberspace, sociomateriality, ‘network society,’ and mobilities.

Although social work has been eager to engage with feminist discourse, this has not extended into social work literature on technology. Feminist perspectives on work, technology and cyberspace proved to be relevant to the emerging themes in the research, in terms of the nature of social work itself and how it has been historically gendered as a ‘caring,’ feminised form of labour, in contrast to the masculinised process of technological development. Early feminist theory discussing these issues, such as Cockburn (1985) and Markussen (1995) suggested that feminised types of labour have historically been minimised through increased technology use. Cockburn (1985) researched the social implications of technical knowledge and competence from a gendered standpoint in several workspaces where technologies have replaced work that was historically completed by women, such as garment construction,
administration, and healthcare. She asserts that processes of industrialisation and scientification aligned the concept of technology and innovation with male-dominated spheres, such as engineering, and erased women's contributions to innovations and technologies that often related to the domestic sphere due to historical divisions of gendered labour (Cockburn, 1985, 2009).

Markussen (1995) explored the relationships between gender, technology and work in relation to the concept of ‘progress’ in her work with nurses. Nurses have dealt with similar challenges compared to social workers, as their work often involves fluid multitasking ‘care work’ that is difficult to categorise. She argues progress is often measured as it relates to time, and asserts that the ability of a particular technology to make a process easier, and therefore less time-consuming, has become the proxy through which human progress has been measured. ‘Progress,’ she argues, is, therefore, both the driver of technological development and the outcome of this process, defined by its ability to reduce the amount of time spent on a task. She asserts technologies have decreased the amount of time women have spent on certain types of domestic and feminised work. On one hand, this can be interpreted as deskill ing, or on the other, that women simply had to learn different skills. Rather than learning how to do the task itself, they had to learn how to operate the technology mediating the task.

Yet, these accounts simplify the range of experiences women may have with technology, both at the time they were conducted, and now, as technology has changed and new technological possibilities have emerged. Trauth (2002) problematises this type of essentialist view of gender and technology, which positions women as victims of social and political structures that limit their access to
forms of knowledge with higher social value, such as technical knowledge, by exploring the lived experiences of women who work in the creative sectors of the technology workforce. She found that each of the women had different experiences, and attached different meanings to them based on her age, cultural background and frame of reference. Not all of the women believed their gender had negatively impacted their ability to work in the technology sector as previous research may have suggested. Ozkazanc-Pan (2012) and Wajcman (2008) also challenge this assumption, specifically in relation to women experiences with technology, by highlighting the on-going theoretical debate about the value of envisioning 'the female experience' as this inevitably silences intra-group differences. I revisit this debate in Chapter Six as it relates to statements made by the research participants.

I also consulted postcolonial feminist perspectives on technology as influences from the early colonial period of Canadian history became noticeable during fieldwork. According to Madison (2012), things that have a colonial past, must also always have a colonial present. Although I was not working with First Nations communities in this research, current policies and practices are influenced by layers of historical decision-making both in relation to social work and technology. In relation to technology, several writers have described the historical impacts of the ‘technical project of the West,’ in which western nations used scientific knowledge to rationalise the violence of colonisation and imperialism (see Kitwood, 1984; Philip et al., 2010; Smith, 1999). Technologies were developed and used to control nature, time, space and people, with global and individual implications (Kitwood, 1984). In Canada, how scientific knowledge and technologies were used to control and discredit Aboriginal groups is explored in social work education because it
relates to contemporary practice with Aboriginal communities that continue to deal with the impacts of these historic traumas (Native Women's Association of Canada, 2010). Technology use has also been connected to patriarchal and classist social structures embedded in the industrial revolution and capitalism (Arnold, 2005; Kitwood, 1984; Smith, 1999).

For example, in Canada, the development of the Canadian Pacific Railway, which connected Central Canada to the Pacific coast through the Rocky Mountains, is heralded as a feat of engineering and became a symbol of national identity at the time, as it linked vast parts of the country (Mar, 2007; Roy, 1989); however, only recently has the exploitative nature of the project been acknowledged in the national context. The development of the railway involved the exploitation of migrant labourers from China who were given the most dangerous jobs while being paid less than their white colleagues, and were subjected to on-going racism against Asian communities in Western Canadian at that time (Mar, 2007; Roy, 1989). Despite the benefits of the railway, this type of oppressive legacy remains associated with the broader ‘technological project,’ drawing attention to whether the mistreatment of Chinese workers could have been prevented while achieving this feat and how this relates to contemporary technology projects.

Entire colonised areas were also often deemed to be intellectually inferior, and therefore unable to understand or contribute to technical knowledge development, which led to their exclusion (Arnold, 2005; Kitwood, 1984). Scientific, empirical knowledge, informed by positivism, was historically used to discredit and devalue the tacit and experiential knowledge of colonised peoples (Avgerou, 2010). Scientific knowledge claims to be based on rational inquiry, which is neutral and unbiased, and
therefore seen as ‘truth’ (Fook & Askeland, 2007; Paechter, 1998). It is prioritised above experiential knowledge, the ability to know through experience (Fook & Askeland, 2007), and embodied knowledge, the ability to know through bodily sensation and self-awareness (Mensinga, 2011); both of which are highly valued in social work.

Postcolonial theory argues the importance of considering links between knowledge and power. The voices and knowledge of colonised groups have historically been excluded from the empirical, positivist knowledge base that continues to dominate the Western approach to progress and development. Therefore, although many fields of study have recognised that all individuals, regardless of their geographic, economic or social locations possess knowledge about the world that is valid and valuable, the extent to which different forms of knowledge have been recognised and socially valued varies. During colonisation, scientific knowledge was always at the top of this hierarchy of knowledge, a trend that continues to be critiqued in contemporary development discourse (Sahay, 1998; Thompson, 2008). I reflect on these ideas further in Chapter Six.

Additionally, cyberfeminist theory is also relevant to the data and findings. Early cyber-feminist theory had an optimistic, empowering view of the internet; arguing cyberspace would enable women to redefine gender because cyberspace by nature disconnects users from their physically embodied form (Haraway, 1999). Due to the anonymity of cyberspace, cyberfeminists argued users would not need to disclose their gender and/or could express themselves as any gender, including those different from their physical body (Daniels, 2009; Haraway, 1999). However, as time has progressed, this argument waned in popularity. Cyberspace failed to become the
non-gender-binary-conforming safe space early researchers had hoped for, and users continued to value gender identity in the process of online identity creation as they engaged with others online.

Moving forward, cyber-feminism explored the potential of cyberspace to resist patriarchal structures and encourage the sharing of female perspectives and knowledge (Daniels, 2009). Because content can be co-created using Web 2.0 tools, individuals and groups are able to develop content, and in turn have access to a wider variety of perspectives (Barbatsis, Camacho, & Jackson, 2004). Mills (2002) argued that because cyberspace transcends geographic boundaries, women were able to engage in meaningful debate and mobilise in ways that were not possible before (although he acknowledges the limits posed by state censorship, he does not address access to technology issues facing women on a global scale). The challenges and opportunities presented by cyberspace arose as a theme in the research, and I refer back to these debates in cyberfeminism in Chapter Seven.

Beyond feminist literature, the material nature of the technology emerged as an important factor to the research participants, indicating the potential importance of sociomateriality theory to the research. Materiality has been studied in many other organisational contexts; it seeks to understand the material properties of ‘things.’ Socio-materiality argues that by researching the material properties of ‘things’ we are able to create knowledge about the social relations that lead to its design and use (Orlikowski, 1992). With regards to technology, socio-materiality considers the social factors leading to the development of technological artefacts as well as the artefacts themselves, and the interplay between the two. According to Leonardi and Barley (2008), “information technology and organizations both arise at the
intersection of social and material phenomena” (p. 160). For example, in her description of the research methodology 'the ethnography of infrastructure', Star (1999) warns: “[s]tudy an information system and neglect its standards, wires, and settings, and you miss equally essential aspects of aesthetics, justice, and change” (p. 379). This sentiment is mirrored in STS, as technology ultimately reflects choices and, therefore, the analysis of material qualities can be sources of knowledge in research (Joerges, 1999; Leonardi & Barley, 2008; Winner, 1980).

According to Barad (2003), the entire field of organisational studies has neglected materiality in research: “Language matters. Discourse matters. Culture matters. But there is an important sense in which the only thing that does not seem to matter anymore is matter” (p. 801). Orlikowski (2007) argues that organisational research has focused on either “technological effects (a techno-centric perspective) or on interactions with technology (a human-centred perspective)” (p. 1436). These sentiments reflect the findings of the social work literature review as well. I revisit the concept and potential usefulness of sociomateriality to social work in Chapter Six.

Thirdly, another emerging concept relevant to the data is the ‘network society,’ which conceptualises social life in the 21st century using a complexity framework. It states that there are many technological assemblages that shape, enhance and confine our lived experiences (Reed, 2006). This idea has been explored in relation to the physical aspects of networks mediated through infrastructure (Star, 1999), and flows of information and communication Castells (2007). The ‘network society’ is characterised by the growing complexity of social systems, and complex systems are categorised by four key characteristics: non-linearity, multifinality, self organisation,
and attractors. As was highlighted in the literature review above, much of the current social work research has used a deterministic lens and tried to establish controls on the profession’s relationship to technology. The ‘network society’ concept specifically highlights that this may not be possible by outlining the inherent characteristics of many emerging technologies. I revisit this concept in Chapter Seven as it relates to my findings.

Finally, I refer to social work research on ‘mobilities.’ The 'mobilities' paradigm developed in broader social theory, and has recently been applied to social work by Ferguson (see 2008, 2011). The 'mobilities' discourse argues that social contexts are best framed as movements and flows – of people, materials and information – rather than static states of being. Ferguson (2008) argues that, although in policy and analysis social work is often framed as a sedentary profession comprised of workers sitting at desks or in case conferences, social work is actually a mobile practice. He focuses on a different form of technology, the automobile, and its role in shaping key tasks of child protection social work, such as conducting home visits and providing transport for service users, but his key arguments are applicable to the shelter data in relation to different technologies.

According to Ferguson (2010), as the 'risk' paradigm emerged in child protection social work, the pressure to travel faster and further in order to reach vulnerable children intensified. However, with the growth of managerialism and neoliberalism, the need to account for time spent working outside the organisation, through documentation using IT, also grew (Ferguson, 2008). Despite his focus on automobiles and child protection social work, he claims further analysis is needed to include emerging ‘systems of mobility, such as information technology, the mobile
phone and so on” (Ferguson, 2011, p. 72). The ‘mobilities’ paradigm relates to the findings and analysis in Chapter Seven.

Although none of these theories can fully account for the themes that emerged in this research, they all offered a new perspective on the data compared to the existing social work literature reviewed above. This suggests that by expanding current social work conceptualisation of relevant literature, new research questions and ideas are possible and will enrich future discussion and debate.

2.6 Conclusions

This literature review sought to explore how social work has conceptualised its relationship to technology thus far by locating social work literature on technology, identifying the embedded assumptions in the theoretical frameworks being used, linking these approaches to existing theoretical frameworks in STS, and identifying gaps in the social work research based on this cross-disciplinary comparison. This is especially timely because much of the social work literature called for greater empirical research on social-work-specific issues.

Based on the findings of the review and the identified gaps, I have developed several recommendations to guide future social work research in this area:

1. Explore new theoretical approaches. A variety of conceptual frameworks already exist in other disciplines. As stated by Phillips (1990): “one major task for social philosophers which needs to be undertaken is the rigorous exploration of the ethical and cultural implications of IT in social work” (p.17). I argue that this task should not be left to social philosophers; social workers and social work researchers should actively be involved in understanding and sharing existing philosophical and social theories related
to science and technology. A cross-disciplinary approach to theory development, which makes use of this existing work, can also be a mutually beneficial research strategy. Social work research will benefit from the critically grounded theory and reflection already available in other disciplines, and other disciplines will benefit from the professional insights and knowledge created about under-researched social service organizations. In fact, the lack of knowledge about diverse contexts is already a self-identified gap in the STS literature. For example, Woolgar et al. (2009) have examined “how STS has been appropriated within new contexts, including management studies and business schools” (p. 5). Therefore, the benefits of using a cross-disciplinary approach are twofold: social work benefits from the richness of theory already developing in STS, and STS gains more insight into how existing theories and concepts relate to social service organisations. In addition to STS literature, other disciplines have considerable knowledge about specific technology issues, which is why I have also incorporated organisational studies and critical feminist studies in my analysis. Other researchers may find other types of cross-disciplinary collaboration more appropriate for their own practice area, such as using critical disability studies research to examine web accessibility policy.

2. Be specific and collect data. Much of the existing social work literature is based on theoretical commentary rather than data and analysis. Social work practitioners need up-to-date research evidence to incorporate into their practice models; without conducting fieldwork or gathering data on these issues practice will not be evidence-informed. Researchers should treat
technology research just like any other area of social work research and justify the theoretical and methodological choices throughout the research so that social workers can easily identify approaches that match their own practice orientations and organisational cultures. Making the rationale for these decisions explicit helps the reader understand the epistemological and methodological choices and assumptions embedded in the research (Carter & Little, 2007). In doing so, future social work researchers will be able to build on the existing literature and data, rather than posing similar questions.

3. Look for sympathetic partners to conduct applied research. Given the number of unanswered questions about the sustainability, security and accessibility of technology, social service organisations should not be pressured to invest resources in technology just for the sake of establishing computerisation, as Hartmann (1990) has already argued. However, organisations that are interested in alternative models of IT use, may find existing collaborative research partners could help address some of the barriers identified in the existing social work research. Social service organisations may also wish to explore other resources that are already sympathetic to the social service and non-profit needs. For example, Tech Soup Canada is a non-profit organisation comprised of IT professionals addressing the sector- and context-specific IT needs of non-profit organisations. These types of research or practice collaborations may help identify creative solutions in the future.

Given the breadth of these recommendations, I did not attempt to address all of them in the ensuing research project. Instead, I chose to focus on gathering detailed data on the relationship between technology and social work in a specific practice
setting, which I discuss further in Chapter Three.
3 Chapter Three: Research Design

Given the existing cross-disciplinary culture of social work, social work researchers use a variety of methodological approaches. Like other social researchers, they must demonstrate an understanding of how their research design choices are shaped by the assumptions about reality they bring to their work (Crotty, 1998). In Chapter One I described my orientation as a critical social worker and social work researcher, which I expand on further in relation to ontology, epistemology, and methodology. This chapter further outlines how this orientation, in combination with the literature review recommendations, ultimately resulted in the design of this research. I discuss the choice of setting, (Violence Against Women (VAW) shelters in Ontario), the research approach (qualitative case studies), the methodology and data collection methods (critical ethnography involving participant observation, unstructured interviews, and document analysis), the data analysis strategy (grounded theory with cross-disciplinary comparisons), the evaluation and dissemination strategies, limitations of the research design, and ethical considerations.

3.1 Research Orientation and Epistemology

In the introduction, I discussed my critical practice and research orientation more generally; however, I chose to narrow this in the context of this research to a critical feminist approach more specifically. Critical feminism seeks to “openly interrogate gender as a noun and a verb (performance), thus exposing the structures and processes that help construct gender as identity and/or as difference” (Gringeri & Roche, 2010, p. 338). It interrogates the historical silencing and marginalisation of diverse women's voices in both public and private spheres. Historically, feminism
developed from the suffrage movement, advocating for basic human rights to be applied to women including the ability to work outside the home (hooks, 1984). This movement was premised on the idea that women should have access to the same labour opportunities compared to men in order to gain equality, and was largely organised by white, middle-class women. Although this movement resulted in many significant human rights gains for all women, contemporary feminism also now acknowledges that other groups of women, such as women of colour and disabled women, face other significant structural and social barriers to equality, such as racism and ableism, which intersected with their experiences of gender oppression. Therefore, the early feminist movement did not meet their needs from a more holistic perspective. In fact, feminism's focus on labour rights appears to have alienated many women who may have agreed with the underlying principles of gender equality but still found fulfilment in the domestic spheres or experienced other barriers to participating in the workforce.

Critical feminism then developed in response to this marginalisation that occurred within the feminist movement itself. Since raising this critique, feminist researchers started to become more “aware of the limitations of gender as a single analytical category” (McCall, 2005, p. 1771). Intersectionality arose as a way of theorising about the lived experiences of women that accounts for this diversity. Intersectional analysis explores “the complexities of individual identities and group identities while making visible the ways in which diversity within groups is often ignored and essentialized” (Mehrotra, 2010, p. 419; see also Crenshaw, 1991; Davis, 2008; hooks, 1984; McCall, 2005). Critical feminism uses intersectional analysis to deconstruct how power relations, including those in dominant groups both external to
and within the feminist movement, control language and discourses about women overall.

Critical feminism also has a broad understanding of gender, analysing not just the experiences of women but also the impact of patriarchal structures and social discourses of masculinity on boys and men (Dominelli, 2002, pp. 5-6; see also Flood, 2011; hooks, 1984; Pease, 2000). In addition, although social structures in the broadest sense are seen as patriarchal and male-dominated, the possibility and reality that men also have diverse lived experiences and face intersecting oppressions, and women themselves can be both oppressed and oppressive to others is also highlighted in critical feminism. hooks (1984) reiterates this point by posing the question: “many people think feminism is the movement to make women the social equals of men, but since men are not equals, which men do women want to be equal to?” (p. 19).

In light of the fluid and flexible approach to social categories and structures inherent in critical feminism, theorising about how feminism should proceed as a movement is a difficult proposition. A generally accepted recommendation is that a wider variety of voices and experiences should be included in theory development and knowledge creation in order to address the historical marginalisation of various groups. This includes lesbian and queer women, disabled women, immigrant women and women living in the Global South amongst others (Schutte, 1998).

I chose this research approach because social work is often framed as a feminised profession due to the ‘caring’ nature of the work. It is informed by feminised forms of knowledge, such as narrative and embodied knowledge, which are often devalued for a lack of scientific objectivity compared to positivistic forms
of knowledge (hooks, 1990); therefore social work has a long-standing connection to the feminist values. The workforce in social work is predominantly female, which contrasts with technical fields, such as engineering and software development, which are heavily male-dominated despite recent efforts to increase gender diversity (Paechter, 1998); yet, these visible gendered distinctions have not been discussed in the social work literature on technology in depth. I incorporate a critical feminist lens into my analysis throughout this thesis to highlight if and how gender has mediated social work’s relationship with technology.

Given the recognition of heterogeneity amongst women’s lived experiences, and experiential knowledge, critical feminism advocates exploring one's own subjectivities and social locations throughout the research process. This approach complements social work reflexivity discussed in the introduction. I have already discussed how I developed an interest in the relationship between social work and technology, but more generally I have often found myself interested in deconstructing cultural tensions and embedded cultural assumptions or ‘norms.’ This may partly be due to my upbringing. I grew up in a diverse extended family influenced by Islam, Catholicism, and atheism. My parents have Pakistani, Ugandan, French Canadian and British cultural backgrounds, and English, Fransaskois², Punjabi, Urdu, and Arabic were spoken in our home. I inherit both the legacy of historic colonialism of indigenous peoples and land in North America, and the contemporary imperialism legacy of 20th century settler-colonisers. I believe my interest in interrogating cultural norms and tensions has derived from my formative experiences trying to understand how the diverse languages, religions, ethnicities and

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² A regional French dialect spoken in the province Saskatchewan (Assemblée communautaire fransaskoise, n.d.)
beliefs of my family might complement each other rather than exist in opposition or hierarchy. I use the same approach in this thesis. Rather than viewing social work as a static entity in opposition to technology, I believe their relationship is complex, unavoidably intertwined and constantly changing.

### 3.2 Organisational Setting: Violence Against Women (VAW) Shelters

Choosing a specific practice context for data collection was a critical decision in this process. In the past, critical feminist social work research has contributed to the knowledge base of practice issues explicitly related to gender, such as violence against women and child abuse (Orme, 2003). Service users have often remained the focus, or subjects, of the research process because it has been assumed that the research process can uncover service user needs and perspectives that are often silenced or ignored. Yet, I also believe social service organisations are appropriate subjects for critical research because they often control the flow of resources and knowledge service users have access to. This perspective also relates to Nader's (1972) 'studying up' approach.

'Studying up' research frames publicly funded and bureaucratic institutions, and their employees, as important subjects of critical research because of the ways power and knowledge circulate and are controlled in these spaces (Nader, 1972; Priyadharshini, 2003). It can be difficult to evaluate institutions and organisations in positions of greater power and hold them accountable via research because access can be more tightly restricted (Ebrahim, 2003). The amount of social work literature using deterministic frameworks in the review suggests that social work perceives itself to have a passive relationship with technology; however, organisational studies research suggests that organisations have considerable influence in the cultures and
norms they perpetuate. Therefore, I believe it is important to examine how social service organisations recognise and use their institutional power in relation to technology issues, and ultimately how this shapes service delivery. Examining the operations and flows of resources in these spaces can highlight bureaucratic issues that ultimately create additional challenges for service users. Nader (1972), and subsequently Gregory (2002), argues that without also 'studying up' to macro level networks of power, such as institutional decision-making and accountability, the knowledge necessary to guide social change will be incomplete. The critical approaches used in other disciplines to analyse the relationships between organisations, technology, and power can provide helpful guidance (see Alvesson & Deetz, 2006; Lee, 1991; Orlikowski & Barley, 2001; Woolgar et al., 2009).

Based on my literature review recommendations, which highlighted the lack of research in the diverse practice contexts social workers work, I felt it would be beneficial to collect data in a specific organisational setting where social workers worked with individuals from other professional and educational backgrounds and had to negotiate competing priorities and relationships. Child welfare services appeared to be the most frequently researched practice setting with respect to technology issues in social work, but I did not want to focus on this area because I felt my previous volunteer experience might present substantial bias issues, and these types of services present their own unique contextual challenges. Ultimately, I chose to work with Violence Against Women (VAW) shelters. Practically speaking, I was familiar with the feminist and gender-based analyses used by many shelters from my practice experience working at a women’s community health centre, as well as the housing challenges facing individuals in precarious socio-economic situations from
my practice experience with low-income seniors (both based in Toronto, Ontario). These experiences had exposed me to different types of technology issues compared to my experience in the child protection agency; yet, because I did not have any practice experience specifically in the VAW sector I felt there was more for me to learn. My knowledge of gender theories from previous study also enabled me to locate relevant cross-disciplinary literature on gender and technology issues more readily than if I had chosen an area where I had minimal background knowledge.

Another consideration influencing this choice was that larger publicly funded organisations, such as child welfare agencies, tend to be the subjects of more research in general, while the experiences of smaller, community-based organisations are less often documented. Focusing on the VAW shelters’ relationships with technology enabled me to explore a new organisational context I had not come across in the literature thus far and further focus my interest in gender dynamics in practice.

Choosing to work with VAW shelters also enabled me to contribute new knowledge on gender issues in social research more generally as well. As mentioned by Reinharz and Chase (2003), throughout the 19th and early 20th centuries women were not been perceived to be worthy subjects of research, particularly related to technology issues. I felt the gendered aspects of VAW shelter work could add an additional layer of gender-based analysis to the data that did not appear to be present.

In VAW shelters, power operates in complex ways between staff and service users; in different contexts the organisations may use power to enforce policies and procedures while simultaneously being restricted and influenced by broader social structures related to their profession and/or gender. Although I have been mindful of the contexts in which VAW shelters currently operate, and the ways these contexts
may impact and constrain their operations (as I discuss in Chapter Four), I also recognise that VAW shelters are active consumers of technology and therefore unavoidably embedded within global supply chains of technology production and manufacture. Applying a 'studying up' approach, whereby each VAW shelter's decisions about IT use is acknowledged and analysed accordingly, assists with this research's overall goal of challenging the deterministic framing of technology issues in the social work literature.

3.3 Case Studies in Social Work Research and STS

I chose to research the organisations using a case study approach. Case study research enables the collection of rich, in-depth data on one or multiple instances of a phenomenon. It is an ideal strategy for gathering data about a phenomenon in a real-life context without trying to control potential variables (Benbasat, Goldstein, & Mead, 1987; Cavaye, 1996; Darke, Shanks, & Broadbent, 1998; Yin, 1981a). It can be useful for conducting exploratory research, when little is known about a topic, for the purpose of theory building or to test existing theory through in-depth, situated data and analysis (Gilgun, 1994; Yin, 1981b). Therefore, the goal of case study research is not to develop broad, probabilistic theory, but to provide a deep, multi-level analysis that can be used for comparative purposes with other cases (Gilgun, 1994). Case studies often begin with flexible conceptual frameworks that adapt to emerging themes during the course of data collection. Identifying a priori variables and concepts is generally not necessary, or desirable, as this can limit the creative aspects of the theory building process (Cavaye, 1996; Yin, 1981a).

The definition of a case varies based on the overall design and goals of the project, and can be fluid or bounded. In this research, the physical and legal
boundaries of the organisations were used as the basis for the cases. Although organisations exist within complex policy, social and economic structures, using these pre-existing boundaries provides structure and consistency to case studies, as these boundaries can be “similar enough and separate enough to treat them as comparable instances of the same general phenomenon” (Ragin, 2000, p.1). Clearly defining these boundaries enables readers to determine the applicability and generalisability of the findings to other cases, theories or data (Eisenhardt, 1989).

Because case study research is an ideal strategy for emerging topic areas (Benbasat, Goldstein, & Mead, 1987; Eisenhardt, 1989), it worked well in light of the current state of social work literature on technology. As much of the social work research was theoretical, and very little empirical research focused on the experiences of grassroots, community-based organisations, this strategy enabled new findings and analysis on a less-understood service delivery context. While the physical and legal boundaries of the shelters were used to establish the parameters of the cases, I did not assume these boundaries were innate or the shelters were neutral or naturally existing sites. VAW shelters have their own histories as sites of both resistance and oppression, which have resulted in the current policies and practices that constitute ‘doing shelter work.’ These boundaries are embedded within broader social and political structures, as I critically discuss further in Chapter Four.

Case studies have been used in social work education, primarily in a different manner – as teaching tools for intervention strategies (Gilgun, 1994). This teaching strategy reflects the professional and pedagogical belief that examining the diversity within one particular case study can help students develop practice competence in dealing with diversity, as cases mimic the uniqueness of experience that exists
amongst service users. Yet, case studies are not used as commonly as research strategies in social work. Despite their strengths in documenting issues in depth, in context, and in relation to variables at multiple levels, in the evidence-based practice literature, case studies have been critiqued because the findings and analysis are not highly generalisable; they are most often used for comparative purposes (Darke et al., 1998). However, while case study research is not seen as highly generalisable, this conflicts with what social work students are taught about the value of case studies in social work education. The benefit of case studies as educational tools is their ability to prepare students for working with diverse clients specifically because of the uniqueness of each case. Therefore, case study research is well-suited to social work research specifically because social workers are trained to work with uniqueness in practice, and make connections across different instances of a phenomenon, rather than avoid it.

Further supporting this position, case study research is a widely accepted strategy for studying IT issues in organisations in STS (Beaulieu, Scharnhorst, & Wouters, 2007; Cavaye, 1996; Darke et al., 1998). Benbasat et al. (1987) describe the shifting interest of information systems professionals “from technological to managerial and organizational questions, and consequently more interest in how context and innovations interact” (p. 370). In addition, they argue, “the case study is well-suited to capturing the knowledge of practitioners and developing theories from it” (p. 370). Gathering in-depth data on the complex relationships between the social and technical has strengthened STS theory critiquing the technological determinism framework (Beaulieu et al., 2007). This rationale for case studies in research can be extended to include the social service organisation contexts relevant to social work.
3.3.1 Multiple Case Design

Although case study research can focus on a single case study, this research uses a multiple case design involving two cases. Yin (1981b) suggests that multiple case designs are best when a phenomenon exists in a variety of similar situations – in this instance the phenomenon of technology exists in a variety of social service organisations. Multiple case designs enable both within-case analysis and cross-case comparisons (Darke et al., 1998). In multiple case designs, comparisons are made based on the assumption that the pre-determined boundaries of the cases are similar enough across cases (Abbott, 2000; Beaulieu et al., 2007). As mentioned above, using the pre-existing physical and legal boundaries of the shelters to establish the definition of a single case is a common strategy in case study research.

Even in multiple case designs, it is not necessary, or possible, to strive towards a statistically proportional sample of the entire population of possible cases. Cases can be selected based on the concept of theoretical sampling – their perceived ability to provide unique data and contrast to one another, based on the underlying theoretical framework of the research (Darke et al., 1998; Eisenhardt, 1989). It is widely agreed there is no ideal number of cases for multiple case designs and that the appropriate number of cases depends on the details of the individual research project (Cavaye, 1996; Eisenhardt, 1991). For this research, two cases were selected to balance on the allotted time available to perform fieldwork with the need for depth in data collection. While Eisenhardt (1991) states, ideally, cases should be continually added to a research project until theoretical saturation (the point at which further theoretical insights are deemed to be minimal), given the exploratory nature of the project this was not a feasible goal as practical constraints, such as transportation and
finances, needed to be considered given the vast size of Ontario where the research was conducted. Eisenhardt (1989) recognises and acknowledges these challenges to the overall practicality of case study research.

The two cases were chosen using theoretical sampling based on their geographic and demographic locations – one in an urban centre and one in a rural area. Both social work and STS have discussed and researched the impact physical location can have on an individual or group’s access to opportunities and resources in the broadest sense. There are many ways geographical location can impact the service networks that develop to assist individuals. In Canada, rural areas must establish complex, yet efficient, networks of services across low-population density areas, recruit and retain skilled professionals, and maintain confidentiality and anonymity in small communities (McMahon, O’Donnell, Smith, Woodman Simmonds, & Walmark, 2010). Geographical location also impacts access to technological infrastructure, technical skills and knowledge, and social services provided through IT, such as e-Health (McMahon et al., 2010). In proportion to urban areas in Ontario, relatively little research is available documenting the technological experiences of rural areas, or they are treated as areas of speciality. Therefore, the goal of contrasting the findings from these case studies based on their geographic locations addresses research gaps in both social work and STS.

3.4 Selecting Cases

The sampling population included all VAW shelters in Ontario, Canada. The exact number of VAW shelters in the province is not known as many shelters serve a broader range of service users including, but not necessarily limited to women experiencing violence. However, on September 1, 2012, when I began approaching
organisations, there were 140 shelters (duplicate and out-dated entries removed) listed on Ontario 211, a non-profit website providing up-to-date contact information for social service organisations across the province.

I contacted urban shelters first. A shelter was considered ‘urban’ if it was located in a ‘Census Metropolitan Area’ (CMA) as defined as “an area consisting of one or more adjacent municipalities situated around a major urban core. A CMA must have a population of at least 100,000, and the urban core must have a population of at least 50,000” (Turcotte, 2008, p. 3). At the time of this research there were 15 CMAs located in Ontario. Shelters located in these areas were also filtered out based on logistical and practical criteria. As Canada's most populous city with more than four times the population of any other CMA in Ontario, shelters in Toronto were eliminated due to the unique demographic and geographical issues faced by these shelters compared to the rest of the province. Shelters in the Ottawa/Gatineau CMA were also eliminated due to the bilingual (English and French) nature of the region. This would have posed linguistic challenges beyond the scope of this research. The urban case study was selected from shelters within the remaining 13 CMAs in Ontario based on the shelter's willingness to participate in the research, and the level of access they were willing to provide, as well as practical factors, such as transportation, time and the cost involved in being located there. The area eventually selected was inhabited by a diverse range of communities – newcomers and immigrants, settler families, and urban Aboriginal communities; varied socio-economic groups; and university and college students.

The broadest definition of rural used by Statistics Canada (2012b) was used to determine which shelters served rural areas: “all territory lying outside population
centres” (para. 1). In Canada, because the population is not evenly dispersed throughout the land, rural areas are also identified by a Metropolitan Influence Zone (MIZ) percentage. A high MIZ percentage indicates a strong metropolitan influence whereby 30% or more of the “employed labour force commute to work in any CMA” (Statistics Canada, 2012a); a low MIZ percentage indicates fewer workers commute to urban areas. This measure is used as a proxy for estimating the level of urban influence in the rural area. For the purposes of this research, the MIZ percentage was not considered in the case selection process because both types of zones have very different characteristics. High MIZ percentages are more common in the southern areas of the province, whereas low MIZ percentages are more common in the northern, remote region and there was little data already available on either of these contexts. Instead, the rural case study was selected for similar reasons as the urban case study – the shelter’s willingness to fully participate and provide access, and practical factors. The chosen rural shelter was located in an area with a high MIZ percentage, with a primarily white community with both high and low socio-economic status groups located in different parts of the shelter’s catchment area. If time and resources had permitted another case study in this research, I may have selected a shelter in a lower MIZ percentage area to provide further contrast to the findings and analysis.

I made initial contact with shelters by emailing the Executive Directors and introducing myself and the research project and goals (refer to Appendix A). I followed up this email by calling the Executive Directors to answer any questions and concerns they might have about participating. The Executive Director at, what would eventually become, the urban case study requested a one-page summary of the
research project, which I included in my initial communications with the rural shelters as well (refer to Appendix B). This initial communication was met with mixed reactions: most shelters declined to participate, stating they either did not have the resources to accommodate a research project at that time, or they were not interested in the topic. With the shelters that did express interest, I organised a meeting with key individuals, or ‘gatekeepers,’ in the organisation to further discuss the project and negotiate access. ‘Gatekeeper’ refers to individuals who have the power and authority to provide a researcher with access to the settings, documents and individuals needed to complete the research. Negotiating with ‘gatekeepers’ can be one of the challenges of a ‘studying up’ approach because power dynamics are often not in the researcher’s favour, making it difficult to access certain field sites (see Ortner, 2010). A Memorandum of Agreement was created outlining the mutually agreed upon access arrangements and specific dates and times fieldwork was to be conducted (refer to Appendices C and D).

3.5 Research Questions

Given the exploratory nature of this research, the research questions were intentionally broad, allowing for the greatest flexibility during data collection. As data collection progressed and I engaged in iterative data analysis, more specific issues and themes arose which shaped the direction of the questions and future data collection. Three guiding questions form the basis of the following analysis chapters:

1. What ICTs were used in VAW shelters?
2. How did ICTs impact the VAW shelters internally?
3. How did ICTs impact the VAW shelters service delivery?
4. What cross-disciplinary theories (including but not limited to those found in
STS) may be relevant and useful for analysing the data?

Through these broad questions I was able to explore the relationships between staff, the organisation, service delivery and technology in a holistic and contextualised manner.

3.6 Data Collection Methodology: Critical Ethnography

This research employed a critical ethnography approach to data collection to maximise the number of data sources used to establish findings and recommendations. Critical ethnography is a research methodology that combines the methods of ethnography with a critical analysis lens. Generally speaking, ethnography is based on “the notion that in order to develop theories about human life, an ethnographer must study human activities and the way people interpret their realities in their every-day context” (Beach, 2005, p. 2). Therefore, the researcher often spends a significant amount of time in a space observing and engaging with participants, whose daily lives are embedded in this reality. Ethnography can involve a variety of methods, but participant observation is the primary differentiating method compared to other social research methodologies.

Unlike more traditional forms of ethnography that have assumed the researcher (historically, a Western scholar who has travelled to an ‘exotic’ locale to study a particular cultural group) could objectively observe, document and uncover the true meaning-making processes behind the behaviours and beliefs of cultural 'others' (Madison, 2012), critical ethnography is intentionally a subjective and politically-charged account of the researcher’s experiences observing, documenting and analysing. Critical ethnography argues that the researcher cannot be an objective observer because they unavoidably bring their own cultural and social beliefs and
meaning with them into the research project. Therefore, critical ethnography is an iterative, reflective process that forces the researcher to draw attention to the context of the research process itself and how their own uniqueness contributes to the overall findings of the research, including power dynamics and privileges. I feel I was drawn to ethnographic method based on my past experience studying anthropology more generally, and the critical lens appealed to my lived experiences with cultural fluidity I described above.

Critical ethnography is underpinned by broader critical theory beliefs – that inequality exists within society and that this inequality is caused by structures of oppression. Research is seen as an actionable process that can bring marginalised voices forward, challenge dominant cultural assumptions that create oppressions and ultimately change these structures. While traditional ethnographers typically look for unique cases to examine phenomena, critical ethnographers focus on behaviours, beliefs and meanings considered to be 'normal' (Beach, 2005). Dominant, 'normal' beliefs and practices are interrogated to create knowledge specifically for the purpose of reducing inequalities (Carspecken, 2001; Given, 2008). In this research, I sought to create knowledge and recommendations for social work that would promote more equitable processes, procedures and polices related to technology based on an analysis of the existing, normalised cultures of practice. According to Hall and White (2005), this type of approach helps “question assessments and formulations that are taken for granted in other research and attempt to uncover the conditions of production” (p. 380).

Both social work practice and critical ethnography use a reflective, interpretive approach to knowledge creation, therefore it is not surprising that critical
ethnography research can provide useful insights for practice (Archer, 2009). While I was not able to locate any examples of critical ethnography research in the social work literature regarding technology, critical ethnography has been used in STS (see Beaulieu et al., 2007). STS scholars have adopted critical ethnography in order to understand how individuals and organisations interact with technology in their everyday work, and to document the normalised relationship between technological development and power in the workplace. Therefore, I believe this methodology is well suited to the issues that arose in literature review relevant to social work. I now turn my attention to the specific research methods I chose to use in this ethnography – participant observation, unstructured interviewing and document analysis.

3.7 Methods

Case study research can involve qualitative, quantitative or mixed methods approaches to data collection (Eisenhardt, 1989), and using multiple sources and methods is supported by critical social work epistemology, case study methodology, and critical ethnography (Gilgun, 1994; Hine, 2007; Ragin, 2000). Although qualitative data can be more time consuming to collect, it provides a greater level of depth and detail compared to quantitative data (Cavaye, 1996). Due to the exploratory nature of the research, and my desire to understand the relationship between organisational and individual practices and technology, a variety of qualitative data collection methods were used including participant observation (resulting in field notes and a reflective journal), non-structured interviews (resulting in interview notes), and document analysis (including organisational policies and documents, IT and web applications). The benefits and challenges raised by each method are described below. I also reflect on the challenges I faced negotiating
access, as I was not able to follow through on every aspect of my original data collection plan due to the specific requirements of the shelters. Compromising my data collection plan to meet their organisational requirements created additional logistical and conceptual issues in the data collection and analysis processes, which I discuss further.

3.4.1 Participant Observation

Participant observation involves systematically describing events, actions, behaviours and objects occurring in the research setting (Kawulich, 2005). Through observation, the researcher can learn about what participants say and do regarding a phenomenon over extended periods of time, rather than what participants choose to tell the researcher in one particular interview or context. In this research project, I included participant observation as a data collection method to help me develop “a detailed account of ‘life’” (Barbour, 2014, p. 155) of the shelter staff members, by physically being present in the shelters and observing them do their work. However, the process of observing, and subsequently making notes about these observations, is an interpretive process that involves a high degree of discretion by the researcher, creating logistical and conceptual challenges throughout the process, some of which I reflect on below (see also Flick, 2014; Wolfinger, 2002).

The first challenge I encountered was negotiating access to the shelters themselves in order to conduct participant observation. I wanted to be in the shelters five days per week, and to observe various shifts in the schedule, but the shelter management felt this would place too much of a burden on the staff. I had not foreseen the act of participant observation to be viewed as a ‘burden’ by the shelters in such an explicit sense. This was my first indication of how the ‘outsider’ identity,
as a researcher with separate and specific goals, would impact my experience in the
shelters. According to Barbour (2014), it is not uncommon to experience identity
dilemmas during participant observation because, while the goal is to be immersed in
the lived experiences of participants, the researcher must balance competing
priorities and external considerations. Originally, I had assumed that because of my
shared knowledge base and identity as a feminist, the shelters would welcome my
presence; however, I had to adjust this expectation. Direct service staff members
were already dealing with a shortage of space to complete daily work, and a lack of
specialised staff members to handle complex cases (as I discuss further in Chapter
Four); these issues had created space constraints and increased the workload of the
direct service staff members. Management did not want to exacerbate these issues by
allowing me to be in the shelter staff members’ space for the majority of the week,
even in an observational capacity. Therefore, participant observation in the urban
shelter occurred two to three days per week from December 2012 to February 2013,
comprising a total of 34 fieldwork days spent observing staff members in the shelter.
During this time, I observed individuals from all departments of the shelter listed on
the organisational chart (refer to Appendix E), eventually concentrating the majority
of my time on the direct service delivery staff. Participant observation and
interviewing in the rural shelter occurred from March to May 2013, comprising 36
days spent observing in the shelters and satellite service locations. During this time, I
spoke with individuals from all departments of the shelter listed on the organisational
chart (refer to Appendix F) and visited all shelter locations where services were
provided. I observed a variety of shifts, including afternoon shift transitions when
new information about service users was passed on to arriving staff. Although I
would have liked to have spent more time conducting participant observation in the shelters, I was perceived as an ‘outsider’ despite my professional and ideological identities, and, therefore, the shelters chose to restrict my access in ways they felt better met their own staff members’ needs.

I then had to decide how active to be in the shelters – how much I wanted to observe or engage in shelter activities. The decision to focus either on participation or observation is discussed in methods literature because it impacts what the researcher experiences, and how they may be viewed by the participants themselves (see Barbour, 2014; Beach, 2005; Flick, 2014). Depending on the nature of the project, the researcher can be more or less active in order to obtain different types of information. For example, active participation may be appropriate in situations where the researcher must gain the participants' trust quickly. In this research, I intended to be a passive observer while I was observing in the communal spaces of the shelters, due to the potential for boundary issues with service users and residents at the shelters. Although I explained my research goals and presence to residents and service users in general, I did not want to be perceived as a service provider simply because I was sitting in close proximity to the staff. Therefore, I tried to maintain friendly but distant relationships with the residents. If a resident or service user asked me for assistance related to shelter services, I directed them to the appropriate staff member. Although this was not often an issue, because I was not able to speak with service users about the research project in order to collect data, I do not know how they felt about my presence in the shelter overall.

In contrast, I decided to be more actively involved when I was interacting with the shelter staff members in staff-only spaces, such as in staff meetings. Having
worked in similar organisations with feminist values, I felt it would be important and beneficial for me to engage with staff members, both in work contexts, such as staff meetings, and informal contexts, such as the lunchroom, because relationship building is often a key aspect of their organisational cultures. I felt this engagement and my attention to boundary issues with service users would demonstrate my understanding of their organisational ‘norms.’ Although I did develop positive working relationships with many staff members, I did not anticipate that this would have also created discomfort for me. My intentions were genuine, but, as Barbour (2014) notes, developing personal relationships with participants may always feel opportunistic because they can become ‘key informants’ that provide assistance throughout the data collection process. Often, I found myself balancing empathy and respect for the staff members’ time, with my desire to divert the conversation to my own research interests at all times. For example, I encountered many staff members in the lunchroom throughout the course of the day, but I did not want to engage them in conversation about the research topics because they were on their breaks. Because of my overarching research agenda, I never felt I was a member of either shelters’ team, taking on the ‘outsider’ identity even when I could relate to specific issues they discussed in relation to their work. This was uncomfortable because working as part of a team is a valued practice in relation to my social work training, and overall, the participant observation process was more complex emotionally, and often lonelier, than I had expected.

The next consideration related to taking the practice of taking field notes. Participant observation usually entails writing field notes to keep track of details and ideas during fieldwork. Note-taking is guided by the concept of ‘thick description'
developed by Geertz (1973), which refers to the density and quality of the field notes regarding the observed phenomenon (C. A. B. Warren et al., 2000). According to Wolfinger (2002), comparatively more attention has been given to the 'writing up' process of analysis than the actual writing of field notes during fieldwork; however, he does identify two strategies researchers can use to structure field notes depending on the research goals and personal preferences. The first strategy is salience hierarchy. In this strategy, the researcher describes what appears to be most noteworthy or interesting in a given interaction. This clearly involves a highly subjective process of decision-making about what should be considered noteworthy. Using this strategy, the researcher is more likely to record observations deemed to be 'deviant' in the sense that they deviate from what the researcher expected to observe; therefore, this strategy may be useful when trying to identify instances of resistance to dominant norms. Wolfinger (2002) also argues that the researcher’s subjective positioning will inevitably influence which observations they record and this should always be interrogated in the analysis of the research project rather than ignored in the note-taking process. The second strategy is comprehensive note taking. Using this strategy, the researcher records as much as possible in a period of time, even when they may feel there is nothing ‘interesting’ happening. Using this strategy, the researcher is more likely to capture 'non-interactions,' or instances where they expected a certain phenomenon would happen but did not. This strategy can be useful for addressing biases, either those held by the researcher or more persistent biases in the literature.

For this research, I chose to keep two separate fieldwork journals based on my participant observation experiences. In the first journal, I aimed to record descriptive
content using the comprehensive note-taking strategy. This strategy also relates to Geertz’ (1973) ‘field notes as transcription’ method. In this journal, I recorded descriptions of events and conversations, and meanings directly conveyed to me by research participants related to the research questions. These field notes enabled me to keep track of how participants described their own meaning-making processes during fieldwork while limiting my own interpretations. The second journal contained inscriptive and reflective field notes, using Wolfinger (2002) salience hierarchy approach. In these field notes, I reflected my own interpretations of significant events and conversations in the field. This journal included many more tangents, thought streams and abstract diagrams documenting what I felt was important, and my own meaning-making process during fieldwork and data analysis.

Although these types of field notes have been described separately in relevant literature, during fieldwork I found it more difficult to discern what material should go in each journal. Not only was it logistically challenging to move back and forth between journals during meetings, but it also felt as if I was analysing my own notes before they had even been written by categorising them as descriptive or reflective. Later in the data analysis process, I often reflected on what details I had observed and chosen to write down. This process involved a high degree of subjectivity in terms of what observations I deemed relevant to my research questions, and how I documented these observations in my notes. Overall, I did not find the field note process to be as straightforward as the binary categorisations Geertz (1973) and Wolfinger (2002) suggest.

Barbour (2014) also notes that the act of writing notes during fieldwork can draw unwanted attention to the observer, thereby causing research participants to act
in unusual ways that do not necessarily reflect their usual daily experiences. While it is not possible to know if participants, either consciously or unconsciously changed their behaviours due to my presence, I did not feel my note taking drew exceptional attention to me, and I did not feel self-conscious during fieldwork. Staff members were often busy writing or typing their own notes, or speaking with service users and other staff, and did not appear to be self-conscious about my presence or note taking.

Notes from both journals have been incorporated into the findings and analysis chapters, and are clearly identified throughout. Further details regarding the data collected through participant observation in both shelters is shown in Table 2.

Overall, while I felt the participant observation method enabled me to gather data about the daily experiences of shelter staff members in a more nuanced, and holistic manner, I was surprised and challenged by the constant uneasiness of being an outsider in a space that was familiar to me from a professional standpoint. I had not expected to feel so ‘out of place’ in these feminist organisations, and struggled to maintain my researcher identity while developing relationships with participants in a genuine manner. My field notes, and in particular my reflective notes, often comment on this struggle, and highlight the interpretive nature of the participant observation process. I have been mindful of this in the following findings and analysis chapters by including excerpts to highlight my interpretations of my experiences.

<table>
<thead>
<tr>
<th></th>
<th>Number of Days in Participant Observation</th>
<th>Number of Pages of Transcription Notes</th>
<th>Number of Pages of Reflective Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban Shelter</td>
<td>34</td>
<td>55</td>
<td>48</td>
</tr>
<tr>
<td>Rural Shelter</td>
<td>36</td>
<td>67</td>
<td>58</td>
</tr>
</tbody>
</table>

Table 2: Summary of Participation Observation in Both Shelters
3.4.2 Unstructured Interviews

Research interviews are a commonly used qualitative method across a range of social science disciplines (Qu & Dumay, 2011) and I used interviews to gather more specific data based on my observations. Interviews are often classified based on how they are structured. The three most common classifications are structured, semi-structured and unstructured. Structured interviews are often used in positivist research because they attempt to exert the greatest degree of control over the interview process in order to ‘discover’ pre-existing truths as told by the interviewee, whereas unstructured interviews, originating in anthropology and ethnography, “rely entirely on the spontaneous generation of questions in the natural flow of an interaction” (Zhang & Wildemuth, 2009, p. 223). Semi-structured interviews combine the pre-determined thematic questioning of a structured interview with the flexibility of an unstructured interview, to explore emergent ideas at the interviewer’s discretion. In this research, I conducted unstructured interviews for practical reasons related to the fieldwork agreements I signed with the shelters as I describe below.

Earlier in the research design process, I had decided to incorporate semi-structured interviews because they would have allowed for greater control over part of the data collection process in contrast to participant observation, and would have enabled me to probe emerging themes and ideas that may not have been explicitly voiced by the participants in a more systematic manner. However, as I negotiated access with the urban shelter, I encountered two challenges I had not anticipated. First, the management staff members were concerned that because of the on-going potential for crisis intervention work necessary in the shelters, the staff members
could not take fixed amounts of time away from their work for formal interviews. They were adamant that the interviews needed to be conducted in spaces where service users could still access the staff members, and this work would take priority over interviewing. The potential for interruptions, ending interviews early and constantly-changing interview settings would have weakened my ability to control the interview process within and across the case studies, and therefore my ability to compare and contrast the data. Therefore, instead of semi-structured interviews, I decided to conduct unstructured interviews instead. These interviews lasted from five minutes to 45 minutes before being interrupted. Specific interview data for both shelters is provided in Table 3.

<table>
<thead>
<tr>
<th>Department/Role</th>
<th>Urban Shelter</th>
<th>Rural Shelter</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of Staff</td>
<td>Number of Interviews</td>
</tr>
<tr>
<td>Upper Management (Executive Director, Directors)</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>Middle Management (Team Managers)</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Administration</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Transitional Housing</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Direct Services</td>
<td>14</td>
<td>36</td>
</tr>
<tr>
<td>Outreach and Education</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Children’s Programs</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Therapy</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>IT Support</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Database Consultant</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Social Media Consultant</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Total</td>
<td>31</td>
<td>59</td>
</tr>
</tbody>
</table>

Table 3: Summary of Interviews at Both Shelters

According to Dimond, Fiesler, & Bruckman (2011), an unstructured approach can be more appropriate when conducting interviews in complex settings because it affords a high level of flexibility that is more likely to meet the needs of the interviewee. According to Patton (2002), unstructured interviewing is commonly
found in tandem with participant observation because of their spontaneous and flexible nature. It is a useful data collection method when the primary goal is to better understand the interviewee’s social reality from their perspective, which fit with my critical and interpretive epistemological orientation. My experience supported these assertions, as I did find that adjusting my approach to include unstructured interviews helped me establish rapport with staff because they felt I understood, and was willing to adapt to, the high variability of their work patterns.

Yet, Qu and Dumay (2011) argue that unstructured interviews can ‘romanticise’ data by ignoring the fact that interviewing is itself a socially situated practice. The interviewer should not assume, or take for granted, that the data represents a timelessly accurate perception of the phenomenon, or that respondents would provide similar answers in diverse situations or interview contexts. Instead, they argue interviews should be seen as acts of data creation themselves, situated in particular contexts that contribute to what data is collected. They believe this situatedness of the interview process should be considered in the overall analysis.

In this research, the unstructured interviews were conducted in the workplace, during the day, and in some instances, with other staff members present. It is possible that staff members were more or less likely to share common or divergent ideas in the presence of other staff members. Even the potential of being overheard by other staff or service members, particularly in the urban shelter where staff members did not have individual office space, may have impacted what and how they answered my questions. In instances when two or more staff members were present, I tried to follow up with each staff member individually at a later time.

Other challenges caused by the unstructured interview approach were that
although I had negotiated access to the shelters with the management staff, I then had to continuously negotiate access with individual staff members based on whether they felt they had the time to speak with me. According to Barbour (2014), “the necessity of continually renegotiating access throughout a fieldwork period” (p. 164) is both uncomfortable and a common experience amongst ethnographic researchers. Furthermore, “un-granted requests for access are, themselves, data. For example, such exchanges […] can provide valuable insights into sensitivities, valued activities and power relationships” (Barbour, 2014, p. 165).

This is another example of when the ‘insider/outsider’ researcher dilemma presented a challenge for me. In terms of prioritisation of tasks, I was aware that taking time for an interview with me was often a low priority, particularly on busy days when emergency situations had arisen. I often felt uncomfortable asking staff members for their time, sometimes repeatedly, when it was clear they had high workloads and many different tasks that needed to be done. Many times I questioned my own position in the shelters because renegotiating access was a constant issue due to the nature of the work.

When I was able to interview staff members, because they also needed to be available to service users during these times, they were not always able to give me their full attention. The logistical concerns raised by management staff members were well founded, because the unstructured interviews often occurred in fragmented parts throughout the day due to various interruptions, and staff members often had to leave our conversations to attend to other matters. This created data collection challenges because I found it took time at the beginning of the interviews for staff members to formulate and express perspectives beyond tropes such as ‘technology is
great,’ or ‘I can’t imagine doing this work without it.’ More complex and critical perspectives emerged further into the interviews, but I was not always able to get to that stage due to interruptions, which was incredibly frustrating. Minimising possible distractions in future research may help ensure greater depth in the data.

Another management concern that created access challenges was with recording interviews. They were concerned that recordings created confidentiality concerns for the service users, because their voices could be audible in the background. They did not want me to record any conversations in the shelter. Without being able to record the interviews, I would be forced to rely on my handwritten notes to identify and recall emerging themes both during and after fieldwork. As I discussed in relation to participant observation, note taking is, itself, an interpretive act; therefore, my analyses of the interviews are based on my own interpretations of events and conversations, and further analyses of these interpretations. In hindsight, I would have preferred to have recordings to clarify and add depth to the data. Additionally, the act of making notes during an interview has been critiqued for making respondents self-conscious and distracted (see Barbour, 2014, p. 173); however, it is difficult to know to what extent my note taking impacted interview respondents due to the many other environmental distractions occurring simultaneously. A chaotic, fast-paced environment was typical of both shelters on most days, so it is possible the staff members were used to this type of ‘on-the-go’ interaction. In the analysis chapters, I tend to present conversational summaries rather than direct quotes to avoid incorrectly quoting the participants. While identifying details have been changed to uphold the anonymity of the participants, particularly in these small organisations, the content remains the same.
In conclusion, while conducting unstructured interviews was not my preferred data collection option with regards to interviews, using the unstructured interview method still enabled me to gather individual perspectives from staff members, and probe emerging themes in a more direct manner, while remaining as flexible as possible to the realities of the organisation’s policies and practices, and the access requirements they were willing to negotiate. The data helped clarify themes at various stages of data collection and analysis, but is limited to my own interpretations of interviews due to the lack of recordings. In future research projects, I would consider and more strongly advocate for semi-structured interviews and interview recordings to strengthen the data by providing more consistent structure and control between and within the case studies. I will take this consideration forward in my future research endeavours.

3.4.3 Document Analysis

Document analysis was the third method in my data collection strategy. According to Atkinson and Coffey (2011), “organizations in contemporary society are major producers of documentary materials [and documents] actively construct the very organisations they purport to describe” (p. 77). Analysing documents can help researchers understand how the lived experiences of the staff relate to the formal, written policies and procedures created by the organisation. As textual and visual representations of physical actions, they also demonstrate how information is created, distributed and organised within the organisation. Huss (2011) argues that combining visual research methods with verbal data collection can help social work researchers identify and merge analyses on multiple levels. As described by Barbour (2014, p. 161), data collection from document analysis can be increasingly important
in research where the researcher faces access restrictions to other methods, such as participant observation and interviewing.

According to Prior (2011), documents can be analysed for content and function. Content approaches focus on either what is in the document, which she refers to as 'document as a resource,' or how the document came into being, referred to as 'document as topic.' Function approaches analyse how actors use documents to meet specific ends, referred to as 'documents in use,' or how documents impact social interactions, referred to as 'documents in action.' In this research, I used the both content and function approaches to determine the content of the organisational policies, how the shelters developed these policies, and how the formal policies impacted staff in their daily work.

Documentary analysis was on-going throughout fieldwork, and included relevant organisational policy documents, guidebooks for specific IT programs, relevant software programs, internal memos and emails, and external communications with IT support professionals. I kept original copies of the documents or made copies in instances where this was not possible. A detailed account of the documents analysed in both shelters is shown in Table 4. Using guidelines on key documentary elements developed by Prior (2011) and Atkinson and Coffey (2011), I analysed the language used in the documents, the perceived audience, the inter-textuality in terms of how the document made reference to other documents, and the reality the document attempted to construct about the phenomenon.
<table>
<thead>
<tr>
<th>Internal Documents</th>
<th>Type of Document</th>
<th>Urban Shelter</th>
<th>Rural Shelter</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Meeting agendas/minutes</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Emails and memos</td>
<td>41</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Training materials</td>
<td>8</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Organisational policies</td>
<td>11</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>Database user manual</td>
<td>52</td>
<td>234</td>
</tr>
<tr>
<td>External Documents</td>
<td>Newsletter</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Annual Reports</td>
<td>8</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Brochures</td>
<td>5</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>Mission statements and visions</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>145</td>
<td>326</td>
</tr>
</tbody>
</table>

Table 4: Summary of Paper-Based Documents Analysed at Both Shelters

Electronic and online documents, such as record-keeping software and websites, were also analysed. The nature of these documents presents different challenges specifically due to their physically inter-textual nature. Hyperlinks and interactive designs found in software and online enable users to move seamlessly between documents, creating their own assemblages and pathways in infinite unique combinations (Dirksen, Huizing, & Smit, 2010). Therefore, the content of the document and the context in which the document accessed may differ depending on the user and context. Internet ethnographers have highlighted the additional challenge of accounting for the active nature of internet users in online ethnography: “Users of the World Wide Web are no longer passive audiences of data consumers...but are active participants controlling the content of the information. They shape the quality of the data and respond to them” (Sade-Beck, 2004, p. 3). Online documents expand the boundaries of 'the field' to an unknown, undetermined wider audience that is able to interact and co-create content.

According to Dirksen et al. (2010), combining electronic data with data from offline sources can provide greater understandings of the social interactions and...
structures of 'real world', technological and cyber spaces; they refer to these mixtures of online and offline data collection as connective ethnographies. In this sense, there is a connective element to this ethnography, however, I chose to focus solely on content generated by the shelters, such as their own websites, rather than content directed at the shelters or created by external sources, such as comments or mentions on social media made by other users. This strategy helped keep the boundaries of the field manageable given the number of methods being used concurrently while still accounting for the importance of electronic and online documents in the shelters.

3.8 Thematic Data Analysis and Cross-disciplinary Comparison

The data was analysed iteratively throughout the data collection process as is recommended by interpretive case study researchers (Eisenhardt, 1989; Yin, 1981b) and critical ethnographers (Madison, 2012). Key themes were identified inductively, using the three research questions as starting points, although differences between cases were explored and documented as well. As critical ethnography seeks to create knowledge about broader social structures and dominant discourses, I used Gee's (2005) description of the building tasks of discourse analysis as the starting point of my critical analysis. These building tasks were:

- **Significance** – What is treated as significant, or meaningful, by the participants related to technology? What is treated as insignificant, or not referred to at all?

- **Practices (Activities)** – What practices do the participants enact in their work? What 'histories' do participants tell about these practices? Do these practices involve technology?

- **Identities** – What identity(-ies) do participants enact? Are identities attributed to others? Is technology implicated in identity?

- **Relationships** – What relationships are enacted between participants? Do relationships exist with technology? How are relationships established and
reinforced?

- Politics – What broader social issues are embedded within discussions of the organisation’s affairs? What is at stake, politically, in these discussions?
- Connections – How do participants connect issues or things to make them appear relevant? How are issues or things disconnected to make them appear irrelevant?
- Sign Systems and Knowledge – What sign systems (i.e. languages, non-verbal communications, communication styles) are privileged or marginalised regarding technology?

Referring back to these key questions and concepts throughout fieldwork helped me identify themes in the data, interrogate these themes and adapt to new information as necessary. As discussed by Dey (1993), this initial thematic classification helped create a conceptual framework from which to continue with data collection and analysis.

The second stage of data analysis occurred after data collection was complete, and made use of the theory-testing potential of case study research to identify relevant themes found in cross-disciplinary literature (Eisenhardt, 1989; Yin, 1981b). As has been mentioned above, much theory about the social and organisational relationships with technology already exists, but this knowledge has historically been developed in for-profit organisational contexts (Woolgar et al., 2009). These researchers suggest that current STS theory development has been unintentionally limited by the overrepresentation of for-profit case studies, therefore, “[b]y selecting cases which are conceptually different from the original cases, the researcher can check for limitations of generalizations” (Cavaye, 1996, p. 236). Given the limited number of cases in this research, I do not intend to over-generalise the implications of the findings and analysis for either social work or STS. The cross-disciplinary themes were explored to determine whether existing concepts could be relevant and
worthy of future exploration in social work. While many STS concepts were relevant, this also resulted in cross-disciplinary comparison with organisational studies and critical feminist studies as well. According to Yin (1981b), using case studies for theory testing can help researchers identify both gaps and new ways of using existing concepts.

3.9 Evaluation of Case Study Research

Like any research strategy, case study research should be evaluated in the context of its stated goals and purposes rather than by external or scientific criteria (Lee, 1989). Critical research is based on an interpretive epistemological stance that does not advocate one knowable version of truth; it relies on the researcher to maintain a high degree of reflexivity and to openly interrogate assumptions and standpoints to create a detailed version of reality. Rather than attempting to mitigate potential 'threats' to trustworthiness through positivist evaluation strategies, critical research, and qualitative research more generally, has attempted to establish standards of rigour and quality that reflect its own epistemology in a flexible manner. This has also been debated in social work and other practice-based disciplines where experiential knowledge, reflexivity, and other forms of embodied knowledge are significant parts of the knowledge base (Hammersley, 2003; Seale, 2002; White et al., 2006; White, 2006).

Critical feminist research rejects positivistic approaches to evaluation that attempt to make truth claims (Hawkesworth, 2012, pp. 99-103) and this thesis is no different. However, that does not mean there are no frameworks from which to guide broader evaluation. For this research project I chose to refer to Lincoln & Guba's (1985) four point criteria list for qualitative inquiry as a guiding framework to
evaluate the practical implications of this research:

1. Credibility – Strengthening findings by establishing confidence in the overall resonance of findings for the research participants, and the broader social context of the research project. This includes reflection on the length of time spent 'in the field', on-going triangulation exercises taking new theories and issues into account, and continued commitment to revision of analyses in the face of emerging challenges.

I spent three months collecting data in each shelter, yet historically ethnographers have spent years immersing themselves in their fieldwork. By the end of the fieldwork in both shelters, I felt I had allotted enough time because I noticed data saturation related to many of the themes; however, I did have to leave before some important issues were resolved. I have addressed these issues in my analysis, as these delays became part of the analysis itself in terms of the logistical issues faced by the shelters related to implementing new technologies. I used the second phase of data analysis involving cross-disciplinary theory as a method of triangulation to determine if concepts were relevant in other contexts, and to challenge any apparent biases in my findings or analysis based on cross-disciplinary comparison.

2. Transferability – Showing potential relevance of the data by determining if the findings are applicable in other contexts or with other individuals or groups. This can be done by collecting and including a thorough documentation of the inquiry context with the findings, so the audience can judge how findings may relate to other contexts, and individuals or groups.

While these findings are not explicitly generalisable to other shelters or practice settings, I have addressed the issue of transferability by dedicating an entire chapter (see Chapter 4) to describing and analysing the specific practice context of the cases in detail. Individuals and/or groups working in other practice settings, or in VAW shelters in other geographic or demographic areas can use this chapter to determine the degree of transferability to their own unique situations.

3. Dependability – Reflecting on whether findings would be repeated if the
qualitative inquiry were replicated with similar participants in a similar context. This can be explored by thorough documentation of data, methods and decisions of the researcher throughout the entire research process, including during data analysis.

In order to make the analysis as dependable as possible, I have kept all the fieldwork journals, documents and previous drafts of this thesis as documentation of the analysis that led to the recommendations. Although other researchers may find different cross-disciplinary similarities indicating the usefulness of other concepts or frameworks, I believe other critical researchers would find similar connections between the fieldwork experiences, findings and analyses if they focused on the same areas I have chosen to in the analysis.

4. Confirmability – Reflecting on the overall knowledge creation claims, which should only highlight a temporary, contextualised view about the phenomenon being research. The research should highlight the diversity of views uncovered during the research process.

I do not attempt to present an objective account seeking to establish a solitary truth of what I experienced in fieldwork. I do my best to analyse the tensions and conflicting beliefs I encountered within the analysis chapters and reflect on the multiple contexts and biases unique to me. Throughout the process, I captured my thoughts about how my own identities and experiences may have impacted data collection and analysis in my reflective journal, which I also discuss in the analyses. While I was motivated to determine whether and how technology relates to social work, cross-disciplinary literature had already provided a compelling argument that this was the case by the time I began fieldwork. There are still many unanswered questions and this research represents only one interpretation of the relationship at a single point in time in this particular context. The implications of this are discussed throughout and in reference to areas for further research. Being mindful of these four
criteria helped strengthen the overall quality of the research project by continually prompting me to critically reflect and seek opposing views and theories throughout.

3.10 Limitations of the Research

While ethnographic case study research has many strengths, as with any research strategy, there are limitations. The most common criticism of case studies, and interpretive and qualitative research in general, is that they lack rigour in the data collection process due to their flexible nature (Darke et al., 1998). Interpretive and critical researchers have acknowledged the inherent problem of relying on the researcher's interpretations of the research subjects' interpretations to create theory. Epistemologically speaking, this dilemma is seen as unavoidable and currently the most widely accepted strategy to address this is to approach the research process reflexively, which, as mentioned above, is a key aspect of critical social work research as well.

In this research, I faced many challenges in the data collection process due to the shelters’ access requirements, and the fact that I had to rely on my own interview notes, with no recordings to refer to after the fact, is a limitation of this research. My field and interview notes are, themselves, my own interpretations of events and conversations. However, by incorporating document analysis I was able to gather data from a different perspective, that eventually greatly impacted my findings (as I discuss further in Chapter Six). I have learned that data collection plans must change and adapt to the circumstances and needs of the participants, but I do feel in future research I could find more creative, and mutually beneficial, solutions to some of these issues in order to permit either semi-structured interviews or interviews recordings.
Another limitation of case study research is that the findings and analysis are not widely generalisable. This type of in-depth research results in large quantities of data gathered from various sources. Large quantities of data combined with a diverse array of variables make it difficult to attribute causality concretely (Eisenhardt, 1989; Yin, 1981a). Therefore, case studies can be used to illustrate particular phenomena, but they lack the ability to create broad social theories. Given the fact that only two case studies were conducted in this research project, the ability to develop generalisations at this stage is limited; however these examples can provide direction for future research both in shelters and in other types of social service organisations in similar contexts.

3.11 Dissemination Strategy

Dissemination refers to “the targeted distribution of information and intervention materials to a specific...audience” (Schillinger, 2010, p. 1), and a research project may be relevant to several different audiences. Often the final written research account is often thought of as the dissemination strategy because it makes the account available to the general public. However, LeCompte and Schensul (2010) argue that disseminating the research to the participants more intentionally should be a priority and these dissemination activities should be meaningful, relevant and timely. Wilson, Petticrew, Calnan, and Nazareth (2010) state that dissemination activities are often overlooked as part of the research process because funders do not account for them in timelines or funding.

Dissemination of research using the ‘studying up’ approach also presents unique challenges, even personal and professional risks, for the researchers because of the reversed balance of power between the researcher and the researched
Typically research has an unequal balance of power, as researchers can use and benefit from participant data often more than the participants; however, when 'studying up', the research subjects may have the power to control or influence how data is analysed and disseminated, particularly if the findings portray them in a negative manner. The political nature of ‘studying up’ often deters researchers, and creates barriers to obtaining funding and support (Priyadharshini, 2003).

During fieldwork I did not feel pressured by the shelters to gather or analyse the data in particular ways, and found the staff forthcoming with any information or documents I requested. However, during the writing process I felt some discomfort reporting data that might have cast the organisations in a negative light, depending on how and where it was disseminated, and how this might impact my future relationships with the organisations. For example, spending on technology was a particularly sensitive issue, and details were not made public (an issue I interrogate further in Chapter Six); however I felt these details were important considerations related to tensions in the cases. I found myself considering the implications of the 'studying up' approach throughout the writing phase and have addressed some of these challenges in the dissemination strategy below. Ultimately, reflecting on how power operated in the shelters enabled me to gather different perspectives throughout the research process.

Because a main goal of critical social work research is to create actionable knowledge for social change, dissemination is a key part of the overall research design (Pozzuto et al., 2005). Given the exploratory nature of the research and the limited generalisability of the two cases, my dissemination goals for this project
began modestly. I identified the shelters themselves, social work and STS academics, and social work educators as the key audiences for dissemination. I negotiated a relevant dissemination strategy with each shelter at the beginning of fieldwork to help ensure each organisation would have access to the knowledge at the end of the process. In both cases we agreed on a short presentation of the findings during a regularly scheduled staff meeting (approximately 15-20 minutes) and a short (10-15 page) written report made available to all staff, including those who were not able to attend the presentation.

I also plan to disseminate my research via articles in academic journals in social work and STS so that future social work researchers can continue applying this approach to technology research. This will help address the gaps identified in the literature review and provide a foundation for further interdisciplinary research between social work and STS in the future. STS journals may also find my use of STS theories in the shelters interesting, and I will write an article for publication for this audience as well. Social work educators are the final audience for whom this research is relevant. As the new generation of social work students arrives ready to learn with increasing technological literacy skills, I believe it is important to share findings that interrogate the use of technology in practice at the earliest possible stage of professional development. I have already presented material from this thesis at two social work conferences in Canada, one media studies conference in New York City, and one STS conference in England.

3.12 Ethical Considerations

As a highly sensitive topic, ethical issues surrounding VAW research have been discussed in academic literature (see Ellsberg, Heise, Peña, Agurto, &
Winkvist, 2001; Fontes, 2004). Although the majority of this study did not explicitly involve researching the social issue of VAW, there are significant ethical issues involved in entering a safe space for women seeking VAW services. In Chapter One, I discussed the concept of anti-oppression as it relates to the research process.

Despite the fact that service user involvement has been promoted as a crucial part of anti-oppressive research, this must be weighed against the potential benefits and risk of harm of participation in the research process to the service user (Fontes, 2004).

In the initial design of this research project, I had hoped to speak to previous residents of the shelters to understand if the technology use in the shelter had impacted their experience in any way. However, in negotiating access with the shelters, we agreed I would not speak with service users and residents in light of the exploratory nature of the research. Although gathering data from service users would have helped provide a more holistic analysis of shelter issues and addressed power imbalances in knowledge creation between staff and service users, at the time of fieldwork I did not feel the potential benefits to my research outweighed the potential harm to service users who may have felt pressured to participate while residing in the shelter despite dealing with other personal, sensitive issues.

As I mentioned above, I also chose not to conduct semi-structured interviews because of the ethical implications of preventing staff from being available to service users. The shelters could not afford, nor were they willing, to hire additional relief staff to cover these times. I feel this was the best decision as they were very open and willing to share any other types of information with me to include in the findings and analysis, including personal emails and internal documents. I have changed identifying facts and findings reported in this thesis to help the both shelters remain
anonymous to the greatest extent possible. Any changes made did not affect the reliability of the data or the outcomes of my analysis. Ethics approval for this research was received from the University of Edinburgh School of Social and Political Science Research Committee on September 25, 2012.

3.13 Conclusions

In this chapter, I have summarised the rationale for the research design choices that culminated in the following data collection and analysis. Based on the critical feminist orientation, a qualitative critical ethnographic methodology was used to gather data in two VAW shelters in Ontario, Canada from December 2012 to May 2013. The research design incorporated multiple methods of qualitative data collection, and an inductive analysis strategy was used to find relevant themes and relate them to existing cross-disciplinary literature. The limitations, dissemination and ethical considerations have been discussed in relation to the research questions, the methodology and the practice setting. I now begin my analysis of the data, starting with a review of the social and organisational contexts in which the shelters were operating at the time of fieldwork, and how this relates to technology.
4 Chapter Four: The Context of Shelter Service Delivery and the Shelter Case Studies

Violence against women (VAW) is a complex social issue in Canada, given the intersection of ethnicity, race, age, sexual orientation, gender identity, ability, geographical location, Aboriginal status, immigration status, and other identities that impact a woman’s lived experience. The definition of VAW itself has evolved as new forms of harassment and violence, some enabled by new technological developments, change the nature of women’s experiences; yet, issues involving technology and violence have developed at a more rapid pace than law and policy (Powell, 2010). Social workers may have different roles in VAW service delivery, such as prevention outreach, policy development and advocacy, and counselling services for survivors. As STS theorists have noted that STS research has focused more on business case studies, which are not generalisable to all organisational contexts (Woolgar et al., 2009), in this chapter, I explore the unique ways social, economic and political contexts have shaped operations at the shelters. Historical briefings of the VAW issue and the shelter movement in Canada are provided to describe how VAW became a public issue, and how the shelter service model came to be a normalised intervention strategy. I review dominant ideas about VAW and shelters, and discuss the implications in relation to shelter service delivery more generally. This is followed by an introduction to the case studies, including a review of the various services provided in the shelter case studies and how the current social, political, and economic contexts shaped service delivery in the field sites. I assert that the shelters’ organisational contexts were most noticeably influenced by the instability of their funding arrangements, which was both a result of, and encouraged
greater institutionalisation and professionalisation of shelter services. These findings provide a frame of reference for the following findings and analysis presented in Chapters Five, Six and Seven.

4.1 The Context of VAW in Ontario

The World Health Organization has estimated that one in five women has been physically or sexually abused by a man at some point in her life globally (Massaquoi, 2005). Contrary to dominant portrayals of VAW in mainstream media, women are more likely to be victimised by a person who is known to them rather than a stranger (Hotton Mahony, 2011). For example, the Office of the Chief Coroner in Ontario (2010) determined 36 deaths in the province that year were related to domestic violence; thirty-four of these victims were women, and all of the perpetrators were men: “More than half of the cases involved couples that were legally married and in a relationship for over 10 years” (p. 5).

Prior to the 1980s, VAW was perceived to be a private, domestic issue rather than a social issue (Domestic Violence Advisory Council, 2009). Due to campaigning from various grassroots community and feminist groups, this began to change and awareness of the pervasiveness of the issue grew (Sev’er, 2002; Tutty, 1998). Since then, eliminating VAW has become a policy issue to the federal and provincial governments; however, due to Canada’s decentralised, federalist government structure, each province has significant control over how it addresses the issue in policy and practice. This has resulted in different approaches across Canada.

In Ontario, VAW has been placed within the jurisdiction of the Ontario Women's Directorate, a government department overseeing many gender-based issues. In the last 30 years since VAW became a policy issue, the province has
developed different policy and practice approaches. In recent years, the Liberal party in power has introduced the Domestic Violence Action Plan (DVAP) (2009), the Domestic Violence Advisory Council (DVAC) (2009), and the Ontario Sexual Violence Action Plan (OSVAP) (2011). These policy documents use an intersectional approach to VAW to analyse and discuss the province’s planned responses to VAW issues (Jaffe, Berman, & MacQuarrie, 2011). The government supports a holistic service network “that strengthens community supports to better protect victims, focuses on public education, early intervention and prevention strategies to help reduce domestic violence, strengthens the justice system response and offers better access to French-language services for the francophone community” (Ministry of Citizenship and Immigration, 2005, p. 1).

While the Domestic Violence Action Plan (2005) did not address concerns about how violence can be perpetrated through ICTs specifically, the OSVAP (2011) specifically mentioned that sexual violence perpetrated through ICTs are included in the scope of the plan, including advocating for legal and policy updates that reflect broader social and technological changes in relation to how violence happens. The DVAC (2009) recommended greater development of technologies that benefit survivors, such as web resources, crisis lines, and equitable access for rural and remote women, and women with disabilities. The impact of ICTs on women’s experiences of violence has been a topic of discussion in various policy and practice arenas. The Annual Report of the Domestic Violence Death Review Committee (2010) reports that “perpetrators of domestic violence are increasingly using a variety of technologies, including telephone, surveillance and the Internet, to harass, terrify, intimidate, coerce and monitor their victims” (p. 34).
Aboriginal women in Canada experience proportionally high levels of violence. According to the Native Women's Association, “[i]n some northern Aboriginal communities in Ontario, it is believed that between 75% and 90% of Aboriginal women are battered” (Ontario Native Women’s Association & Ontario Federation of Indian Friendship Centres, 2007, p. 3). Aboriginal communities describe this in relation to the historical legacies of colonial violence in Canada. These legacies include physical and sexual abuse perpetrated by colonial officials and religious leaders against Aboriginal children, on-going systemic racism and exclusion of Aboriginal communities and families, and minimal access to culturally relevant services based on Aboriginal methods of healing (Sisters in Spirit, 2010). Aboriginal communities have continued to advocate for a national inquiry into this issue and more resources for culturally sensitive responses developed and coordinated by Aboriginal women themselves.

VAW can take different forms and occurs in many different contexts and demographic communities (Johnson, 1995; Massaquoi, 2005). Yet despite positive strides in policy and practice since the 1980s, it is still largely accepted that due to the social stigma and barriers within the justice system, only a minority of women report violence to the police, making it difficult to accurately examine the extent of the issue (Tutty, 1998). These barriers include the mainstream culture of shame and stigma associated with experiencing and reporting violence, a lack of resources to pursue legal recourse or prove violence occurred, and the general tolerance of violence against women in the community (DVAC, 2009).

Negative associations with the feminist movement more generally have also impacted the VAW advocacy success. For example, in reflective notes from Day 22
at the rural shelter, I note:

“I just had a long conversation with [an outreach educator] about the role of critical feminism in shelter operations. We have similar educational backgrounds, more specifically in graduate-level feminist studies compared to the rest of the staff, and were both familiar with the jargon and key debates happening in feminist academia these days. But, at one point she said she felt self-conscious using that language and talking about those types of issues in her work because not all the staff share critical feminist perspectives, and it can also backfire and alienate women in the community if her words are ‘taken out of context.’ I have felt this in my own work in the past, too. Having to keep our voices down in certain places, so we are not labelled ‘those radical feminists.’”

Due to feminism's early focus on women’s labour and economic rights, the existing patriarchal political and economic systems viewed the movement as a threat to gender norms that relegated women to unpaid work in the domestic sphere. Opponents attempted to establish and reinforce polarising and negative beliefs about feminism amongst the general public. Moi (2006) outlines three pervasive beliefs:

(1) feminists hate men and consider all women innocent victims of evil male power; (2) feminists are particularly dogmatic, inflexible, intolerant, and incapable of questioning their own assumptions; and (3) since every sensible person is in favour of equality and justice for women, feminists are a bunch of fanatics, a lunatic fringe, an extremist, power-hungry minority whose ideas do not merit assessment (p. 1737).

According to Moi (2006), these beliefs continue to impact mainstream views on feminism and feminist practice today, asserting that “young women who would never put up with legal or institutional injustice believe that if they were to call themselves feminists, other people would think that they must be strident, domineering, aggressive, and intolerant” (p. 1736). While some radical, or extreme feminist communities may uphold these beliefs, the majority of contemporary feminist theory does not support these assertions. Nevertheless, these misconceptions about contemporary feminism affect how feminist advocacy is perceived by the
general public, even in the context of a pervasive social issue, such as VAW. In this research, I also recognise that intimate partner violence is not only an issue faced by females, or in heterosexual relationships; the experiences of men in heterosexual relationships that experience violence, or women in same-sex relationships is also often under-reported and not well-researched (see Dutton & Nicholls, 2005).

In summary, VAW is a complex social issue that has required coordinated policy, research, and practice approaches since it became a public issue in Ontario in the 1980s. Survivors face barriers to reporting these crimes due to systemic and structural factors related to the diversity of experiences and the need for more culturally sensitive policies, while dominant ideas about feminism limit successful advocacy. New technologies have also introduced different forms of violence that have not been adequately addressed in policy and the law thus far. These factors limit whether current statistics on reported violence accurately reflect the occurrence of VAW, which in turn makes it difficult to assess and prove the level and type of services needed in communities. This is a challenge faced by any type of service provider working in the VAW sector; while encouraging more women to report violence might help capture the reality and extent of VAW as a social issue, it may not be the best option for many women in the current social and political climate that perpetuates negative stereotypes about the women themselves.

4.2 The Context of VAW Shelters in Ontario

VAW services address prevention, intervention and survivorship in the non-profit and social service sectors. A variety of professions are involved, including “shelters, police, health care professionals, lawyers, child welfare workers and advocates” (DVAC, 2009, p. 9), making VAW service delivery a highly inter-
professional practice. One part of this service network in Ontario is the shelter system, which provides emergency accommodation for women fleeing violence. Admissions into residential shelter services have increased in recent years, with shelters often operating at maximum capacity (Tutty, Ogden, & Weaver-Dunlop, 2007). This has led to the development of more shelters across Canada each with higher numbers of beds to increase overall capacity and meet demand (Burczycka & Cotter, 2011).

Grassroots feminist groups originally developed shelters as a form of crisis intervention for women facing imminent bodily harm (Tutty, 1998). The first shelter for abused women and children in Canada opened in Vancouver in 1973 (Sev’er, 2002), a time when VAW was still largely considered a private issue and services for women were minimal. Historically, volunteers ran shelters using a collective, cooperative approach; volunteers may have even been past residents of the shelters. As the shelters became aware of the diverse needs of women experiencing violence, beyond emergency housing, they began to incorporate other types of services. The shelter system grew and its resource needs grew as well, as did organisational complexity. Now most VAW shelters are legally registered as not-for-profit corporations under Ontario's Not-for-Profit Corporations Act (2010), employ paid staff in addition to volunteers, and are subject to government accountability measures in order to be eligible for non-profit funding and benefits. The Not-for-profit Corporations Act (2010) sets forth the legal requirements of organisational hierarchy and policy shelters must follow to be given ‘non-profit’ status and access various forms of government and community-based funding.

According to Ontario’s aforementioned Not-for-profit Corporations Act
(2010), a volunteer Board of Directors, with a minimum of three directors, must govern a not-for-profit corporation. The Board's role is to supervise the activities of the organisation and ensure the requirements of not-for-profit status are being met. This includes undergoing an annual financial audit, recording meeting minutes and making them publicly available, and maintaining a record of all eligible voting members of the organisation (Not-for-Profit Corporations Act, 2010, s21). The Executive Director of the organisation is “the liaison between the staff, the workers who provide direct service to the shelter residents, and the board […] also the link to the broader community” (Tutty, 1998, p. 35). Most shelters still enlist the assistance of volunteers and unpaid student interns for various jobs. Volunteers may work in direct proximity to residents, such as assisting with child minding during therapeutic sessions, or in administrative roles, such as data entry.

Presently, VAW shelters across Canada receive between 70-80% of their overall funding from provincial governments (Burczycka & Cotter, 2011). In addition, because Ontario also has a decentralized social policy structure that gives local governments much of the responsibility for related issues, such as affordable public housing and social service delivery, the municipal governments also provide some funding to VAW shelters. Given the diverse range of services now often offered within a shelter, funding arrangements are often fragmented and complex, coming from different government departments and levels. In Ontario, the relationship between VAW shelters and the provincial government has been unstable due to constant funding freezes or cuts despite rising costs of living and service expectations (Sev’er, 2002). Despite the many policy initiatives and written support from the provincial government, shelters in Ontario have continually struggled to
secure consistent funding for the range of service they now provide, despite growing accountability measures for service delivery organisations (Tutty, 1998). For example, the DVAC was tasked with generating “recommendations that required no additional funds, could be achieved by making better use of existing resources and that built upon promising practices” (DVAC, 2009, p. 9). Current funding shortages have increased the amount of fundraising activities by shelters, although Sev’er (2002) asserts that this increased focus on fundraising will only continue to lower government accountability to supply public funds to shelters.

This point was clearly exemplified in my notes from Day 17 in the urban shelter:

“During a staff meeting, [one of the relief residential counsellors] reflected on how the shelter had been meeting their own goals of anti-oppression in the context of admitting and departing women. She felt there needed to be more discussion happening about what they were actually doing, and whether they needed to re-examine some of their practices. [Another residential counsellor] adds: ‘Wouldn’t it be so great to have a day where people could come together and discuss and brainstorm the ways the organisation has changed?’”

Although according to Tutty et al. (2009), women's shelters are the most widely accessed service providers for VAW services, Burczycka and Cotter (2011) estimate that only 6-8% of women who experience violence in their relationships access them. Women may also not access shelter services due to broader social barriers. Women who experience multiple forms of oppression are more likely to experience barriers to accessing shelters because of the uniqueness or complexity of their needs (Barnoff & Moffatt, 2007). In Canada, these barriers:

include but are not limited to, Aboriginal women, older and young women, women living with disabilities/Deaf women, immigrant and refugee women, Francophone women, homeless women, women with mental health issues, women abused by caregivers, women with
concurrent disorders, women in conflict with the law, transgendered women. Women living in rural or remote regions of Ontario also experience particular challenges in accessing the VAW system in a meaningful way (DVAC, 2009, p. 25-26).

Barriers can be caused by a lack of understanding of the needs of these particular groups and/or a lack of resources to implement strategies to reduce known barriers to accessing services (Sisters in Spirit, 2010). Although much theoretical literature in social work is available on anti-oppression practice, Barnoff and Moffatt (2007) highlight that little research discussing “anti-oppressive organisational practices” (p. 57) is available to help guide feminist organisations. The shelter system has been criticised for failing to account for cultural differences of the diverse groups in Ontario. For example, Aboriginal communities view VAW as a community issue and prefer group approaches to the women, children and abuser’s healing (Ontario Native Women’s Association & Ontario Federation of Indian Friendship Centres, 2007; Sisters in Spirit, 2010). Massaquoi (2005) also states that violence amongst immigrant families in Canada is not well understood, and community service providers are quick to assume diverse cultural, ethnic or religious norms and beliefs shape woman’s past experiences or future goals in deterministic ways.

As feminist theory has developed over time, it has expanded its analysis of how and why VAW occurs. Over time, shelters have incorporated these new understandings into their work and broadened their range of services and the models used to provide them. Yet, according to Westbrook (2009), despite the fact that shelters have expanded their approaches over time, negative assumptions about VAW and shelters persist and may prevent women from accessing services. These assumptions include that women must have proof they have experienced physical
violence, that women must leave their situations or divorce their partner in order to access services, or that a woman’s children will be taken away from her. According to Westbrook (2009), former shelter residents have voiced concerns about informing shelter staff they plan to return to the abusive partner for fear of judgment. Some women may want to access services while they are still with their partner, or may wish to seek services with their partner rather than alone. Misinformation can be circulated through face-to-face and online communities to prevent women from seeking services or from shelters to be built in communities at all.

Over time, shelters have become a normalised intervention method to VAW, growing from 20 shelter sites across Canada in 1975 to 593 sites in 2010 (Burczycka & Cotter, 2011). This growth is partially due to growing public awareness of the issue in communities across Canada, but, as Mann (2002) describes in her study on the planning and development of a women’s shelter in a rural Ontario community, the VAW issue, and the perceived need for a VAW shelter in a community, can still evoke strong moral and ethical opinions that may polarize communities. Some of these beliefs may be based on the dominant ideas about VAW, feminism and shelters described above, or may reflect the fact that some individuals still believe violence is a private matter.

Although shelters provide immediate relief in violent situations, residing in a shelter can be an extremely stressful time for women and children. One of the biggest factors leading to VAW in the first place is isolation, and the shelter system has been criticised for forcing women and children to uproot themselves from their daily lives, homes, jobs, and/or communities in order to be safe (Domestic Violence Advisory Council, 2009). Residents usually enter the shelter having experienced prolonged
periods of violence as the thought of moving can be daunting enough to prevent women from accessing shelter services, instead hoping that ‘things will get better.’ This is compounded by the number of practical challenges that can further complicate leaving a violent relationship, such as finding affordable housing quickly, liaising with legal authorities such as the criminal justice system and child protection, finding work or another income source, and navigating relationships with the abusive partner, family, and friends, some of whom may not always be supportive of her decision to leave. Women with children face additional challenges to finding housing in safe neighbourhoods, flexible employment and affordable child care (Krane & Davies, 2002). Unfortunately, unstable funding in recent years has meant that services which “make the shelter stay more inclusive and less traumatic (such as cultural sensitivity programs, programs for children, etc.), have been the first to go” (Sev’er, 2002, p. 317).

Despite the growing demand for VAW shelters and beds every year, the shelter system is not an ideal response to the issue of VAW on its own. It is reactive to violence and places the responsibility for ending the cycle of violence on the victim rather than the perpetrator. The fact that many residents do return to abusive situations has been discussed as both an inevitable challenge due to the many structural and systemic factors impacting a woman's life, and the fact that the shelter system does not address the violent behaviours by the perpetrator (Sev’er, 2002; Tutty, 1998). Although fewer in number comparatively, men who have been victims of violence and/or are abusers should also be able to access to appropriate services (Tutty, 1998).

Despite the fact that 48% of women admitted to shelters bring children with
them (Hotton Mahony, 2011), the provision of children's services in shelters remains an under-researched area in terms of evaluating interventions and measuring long-term outcomes. It is likely that children residing in shelters have either experienced or witnessed violence in the home, and therefore have their own unique set of needs in addition to the women themselves (Jenney, Mishna, Alaggia, & Scott, 2014). Although beneficial for the children’s well-being long term, moving from their home to the shelter can be a traumatic experience and this transition increases the likelihood of disruptive behaviours in the shelter, at school or in other social situations. Beliefs about the children’s short term and long term needs may impact a woman’s decision to seek services, remain in the shelter or return to the abusive partner. Children also require specialised services based on their own needs and developmental stages, including if they have witnessed or experienced violence themselves.

The vast distances between some rural and remote communities present logistical challenges in addition to the other barriers women face in reporting violence already discussed above. For example, in some remote communities in Ontario it may take days for a legal response to a VAW incident, and women may have limited accommodation options in the meantime as many rural and remote areas do not have readily accessible VAW shelters (Tutty, 1998). In rural areas, isolation from support and services is an important factor explaining why women may not leave a violent relationship or may take longer to do so (Tutty et al., 2007; Tutty, 1998). Women living in rural areas may also find it difficult to find affordable and safe housing in their own communities, or may they have personal relationships with service providers in different capacities, and not feel comfortable disclosing their
situations.

All of these factors contribute to a fragmented, unstable service network of VAW shelters across Ontario, with many rural and remote women and children lacking access to appropriate services, and few culturally relevant services for the diverse experiences of women residing in the province. As VAW shelters adapt and incorporate new service models, they also must address out-dated misinformation about shelters that may prevent women from accessing services. These practical challenges impact how well organisations are able to anticipate service users needs and preferences, and plan for service delivery in subsequent years. Relying on provincial and community funding has presented different challenges to the previous volunteer-run system; therefore, shelters have shifted their service approaches over time to adapt to this instability, which has also resulted in further institutionalisation and professionalisation of shelter services compared to the shelter system’s grassroots origins.

Institutionalisation refers to the embedding of shelter services into broader governmental and social responses to VAW. Institutionalisation has impacted both the funding structures and the internal structures of VAW shelters. VAW shelters have embraced institutionalisation for a variety of reasons, including a growing preference in Ontario towards contracting social service delivery to non-profit organisations, and quality assurance of services offered – although very little research has been done about the impacts of these contractual relationships on service delivery quality or outcomes (see Brown & Troutt, 2004). According to Sev’er (2002), “governments have been and continue to be reluctant to fund organizations that lack a clear bureaucratic structure and division of responsibility”
At the local and global levels, health and social services are increasingly constructed as commodities, whereby providers are accountable to financial stakeholders. Service providers therefore focus on competitiveness in the market - by increasing efficiency through the use of fewer resources – in order to maintain their funding (Aberbach & Christensen, 2003; Beck, 2001). The key characteristics of the neoliberal business model are greater accountability to service users due to constant supervision of services and staff; greater efficiency in service delivery resulting in lower taxes, wait times and redundancies; and greater access to choice of services because of increased competition in the market (Aberbach & Christensen, 2003; Ashworth, Boyne, & Walker, 2002). However, these characteristics are also criticized for the lack of power analysis between different stakeholder groups and funders that contributes to access inequalities and competition between organisations working toward similar emancipatory goals.

The institutionalisation of shelter services, which has led to increased governmental involvement over shelter services through funding systems, has also changed relationships within the shelters; there has been a shift from relying on volunteers to paid staff, and from viewing shelter residents as peers to clients or service users (Sev’er, 2002; Tutty, 1998). Given the grassroots history of the shelter movement, formal social work training or professional registration has never been mandatory for VAW shelter staff, but, as institutionalisation has increased governmental and public scrutiny of shelters, many organisations have focused on hiring professionals with formal training and registration in related service areas (Ministry of Citizenship and Immigration, 2005). Social work skills have become
increasingly valuable in this setting due to the practical training in on-going crisis intervention, case management, advocacy, and inter-professional collaboration needed to understand the diverse needs of women who are seeking shelter services (Mann, 2002; Ministry of Citizenship and Immigration, 2005).

One of the challenges of professionalisation in the social service sector is that funding for wages has not increased despite the pressure to hire staff with post-secondary education and professional qualifications. Residential shelter staff members have traditionally been seen as semi-skilled workers by funding bodies; therefore wages have typically been low compared to other fields of practice, especially considering they often do not include benefits such as supplementary health insurance (Tutty et al., 2009). These positions are often funded on an annual basis, making them unstable employment options for individuals possessing specialised skills coupled with the stressful nature of crisis work. For example, answering crisis calls, as Tutty (1998) describes, can be particularly stressful as staff will likely never know if the caller was able to safely resolve the situation for herself, and her children. Brown and Troutt (2004) argue that this tension represents an exploitative loophole on the part of the government, using professional organisations (such as the OCSW-SSW in Ontario) with established standards as an extra measure of accountability without having to provide any extra resources to shelters themselves. Although social work skills can be valuable in shelter settings where crisis intervention happens alongside therapeutic work, one of the main challenges is finding and retaining professionals committed to feminist practice, who are willing to accept the instability of working in an organisation that is funded on a year-by-year basis (Tutty, 1998). With this context of the shelter system in mind, I now turn my
attention to the specific details of the two shelter case studies involved in the research project, outlining their own unique approaches to these issues.

4.3 Case Study Descriptions

4.3.1 Urban Case Study

At the beginning each case study I made an effort to understand the organisation’s structure, services, and local context before focusing on technology. I did this by reviewing the training documents provided to new employees and volunteers about the organisations, and through further fact checking with staff in various departments. Given the theoretical links between technology and power within organisations, this background information helped me stay aware of how factors such as job title, internal hierarchy and management structure might impact technological decision-making. At the urban shelter, a variety of services and programmes were offered, which were overseen by the Executive Director and the Board of Directors. Given the breadth of services, the operations were divided into five distinct areas:

1. Residential programs and services
2. Transitional and community services and property
3. Human resources
4. Finance
5. Development (Fundraising)

Both the residential programs and services and the transitional services also had their own program directors as well. Greater detail of the organisational structure can be seen in the two organisational flow charts provided to me by the organisation (refer to Appendix E). During fieldwork, I spent the majority of my time in the
residential areas because this is where the majority of the staff worked and where specific IT issues emerged while I was there. However, I did speak to staff members from all areas of the organisation.

The organisation had two residential service sites – a main site and a satellite site – and provided a combined total of 67 beds. The catchment area was approximately 400 km² and had a population of approximately 400 000. These residential areas were open 24 hours a day, seven days per week, including all holidays. The residential counsellors rotated in three eight-hour shifts. The locations of the sites were largely known in the urban area, as large signs with the organisation's name were clearly visible from the street. This was unusual as often shelter locations are not disclosed to the general public to offer further protection from unwanted visitors, although many VAW shelter locations are now discoverable through the internet and GPS mapping (Dimond et al., 2011).

In the 2012-2013 fiscal year, the organisation sheltered 527 individuals – 326 women and 201 children. When arriving at the shelter or inquiring about services over the phone, the first point of contact was the administrative counsellor who completed intakes or referred the woman to other appropriate services. While staying at the shelter, women had access to therapeutic, practical and advocacy support from the residential counsellors. However, the shelter also functioned as the residents’ temporary home. After my first day of fieldwork at the urban shelter, I noted:

“Walking into the shelter on the first day of fieldwork was a bit unnerving. Even though I had been there before while negotiating access with management, I was surprised at how many different things were going on that were 'normal.' Women were getting ready to go to work, making their breakfast and lunch, and, in some cases, getting their children ready to go to school. Throughout the day I felt hyper-aware of the on-going, tenuous balancing act between exhaustion and resilience.”
The staff in residential service roles had a mixture of undergraduate social science degrees (including social work), college diplomas in social service work (which is regulated by the same provincial body in Ontario, as mentioned in Chapter 2), and occasionally postgraduate degrees in social science disciplines. One staff member in the urban shelter was in the process of obtaining a Master of Social Work degree, and was completing her required placement hours at the shelter. In the urban case study, the Executive Director was adamant that regardless of qualifications, all staff needed to have feminist values in line with the shelter's mission and goals.

The counsellors helped women find appropriate housing, employment and social support, navigate legal and court processes, and health services. Two specialised counsellors (for addictions and mental health respectively) were also on staff. The addictions’ counsellor position was shared between both sites; however, she went on a health-related leave of absence halfway through fieldwork and had not been replaced. It was uncertain whether her contract would be renewed or reposted at the end of the fiscal year due to funding instability. The mental health counsellor position was a job share position with the Canadian Mental Health Association but had not been filled due to on-going budget tensions. According to the Executive Director, there was no plan to fill either position due to the overall budget concerns. Due to the high number of children in the shelter, a child advocate also worked with women at both sites on an as-needed basis. The satellite shelter had fewer beds and therefore was also primarily responsible for handling incoming calls to the emergency crisis line. Generally, the counsellors at the satellite shelter spent more time answering calls than dealing with in-person issues compared to the main site.

Each site had a kitchen service although residents were not able to cook for
themselves because of health and safety regulations. A kitchen staff member with safe food handling certification prepared hot lunches and dinners each day for residents and children. Food allergies, sensitivities and lifestyle choices were catered for as much as possible. The kitchens were located near dining areas and recreational spaces for residents to socialise and to maintain a home-like environment. The recreation spaces had couches, televisions, DVDs, and toys for children to play with when supervised by either a resident or the child care staff. Both sites also had backyards with play structures for children, picnic tables and specific procedures enabling smoking on the shelter property.

A minimum of two residential counsellors was working at any given time, although during the daytime and evenings shifts there were likely to be up to four counsellors available. Although turnover of residential staff was not an issue during fieldwork, there was a high degree of variability in terms of the overall staff composition at any given time. This was because relief staff often filled in, particularly during holiday seasons. This created a need for a system where information about residents, referrals, and inter-organisational communications could be transferred accurately multiple times per day amongst different team members. To facilitate smoother transitions between shifts and staff, residents were assigned to one of two 'teams' of residential counsellors – red or blue. Permanent full-time staff worked the same shift (day, evening or overnight) at the same site and with the same team and therefore had the best opportunity to develop deeper relationships with residents; ideally part-time staff were consistently based in the same team at the same site, but had more flexibility to be moved as needed and worked a variety of shifts throughout the day; and, relief staff could be assigned to either team at either location
for any shift on an as-needed basis.

Although in the organisational flow chart, 'assigned counsellors' and 'residential counsellors' occupy separate positions, in practice most employees referred to themselves as residential counsellors regardless of whether they were assigned to a team or not. Additionally, there were no residential support clerks or counselling students working at the shelter during fieldwork, though these are shown on the chart. The Executive Director, and human resources, finance and development staff members had offices at the main residential site, occupying half of the building, which was separated and secured from the residential space.

The urban organisation also had a second stage housing facility with 25 units, housing approximately 100 tenants each year. This operated independently from the main and satellite shelter locations. Second-stage housing was subsidised, longer-term housing with limited counsellor support available for residents. Often the tenants were former shelter residents who desired greater independence but still wanted support and/or could not move into the private housing market immediately for safety, credit or financial reasons. One support staff was available at the transitional housing during regular business hours to assist residents. While staying in the shelter itself was free, residents paid rent in the second-stage housing. Therefore, it was more self-sustaining and required less external funding than the shelter and other support services. The shelter also offered community education and advocacy about VAW to the general public. They did this type of work on a campaign basis at different times of the year.

The shelter's annual budget in the 2012-2013 fiscal year was approximately $5
million Canadian dollars\textsuperscript{3}. The management staff told me that the shelters received provincial funding from the Ministry of Children & Youth Services, the Ministry of Community and Social Services, the Attorney General, the Ministry of Health, and the Local Health Integration Network. Only through combining partial funding from different Ministries had it been able to create several of the full-time positions in the shelters. This resulted in the shelters reporting annual statistics and applying for renewed funding to at least five different provincial Ministries each year, and the municipal government, each with their own transparency and accountability requirements. The majority of spending went to running both residential sites, including land and property costs and salaries for employees. The broader community also had an important role in supporting VAW shelters, through funds, in-kind donations, and time; however, a tension between management and direct service staff regarding community donations became apparent at the urban shelter. While in-kind donations, such as clothing and white goods, were still accepted, management encouraged donors to give cash donations instead. This caused conflict with direct service staff members who did not agree with discouraging any kind of donation given the shelter faced funding shortages. The shelters’ community partners also faced funding instability and this impacted shelter operations. For example, one of the urban shelter's community partners, that assisted women with transitioning into stable housing from shelters, was defunded during fieldwork, and shelter staff members had to quickly determine how to assist residents with dwindling community support.

It had also recently developed a semi-independent social enterprise in the

\textsuperscript{3} Approximately equivalent to £2.5 million as of April 30, 2015.
hopes of establishing a new reliable source of funding. Despite being owned and run by the shelter, the store was located in a different area of the city and had the appearance and operating procedures of a regular clothing store. According to the 2012-2013 annual report, the social enterprise had not yet turned a profit for the organisation although this had been expected as it was only in the second year of operation. However, hopes were high it would turn a profit in the coming fiscal year.

4.3.2 Rural Case Study

The rural shelter offered many different programmes and services related to the issue of VAW, in addition to the residential shelter. Therefore, in contrast with the urban shelter, which was more residential focused, the rural shelter’s residential services were a proportionally smaller part of the organisation's overall purpose, funding and mandate. The organisation consisted of one main site which housed the shelter, administrative offices, counselling offices and community programmes offices; two satellite offices in smaller towns in the region, which were shared spaces each used by one of the therapeutic counsellors one day per week; and, the transitional housing building located in the same town. The residence was located in a residential neighbourhood and had only a sign featuring the ‘woman symbol’ marking its location. After the first day of fieldwork at the rural shelter, I wrote:

“On my first drive to the shelter this morning, I wondered how the physical distance would impact this case study. I am aware I have preconceived ideas about what technological issues I might find in rural areas, but driving here has made the vastness and isolation more real, more concrete. How do women even access services without a car or public transportation? How does that impact their relationship to technology?”

The shelter's mandated catchment area had a population of approximately 90 thousand, and covered approximately 3000 km². This is an approximate population
density of 30 individuals per square kilometre compared to 1000 individuals per square kilometre in the urban area. It bordered a large area of land owned by an Aboriginal group that controlled its own services. Similarly to the urban shelter, the Executive Director and the Board of Directors oversaw the organisation’s operations.

The organisation had 11 different programme areas that were separated into two key areas each with their own manager (refer to Appendix F):

- **Residential services**
  - Shelter (including emergency telephone counselling)
  - Transitional housing
  - Second stage housing

- **Community services**
  - Elementary school based counselling program
  - Youth housing advocacy
  - Women's counselling
  - Sexual assault/abuse counselling
  - Child and youth programme
  - Community education and counselling
  - Specialized children's programme
  - Children's Aid Society/Youth advocacy worker liaison programme

The shelter also had a combined finance and human resources department, and all the programme areas, except for transitional and second-stage housing, were housed in the same building. The shelter residence was in a separated, secure wing and had 20 beds. Similarly to the urban shelter, the residential areas of the shelter remained open 24 hours a day, involving three eight hour shifts each day, including
holidays. In the 2011-2012 service year, the shelter had served approximately 100 women and 50 children.

Access to all services and programmes was through a common entrance, and the intake counsellor was the first point of contact for all residential, therapeutic, advocacy and crisis programs. Similarly to the urban shelter, the residential staff had a mixture of undergraduate social science degrees (including social work), and college diplomas in social service work. One staff member had a Masters degree in gender studies. After discussing the woman's needs, the intake counsellor forwarded the completed intake to the staff member in charge of the appropriate programme who would follow up (except in the case of women seeking refuge in the shelter itself who would be admittedly immediately as needed). During the overnight shift, one residence counsellor was present in the shelter. During the day, one or two counsellors were present and the intake counsellor. Residence counsellors in the rural shelter assisted with similar tasks and supports as the urban shelter, such as advocacy and transitional needs; however, given that a wider range of services was provided by the organisation, it was not uncommon for a resident to receive assistance from many different staff members in the building, based on her needs. For example, residents were involved in the mother and child group while working with the housing advocate as well. However, the counselling programme involved more intensive emotional work, and was only available to women living independently with a greater degree of overall stability. Many staff members worked in more than one programme; full-time positions were often pieced together using funding from different sources to create one position. This made their employment somewhat unstable, as often the funding contracts would be up for renewal by each government
ministry at different times of the year.

The residence had a large shared kitchen where residents could store food and cook. There was also a shared recreation space with a television and toys for the children with access to a fenced backyard with a small play structure for children and a picnic table. Although the residence was open and staffed 24 hours per day, staff in the other programmes worked daytime business hours and access to the office areas of the building were not permitted outside these times.

The organisation had a second stage housing facility with 16 units that provided housing and transitional services to women experiencing violence; they did not need to be shelter residents in order to apply. One staff member worked there during daytime business hours only. Women were able to stay in the second-stage housing for up to two years, eventually transitioning to private accommodation in the community when ready. In addition to the support offered by the staff member, the facility also offered social programmes for residents, such as craft sessions and cooking classes in a shared kitchen facility to prevent isolation and promote community building.

As part of the therapeutic programmes, three counsellors provided therapy to women at the main location and at the satellite offices based on what location was more convenient for the service user. Staff employed in therapeutic work in the rural case study did have formal qualifications in counselling or therapy, and were employed on a salaried basis with more job security compared to residential staff. Isolation was one of the main barriers to accessing services at the main site as many individuals in the community did not own a personal vehicle and public transportation was extremely limited. Although there was a waiting list for this type
of counselling, the specialised programme for survivors of sexual abuse or assault provided immediate access to therapeutic services for women in this form of crisis.

The rural shelter had more specific outreach goals than the urban shelter. They specifically hired staff to engage with the community and provide information on maintaining healthy relationships, identifying warnings signs of harassment or abuse, and accessing community services, particularly for children and youth. These staff often worked in the community but had their primary offices based in the shelter building. There were two elementary school based counsellors who visited local schools to provide therapeutic services to children who had witnessed violence. Two other counsellors worked with mothers and children together to promote healthy attachment and child development. Another two outreach educators worked with other community service providers to educate groups about healthy relationships. According to these staff, their services were particularly successful in high schools and the local police department had approached one of the educators to help create workshops regarding cyber-bullying and healthy relationships online.

Funding was largely from government sources at the rural shelter; community support was less evident. The finance manager at the rural shelter, who had worked there for 24 years, told me that the amount of donations had decreased every year. She stated that given the overall lack of health and social services in the community, she believed people were more likely to donate to the hospital or other more widely accessed services, although the children's programs at the shelter were an exception to this and received donations. The Executive Director at the rural shelter also stated that she felt rural residents were more likely to contribute to the county hospital or other more visible and less stigmatised causes.
Shelters may also offer services for men, both as victims or perpetrators of violence, although neither of the case studies provided services directly to men (either abusers or survivors) in the shelter. As part of her job responsibilities, one of the intake counsellors at the rural shelter co-facilitated a men's group for abusers in collaboration with another local service agency and stated that this was the most rewarding part of her job, although overall she felt offering only one service for men seemed insufficient given the number of women accessing shelter services. Other staff members also voiced a concern about the limited services for men in the community as well. In our conversations about the fragmented nature of service delivery in the VAW sector, they spoke about what they saw as the need to address men’s role in the cycle of violence, and deconstruct the masculinised social norms of dominance and control that often lead to VAW in the first place.

Each shelter could determine the maximum amount of time women were permitted to stay in the shelter; the overall goal was to assist residents in transitioning out of the shelter to a safe place when it is safe and possible. Both shelters operated at approximately 80% capacity during fieldwork, although there were times when the shelters were full and women had to be referred elsewhere. Although the shelters had similar mandates, they offered different types of services and relied on different funding sources. The urban shelter had many more community partners to work with and therefore did not feel the need to offer as many services in-house, compared to the rural shelter that had fewer community partners working in similar areas. Both shelters operated crisis lines that were available for any women, regardless of whether she wanted to stay at the shelter or not, and the rural shelter offered many more services for all women in the community.
Neither shelter required women to leave their situations in order to access services. In fact, at both shelters, the staff helped women create safety plans in case of future incidents of violence while they were residing with the abuser. Yet, staff members at both shelters felt dominant assumptions about VAW and shelters, such as those described by Westbrook (2009) above, prevented women from accessing services. They also felt they did not have control over the accuracy of mainstream information about VAW and shelters. The shelters tried to address this misinformation and stereotypes by providing contrasting information on their organisational websites, such as “in multiple formats including definitions of abuse, lists of abuse warning signs, examples of escalating abuse consequences, and affirmations of abuse perceptions” (Westbrook, 2009, p. 830). In my discussions with shelter staff members, they told me assumptions and misconceptions about VAW and shelters continued to impact how the community viewed them and their work, creating a constant pressure to justify their ideology. The Executive Directors at both shelters expressed to me that new staff needed to understand and share a feminist perspective on VAW to be able to articulate the shelter’s mission and goals to broader audiences and focus on providing services in line with these values.

In this section, I have described the services and settings of the case studies in light of broader contextual factors. While the shelters offered similar residential services, the rural shelter’s scope of practice was broader because they had fewer community partners available to work with. Both shelters faced challenges with unstable funding and misconceptions about VAW, feminism, and shelters amongst the general public, leading to unique contextual factors impacting their organisational goals and needs.
4.4 Implications of Contextual Factors for the Research

This data highlights the importance of understanding broader social contexts in relation to organisational research. The shelters were impacted by the unstable funding arrangements that were largely out of their own control, and sought to meet evaluation strategies created by these external bodies. This created a complex and often inefficient system of reporting for the shelters, because they were accountable to so many different Ministries that operated separately. Although the shelter staff largely agreed that some degree of accountability was necessary in their line of work, they also felt the degree to which they could be efficient was now embedded in the government’s fragmented system of reporting. Furthermore, the economic and political context encouraged competition between service providers that were rewarded when they increased the number of service users served, despite the fact that networks of services rely on each other to remain flexible to service user needs (Brown & Troutt, 2004). Even if one service provider did not experience budget cuts, they were susceptible to increased pressure for services if their community partners did. Although they tried to work efficiently with the resources they had, it was difficult for them to create any long-term plans due to the instability of the funding arrangements with multiple provincial and municipal government bodies.

Although institutionalisation and professionalisation brought benefits, it also created tension: “the dependency upon and legitimate demands for government funds on the one hand versus their independence, reflexivity, social activism, and quest for social change” (Sev’er, 2002, p. 314). This shift towards formal organisational hierarchy and structure in many non-profit or service delivery organisations has not been without challenges; tensions between balancing advocacy and social justice
work, and with meeting institutional requirements have been documented in the literature (see Barnoff & Moffatt, 2007). According to Burton and van den Broek (2009) increased bureaucratic accountability measures have pressured organisations to implement technologies that make these processes more manageable, despite the lack of evidence to support whether they improve services given the increased complexity of the administrative burden.

Trudeau (2008) has shown that government agendas shape the mandates of social service organizations despite claims that collaboration will allow services to be more responsive to service user needs, and that non-profit organisations continuously negotiate meeting the needs of the government and the community. Similarly, Tseng (2005) documents this finding specifically in the context of ethnic community-based organisations that are critically dependent on government funding for survival and are the most vulnerable in times of financial crisis. Ebrahim (2003) shows that accountability and transparency to government and other funders has become more important than to the communities who make up the target service users due to critical funding needs; even when it has been shown that this upward accountability does not necessarily result in improved mission achievement (Christensen & Ebrahim, 2006). Non-profit research has also shown that service organisations less critically dependent on government funding are more likely to succeed over time, and are more likely to develop lateral collaborations with other service organizations to further decrease reliance on government funding and increase stability (Guo & Acar, 2005; Hager, Galaskiewicz, & Larson, 2004). However, this raises the question of how VAW can be described by the Ontario government as a public concern, but receives minimal public funding.
Several studies documenting service provider needs have shown that these organisations feel chronically underfunded and more vulnerable to defunding (Meinhard & Foster, 2003; Wang & Truelove, 2003). Social service agencies also believe uncoordinated policy, distribution of responsibilities across levels of government, and lack of general understanding of non-profit management by government contribute to the need for greater research on service provider needs in the current neoliberal context (Helmig, Jegers, & Lapsley, 2004; Stewart et al., 2006). In light of this instability, it would likely be difficult for the shelters to make long-term decisions about technology use, including how to invest resources wisely over time. I expand on this issue in the following chapter.

4.5 Conclusions

In this chapter, I have discussed the broader social and political contexts in which the case studies operated at the time of fieldwork. VAW was seen as a private issue until the 1970s when it gained attention due to grassroots advocacy. The shelter movement developed from grassroots organising as well; however, modern shelters are now usually formally registered as non-profit organisations in Ontario and are, therefore, subject to greater government and public scrutiny in exchange for public funds. As the shelter movement developed, it dealt with misconceptions about its feminist underpinnings, and shelter operations amongst the general public. This may have prevented women from accessing services. Findings from the shelter case studies were also presented to highlight similarities and differences between the two field sites within this broader context. This information provides context for the following analysis chapters. I now turn my attention to the specific technology issues in the shelters in the midst of these other contextual circumstances.
Chapter Five: What ICTs were the VAW shelters using?

This chapter explores the first research question: “What ICTs were the VAW shelters using?” I posed this research question to gather data in the cases in a more holistic manner than is found in existing social work research on technology – focusing on the different types of ICTs being used and how they worked together to support shelter work rather than focusing on one particular object, application, or system. In the literature review process, I did not find any social work research that had documented the range of ICTs being used by an organisation, and I felt this information would help establish a more complex understanding of how technology related to shelter work. I kept the definition of 'ICTs' broad, and encouraged participants to self-define what technology meant for them in the context of their daily work. This enabled me to gain a better understanding of what staff perceived to be the technological aspects of their work, and resulted in discussions about many different topics. I identified four dominant themes from the data that I discuss in further detail in this chapter: computer use, ICT infrastructure and internet access, electronic record keeping, and social media engagement. I discuss each theme in turn and relate it to existing social work research.

I then turn my attention to cross-disciplinary analysis. My analysis of the themes indicated that the staff discussed ICTs as discrete objects brought into the organisations through external forces, similarly to the perspectives taken in the reviewed social work research in Chapter Two. However, I observed that staff members’ descriptions of ICTs did not always align with how they actually engaged with technology issues. While staff discussed technology as an external, distinct concept, technology issues were always embedded in the broader, on-going
processes of strategic decision-making about policy and practice happening in the shelters. Recognising this on-going process of technological decision-making in the shelters relates to the ‘social shaping of technology’ framework discussed in STS, and I build on this to discuss how the shelters did not simply accept technology passively or resist it automatically, but thoughtfully considered the options available to them as much as the social, economic and political contexts discussed in the previous chapter allowed. The implications of this conceptual shift, from ICTs as objects to technological development as an embedded process, are explored at the end of this chapter.

5.1 Computer Use

The most visible ICT issue I observed during fieldwork was the constant use of computers to complete work tasks, and the organisation of the workspaces around the computers. Computers were located in most staff office spaces, including the reception desks at the entrances and in meeting rooms used for therapeutic and/or counselling purposes. This issue emerged from my observations of how often staff used the computers throughout the day, including when they were with service users.

On Day 1 in the urban shelter, my fieldnotes state:

“At the reception desk, I see computers. On the middle desk there are three computer monitors, one for inputting data (the main one on the left), one for the security cameras and one for the outside security camera scanning the premise. Also, a small desktop computer printer, black desk telephone, switchboard for the door security, smaller switchboard for resetting the door settings, and two other black boxes connected to the other equipment with wires (unclear what these are for). A residential counsellor sits off to the side typing on another desktop computer.”

Furthermore, on Day 2 in the urban shelter, I note:

“[s]itting in the shelter is familiar and strange. Part of me feels like I am
back at work, the other part reminds me I now have my ‘research hat’ on and I am here to observe and engage. But the environment looks and feels familiar.”

In my conversations with staff, they did not appear to be aware of how often they used the computer to record or find information. The computers were so embedded in the office landscape that, in contrast with the other issues discussed below, staff did not see a reason to talk about them with me, unless they were broken. According to Røpke (2001), while computers may have been novel at one point in the shelter, this 'invisibility' suggests they are now accepted, routine technologies used in the shelters.

In the urban shelter, the Executive Director and the administrative staff had personal offices in one half of the building with their own personal computers, but on the residential side the counsellors had a shared workspace with three computers and two counselling rooms each with their own computer as well. The staff members moved around to the open desk spaces and offices to use the desktop computers as needed, as there was a network enabling access to the database from any computer in the shelter. Lack of desktop availability did not appear to cause any problems for the residential counsellors, although it did pose a challenge for the addictions and mental health counsellors who shared a specific office located further down the main corridor that had a non-functioning desktop for the entire duration of fieldwork.

Often the computers did not have up-to-date versions of plug-ins, such as Adobe Flash, or the administrative power to update them, which made it difficult for staff to access some resources online for clients. For example, during fieldwork I attempted to watch the organisation's own informational video on its website, but I was not able to do so because the flash player was out of date and could only be updated by an
administrator. No laptops were available for staff use outside the shelter, although there were two laptops available for internal use. As all services were largely provided in the shelter, staff did not appear to work in the community and rarely, if ever, used a work laptop outside the organisation. Laptops were most commonly used when working with residents in a space without a working desktop computer, although this did not happen frequently. Residents were not allowed to use any of the shelter computers, although they were permitted to bring their own devices with them.

At the rural shelter, each staff member on the community services team had a personal computer and either a private office or shared space with another member of the same team, with the exception of the staff members who worked primarily in the community and were not there as often.

“One noticeable difference from the urban shelter is that space does not appear to be an issue here. Each staff has their own desk with a computer, rather than shared space and computers. It feels less chaotic here already.”

Reflective notes, Day 4 at the rural shelter

In the residence, the staff member on duty had a small office, which had a computer and other resources, and also functioned as a counselling room when needed. I usually found the residential counsellor either in the office with the door open or out in the living space with residents with the office locked to prevent unauthorised computer access and/or breaches of confidentiality. Most staff had desktop computers, but the organisation also provided laptops for staff. Personal laptops were provided to the two youth outreach team members on an on-going basis, rather than providing desktop computers, as they worked out of the office regularly. These staff members also used the laptops while at the shelter rather than
accessing a desktop computer, and therefore the laptops their main work computers. According to the one member of the youth outreach team, having a personal laptop where she could store and quickly access information was necessary because she often used videos, games or other online resources as part of her engagement strategy with youth. She also kept notes on “what worked and didn't,” and networking and contact information.

On the other hand, the two children's counsellors, who also spent the majority of their time outside the shelter working in elementary schools, were not provided with laptops. In conversation with the children's counsellor who travelled to the furthest schools in the counties, her feelings on this seemed ambivalent. She stated the main benefit of having a laptop for her would have been to quickly access information when needed, and she also reflected on using it to engage with children in the practical skills groups, such as teaching skills like “how to call for help in an emergency.” However, she also stated that creative activities without the computer were better for “helping children understand their personal self” in a therapeutic context. Because she did not have a laptop, she wrote her notes by hand and then entered the notes into the database when she returned to the shelter.

The rural shelter also provided laptops for staff to sign out as needed. Two of the three therapeutic counsellors worked one day per week at different satellite locations in smaller communities. One of the therapeutic counsellors signed out a laptop on the day she travelled to satellite office #1. Satellite office #1 consisted of a room in a house owned by another local non-profit organisation that the shelter rented one day per week. The building was unmarked from the outside. The counsellor believed that because it was difficult to identify, it offered a greater level
of confidentiality for service users. Given the shared nature of the space, no shelter-specific software or storage of notes was possible. The building had no Internet connection or desktop computer so the counsellor brought the work laptop to make notes after meeting with each client. Given that there was no secure Internet connection, the counsellor was not able to access the database so she had to save her notes and transfer them to the shelter database the following day.

The other therapeutic counsellor travelled to satellite office #2. This consisted of a room in a shared office building inhabited by various community agencies. Due to the shared reception space and the number of organisations in the building, it was difficult to ascertain what service or appointment an individual may be accessing which she also felt provided a level of confidentiality. This town was much more affluent as it was a popular tourist destination in the summer months and had more resources to invest in community services and infrastructure. Because the building was newly constructed and funded by a variety of agencies, the counsellor had a desktop computer directly in the office where she met with clients and therefore did not sign out a laptop. However, because she used a shared computer, she was not able to access the shelter database and often did not complete her notes until returning to the office the following day. Overall, laptops were provided to staff only in instances where it was deemed necessary to the work. Interestingly, this appeared to include staff that primarily worked with youth. In all other cases, laptops were shared and only had basic functions, such as word processing. Staff members were able to use the shared laptops, but desktops were still the primary form of computer used to input data into the database and complete other work tasks at the two shelters. The computer use patterns I observed suggested that although all the staff
used computers in their daily work, they were quite flexible in how, when and what computers they used.

Deciding when to invest in new computers appeared to be a strategic issue at both shelters, based on the likelihood of being able to secure external funds. Because over time the shelters had not received any additional funding to account for growing costs associated with technology use from funders, and they were reluctant to transfer funds from the direct services budget to fund technology investment, they waited for machines to breakdown beyond the point of repair before considering IT upgrades. This meant they were often working with out-dated hardware that was more susceptible to breakdown, required more frequent on-going maintenance, or was simply not functional at all anymore. At the main urban shelter, one of the computers had broken down and because no funding had been secured to replace it during the entire fieldwork period, the residential staff had one fewer computer to share in an already-limited selection; while the rural shelter undertook computer repairs during fieldwork, they had more flexibility because of the laptops available for staff. Management staff suggested that waiting until hardware failed before applying for funds was a good strategy, in that it gave the impression the organisation was committed to efficiency because it had waited until there was a proven need for additional funding rather simply a desire to upgrade to newer equipment. This approach appeared to be supported by other staff too, because researching new technology and preparing grant applications required a significant investment in time and energy by staff who were already stretched thin. Spending time on technology grants was viewed as a waste, if the likelihood of gaining approval was not significantly high.
The funding they often referred to was a government-funded 'Capacity Building' grant, which provided one-time lump sum payments to shelters for upgrades, including technology, through an annual grant application scheme. The funding was allocated by region and any shelter could submit an application each year; the case studies were not in the same region and therefore not in competition with each other. However, if either shelter’s application were rejected, they would have to wait until the following year to apply again. Both shelters had applied to the fund and were awaiting responses during fieldwork.

Despite being less expensive on a short-term basis, funding on-going maintenance of older systems was not an efficient use of funds long-term, and this was noted by the IT support at the rural shelter. He stated it had taken him time to understand the needs of the shelter based on its funding context. For example, now he knew to suggest purchasing certain brands when hardware broke down because they lasted longer and were less expensive in the long term; saving even more time and energy because the shelter would not need to constantly apply for new funding every year. However, in his experience of working on technology grant proposals with the shelter, he realised that because these brands were often more expensive upfront, funders wanted the long-term rationale explained in detail to support the justification of the higher costs. The rationale needed to be clearly stated to prove to funders that the organisation was not asking for more resources than were necessary.

According to Pollock and Williams (2007), much organisational research has framing technological choice as either a formal or discursive endeavour. They assert that organisational decision-making has been simplistically portrayed, either as a formal process of assessment between available options, or a result of persuasive
discourses producing the assessment measures themselves; rather, it should be seen as “the ‘co-production’ of both the assessment measures and the assessment” (p. 137). The limited formal and discursive frames of reference did not reflect the shelters' experiences either, because the available options were already constrained by various contextual factors, such as the strategic decisions about durability driven by broader market preferences. The shelters were not driven to continually implement new technology in order to increase revenues, nor were they able to even utilise many of the available functions due to lack of overall resources and knowledge (Hackler & Saxton, 2007). For the shelters, it was acceptable for the computers to operate at slower speeds and without any additional features in order to achieve a lower overall cost. The challenge of securing funding for sustainable and cost-effective technology was a key consideration in the organisations’ technological choices. Therefore, I sought out other frames of references that provided different analyses of the tensions between decision-making and resources I observed: a 'consumption' frame of analysis, or a 'sustainability' frame of analysis. The consumption perspective relates to how users come to learn about, desire, purchase, implement, and adapt to the new technologies available to them. This perspective highlights tensions between the goals of producers and their target markets, or consumers. As computers are consumer goods available in the free market, producers continuously seek new ways to increase their economic growth, largely by marketing new forms and applications of technology as desirable to users. For example, new forms of ICTs, such as laptop computers, tablets, notebook computers, smart phones and a plethora of applications ('apps') for these devices have become widely available. Changes in hardware have also driven frequent updates of software, and
while customers can often install minor security updates freely, acquiring new full versions in order to ensure on-going compatibility often requires customers to make yet another purchase.

However, appealing to consumers is not simply a matter of improving features and justifying cost, but of clearly defining the social value of the product. While historically the ability to purchase new technologies as they became available was a signifier of socio-economic status, in modern society consumer choices are driven by a multitude of factors that enable users to signify different meanings about themselves to the world, a process known as ‘conspicuous consumption’ (Røpke, 2001, 2003).

Shorter lifespan technologies are often marketed as desirable to consumers because they enable consumers to upgrade to the latest technology on a more frequent basis, thereby enabling on-going conspicuous consumption for as many users as possible. The shelters, however, did not appear to be interested in purchasing computers as a form of conspicuous consumption; their needs were simply functional. Unfortunately, this desire for simple products that adequately met their needs appeared to conflict with the products available to them in the current market that had numerous unnecessary capabilities for this context. They were forced to purchase technologies based on the market price even though simpler, and more cost-effective products would have been sufficient.

Furthermore, the sustainability perspective highlights how the production of technological waste impacts the technological development process. The decreasing lifespan of technologies has resulted in significant amounts of electronic waste, or ‘e-waste,’ on a global scale (Dholakia, 2012, pp. 199-202). According to Widmer,
Oswald-Krapf, Sinha-Khetriwal, Schnellmann, and Böni (2005), the average lifespan of a computer in 1997 was four to six years, but in 2005 this had decreased to two years (p. 437). Additionally, although new technologies may simply improve on existing products, they may also make previous forms obsolete. For example, USB connections have replaced CD-ROM drives, which previously replaced floppy disk drives. Both shelters wanted sustainable computers with longer life spans to avoid having to purchase new computers as often. This was both a financial and an administrative burden. Unfortunately, the broader, market-drive shift towards technologies with shorter life spans has made this more difficult. This meant that even though they did not want to replace their computers frequently, it took time and knowledge to locate particular brands with longer life spans and secure funding for this type of computer due to the higher upfront cost. Overall, because the technology available to them was largely designed to meet the desires of the broader market, the shelters had to determine how to best meet their organisational priorities for functional and cost-effective technologies from within their limited resources. This situation highlighted an interesting contradiction not discussed in the literature; although the shelters had integrated computers in an effort to increase organisational efficiency, they lacked competitiveness in the ICT market as consumers, and had to spend resources according to what was available rather than what they actually needed, which reduced efficiency.

5.2 ICT Infrastructure and Internet Access

Another issue related to ICT use in the shelters was ICT infrastructure and Internet access. In the ICT context, infrastructure refers to the systems of physical components and internal logic that enable wired and wireless networks to exist.
According to Star (1999), infrastructure invisibly supports tasks and is embedded within other structures and practices, often only becoming visible to users when it breaks down. In Chapter Two, the literature review suggested that a lack of consistent resources might be one of the biggest challenges faced by social service organisations using technology; however a lack of infrastructure is equally problematic. Without IT infrastructure, the shelters would not have had the capacity to integrate technology into their work. Both shelters had access to sufficient infrastructure to implement technologies, but this is not necessarily the reality throughout the province.

During fieldwork, I observed both shelters working with the IT infrastructure available to them using different strategies. At the urban shelter, the main challenge appeared to be maintaining secure wireless internet connections and staff informally dealt with issues as they arose. Internet access was available throughout fieldwork to staff through wired connections at the desktop computers. Residents were not allowed to use these computers. No wireless internet was provided for either staff or residents, although at the satellite location a staff member mentioned that residents were often able to access the free wireless network of a nearby retail store using their own devices in the shelter. Throughout fieldwork, the shelter debated whether to provide wireless internet access for staff and residents. The concern expressed by management appeared to be about security of client data. Management staff stated to me and to staff that two separate networks would be needed – one for staff to use for work purposes and another for residents to use for daily tasks. This would limit the possibility of residents or other unauthorised parties accessing confidential records held on the shelter’s internal network. It was seen as a risk management strategy as
outlined in their policies on technology use.

On the other hand, as there was no computer or wireless network available for residents' use, residents often asked staff in the front area for help with basic tasks such as looking up job or housing advertisements, gathering information about government assistance programmes and benefits, and looking up neighbourhoods and school systems.

“‘What did we do before the internet?’ [a residential counsellor] asked me today. She finds searching information so much easier and up-to-date compared to keeping a resource binder. ‘I hate it when I can’t find the information I’m looking for’ she said.”

Interview notes, Day 29 at the urban shelter

Some residents intentionally travelled to the shelter from different parts of the province as a safety precaution from their abuser, therefore, these residents were unfamiliar with the city and wanted internet access to learn general information about the area. The extent to which staff members were able to help with these tasks depended on what other more formalised tasks required their assistance. Often residents would go to a nearby public library to access the internet when needed, although the opening hours were not always convenient. Staff working directly with residents expressed more certainty about the necessity of the wireless internet access for residents, likely because the lack of this more directly impacted their own time management and they could see the direct benefits for residents.

There were two different issues preventing the implementation of the wireless internet network – one based on logistics and the other based on ethics. Logistically, management stated that the shelter could not afford to provide a wireless network given the overall budget constraints it was facing. However, I learned that in the past the shelter had provided a computer for residents' use with a separate wired internet
connection and printer in one of the smaller recreation rooms. It had been removed when the staff became aware of a number of problems: residents were using up ink and paper for the printer more rapidly than the shelter could afford to provide these consumables; potential security issues were caused by different computer literacy levels, such as when a resident failed to log off internet banking accounts correctly; and in one case, staff became aware that a resident had been engaging in online sex work as a means of income, using this shared machine. So, although it was clear that the shelter was facing serious budget shortfalls due to funding issues and this had impacted their ability to provide computer and internet access to residents, this was not the only reason that the shelter had not done so. These past experiences had brought to light many difficult questions about how and to what extent shelter staff could or should be aware of the technological activities of the residents, and their professional and legal responsibilities for due diligence in these cases. Although the lack of funding was a logistical barrier, it was also a scapegoat; conversations about these challenging realities were avoided because staff felt they could not afford to provide the services anyway. This provided an interesting contrast with the rural shelter.

At the rural shelter, staff members accessed the internet through a wired connection on the desktop computers. Staff using laptops used a wired connection while working onsite, but did not have internet access when they worked offsite. According to the Executive Director, only two telecommunications companies provided reliable wireless and mobile phone coverage to large portions of their service area, which covered approximately 2500 kilometres square, but neither company provided consistent service throughout the entire region, meaning staff and
service users could be without connectivity as they moved throughout the region.

The residents had never had access to a computer or internet at the shelter, but wireless internet access for residents was discussed and finally installed in my final week of fieldwork. However, the residents experienced technical difficulties logging on to the network and it was not operational before fieldwork was completed. Similarly to the urban shelter, prior to implementing the network most rural shelter residents had accessed the internet through the local public library, although it appeared that this was a more common choice in the community in general given the overall unreliability of wireless internet connections.

As they expected unreliable connections, staff members displayed more patience at the rural shelter and were able to work around these issues rather than immediately calling for IT support. For example, difficulty connecting to the internet at the second stage housing facility was an on-going issue. The staff member's desktop was connected to the network but often lost access and froze, erasing any notes she had been working on. Many IT specialists had been to the facility to determine the cause of the wireless network issues but had been unsuccessful. Residents in the second stage building had also complained of weak wireless signals in their own apartments, which suggested it may have been a building issue, but the local government who owned the property was not willing to complete any upgrades. Because the organisation did not own the property, they could not make the upgrades themselves, even if they could have secured funding to do so.

In my interview notes from the IT support professional for the rural shelter, I wrote:

“[IT support] has been working on the [lack of consistent wireless
internet access at the transitional housing site] for six months. The internet connection gets lost in the building. Contacted the service provider and they said no issues showing on their end. He changed all the different hardware components but none of them solved the issue. Now he thinks the service providers just didn’t want to ‘man up’ about it not working. I asked about changing service providers but he said the only other option is cable hook up, which is not set up and would require wiring the whole building. It is not their building, they only rent it from the city, so it is ‘not their call’ to make.”

Interview notes, Day 15 at the rural shelter

Because of this, the staff member went to the main site after finishing her shift to input her notes using an available desktop computer. This problem had not been resolved by the time I completed fieldwork.

Although I was aware of the concept of infrastructure before beginning fieldwork, I was not as aware of its importance until I began fieldwork at the rural shelter. Because the urban shelter did not experience as many issues with overall connectivity, my experiences support Star’s (1999) comments that infrastructure only becomes visible when it breaks down. Because the rural shelter lacked reliable infrastructure, I was able to see different issues that were not apparent in urban contexts and understand how embedded and invisible it can be. However, despite a growing awareness of the importance of infrastructure during fieldwork, I did not think about who actually controls infrastructure until I was comparing the data from both case studies. Each shelter had to adapt to circumstances not of their own choosing, but the social shaping perspective suggests the many stakeholders make decisions about technology and infrastructure that create the reality in which the shelters are embedded.

In Canada, telecommunications infrastructure is currently a private sector service offered by a number of companies; each company determines their own
service area and the type of connectivity (broadband, fibre, etc.) offered based on many factors. Given the country's demographic and geographical makeup, rural and remote areas face barriers to accessing reliable, fast internet connectivity because it is not financially lucrative for companies to provide services in areas with low population density. Being located in a metropolitan area of Ontario meant that the urban shelter had access to reliable, fast internet connectivity and prices were affordable due to competition between companies. Even though staff and residents purchased services from different telecommunications providers, it was not a concern because all of the networks provided reliable connections in the area. This infrastructure enabled them to be connected at all times and helped support the infrastructure's invisibility. In the rural area, depending on the network the organisation chose to use to supply internet and mobile capacity, staff would have greater and lesser connectivity in certain areas of the region they served. This had implications for the practical ability of staff to connect with the organisation while working outside the office and therefore related to staff safety as well. The importance of infrastructure was more visible to the rural shelter because the staff members did not always have consistent access, and therefore had to create and educate staff on the appropriate policies if they were not able to access things such as the database or mobile networks during work hours. Thus, the key challenge for the urban shelter was not reliable connections, but cost, a factor within its control. On the other hand, the rural shelter faced greater systemic barriers outside its control due to the weaker infrastructure of the rural area in general. While using mobile devices provided benefits, staff members were still forced to rely on the telecommunications companies to continue offering services, putting themselves in a precarious position
over which they had no control over.

Historically, telecommunications infrastructure has not always been a private service left up to the discretion of businesses. In 1999, the Canadian Radio-television and Telecommunications Commission (CRTC) required providers to provide a minimum level of telephone service at a reasonable price to designated 'High-Cost Areas' located within their service maps by 2003, providing subsidies and other financial incentives (Ramírez & Richardson, 2005). The reasoning behind this policy was to increase all Canadians’ access to the potential benefits of telecommunications. However, this mandate had not been extended to include broadband access to 'High-Cost Areas' as well, leaving many rural and remote areas with precarious access, if any at all.

In most areas of the province, broadband market-based companies largely control access. Alternative models of providing broadband access have been developed using community-based approaches to specifically address the fact that many rural and remote communities lack access, although these types of networks take significant time and resources and are often unstable entities themselves. For example, due to the rural and remote locations of many First Nations communities in Canada, they remain some of the most under-serviced social groups in Canada in terms of access to ICTs and other basic services, such as healthcare, education and public transportation (Mcleman, Foy, & Clark, 2010). Broadband internet access is seen as a key component of providing essential services through new tele-health and e-learning initiatives; however, due to extremely low population density, private telecommunications companies have not invested in sustainable broadband networks (McMahon et al., 2010). As a result, many First Nations communities have
collaborated to develop their own broadband infrastructures and networks by combining support from government funding schemes in various sectors, such as industry, healthcare, education, and business, resulting in community-owned broadband networks designed to meet the on-going needs of First Nations communities. These networks highlight how dynamics between profit-driven corporations and non-profit service delivery organisations can create power relationships whereby non-profits rely on services that are out of their control. Community-based networks can be a viable option, but face similar challenges as other non-profit entities in that funding is unstable and therefore it is difficult to secure the long-term sustainability of such projects.

According to the Executive Director of the urban shelter, this instability had practical impacts on the collaborative potential of VAW shelters across the province. She recalled an instance when the Ontario Association of Interval and Transition Houses, a service network based in Toronto, attempted to offer a networking webinar for Executive Directors of VAW shelters across the province, but many rural and remote shelters were not able to participate due to lack of IT infrastructure in their regions. She commented that it was difficult for her to imagine providing services at that point in time without any internet access. However, because VAW shelters are located strategically according to geographical locations and needs, shelters that do not have IT infrastructure may be unable to participate in collaborative or knowledge-sharing activities that are commonplace in urban settings. Further study of how digital divides impact similar types of service providers located in different geographical locations would be useful.

Despite few mentions of the importance of infrastructure in the social work
literature, experience with these two case studies suggests that analysing infrastructure is an important 'first step' in understanding subsequent policy and practice decisions about ICTs in the shelters. This could potentially involve what Star (1999) has called 'ethnographies of infrastructure', noting that “much of the ethnographic study of information systems implicitly involves the study of infrastructure” (p. 378). Including this discussion of infrastructure within the question of 'what' ICTs the shelters were using is an example of how this approach can help expand current social work conceptualisations of technology from objects to processes.

5.3 **Electronic Record-Keeping Software**

The third theme was the use of electronic record-keeping software to manage client information. The shelters used these records to gather and report specific information to their funders, and for inter-organisational communication and data collection. Data was compiled for external use, and identifying information was kept confidential within the shelter. According to the staff I spoke with and observed, there were many benefits to using electronic records compared to the previous system of paper-based records. However, due to the constantly changing reporting requirements from their funders, and the personal nature of the information, the shelters needed highly secure, yet flexible software that was both easy to maintain and use, and that accommodated their small, fixed budgets. This was not an easy task given many of the contextual challenges facing the shelters in relation to how technology is designed and developed for mainstream consumers.

In addition to electronic record keeping, other software programmes were in use as well. At the urban shelter, the volunteer coordinator used an automated
scheduling programme to communicate with volunteers, and volunteers were able to cancel shifts through the online schedule. The transitional housing site did not use or have access to the same database as the residential sites. A simple note-taking programme was in place, although the staff admitted that they did not use it very often because the residents were often much more independent and self-sufficient compared to the shelter. The human resources, finance and development managers used relevant software for their tasks as well. I decided not to explore these administrative programmes in detail during the fieldwork because the electronic record-keeping database was the most relevant programme used in relation to direct service delivery by staff with social work or social science education and training.

Before I began fieldwork, both shelters were already using electronic means to record service user data and were in different phases of the transition process to new software. Accurate data was important to the shelters due to the high turnover amongst staff.

“A relief counsellor mentions ‘it is hard as a relief staff because when you come in, it could be an entirely different group of clients, and you don’t know anyone…so you really rely on proper notes.”
Interview notes, Day 11 at the urban shelter

Previously both shelters had been using different custom-designed database files made by local programmers; over time, the shelters had outgrown the capacity of the files and were interested in acquiring new tools with greater functionality to meet their needs. In both shelters, this meant exploring pre-made software packages rather than having another local professional design a customised one.

The urban shelter used a generic database file to keep track of service user data. This database was updated in the early 1990s and this second edition was the
same database being used to hold records during the entire course of my fieldwork. It had not undergone any major design overhauls, although certain fields had been added or removed by different IT support people as needed.

“[This residential counsellor] has worked at the shelter for seven years. She said ‘the database crashed, totally, in the last year and everyone had to use paper intakes. The database would lose info and wouldn’t let you input in certain places.’ That was the major impetus for getting the new system. She believes it will help reduce the problems of the current system, like crashing and freezing.”

Interview notes, Day 12 at the urban shelter

The rural shelter used a database custom-designed by its IT support, which it had eventually outgrown as the breadth of services offered had grown substantially.

According to both the Executive Directors, no generic software packages were available to choose from and their options had been limited when the original database files were made. Since then, advances in technology, and social and organisational expectations about technology use had changed dramatically. Neither organisation felt that designing another custom file was a realistic or useful option – practically or financially – and both were looking for an existing database package that offered greater support and long-term flexibility. Having made the decision to invest in a new programme, they then had to choose a generic programme based on the options available to them in the market. In this case, geographical location did not appear to be an issue because all of the software options could be shipped or downloaded to either location in the same manner; therefore, the organisations appeared to evaluate the available programmes and make decisions based on other factors, such as relevance to the services they offered and perceived value for money.

When I initially approached the urban shelter as a potential field location, the executive director advised me that they were in the process of designing and
implementing a new database system; she noted that this would likely be a good time for me to conduct my research as I would be able to see the impacts of the transition in the organisation. The new system was a software package designed by an American company originally as hotel reservation software. It therefore had many features that shelters could use to keep track of statistics on bed allocations amongst different sites. I refer to this database as ‘Dreams.’ According to the Executive Director, the number of residents staying in the shelter each night compared to overall capacity was one of the key types of information requested by the provincial government to prove the need for the service. However, Dreams needed to be customised for other types of information such as resident demographics, children's information, abuser information and details regarding client history and referrals to other services. In my communications with the management staff, they told me they chose Dreams due to its greater overall flexibility to adapt to on-going changes in reporting requirements the shelter faced from the various funding Ministries. According to the Manager of Residential Services, Dreams was 'the Cadillac of databases' available to VAW shelters.

Dreams was already being used by another urban shelter in Ontario, which seemed to generate confidence amongst management that it could be customised and procured successfully. The negotiations for customisation, licensing and pricing continued throughout fieldwork. As an American company had developed Dreams, the generic version of the software used terminology and structured content relevant to the American context, which not only needed to be changed to the Canadian context, but also needed to support both English and French data entry. The shelter also needed to negotiate the cost of licences; they could not afford to purchase one
licence for every staff member but still needed to ensure that during the busiest periods all staff would be able to access the database. Because the company was looking to expand its market share in Canada, it was willing to negotiate a lower price, but it seemed that the costs for the customisation the shelter wanted were still higher than it was comfortable paying. By the time I completed fieldwork with the urban shelter, the implementation of Dreams had been put on hold. This caused stress for direct service staff members that were forced to continue using the out-dated system, which caused the computers to crash, and management who continued to put many resources into the negotiation process without any clear resolution to the situation.

In contrast, the rural organisation had already implemented its new chosen database in 2011, a software program I call ‘RecordNet.’ Their previous programme had not yet failed completely, but in 2011, a staff member had accidentally deleted a significant component of the database file and the shelter had lost a considerable amount of client information in the process. It had taken weeks for the staff to manually re-enter this information and had convinced them to upgrade.

RecordNet was a software package designed specifically for VAW shelters by a Canadian company. The rural organisation had customised some features of the programme so that it was relevant and could be used by all staff in the organisation, but overall the original design complemented the type of work they did and the type of data they needed to record. According to the Executive Director, staff members had reviewed several options, including the Dreams database chosen by the urban shelter, but had ultimately decided on RecordNet because of the significant difference in cost, and positive feedback from other shelters using the programme.
The Executive Director had also already purchased other programmes designed by the same company for other areas of the organisation, and was happy with their performance.

I was able to view RecordNet from the beginning of fieldwork. On Day 8, I wrote in my reflective notes:

“I am surprised at how positive the staff are about the new database. The program seems clunky to me. It just feels old – out dated design, poor quality graphics. Overall, it can be delayed, or unresponsive, when I try to scroll through.”

RecordNet was only accessible through a computer linked into the organisation's network, therefore staff were not able to access or input notes in the database while using laptops offsite. Overall, there appeared to be much less tension in the rural organisation regarding the database, including both the decision to use RecordNet and how it was functioning. This was one of the key differences between the case studies: while the urban organisation was dealing with internal tension around the need to replace the database, staff at the rural organisation were quite satisfied with RecordNet and often spoke highly of it. They described being able to create files for women and children easily and access relevant notes written by their colleagues for clients accessing multiple services in the organisation. Due to the greater diversity in services offered by the rural shelter, this was seen as a great benefit for overall coordination.

As with hardware and infrastructure, the shelters faced challenges to locating products that met their needs but also accommodated their budgets. For example, the need for flexibility is not unique to shelters; most software packages cannot be implemented successfully without making significant changes relevant to the
organisation’s context (see Pollock & Williams, 2007; Williams & Pollock, 2009). Yet, the extent to which this would be necessary on an on-going basis, and the resources needed to do so, were not taken into account by the shelters and put the shelters in weak negotiating positions with many IT developers, which in turn frustrated the Executive Directors. At both shelters, working with IT companies that understood the shelters' needs was highly valued. Management staff described their frustration when working with unsympathetic IT companies; they often felt they were not taken seriously as organisations. The Executive Director of the rural organisation felt that IT developers often minimised their needs and talked down to them: “oh, let's just design some products for these little women; they don't need much” and assumed they understood the organisation's needs without taking the time to work with them.

In contrast to infrastructure and hardware, where the shelters were disadvantaged by their weak bargaining power in the market, in terms of software, the shelters appeared to be gaining some leverage due the growing number of shelters across the country and the growing number of services they offered. As the need for VAW shelters and related services grew, they also became a viable niche market for IT software. This constituted a relatively small market for IT companies to develop and market a specialised database, with the additional consideration that these types of organisations have limited, unstable budgets and would not be able to pay a considerable amount for it. Specialising in creating products to meet the needs of a niche market can be a lucrative business model, however, due to the unstable social and economic context surrounding VAW shelters, the financial gains for specialising in the needs of these types of organisations were limited. Companies
attempting to enter this market would need to ensure that they did not invest more
time and resources into a product than the target market could afford, and that there
were relatively few, if any, competitors to ensure it was worth their investment.

The urban shelter attempted to leverage the American company’s desire to
break into the Canadian market by offering themselves as a test case for a reduced
price. It was argued that this arrangement would ultimately benefit both
organisations. Additionally, the Canadian company had capitalised on the potential
of Canadian VAW shelters as a niche market by developing and marketing
RecordNet as a database that would function at a basic but adequate level, and enable
them to stay within budget. This 'niche market' approach appeared to be successful,
based on my conversations with management staff at the rural shelter.

In summary, while staff at both shelters had similar ideas about the benefits of
using electronic records, and were committed to purchasing new databases before my
arrival, they had very different approaches to meeting their needs. The urban shelter
pursued a riskier strategy – trying to obtain a more sophisticated product through
strategic negotiation – whereas the rural shelter pursued the readily available,
although simpler, option. In both cases, they had greater leverage in this area
compared to both hardware and infrastructure. This resulted in a unique situation that
did not arise in the social work literature – as the demand for the services grew, and
therefore the number of shelters across the country, IT developers began to see the
shelters as a viable niche market, ultimately giving the shelters more leverage to
meet their software needs.
5.4 Social Media Presence

The final commonality was social media use, primarily in the shelters’ outreach and education strategies. Both shelters only used Facebook and Twitter, therefore I use the term only to refer to these particular platforms in this discussion. Unlike hardware and software, using social media did not explicitly require the shelters to purchase anything new in order to engage. Therefore, both shelters perceived social media to be a free way to engage with the community about the shelters' services and events. Social media use did, however, present other logistical challenges. In this section, I describe each shelters' strategy for manage their social media profiles and content, and the potential future implications of this.

The urban shelter had registered one account on Facebook in 2008 and two accounts on Twitter both created in 2009. The Facebook account represented the entire organisation and was updated approximately 1-2 times per week. One of the Twitter accounts was for the organisation itself and the other was supposed to be specifically for its largest annual fundraising event. However, although the organisational account was the one directly linked on the shelter's webpage, it only had 14 tweets from 2009 and had then been abandoned. I only became aware of the second account associated with the fundraising event through a link from another organisation's Twitter account. The active account named after the fundraising event had been active since 2009, tweeting approximately 1-2 times per month about various shelter activities, not just the fundraising event. Eventually I realised that when staff members at the shelter spoke about the organisation’s Twitter account, they were speaking about the account that was named after the fundraising event, which was being used for all the shelters’ social media communications. Most staff
members did not know about the abandoned account, even though it was directly linked on their website. I brought this to the management team's attention during fieldwork to clarify the purpose of both accounts, and although they confirmed it was a legitimate account that had been created by a previous staff member, they claimed to be unaware that it was the account linked directly from their own website. Despite bringing this to the staff’s attention, at the end of fieldwork the website continued to link to the abandoned Twitter account rather than the active one.

Because social media was perceived to be a free tool and the shelter lacked resources to employ any new staff for social media engagement, the job of creating and maintaining the social media presence was given to existing employees. The management team's strategy was to incorporate social media engagement into the work of the development and fundraising team as a means to engage with donors and the community. However, neither of the staff members on the development team was familiar with Facebook or Twitter and both had actively chosen not to use these in their personal lives because they didn’t feel they were useful for them. I learned this at a meeting when the shelter had asked three librarianship students taking a class in social media at the local university to help create a strategic plan as part of their course credit. The executive director, the fundraising team and other management staff, plus the students and myself attended the meeting, in the meeting room of the shelter.

“Meeting today about the state and future of the shelter’s social media accounts. [The Executive Director] wants to 'get the word out with potential clients.' Administrative team wants to ‘drive traffic to the fundraiser websites.’ They compare themselves to other domestic violence outreach organisations in the community: ‘They send too many messages. We want to reach people but we don’t want to be like that.’ No apparent agreement on how to use the accounts or for what goals. Staff
in charge of the accounts are not using social media in their personal lives. ‘We want to know what’s going on, but don’t really engage.’”

Transcriptive notes, Day 30 at the urban shelter

Despite feeling a distinct urge to engage with Facebook and Twitter, they admitted to being struggling to understand how social media works and what the best strategy for them would be as an organisation. This sentiment was echoed by all of the attendees in comments, such as: “not all of us are using it personally, we want to know what is going but don't really engage;” and “we are not sure how we should use it, what the different opinions are, not sure the best way.” There was also confusion regarding the target audience: the Executive Director stated “we want to get the word out to the client population, the community” while the Administrative Manager stated: “we want to drive traffic to the fundraisers websites.”

The development team staff members were therefore reluctant to take on this responsibility at the professional level, which created tension with both the Executive Director and the direct service staff. The Executive Director felt that social media could enable the shelter to reach new audiences and create new funding opportunities but, these beliefs conflicted with her self-admitted lack of knowledge of social media, at one point admitting to me: “I couldn't tweet to save my life!” Some of the direct service staff members were enthusiastic about social media use for similar reasons; they believed any way to generate more donations and financial resources would directly benefit service users, and therefore help the organisation support service users in its daily work as well.

Although social media itself was seen as free, the organisations lacked the capacity to acquire training for the development team that could have possibly addressed some of their concerns about taking responsibility for social media.
Providing training for technology issues was seen in the literature review as a beneficial strategy; however, these staff members were simply expected to know not only how to use Facebook and Twitter, but how to use them effectively from an organisational perspective, despite the fact that neither staff member on the development team that had been given the task had used social media before. Additionally, no clear goals about how to measure social media effectiveness had been set or communicated; therefore, it appeared that simply establishing a social media presence was the priority, with the hope that it would somehow generate more donations.

The rural organisation was also using Facebook and Twitter. It had created an organisational page on Facebook in 2011 and had been using Twitter since 2012; content was often posted multiple times per day. In contrast to the urban shelter, where the profiles were maintained internally, the rural shelter had chosen to hire a local communications professional on a freelance basis for a payment of $100 per month. Furthermore, in contrast to the urban shelter, which conceptualised social media mostly as a tool for fundraising and donor relations, the rural organisation gave the hired profession very few guidelines on the overall goals of the accounts other than to establish relationships with other local users and maintain a positive image.

“\textit{No one here talks about the shelter`s social media accounts. So far, they are either unaware of them, or are choosing not to follow them. No pressure to follow either, which contrasts with the urban shelter desire to have everyone following and engaging.}”

Transcriptive notes, Day 26 at the rural shelter

While on one hand, there appeared to be little tension amongst different staff related to social media use compared to the urban shelter, on the other hand there
was little documented information about social media's role in the organisation's strategy. It appeared that the Executive Director was satisfied with the woman they had hired and the content she produced. Therefore, although the approach was quite different from the urban shelter, it also lacked clear goals and an overall method of evaluation. By outsourcing its social media presence, the shelter avoided the issue of how social media use fitted into the organisation’s overall strategy, and whose job it should be to manage this. It was not clear if this was the shelter's long-term strategy for social media engagement or if they wanted this to become part of a staff member’s responsibilities eventually.

According to more generalised literature about non-profit organisations, this unstructured approach to social media use is not uncommon and stems from logistical issues. Despite being seen as 'free tools', effectively using social media for organisational purposes does require the user to spend time learning not only how to use the platform, but also how to anticipate changes and the implications of those changes on the image they project (Bucher, Fieseler, & Suphan, 2013). According to Edwards and Hoefer (2010), on-going engagement with an audience is embedded within the very nature of Web 2.0 tools, such as social media. Web 2.0 is a term which encompasses the shift from the static, one-way communication tools of the Web 1.0 era, such as informational websites, to technology “that allows for a high level of frequent interaction in multiple web environments between and among groups of people” (p. 223).

This type of communication was very different from any of the other strategies employed by the shelters at that time. Both shelters relied on more traditional forms of communication with donors and the general public, such as distributing print
materials in the community, calling or faxing other community organisations for referrals, sending email newsletters and maintaining a website. These forms of communication were tailored to the intended audiences, such as the general public, the Board of Directors, and volunteers, but did not seek their active engagement. However, social media presented a challenge because it required on-going engagement with a variety of audiences with different needs and levels of confidentiality.

Even though engaging with 'the public' was a key goal of their social media use, the shelters knew very little, if anything, about who they were engaging with. Despite framing social media users as potential donors, after scanning the friend lists of both shelters, I determined that many of their followers were actually other community organisations. Although specific content analysis of the social media pages was beyond the scope of my fieldwork, this raises questions about the effectiveness of the shelters' social media use in relation to their goals, especially to do with fundraising. It is possible that the content they shared was appealing to other community organisations and, therefore, helped build inter-organisational relationships, which could have been used to facilitate relationships offline as well. However, it is also possible that the organisations 'friended' or 'followed' other organisations because it was easier to initiate communication with these types of accounts compared to individuals, such as donors or volunteers, because they did not have the same confidentiality considerations.

There is a growing body of literature addressing the logistical and practical challenges faced by non-profit organisations related to social media use.

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4 Due to the privacy settings on social media sites, I was not able to view all of the shelters' followers; therefore these observations are based on only publicly viewable profiles.
Additionally, as mentioned in the literature review, non-profit organisations, such as Tech Soup Canada and Non-Profit Engage, have developed with the sole purpose of supporting the technology needs of non-profits, including social media strategies. However, neither of the shelters had explored the possibilities of either free or paid training opportunities to address their social media needs. This suggests that although social media was free, in the sense that it did not require extra financial resources to use, the organisations had different opinions about whether it was a good idea to invest staff time to maintain it. The Executive Director at the rural shelter appeared to have outsourced the responsibility to prevent shelter staff members from giving up this time to this activity, while the Executive Director of the urban shelter believed it was worth using staff time to handle these tasks. However, she faced resistance from the individuals whose time was affected by these new responsibilities. The persistent, pessimistic views of the development team at the urban shelter suggested that, while accessing training materials may have addressed technological literacy gaps, personal opinions about technology were an important factor in understanding how the organisation made decisions about, and implemented, social media. This theme is explored more deeply in Chapter Six.

The four issues described above represent the most discussed topics in both shelters related to technology while I conducted my fieldwork. Rather than suggesting that the shelters simply adapted to predetermined technological changes in a linear fashion, this data supports the 'social shaping of technology' theory, which argues that technology and society mutually shape one another in as part of a broader, on-going process. I now turn my attention to the implications of this re-framing for the shelters involved in this research.
5.5 Implications for Shelter Policy and Practice

Thus far I have described four important aspects of technological use arising from the data at both shelters: computer use; ICT infrastructure and internet access; electronic record-keeping software; and, social media presence. Each of these issues relates to social work’s relationship with ICTs more generally, and examining any one could provide additional insights to the current social work literature; however, I have chosen to focus on the potential implications of these issues more holistically. In this section I contend that the findings highlight two important considerations that could potentially guide future research and help the shelters in their strategic planning. First, in contrast to the determinist social work literature, the shelters both shaped and were shaped by technological development in an on-going manner. Secondly, they were not passive consumers of technology, but instead exerted agency in this process, which was mediated by broader social structures that enabled and restricted the shelters’ relationships to technology. These two considerations suggest that a process-oriented framework of analysis that highlights the temporal context and the agency of many actors throughout were more relevant to the findings than the deterministic or social constructionist frameworks. This type of multi-level, process-oriented framework of analysis is compatible with existing systems perspective already in use in social work.

My original intention when posing this research question was to document the specific technologies being used by the shelters to better understand how they functioned in the organisation. I assumed that determining what ICTs the organisations were using could provide insight into both the technologies they found useful, and also those they found unnecessary, and that this information could help
other organisations with their own decision-making. Although I was correct in my assumption that multiple technologies would be in use, and their functions may be related to each other, I realised during fieldwork that I held an assumption that the types of technology would be more static than they actually were. I had not expected to encounter so many different issues that were on-going throughout fieldwork.

During fieldwork, I found myself reifying the conceptualisation of technology as discrete objects when I spoke with staff members because I thought it might be more familiar for them. However, as I reflected on my field notes, I noticed that staff often answered questions in ways that pointed to a ‘bigger picture’, usually about how the organisation had acquired technology and their personal opinions on whether it was useful in practice or not (as I discuss further in Chapter Six).

It became apparent that while the question ‘What ICTs are used?’ was inherently descriptive, it did not reflect the type of narrative data staff members were offering me. The staff appeared to enjoy telling me more about the on-going experience of using technology rather than simply what it was, and how it functioned, a recurring story was how much better the shelter would be as soon the issue in question was resolved. A historical narrative seemed to emerge in these conversations, but staff members were most likely to be interested in technology issues happening in the near future, rather than hypothesising about how future technological development might transform shelter work long term. From these fieldwork experiences, the importance of conceptualising technology as an on-going mutually shaping process, rather than a set of objects, began to emerge.

In hindsight, even how I thought about the question, using ‘impact’ rather than a word that indicates a more reciprocal relationship, shows my own bias towards
seeing technology as a set of discrete objects, even as I began fieldwork. As was mentioned above, new technologies are marketed as ‘breakthroughs’ or revolutionary, rather than as assemblages of pre-existing parts. This perpetuates beliefs about technology as a ‘black box,’ beliefs that are prevalent in society, including in social work at the moment. This bias reflects how challenging it can be to deconstruct the dominant, embedded beliefs about technology that circulate in broader society, in which VAW and shelter services are embedded.

Yet, both shelters made decisions about their own technology use. Even though they faced similar dilemmas, they often made different decisions. During data analysis, I became aware that the focus on structural barriers in the social work literature had created a bias in my own mind towards ‘seeing’ structural barriers, and viewing the organisations as passive consumers in the technological development process. For example, at first I interpreted the shelters' decisions to wait to upgrade their technology until it had broken down as passivity – an action that indicated their overall lack of long-term strategy or interest in technology issues. However, as time passed, and I learned more about this decision in the context of the barriers to upgrading they faced, I realised this initial interpretation did not capture the fact that there was an implicit strategy being followed, one that was concerned with the realities of their situation. They were constantly navigating the practical challenges they faced, such as getting funding applications approved for their immediate needs and establishing productive, meaningful relationships with sympathetic IT support people. The technology sector was not seen as a place to advocate for their needs or to instigate systemic change, but to find the best possible outcomes in the short-term, diverting the fewest possible resources from direct service delivery. Although neither
shelter explicitly referred to its own technological decision-making process as a
formal strategy, there was a rationale impacting how they chose what to use based on
many factors, such as the services they offered and their geographic location.

The Executive Directors also expressed frustration with competing social
expectations. At the urban shelter, the Executive Director felt that funders and the
community wanted the shelter to integrate new technologies in order to be as
effective as possible, but to do without using any extra resources. She also believed
that failing to engage could even be used against the organisation. Rather than being
viewed as an efficiency decision, it could be seen by funders as evidence that the
shelter was not innovative or relevant to service user needs. In contrast, the
Executive Director of the rural shelter specifically commented several times on her
desire to combat the stereotype that rural organisations fear or don't know how to use
technology. In both cases, the shelters made choices based on their own perceived
organisational needs and the broader contextual factors that were relevant to them.
As staff members shared their thoughts with me, and I observed staff meetings and
interactions related to technological decision-making, the importance of capturing
the on-going nature of the relationship between technology and the shelters became
more apparent.

The second implication of these findings is that although each organisation’s
decision-making process highlighted their own agency in their relationship with
technology, it was also clear that social and economic structures impacted the options
available to them. Similar structural barriers facing non-profit organisations have
been documented in other disciplines. For example, according to Hackler and Saxton
(2007), non-profit organisations face challenges in creating long-term strategies that
maximise the benefits of IT for their organisational goals because of their unstable funding contexts. Social work literature, as mentioned in the literature review, has focused on the impact of neoliberalism in creating these barriers, but there has been less focus on the concrete strategies organisations used to deal with these realities.

My findings suggest the social work critiques of technology that conflate it with neoliberal social policy need to be expanded to include others issues. For example, the government of Canada has not addressed the challenges rural and remote communities face in accessing reliable technological infrastructure. This market is dominated by private business, and rural and remote services are not financially lucrative. Reliable high-speed access to the internet has enabled many rural and remote communities to access education, healthcare and other social programmes but infrastructure that enables these types of services is necessary. Community-based service networks have provided an alternative model for providing internet, but examples such as those created by First Nations communities face similar funding challenges to the services themselves despite the on-going benefits they provide to these communities. This creates a tension between the neoliberal values driving economic growth through private business interests and the need for a range of services that can be facilitated by internet infrastructure.

There is a global precedent for greater government involvement in providing this service; for example, several countries have ratified the UN ‘right to broadband’ that states access to high-speed internet is a human right because it enables individuals to fully participate in their right to free speech and access to information (Tully, 2014). Without any government incentives, existing telecommunications companies in Canada have been reluctant to invest in providing expensive
infrastructure for areas with few potential service users. It seems likely that without change in this policy arena, this will continue to be a structural barrier for rural and remote communities caused by the market-based nature of technological development.

In terms of the hardware and software issues, the consumption and sustainability perspectives also highlighted different issues outside of neoliberalism. As technological design increasingly incorporates new functionalities, and conspicuous consumption through brand identification and shorter lifespans, it becomes more difficult for the shelters to obtain technology that meet their needs for efficiency, functionality and low cost. Therefore, though the shelters were able to make their own decisions, they were only able to do so within the confines of the market options available to them. Efficient hardware purchases were challenging because the shelters did not have any competitive edge as consumers in the market. However, the fact that they had been seen as a niche market by software developers suggests that as the number of shelters in Canada grows, they have more leverage to advocate for relevant software. The challenges social service organisations face as consumers of both hardware and software within the broader technology market has not been well researched in social work and could provide a more holistic understanding of practical challenges organisations face in combination with neoliberal policy.

The case study data suggests that although external factors and pressures constrained the shelters’ abilities to create long-term plans, they were still able to exert agency within the confines of these social and economic structures and were certainly neither passive nor deterministic. This negotiation process suggests that the
organisations showed resilience in the face of challenges although they had limited abilities to change the broader contexts themselves. The importance of considering contextual, discursive, and formal evaluation criteria in organisational decision-making regarding ICTs has been noted by Pollock and Williams (2007) in STS as well.

Shifting my focus from technology as a series of objects to a process in which the organisations were embedded suggests that the social shaping of technology, which argues that technologies must be understood in terms of the social and technical contexts in which they were created (Williams & Edge, 1996), is relevant to these cases. Social and technical contexts of technological development are viewed as equally important, as technologies are viewed as products of specific social actors and contexts, and technical innovations are seen to shape social relations and communications as new mediating platforms. Rather than simply researching a technological object at the point of implementation or use, the entire lifespan of technology should be considered using the social shaping of technology approach (Pollock & Williams, 2009; Williams & Edge, 1996; Williams & Pollock, 2009). Social shaping of technology examines the entire design and decision-making process that leads to the creation of the technology, before and including implementation. Pollock and Williams (2009, pp. 80–127), and Williams and Pollock (2009) use the term ‘biography of artefacts’ to highlight the temporal context of technology in this manner.

This theory argues that various groups have significant input into the decision-making process of technologies long before users (in this case, the shelter workers) ever see or even hear about the final product. Policy makers and government officials
make choices about appropriate service user data collection methods and tools, hiring
software designers and engineers who make choices about what is possible and
feasible, and translate policy decisions into concrete tools using technical languages
and knowledge. All of these steps are influenced by social, economic, political, and
professional factors and the preferences of the decision makers. Understanding these
erlier stages of the process is seen as equally important as how the objects are used
in the implementation stage because this theory argues that values and objectives are
already designed into the technology long before it reaches the intended user
(Williams & Edge, 1996). Choice is argued to be one of the most important factors in
understanding technological processes; choices are made, rationalised, and justified
throughout the design process using technical languages and knowledge; and
organisations and individuals make choices regarding implementation and usage,
taking social, economic, relational, and political factors into account (Williams &
Edge, 1996).

Social shaping of technology is not simply one theory of technological change,
but, according to Williams and Edge (1996),

a variety of scholars, with differing concerns and intellectual traditions,
find a meeting point in the [social shaping of technology] project. They
are united by an insistence that the ‘black-box’ of technology must be
opened, to allow the socio-economic patterns embedded in both the
content of technologies and the processes of innovation to be exposed
and analysed (p. 866).

Although it does not appear that social work has engaged with this approach
thus far, the relevance of this approach to the data is encouraging. By conceptualising
technology as a process, this approach creates space to discuss the on-going
development of technology, which includes stages other than procurement and
implementation, such as design, maintenance, repair, feedback and change (Aunger, 2010; Graham & Thrift, 2007).

Using a process-oriented framework to examine the data presented in this chapter highlights two new considerations: the overall negotiability of technology, in that many stakeholders, often with variable interests and priorities, contribute to technological decision-making long before objects are implemented; and, the irreversibility of technological development, as choosing certain technologies often means rejecting others, and future directions of technological development are based on how needs and wants have been prioritised in past decision-making processes by either ourselves or our predecessors (Pollock & Williams, 2007; Williams & Edge, 1996). In terms of negotiability, recognising that other actors have made judgements and decisions about the end users needs may help avoid essentialising or blaming social workers for all technological issues encountered after implementation, as was often the case in the deterministic social work literature reviewed in Chapter Two. The life cycle of technology in the shelter case studies did not end with implementation, but rather was a cyclical process as governments constantly changed requirements, new technology capabilities became available, user feedback and customisation requirements were communicated, and the general public voiced opinions about spending and accountability. Considering irreversibility also highlights that although it is simpler to ‘black box’ technology and focus on the implementation context, actors at all stages of development make irreversible decisions that impact all the other stakeholder groups as well. In addition, by highlighting negotiability and irreversibility, social shaping of technology also problematises the concept of development: the neutrality of technology is called into
questioned as the multitude of factors affecting our perception of new innovations become visible. This theory may be a useful tool for expanding the scope of critical analysis of technologies in situations where end users or organisations are not actively involved in the design process.

5.6 Conclusions

In this chapter, I have outlined the four most evident relationships to technology in the VAW shelter case studies: computer use, ICT infrastructure and internet access, electronic record keeping and social media presence. Issues around these four relationships presented practical challenges to the shelters due to their limited resources and capacities. However, I acknowledge that I held a prior assumption that the shelters would be passive consumers of technology based on the structural barriers outlined in existing social work research, and this assumption is not borne out of my data. Despite facing similar issues, the shelters responded differently to these challenges by forming unique strategies based on their organisational needs, resources and goals. This suggests that although social and economic structures impacted their choices, rather than being passive consumers of technology, the shelters acted with agency and both shaped, and were shaped, by technological change. This analysis suggests that the social shaping of technology theory may be a complementary framework for future inter-disciplinary research because it shares a similar epistemology to existing systems theories in social work. Although these findings suggest that organisations make autonomous decisions in the broader social context, I did encounter considerable diversity in the personal opinions of staff in the shelters. In the next chapter, I shift my focus from the overarching practical issues facing the shelters to the individual values and beliefs about
technology within the shelter, which also impacted these decisions.
Chapter Six: How did ICTs impact the VAW shelters internally?

In this chapter, I turn my attention to the relationship between ICTs and the internal functioning of the shelters. The data gathered from different sources (observation, documents and unstructured interviews) suggested three different answers to this question; therefore, I describe the findings from each of these sources in turn before examining them together. First, I present the findings from my observations in the shelters. From these observations, it was clear that ICTs were highly embedded in the daily work practices of staff, as the shelters had good relationships with their IT consultants and had developed organisational norms for troubleshooting issues. This data suggested that ICTs had become normalised parts of the shelters’ daily workflow and staff members had accepted their integration into shelter work.

I then present findings from document analysis of brochures, training materials and organisational policies. This data suggested a very different theory compared to my observations. In documents available to the general public, there is little mention that, or how, ICTs are used in daily shelter operations, and no information about the embeddedness I observed, or the challenges (discussed in Chapters Four and Five) posed by this integration. In documents used internally, some ICT issues were discussed, but largely in a broad, generalising manner. These findings suggested that ICTs had not had a significant impact on the shelters’ operations, and they were not important considerations to understand how the shelter functioned internally. Thirdly, I present findings from my unstructured interviews, which suggested this relationship was not as straightforward as the observation or document findings suggested. Rather than passive acceptance or denial of ICT embeddedness in shelter work, staff members expressed fragmented, often
conflicting, attitudes throughout fieldwork. This involved a range of attitudes, including optimism, pessimism, and ambivalence. Although the organisations actively made decisions about technology (as I discussed in Chapter Five), staff members did not always hold the same beliefs or agree on what course of action to take. These findings highlighted that ICTs had indeed become important aspects of the shelters’ internal functioning, but they had not impacted them in deterministic ways, nor did staff have passive or static attitudes at an individual level.

The following analysis discusses possible reasons for the discrepancies between the data sources. I argue ICTs were clearly embedded into the shelters’ work, but this was minimised, or ignored, by the organisation and the staff members for several reasons. Using STS and feminist perspectives on technology, knowledge, work and gender, I interrogate and challenge two beliefs expressed by shelter staff members: first, that shelter work involving ICTs was not ‘real’ shelter work, because it did not involve working directly with service users. I discuss how staff members balanced competing values and priorities in their work, simultaneously conflating neoliberal values with technological values, and placing more importance on their work with service users in our conversations. However, this binary differentiation between technological work and ‘real’ shelter work did not reflect what I observed. I use STS theory on technological values to describe why conflating neoliberal and technological values, and minimising the extent to which they were reliant on ICTs to do their work, were problematic.

Secondly, I explore the belief held by the shelter staff members that they were not ‘tech people.’ Staff members also conceptualised a clear differentiation between themselves as shelter workers and ICT users, and ICT professionals as external
consultants and experts. Again, this binary conceptualisation did not reflect the complex relations I observed, nor did it acknowledge their roles as consumers and stakeholders in the broader process. I use feminist theories on technology, knowledge and work to explore why shelter workers did not envision themselves to be knowledgeable about technology, to have valid experiences with technology as users, and why this was problematic. I conclude this chapter by discussing the implications of the findings and analyses for the shelters. To prevent further reifying the separation between ‘real’ shelter work and technological work, or users and ‘tech people,’ the shelters need to develop and incorporate an understanding of materiality in relation to shelter work and ICTs. Materiality has been used in organisational studies to highlight the importance of the materials used to ‘do’ work, as practices are enacted, not just through actions, but also through the materials we choose to use. Although the shelter staff did not acknowledge the material aspects of their work, this did not mean there were no material aspects of shelter work or that ICTs had no impact on how the work was done. By acknowledging that shelter work has materiality through which shelter practices are enabled, similar to other organisational contexts, the shelters may be better able to recognise and manage the growing embeddedness of ICTs in their daily work.

6.1 Observing ICTs in Shelter Work

First, I describe findings from my observations in the shelters. As I mentioned in Chapter Five, various ICTs were highly visible in both shelters; office space was organised to make it easy for staff to work on the computers when they were not with occupied with other tasks:
“The computer is the focal point of the office space. They are found in all the staff work areas, but there are none in the residential areas of the shelter. It seems that the presence of a computer inadvertently identifies areas in the shelter where ‘shelter work’ happens, and where residents are not allowed to go.”

Reflective fieldnotes, Day 21 at the urban shelter

Beyond this visibility I also observed the embeddedness of ICT use through the norms that had developed to facilitate ICT maintenance and repair, and the on-going relationships with IT support persons. Shelter staff members were also attentive to other aspects of the shelter environment, which suggested that they were aware of the importance of the shelter landscape in service delivery, but this did not appear to extend to the ways ICTs were embedded within that landscape.

Because neither organisation had the resources to employ a full time IT staff member, they ultimately had to contract an IT consultant at an hourly rate. The cost of IT support was, therefore, based on time, and the urban shelter management had developed clear processes about how to address ICT needs as they arose. Feedback or concerns about technical issues were sent to the Director of Residential Services. The direct service staff did not contact the IT consultant directly because management wanted to try to solve issues themselves first to prevent spending organisational funds unnecessarily. But, because none of the staff had technical training, this could usually only be done for minor problems. The Director of Residential Services triaged these concerns to the best of her ability before determining if she needed to contact the IT consultant. IT support was only called if the issue was deemed to be critically necessary to shelter operations. For example, the mental health counselling office had a computer that did not work at all during fieldwork, but because the funding for the mental health counsellor position itself
was unstable the computer was never fixed. This was a practical issue as well as an ethical one, because the IT consultant charged a higher rate per hour than the shelter paid the direct service employees.

In terms of the database, staff members sent all their concerns and feedback to the Director of Residential Services as well, although she preferred to have this information via email rather than face-to-face. She used this information to help guide the customisation process for the new database. I had access to these notes (approximately 31 pages), which generally described specific features the staff wanted in the new database, such particular language or customised options for existing classification schemes. Based on my observations, ICTs had been integrated into the shelter operations smoothly. Although issues arose, there were clear norms about providing feedback or support, the staff knew these processes and followed them as needed throughout the day. The only challenges I observed happened when the database crashed. In these instances, shelter staff members reverted back to documenting notes in paper files, which were then typed into the database once it was working again.

At the rural shelter, the IT consultant was located in a town approximately 50 kilometres away, therefore he was only able to come to the shelter on certain days and required more notice to plan accordingly. The feedback process was less formal at the rural shelter, compared to the urban shelter, but the process seemed equally normalised. Staff members passed along comments to the Executive Director at staff meetings, which happened weekly, unless the issue critically affected operations. In these cases, they would speak to her immediately. Because the rural shelter had work laptops available, it had more flexibility to work around IT issues until the IT support
professional was able to visit. The Executive Director also dealt directly with the company making RecordNet in relation to specific database issues, although there were no critical issues during fieldwork.

“It is interesting how smoothly things appear to be running here compared to the urban case study. Other than the connection issues at the transitional housing site, there are no major IT projects happening here. Perhaps this supports the idea that when technologies do not need maintenance or repair, they become less visible. The database is running well, and there is less tension amongst the staff about whether they will be able to complete their daily work.”

Reflective notes, Day 18 at the rural shelter

The rural shelter had a good working relationship with their IT consultant, as he had become very sympathetic to the non-profit context over time. He told me that the biggest differences between his contracts with businesses compared to the shelter were the instability and fragmentation of the funding. For example, the shelter had been under-budget on a project to repair the parking lot but was not allowed to use the surplus money for services or to maintain other equipment. He said the whole process did not make sense to him and thought it ‘looked bad’ to the general public who would often hear the calls for funding to support basic services but would then see the shelter invest in ‘the fancy new parking lot’. He stated before working at the shelter he had not understood that funding came from different sources and the allocation for one area, such as building maintenance, had nothing to do with the others, such as service delivery.

There was clearly a visible gendered division of labour amongst the staff in both shelters. All the shelter staff members identified as female, but both shelters employed IT consultants that identified as male. A residential staff member at the urban shelter who had worked there for 17 years mentioned there had been male
volunteers in the past, but generally the staff members were female. Given the nature of the work, I was not surprised the staff members working directly with service users were female, but shelter staff members that did not work directly with service users, such as human resources and administrative staff, were also all female. This was important because both shelters had policies that men were not allowed in the shelters without a specific reason, or without providing 24 hours notice to the residents. This was designed to be a safety measure to prevent perpetrators from being let in to the building unknowingly by other residents; however it also prevented women from having male guests, who may have been part of their support network. However, I observed that the IT consultants were allowed to enter the shelter without proper notice to the residents when ICT support was needed immediately to keep the shelter operations running. The management said this was a necessary exception to their policy.

Although the shelter staff members were not aware of the visible embeddedness of ICTs, they were aware of the aesthetic of the shelter environments in other respects. The environment was discussed in relation to service user comfort and how to make service users feel more relaxed in the shelter. Staff attempted to blend the office furniture with warm, homey accents. For example, the shelter residences had modern, open plan kitchens, dining and living areas with comfortable furniture and fixtures, artwork on the walls and outdoor space with patio furniture and children’s climbing equipment. Additionally, the therapeutic offices at the rural shelter also had comfortable seating with floor rugs, and handmade blankets. The staff told me that they intentionally tried to create an environment that was calming and comfortable for residents because this helped support a smoother transition into
the shelter, and provided stability and comfort for the children adapting to shelter life as well. Yet, this was not consistent throughout the entire shelter; there was fluorescent overhead lighting, industrial outlets and doors, and some areas were locked or had restricted access. Also, as I mentioned in Chapter Five, computers were located in most areas of the shelter but service users were not allowed to use them. These observations suggested that staff members were aware that the physical environment of the shelters impacted service users’ comfort levels, but chose not to consider how service users were also restricted within this environment, and had to cope with the visible harshness of the office aesthetic as well. The shelter staff members sought to add warmth to the space through the strategic use of other objects (furniture, art, fabrics, etc.), but did not consider how other objects, such as ICTs, contributed to the environment as well.

Based on my observations, clear organisational norms had developed about ICT use and maintenance in the shelters, to the extent that these norms were invisible to the shelter staff. The staff members at both shelters knew the appropriate ways to reach out for help and ensure shelter operations ran smoothly. They also had good working relationships with the IT consultants. In fact, they were willing to ignore organisational policies related to gender in order to keep the ICTs working properly, highlighting how important ICT use had become to their daily work. Although staff members believed the environment of the shelter impacted service users’ comfort, how technology factored into the shelter landscape was not considered in the same manner. These findings suggest that while ICTs were embedded in shelter work and the shelter landscape, the staff members had not acknowledged these shifts themselves to the same extent.
6.2 ICTs in Shelter Documents

In contrast, the shelters’ documents, particularly publicly available ones, suggested a different story from the highly embedded ICT use I observed in the shelters. I analysed the documents available to the public, including organisational mission statements and visions, informational brochures and newsletters and annual reports, and internal documents, such as training materials and policies. These documents suggested that ICTs were not important considerations at all because they were largely absent from the materials.

The organisations’ values and missions were available online and in print. The shelters had a primary focus on safety; both working towards safety for women and children in the community, and a safe, secure environment in the shelters themselves. Other values mentioned by both shelters, in relation to their visions for society and their service approaches, included respect, anti-oppression, wellness, and diversity. In these statements, both shelters stated the root cause of violence against women was a desire for power and control within a patriarchal society. This belief was linked to feminist theory, stating that violence was a choice condoned within broader institutional and cultural contexts due to the lack of accountability measures for perpetrators, and was, therefore, a public issue. Both shelters also incorporated the Power and Control Wheel (Domestic Abuse Intervention Project, n.d.) (refer to Appendix G) to demonstrate that that VAW is not limited to physical violence; it also includes other emotional, financial, and sexual actions.

The feminist approach to service using the Power and Control Wheel (Domestic Abuse Intervention Project, n.d.) was reiterated in the staff and volunteer training manuals. In fact, these documents discussed the shelters’ feminist practices
in greater detail. The main framework used in the shelters to guide practice was the ‘Cycle of Violence’ (Domestic Violence Solutions for Santa Barbara County, n.d.) (refer to Appendix H for a similar diagram to protect anonymity). This framework highlights that a woman in a violent relationship may not want to leave for many reasons, or may face barriers to leaving. It argued that it is more likely a woman will return to a violent relationship several times before deciding to end the relationship, and she requires services throughout this cycle. By using framework, shelter staff members are encouraged to support women at every stage of this process rather than focusing on ending the relationship. There are now many adaptations of the Power and Control Wheel, and the rural training manual also included a technology version that highlighted different physical and sexual forms of violence, fear of violence and perceived dangers enabled through the use of ICTs (National Network to End Domestic Violence, 2008) (refer to Appendix I). I discuss this tool further, in relation to shelter service delivery, in Chapter Seven.

The Cycle of Violence framework was also used to support the shelters’ harm reduction approach. Harm reduction helped staff members work with service users to minimise the negative impacts of the violence and enabled the shelters to offer services to women in different ways, rather than only to residents. For example, service users were not required to end communication with the abusive partner in order to access services at either shelter. This was not always a realistic goal, and also unnecessarily forced women to adapt to social expectations of what women in violent relationships should do. The only time a woman was required to be out of contact with the perpetrator was if she was seeking therapeutic counselling at the rural shelter, as this service was only available to women who were no longer in
crisis situations.

The organisational brochures listed the many different services offered by the shelters and called for support, both in time and money, in order to pursue this work. While the documents appealed for more funds, they did not divulge whether any of this funding would be put towards ICT issues, such as those described in Chapter Five. The text directed the audience to focus on how the support could help in direct service delivery, highlighting the number of women and children who had received services; narratives of past service user experiences were often included as well.

“The most recent community newsletters don’t mention anything about the technological changes happening in the organisation, in particular, the new database implementation, and budgeting concerns. Community events, like the annual fundraisers, and awards ceremonies are the focus. It is clear the intended audience is meant to celebrate the shelter’s successes and feel inclined to donate. This is very different from the annual reports, which focused on the numbers. Number of women served, overall budget. But still no mention of the database.”

Document analysis, Urban shelter community newsletters

The only mention of technology in these documents was the teletypewriter (TTY) capability of the crisis lines, which signified that individuals with hearing or speech difficulties would be able to access the crisis line as well.

Accountability was also a key value documented by both shelters, but was used in reference to different groups. The urban shelter identified “stakeholders and the broader community” while the rural shelter was explicit that service user preferences would guide their work. Both shelters produced annual reports documenting revenue and expenditures for the previous fiscal year. These documents focused on financial and quantitative outcomes (e.g. number of residents each year) rather than individual service user outcomes. The urban shelter report for 2011-2012 focused on budget challenges faced by the organisation, using terms such as ‘lean,’ ‘gruelling’ and
'challenging’ to describe the budgeting process, but no specific items purchased to support shelter operations were discussed, including ICTs. The rural shelter annual report listed similar statistics, but also briefly stated that a new database was purchased to support operations.

"The annual report acknowledges the new database: ‘We have also adopted a new database allowing us a much more seamless way to document information.’ I have not found a similar reference in any of the other publicly available materials, but I still feel it downplays the time and energy that went into making the decision to go with RecordNet."

Document analysis, Rural shelter annual report

This is the only mention of an ICT issue in these reports, but did not mention any costs related to this implementation. Neither shelter included information about the costs associated with ICTs, or appealed to the public for funds to support organisational capacity in this area.

The final common theme in the documents was a commitment to social justice. This was listed explicitly by the urban shelter, which specifically identified social justice advocacy as a key shelter activity. The rural shelter documents were less explicit, but incorporated an anti-oppressive, feminist lens into their descriptions of all the services they offered. Both shelters stated they valued service users’ lived experiences as valid forms of knowledge about violence and oppression, as survivors are often blamed or criticised in the general public, which contributes to low levels of reporting. In combination, these documents provided an image of the shelters as the same feminist, grassroots organisations from their past. Although accountability was mentioned as a value, there was little mention of how ICTs helped them achieve these missions and goals in terms of administrative work or funder accountability requirements that had been implemented over time as a result of the increased
institutionalisation and professionalisation I described in Chapter Four.

Finally, I also analysed internal policy documents at both shelters. The urban shelter had a ‘professional standards’ document all staff and volunteers were required to sign. This document reviewed conduct and boundaries issues (which I discuss further in Chapter Seven). The only mention of ICT use is in relation to fair use of IT resources by staff to prevent excessive personal use. The Board of Directors needed to approve any changes to this document, given the breadth of issues covered within, and it was reviewed annual. The latest revision had been done in August 2011. In contrast, the rural shelter had a larger set of organisational policies; additions or retractions could be completed more easily. In 2009, they had added sections entitled Technological Communication, Electronic Files and Records, Faxing and Emailing, and Record Keeping Outside the Office. These sections outlined specific standards of practice for shelter staff members in regards to their daily work and communication with staff and service users outside the shelter, and also what staff members could expect from the shelter in terms of ICT security, such as levels of encryption for service user records.

When analysing these documents, ICT use was almost invisible in the publicly available documents the shelters had created about themselves. While I was not surprised they wanted to highlight their missions and values, any mention of how ICTs enabled this work was absent. In the internal documents, the rural shelter had incorporated significantly more information about ICT standards than the urban shelter. From these documents, it appeared that ICT embeddedness was acknowledged to a greater degree in the rural shelter than the urban shelter. However, the rural documents had not been updated since 2009, and were vague
about how the standards could be interpreted as technology changed over time, or how accountability would be determined. Therefore, these findings contrasted with my observations of the embeddedness of ICT use in shelter work, particularly in the urban shelter. The publicly available documents decontextualised the shelters by presenting them in a timeless manner, with little information about how their missions and beliefs were enacted through organisational practices, norms and materials, such as ICTs. Based on these findings alone, ICTs did not appear to have an important role in shelter operations, and had not significantly changed the nature of practice as the shelter movement developed.

6.3 **Conversations about ICTs in Shelter Work**

In contrast to the previous findings, my conversations with staff members suggested that ICTs had been neither smoothly integrated into shelter work, nor minimally disruptive, but rather suggested ICTs were an integral part of increasing organisational complexity, and these issues were often on their minds. Additionally, staff members expressed neither one consistent group attitude towards ICT use, nor consistent individual staff member opinions throughout fieldwork. Instead, I encountered a range of attitudes that shifted depending on the context of the conversation and the technological issues being discussed. Staff identified benefits, challenges, and concerns, which resulted in disorganised, and sometimes contradictory, conversations. While reflecting on this process, I realised that because of my past experiences I had assumed that the staff members would have had some consistent overall attitude towards technology use in their work, but this was not the case. Instead, I found it very difficult to identify any consistencies. They expressed many feelings, including optimism, pessimism, and ambivalence. The findings
suggested this was partly because they agreed with sentiments within neoliberal values to a certain extent; they wanted to be efficient and accountable to funders and service users, and they believed ICTs would help them do this. On the other hand, they were conflicted about how to prioritise these values in relation to feminist practice and service user needs, creating tension at an individual level and between staff members within the organisation.

The role of computers in shelter work evoked different reactions from staff in both shelters. Sometimes staff told me they “could not imagine doing the work without computers,” because computers enabled them to be more efficient, complete administrative tasks easier and faster, and have access to more accurate, up-to-date information compared to the previous paper-based data management. This was even stated by newer staff members who had not worked in the shelter during that time. Rather than framing their work in complete opposition to technology and neoliberalism, staff members at both shelters told me they agreed with neoliberal values as it related to their administrative work. They stated they wanted to be efficient and effective in their work, but they also felt pressured to use ICTs to pursue these goals by management and funders. In these conversations, staff members were optimistic about technology’s ability to help them meet managerial and administrative goals, rather than the organisations’ broader mission of ending VAW, but this was never directly acknowledged in our conversations. Rather, it was an implied outcome of the more efficient, transparent and accountable work enabled by ICT use. It was assumed any challenges would be overcome. For example:

“[A children’s programs counsellor] has worked in the shelter for 12 years. ‘Things have changed.’ She recalls when the shelter got phones with caller ID: ‘We had to get women to dial another number after
calling so no one could use redial.’ They also had to block their number when calling service users. ‘There was one slip up with that, because once and a while the name and number would show up.’ Now with computers and email, there are new problems.’

Interview notes, Day 5 at the rural shelter

At times, staff members suggested implementing new forms of technology to solve other organisational issues. For example, during a staff meeting at the urban shelter to gather ideas about cost saving measures, one residential counsellor suggested replacing paper-based pay stubs with online pay stubs to reduce paper costs. Other staff members agreed with this idea, although how to implement it and the resources it might take compared to continuing with paper-based pay stubs were described as “human resource concerns.” At other times, the same staff members would be less optimistic about ICTs and tell me they spent far too much of their day completing computer work compared to working directly with service users. Direct service delivery was often described as the ‘real’ shelter work compared to computer tasks, despite the fact that the observational data above highlighted how embedded ICTs were to their work. For example, the volunteer coordinator at the urban shelter told me that she used the new volunteer management software to keep track of volunteers but that she preferred the older system because she had more direct contact with them. With the new database, volunteers could register or cancel volunteering sessions without contacting her and she said she missed checking in with volunteers over the phone. She stated she had grown up in a rural area and reminisced about the personal connections that were fostered through face-to-face contact and continued to be important in her home community. This conflicted and challenged a previous conversation we had had in which she had told me how much easier it was for her to manage volunteers with the new database at busy times of the
year. At the rural shelter, the staff that worked off-site also expressed their annoyance with computer tasks because when they did not have access to the shelter network they had to spend extra time transferring information later on. Yet, often these conversations ended with staff externalising issues, stating “that’s the way it is.”

Conversations about infrastructure and internet access also revealed conflicting beliefs amongst the staff. New staff members in the urban shelter, and the rural shelter staff more generally, expressed their support for enhancing infrastructure and providing internet access to residents. They told me about the many practical benefits they believed it would provide for service users, mostly framed as service user empowerment, as it would reduce service users’ reliance on staff to access basic information for housing, jobs, and other relevant information, which would ultimately help them achieve independent living faster. Providing internet access was also described as an inevitability; an urban residential counsellor stated “Wi-Fi is everywhere these days so I don’t see why we shouldn’t have it here.”

Other urban staff members that had been working at the shelter when the computer and internet connection had been made available to residents expressed more hesitant views. They felt it was less clear how much the shelter should provide from financial, logistical and ethical standpoints. For example, we discussed whether the financial implications of providing wireless internet access would inevitably require funding cuts from other areas of the shelter, such as mental health and addictions support, and who should decide these priorities. In these conversations, the opposite sentiment of the counsellor above was expressed: if residents were able to access wireless internet in many areas around the shelter, it was not necessary to
provide it within the shelter. Many of the hesitant staff told newer staff about the negative issues related to internet access, leaving out any benefits residents might have experienced. After learning about these issues, some newer staff members were more hesitant to support its implementation again.

At the rural shelter, the staff members were largely optimistic about providing wireless internet access in the shelter. I did not mention any specific challenges the urban shelter had faced, but when I asked about potential issues they might anticipate the majority of the staff could not think of any. The only staff member who expressed any hesitation was a residential counsellor that had taken on the responsibility of managing social media safety issues, such as preventing GPS tracking, unwanted social media identification and confidentiality of other residents, and speaking to residents about these informal policies. Due to her insistence of these various safety rules in the shelter related to social media use, she had been given the nickname “the phone Nazi” by residents. She stated she already found it difficult to manage confidentiality, when many residents did not have personal data plans to access the internet from their personal devices in the shelter. Despite this, she said that although providing greater internet access to the residents via a wireless internet network would amplify these issues, it would ultimately benefit more women and the challenges would be worth it.

Although staff had conflicted opinions about computer use in general, attitudes towards the shelter databases were largely optimistic. In the urban shelter, this optimism was driven by the hope of improved workflow following the Dreams implementation. At the beginning of fieldwork, many staff members told me how much better the shelter would function after the new database had been implemented.
The older database that was still in use was so out-dated that it was seen as preventing efficiency rather than enabling it, as it had once done in the past. The residential counsellors were often optimistic because of the new features of the database itself and because they would no longer have to deal with the frequent crashes from the out-dated system. These staff members were not involved first-hand in the on-going negotiation of the database and only received feedback about the process from a colleague who informally represented their interests to management. Yet sometimes discussions about funding for technological capacity were bittersweet for the staff. While hopes were high for the new database, the fact that they had decided not to hire a new mental health counsellor because of budget concerns frustrated the residential counsellors who lacked training in this area but had become increasingly responsible for handling these types of specialised situations.

The management staff were much more anxious about the new database implementation. On Day 2 at the urban shelter, my notes from an interview with the Executive Director state:

“[The Executive Director] said she is frustrated that ‘people believe better technology will solve the problem…there are flaws in that line of thinking.’ But there is also an air of excitement around the implementation of the new database system. Many comments that it would improve things in the shelter and make it easier and just ‘better.’”

Negotiations had taken a significant amount of their time and energy and, despite the fact that they had made progress, they were still unsure if they would be able to have all their needs met for a price they could afford. The optimism amongst the direct service staff also waned as the implementation date for the new database was constantly pushed back and negotiation challenges persisted. Some staff members placed blame for this situation on the management’s approach to
negotiation, while others felt it was due to the overall lack of resources more generally. Some staff expressed they felt Dreams should be reconsidered; although, no one suggested getting rid of the electronic database altogether. When I left fieldwork this issue was still unresolved and direct service staff felt they would be stuck using the out-dated system for the foreseeable future.

In my conversations with staff at the rural shelter, even when they said they were spending too much time at the computer, they were happy with the RecordNet database and felt it met their administrative needs. Although the interface design was out-dated compared to modern trends in software design, this did not appear to impact their user experience. The management staff liked that the software was flexible enough to be updated whenever their statistical reporting needs changed.

In relation to social media, residential staff members at the urban shelter were optimistic about how social media could be used to reach out to the community, but were critical of how the shelter had chosen to use it thus far. They were not aware of the tension between the development team and management around these job responsibilities, and so they were critical of the lack of social media engagement despite the fact that few of them wanted to be involved or personally take on this responsibility. At the rural shelter, the Executive Director was the only staff member who was interested in discussing the shelter’s social media use, likely because she was the only staff member in contact with the communications consultant who handled the accounts. The other staff members rarely spoke about the shelter’s social media accounts and most did not know much about their content or the strategic functions they served overall.

One of the more striking differences between the shelters was that the
Executive Directors had very different perspectives on the role of ICTs in their organisations. At the urban shelter, the Executive Director was often critical and pessimistic about ICTs in the broader contexts outlined in Chapter Four and Five. I had several conversations with her about this, in particular the rationale for using databases to record service user information according to funders. Despite the fact that the shelter was engaged in negotiations to acquire “the Cadillac of databases,” she told me it was frustrating to implement technology in a world that prioritised its use for reporting on the issues above working towards actual solutions. She also mentioned the stress that technological spending put on other areas of the shelter and amongst direct service staff who rarely had pay or benefit increases. While she did acknowledge the potential benefits of using the new database, she appeared cynical about the context in which she was a consumer forced to “move with the times,” and did not feel fully in control of the shelter’s technological choices.

Her interest in the research project stemmed from its critical perspective, although other management staff did not perceive ICT issues in the same way. When I approached her about the research project, she had been enthusiastic and had stated the timing of the fieldwork would be good given the changes happening with the new database. She then referred me to the Director of Residential Programs to discuss access. However, when I contacted the Director of Residential Programs she was concerned that it would not be a good time for me to do research with them because they did not have the new database yet. The Director of Residential Programs told me it would be boring for me because they were still using the out-dated database and “there would be no interesting data to collect.” I decided not to try to persuade her of the potential value of documenting this transition and instead waited to see the
Executive Director’s response. Ultimately I was granted access, but the Director of Residential Programs remained sceptical of the usefulness of my fieldwork while the out-dated system was still in place.

In contrast, the Executive Director at the rural shelter was optimistic about the potential of technology and was interested in the research project because she specifically wanted to be perceived as progressive by other organisations. In conversations, she told me that she didn’t want the rural shelter staff members to “look like country bumpkins” in reference to their technology use. She encouraged the implementation of RecordNet and the wireless network for service users, and maintained a strong relationship with the IT consultant. Throughout fieldwork, she did not waver in her beliefs on the benefits of technology in the organisation, and the importance of staying informed of new developments. In contrast to findings in the social work literature in Chapter Two, the rural Executive Director’s positive leadership approach did not lead other staff members to hold more positive or accepting attitudes to ICTs. I discussed similar issues with staff in both shelters, which included a variety of conflicting and complex opinions.

During these conversations, I repeatedly encountered two different statements from staff members in both shelters: that shelter staff did not consider technological work to be ‘real’ shelter work; and the shelter staff members did not consider themselves to be ‘tech people.’ I found these assertions difficult to accept as my observational data indicated ICTs were embedded in the shelters and staff had developed embedded organisational norms with regards to their use. The first belief, that technological work was not ‘real’ shelter work, was often stated when we discussed how much time they spent at the computer. Despite the fact that some
staff, such as the therapeutic counsellors at the rural shelter, spent almost equal time working with service users as they did typing notes afterwards, they did not consider these tasks to be ‘real’ work. The staff members described their work with service users as the more gratifying part of jobs, which they then described as the ‘real’ work. This also conflicted with their beliefs that ICT use was an important consideration in the overall efficiency and accountability of shelter work.

The other statement I heard often in our conversations was “I'm not a tech person.” Particularly at the beginning of the research project when I initiated conversations and introduced myself, the shelter staff members said this to me right away and then began to describe how little knowledge they had of different technologies and applications. I did not have any expectations that the staff would be able to speak about technical specifications nor did I enter fieldwork with that knowledge myself. The types of conversations I tried to initiate during fieldwork rarely involved or required specific technical knowledge, and I was explicit about the scope of the research goals related to beliefs, perspectives and behaviours rather than the internal logic of machines, but this did not impact the initial responses I received in either shelter. I was surprised that staff felt the need to use this preface with me because I thought by informing them of my own background in social work, and my social work, rather than technical, perspective to the research, it would create greater trust in our relationships based on a shared identity. In contrast, I never overheard an IT professional claiming “I’m not a service provider” or “I’m not a feminist” in our conversations.

These conversations highlighted the variety of perspectives on ICT issues held by shelter staff members, including optimistic and pessimistic; however, I was not
able to speak to every staff member in depth. In my fieldwork agreements with the shelters, it was left up to the discretion of each staff member how much time they were willing to speak to me one-on-one given their workload. Some staff members continually declined my invitations, saying they were too busy with other tasks. It is difficult to know the extent to which this lack of engagement reflected the reality of their workday – whether they felt they simply did not have time to talk to me, if they were not interested in the topic or if they did not want to be involved in a research project more generally. For example, a residential counsellor at the urban shelter declined my request to meet later that day and told me to ask any of my questions to her colleague who was sitting at the workstation beside us. This appeared to create an awkward situation between the two because her colleague was also busy but had already made herself available to talk to me in the past. The more a staff member declined to speak with me, the more interested I was in learning about the reasons for this avoidance, and their opinions on the issues. In this instance, the declining counsellor had been quite opinionated about other issues at staff meetings, and I wanted to find out more about her opinions, but I never had the chance to do so.

I encountered a similar challenge with one of the therapeutic counsellors at the rural shelter. I had made appointments with both of the therapeutic counsellors at their satellite offices to see the spaces they were working in and the IT facilities they had access to. My first visit was to satellite office #2 in a town approximately 45 minutes away. When I arrived at the shared office and informed the receptionist, the counsellor appeared surprised to see me. Despite the fact that I had set up the appointment with her the week prior, she stated she hadn't understood I specifically wanted to talk to her while I was at the satellite office. I did not want to take time
away from seeing service users, but I had been under the impression that I was meeting her at a time when she had no client scheduled. However, instead of rescheduling the meeting, her reaction to the situation was to state she would not have time to speak with me at all, and did not think it would be helpful for me because she “didn't know anything about computers.” Despite this, she invited me back to her office to see the space, but when I arrived I realised she had been working with a service user who was still in the room. This created an awkward situation because I did not know if she had told the service user who I was and she gestured towards the computer saying: “See this is it, there is not much here. That's all. So if you just want a tour then one of the ladies at the front can do that.” I left the situation immediately to de-escalate the tension and agreed to speak to her at the main location the following day.

The following day I attempted to reconnect with her, but was not able to persuade her to speak with me. This was the most frustrating situation I encountered during fieldwork, not because she did not perceive there to be a connection between her work and technology but because I kept making plans to speak with her and then she would back out claiming she had nothing to contribute. At the time, my frustration grew because I interpreted her actions as minimising the research and intentionally wasting my time; however, my interpretation of her actions changed over time. I began to see that she appeared to be just as frustrated as I was about the situation. We both clearly had strong feelings about the research topic; however while I saw many theoretical and practical connections between her work and technology; she was just as convinced there were none. As time passed during fieldwork I became increasingly interested in her belief that the technology in her
office that she used in her work had no relation to the therapeutic work she did, but
unfortunately her on-going resistance to speaking with me prevented me from
collecting more nuanced data about this. Ultimately, I was not able to speak with her
more because she continued to avoid my invitations.

Also at the rural shelter, one member of the youth outreach team was quite
interested in speaking with me about critical feminism but not in relation to
technology. This staff member had grown up in the community, and pursued feminist
studies at a nearby university. Therefore, her education and interests did intersect
with my own and probably contributed to feelings of trust enough for her to open up
about her beliefs in this area. She expressed in conversation with me that she was not
always comfortable talking about critical feminism in the organisation and felt
feminist language was a barrier to working in the community. However, we did not
speak at length about technology issues in the shelter as she often turned the
conversation to specific technology issues related to the youth population she worked
with. We discussed issues such as 'sexting', cyber-bullying and legal ramifications
(which I discuss further in Chapter Seven) instead. It is possible she raised these
types of technology issues with me because of my practice experience and our shared
critical feminist lens of analysis. She was comfortable using the technology in the
organisation and, therefore, was unconvinced that the organisation’s relationship to
technology was an important focus for critical feminism at this point in time.

In addition to encountering different opinions on ICT issues in the shelter, I
also encountered different reactions to the research project and my presence in the
shelter. Sometimes staff members were interested in the project, and other times they
questioned my research interests or treated me with suspicion. At the urban shelter, a
residential counsellor who had worked there for 17 years immediately told me it was very interesting for her because “technology is everywhere and social media is how everyone communicates now,” but she was also one of the staff members who claimed not to be a ‘tech person.’ Based on these findings, it was clear that there was little consensus amongst staff about the place of ICTs in the organisations.

On their own, these three data sources would each present a different picture of how ICTs had impacted the organisations internally: observational data suggested the relationship had evolved seamlessly and ICTs were clearly embedded in organisational practices; documentary data suggested there had been only a minimal impact, one that was of no concern to the general public; and interview data suggested the relationship was confusing and unclear as staff sought to balance values and priorities of neoliberalism and feminist practice, but also did not feel technological work was ‘real’ shelter work, or that they were ‘tech people.’

Analysed in combination, these findings suggest the relationship between ICTs and internal shelter operations is much more complex. In the next section, I interrogate the beliefs that technological work is not ‘real’ shelter work, and shelter workers are not ‘tech people’ further. I argue staff members used these beliefs strategically to rationalise how they balanced competing values and priorities stemming from funders, management, feminist practice and service user needs in their work. Similarly to social work literature reviewed in Chapter Two, neoliberal values were conflated with technological values, which resulted in little critical analysis of the technology itself. I incorporate STS and feminist perspectives on technology, work and gender to interrogate how staff members conceptually separated themselves from the ICTs they used in their daily work, and why they did
not want to acknowledge the embeddedness of ICTs in the shelters’ internal operations.

6.4 Interrogating Embedded Beliefs about ICTs in the Shelters

Shelter staff members made conflicting statements about ICT use in the shelters, which were most often related to the idea that ICT work was not ‘real’ work, and they were not ‘tech people.’ These beliefs suggest that the shelter staff members did not view ICTs as an important part of their work in the shelters, but an external force operating around it, or alongside it. As this contradicted my observations, I first explore how each belief was used as a conceptual tool to strategically separate shelter work and shelter workers from technology using feminist perspectives on technology, work and gender. I expand this analysis by discussing why they shelters left out information about ICTs in their organisational documents, and how perpetuating these beliefs, and ignoring the embeddedness of ICTs in the shelters was problematic in light of the conflicting data.

6.4.1 “ICT Work is Not ‘Real’ Shelter Work”

Given the feminist origins of the shelter movement, it was not surprising that the shelters continued to operate from an explicit set of feminist values, which staff members were expected to share. This expectation was explicit in the recruitment, interviewing and training processes for new employees at the shelters because these values shaped their practice models and beliefs, as shown through the continued use of conceptual tools such as the ‘Power and Control Wheel’ (Domestic Abuse Intervention Project, n.d.) and the ‘Cycle of Violence’ (Domestic Violence Solutions for Santa Barbara County, n.d.). According to Winter and Jackson (2014), values-based organisations have an “integrated values schema as to what constitutes ethical,
equitable, or effective work” (p. 312) and help employees and employers create ‘psychological contracts’ that establish and clarify how they mutually define success in the work environment. The shelters, as values-based organisations, recruited staff based on the assumption that “people are attracted to organisations precisely because they perceive them to have values similar to their own” (Winter & Jackson, 2014, p. 313), and the shelters appeared to be successful in recruiting like-minded staff members that were familiar with feminism. As I discussed above, the publicly available documents about the shelter, and the training materials provided to new staff focused on these feminist values and practices while minimising the role ICTs played in their daily work. This suggested the feminist orientation was the most important aspect of shelter work for new staff members to understand. New staff members, therefore, only learned about the shelters’ use of ICTs and ICT norms through on-the-job experience rather than by reading documents and receiving any formal advice.

In this section I explore two different analyses of why shelter staff did not consider ICT work to be ‘real’ shelter work. First, using STS theory on the values of technology, I highlight how, similarly to the findings in the literature review, staff members conflated their opinions on technology with their opinions on neoliberalism. This made it difficult for them to conceptualise how the technology itself had values and therefore enabled specific practices, outside of their neoliberal goals. Secondly, I present a feminist analysis, arguing that shelter staff members did not consider technological work to be ‘real’ shelter work as a form of resistance to a broader shift towards the automation of ‘women’s’ work more generally. By making their own technological work invisible, they avoided acknowledging this shift. These
analyses highlight that technology itself is political and values-driven, outside of its current relationship to neoliberalism, and the gendered nature of social work and technology shape internal operations as well.

The first argument I present relates to the values of technology. Staff members agreed that accountable and effective service delivery was important, but these practices need not be limited to neoliberal definitions. Although, staff members did not see the shelters’ use of technology as separate from its on-going pursuit of accountable, effective service delivery in relation to external neoliberal expectations, accountability can actually be demonstrated in many ways. The quantity and detail of the information required by funders had increased over time, partly due the institutionalisation of shelter services and this resulted in increased data management burdens on the shelters, rather than simply a new-found interest in accountability. One reason for the separation was that the shelter staff members did not perceive the technology itself as having values; they only perceived ICTs as the mediums through which they could meet these broader administrative objectives. Staff viewed technology as a neutral, or value-free entity and therefore did not account for how the use of particular ICTs related to organisational visions and goals. Although staff members had beliefs about ICT issues, they did not see these beliefs as values-driven in the same manner as their feminist beliefs driving practice. This was problematic because neoliberal values and practices are not the same as technological values and practices. In conflating the two, it was difficult for either shelter to evaluate the specific ICT decisions they made as they pursued these goals.

Over thirty years ago STS researcher Langdon Winner (1980) stated: “In controversies about technology and society, there is no idea more provocative than
the notion that technical things have political qualities” (p. 121). The technological
determinism paradigm suggests that technologies possess naturally occurring internal
logics that unfold in a linear manner; therefore, we often do not think about how
designers make decisions about technologies (Bijker & Law, 1992). Yet,
technologies, like other tools and consumer goods, are designed to meet specific
goals or needs, at the individual, community or social levels. For example, Winner
(1980) uses the example of bridge-building technology to highlight his argument that
technologies embody political values. He described that bridges with low clearances
were constructed to restrict the movement of public transportation buses to Long
Island, New York, which in turn limited the movements of individuals from lower
socio-economic statuses to holiday areas used by higher socio-economic groups. In
this case study, he argued that bridge technology was used politically, strategically
and intentionally to meet the desires of upper class residents who did not wish to
share their holiday areas. According to Bijker and Law (1992), how we design and
use technologies reflects our society on a broader scale as we “reproduce and
embody the complex interplay of professional, technical, economic, and political
factors” (p.3), highlighting how we create order in society. Kirman (1992) argues we
must become aware of our own power in these situations if we wish to use
technology in moral and ethical ways, or else we are “at the mercy of the values of
those who control science and technology” (p. 6). Therefore, although the bridge
technology was not directly responsible for the marginalisation of lower socio-
economic groups, Winner (1980) argues it was used in a way that embodied
oppressive social values and therefore cannot be seen as a neutral entity.

IT designers must make decisions using their discretion and judgement and
therefore inevitably embed values and structure in the design process as well. However, while values may guide technological design, in response, Joerges (1999) points out that assuming the designers’ intended values automatically stabilises it’s potential uses is simply a form of “soft technological determinism” (p. 413) that ignores other contextual factors. While he does not refute that values play a role in technological design, he highlights the interpretive abilities of users and the possibilities of multiple outcomes. Rather than thinking of technology as having a ‘rational function’, it can be seen as having an ‘interpretable meaning.’ This limits the chances of essentialising the internal characteristics of technology (Grint & Woolgar, 1997). While designers use their own values and priorities throughout the creation of new technologies, users also have values and priorities that influence how they choose to use these objects.

The idea that technology itself is embedded with values and enables certain practices to be done in specific ways in organisations more readily is not a new idea; for example, values of electronic databases have been researched in many different organisational settings. By nature, databases seek to organise information in structured and systematic ways; they support the creation of an official record – a single source of 'truth' about the work that has been done. The shelter staff members even acknowledged that the database helped them create this type of archive and found it beneficial to their work in some situations. However, databases create this single truth by restricting the users’ ability to input informal and contextual data and forcing them to categorise people (Komito, 1998).

White, Hall, and Peckover (2009) described these impacts using Gubrium, Buckholdt, and Lynott's (1989) concept of ‘descriptive tyranny’ to describe the
aforementioned Integrated Children’s System tool in child welfare social work in England. The Integrated Children’s System was structured using boxes that users felt disrupted “the temporal and narrative display of information” (p. 1206). While most direct service staff recognised that the structured format of the database did not always reflect how they would have liked to record the information, and in some cases, similarly to the findings presented by White et al. (2009) amongst child welfare social workers using the Integrated Children’s System, they did not use certain parts of the database they felt were irrelevant or outside their expertise. These structural issues were seen by some as acceptable trade-offs in order to have standardised files. However, the value of having a singular ‘truth’ to refer to presented an ethical dilemma for others who wanted to be able to customise their files to include other information they felt was important to understanding the service user’s situation. This dilemma reflects the values of the technology itself, rather than the neoliberal vales of accountability and transparency.

Even scientific work settings, which would seem to have values which would align well with technological ways of doing, have experienced significant changes in workflow through the implementation of database systems. Hine (2006) has researched the influences of databases in genomic laboratory settings, including “how far databases impose a particular form of computer logic on knowledge production, and to what extent they provide new communication regimes, new forms of collaboration and new spatial organizations for science” (p. 270). Even in this scientific setting she determined that databases needed to be designed with contextually relevant work values and priorities in mind in order to be successful.

Komito (1998) also examined the implementation of electronic records in the
Irish civil service and found that the database had been designed to meet the values and priorities of management rather than staff. Similar to the shelters, the database helped management access basic information about a case quickly, but it did not replace paper files. The staff felt the electronic records could not capture contextual information they felt was equally important to the factual information used to make case decisions. They also valued the physicality of the paper files, claiming they felt ownership of the case was demonstrated by whoever had the paper file, despite the fact that any staff member could review the electronic file at any time.

The structured nature of the database and the fluidity of feminist practice were constantly in tension because both methods had strengths and weakness according to the shelter staff members. The organisations and staff members wanted to balance the organisation and structure inherent in the databases with their need to honour and respect service users’ narratives and lived experiences that were much more complex and fragmented. However, this balancing of priorities was not acknowledged within the social work literature reviewed in Chapter Two; often neoliberalism and technology have been described in opposition to social work values, as external, top-down ideologies enforced on organisations. I realised I had also assumed there would be more explicit prioritisation of feminist values compared to neoliberal values until multiple staff members told me they felt both frameworks were important. These findings suggest it is necessary to reflect on how organisations also negotiate multiple, competing value system, and how technology embodies particular values that are not the same as neoliberalism. By not perceiving ICTs to have values that enabled particular types of practices as part of the shelters overall strategy and operations, technological work was not seen as ‘real’ work in the shelters.
The conceptual separation of technological work from ‘real’ shelter work also reflected feminist perspectives on work and technology, as described in the literature review. Shelter staff members’ stated they were spending too much time on the computer compared to direct service delivery. As Cockburn (1985, 2009) and Markussen (1995) argued, the introduction of new technologies may not necessarily reduce the overall workload, it may simply change the required expertise needed to complete the job. Rather than working with service users, shelter staff members spent more time learning to use the database and other required technologies. This shift may not have been surprising, but it did appear to create discomfort about their own roles in the organisation and with service users, and may explain why they did not conceptualise these tasks as the ‘real’ work.

Although feminist perspectives on work focus on the practical impacts of technology on feminised areas of work, they do not account for how women may internalise gendered expectations themselves, or who should provide ‘caring’ work. Even though the shelters had developed relationships with the IT support persons, the staff did not think of shelter work as a joint effort between the different groups. IT staff were not expected to share the feminist values other staff were, and the staff did not refer to the IT support persons as co-workers. According to Fejes and Haake (2013), internalised gender norms can drive occupation choices and lead women to pursue careers in ‘caring’ fields. Clearly, not all women choose traditionally feminised occupations; women have entered many different occupations as the options have become available. But, ‘caring’ work, both paid and unpaid, is still heavily dominated by women (Fejes & Haake, 2013). In the shelters, women provided the ‘caring’ forms of work, and conflated this with the ‘real’ work. This
raises questions about internalised assumptions both about what ‘real’ shelter work is in terms of the gendered nature of ‘caring,’ and who is perceived as able to perform ‘real’ shelter work compared to the technological work that mediated it.

6.4.2 “I'm Not a Tech Person…”

The second belief I encountered was that shelter staff members were not ‘tech people.’ Although the organisations had clear feminist orientations, they had not integrated any feminist perspectives on technology into their policies and practices. Instead, they chose to minimise their reliance on ICTs and assert their identities in opposition to technology. In this section, I explore two possible reasons for this conceptual distinction using critical postcolonial and feminist theories. First, I explore the historical context of technological development and ‘tech people.’ This narrative highlights that technology has been used in particular ways in the past to control and oppress different groups. I argue that shelter staff members did not want to consider themselves to be ‘tech people’ because of historical connotations associated with this identity in comparison to social work. I then further explore this idea in relation to the historical context of technological development and gender using feminist theory. I assert that the gendered natures of shelter work (and social work more broadly) and technological fields have not come to exist without reason; shelter work has a specific perspective on gender relations and patriarchy that supports female empowerment, and feminised ways of knowing that reject positivism; conversely, technological knowledge is driven by a positivist, scientific rationale that excludes other ways of knowing. Because of this, rejecting the identity of a ‘tech person’ was done strategically to draw attention to the type of work, and the types of knowledge, the staff member valued. These findings suggest that gender,
knowledge and power circulate internally in the shelters with in relation to technology, and are important considerations in terms of how shelters reflect on ICT use in the context of growing institutionalisation and professionalisation of their own services.

First, I discuss postcolonial theory related to technological development. Staff in both shelters had clear ideas about the importance of the shelter itself as a space of resistance to oppressive social values and norms. It is possible the idea of a ‘tech person’ had a negative connotation for the shelter staff, due to the historical linkages in Canada between technology and the oppression of various groups throughout its colonial history. Although the colonised land of Canada is relatively young, Aboriginal groups had been living on the land for hundreds of years. The colonisation of Canada involved the mistreatment of Aboriginal communities (as I described above in relation to social work), although it is not always discussed explicitly discussed in research and practice. But, the implications of colonisation continue to impact national, provincial and local policy and development.

Building on the process-oriented approach to technology of the social shaping of technology approach described in Chapter Five, postcolonial research also examines the historical and contemporary context of global manufacturing, production and consumption that implicate many more actors in the process of technological development than are often considered. The historical quest for 'progress' via technological development is seen as linked to the Western desire to manipulate and dominate nature, and other societies that are viewed as inferior (Arnold, 2005). Colonised areas were excluded from technological development and
knowledge because controlling these processes equalled greater power for the colonising nations.

Postcolonial theory highlights that historically, and presently, technological development has had a significant role in the processes of imperialism and colonisation on a global scale and developed countries have historically been gatekeepers of technical knowledge systems. This presents ethical issues and suggests that technology has been used to control knowledge production and dissemination in ways that contradicted the feminist values in the shelters. The concept of a ‘tech person’ may still be associated with this historical and conceptual baggage that links technology to power and control over marginalised groups, which may have led shelter staff members to form oppositional identities to so-called ‘tech people.’

In social work, these impacts have also been discussed in relation to the oppression of indigenous groups and other marginalised groups. Although technology has also enabled beneficial practices in many areas and had positive impacts as well, Canadian social work attempts to be particularly mindful of these oppressions. Therefore, from a postcolonial perspective, a ‘tech person’ may have been perceived as an individual who was more concerned with the implementation and development of the technology itself, to the extent that the operational success of the technology in the shelter was more important than the shelter work itself. Rejecting the identity of being a ‘tech person’ enabled shelter staff members to avoid critically reflecting on how ICT benefitted them according to similar rationales (e.g. efficiency, effectiveness) that had been used to minimise other communities in the past.
The use of the phrase “I’m not a tech person” may also relate to the critical feminist perspectives on work and technology reviewed in Chapter Two. The staff members knew how to use the ICTs required in their work, therefore in describing a ‘tech person’ they were referring to knowledge about how technology worked at the internal or infrastructural levels. This knowledge was seen as a condition for having a valid opinion about technology in general, and because they simply knew how to use the technology, rather than understand its internal logic, they felt they had nothing valid to say. The experiences of a ‘user’ did not appear to be a valid source of knowledge from their perspectives. Although existing social work research has discussed the potential impacts of staff members' technological literacy skills in social service organisations, little was mentioned about technical knowledge, or how control of technical knowledge impacts organisations. While technological literacy refers to an individuals’ ability to use a particular technology’s interface, technical knowledge refers to understanding the logistical workings, or internal logic, of the technology (Orlikowski & Barley, 2001). Much of the previous literature focused on the importance of technological literacy in daily work flow, however this did not account for the in-depth knowledge of the systems required to ensure the technology ran smoothly and could be repaired when necessary (Graham & Thrift, 2007). It is not surprising that staff in both shelters were unable to troubleshoot these issues, as technical knowledge comprises a different skill set than direct service delivery. Nevertheless, this lack of technical knowledge shifted power dynamics in the organisation because it increased the shelters’ reliance on IT consultants with technical knowledge to maintain or repair the systems they used to complete their work. Staff members also minimised their own knowledge and experiences using
technology because they didn’t believe the user experience was another valid way of knowing about technology.

According to the feminist epistemology used in the shelters, individuals learn in multiple ways. While scientific and technological epistemology prioritises knowledge creation through rational inquiry, critical feminism epistemology includes other forms, such as through lived experiences. This can further be described as the 'multiple ways of knowing' epistemology. It has been used in many fields of practice, such as nursing (Carper, 1978; Jasper, 2003), social work (Klein & Bloom, 1995), and Aboriginal scholarship (Dumbrill & Green, 2008). A ‘multiple ways of knowing’ epistemology argues that knowledge can be developed through various experiences and processes, not simply empirically. The 'multiple ways of knowing' epistemology does not discredit the contributions of science and technology, and the positivist epistemology that informs it, but instead argues that empirical knowledge is best used in combination with other forms of knowledge, which are equally important and valid. It is a form of anti-oppressive practice because it highlights the importance of incorporating service user knowledge and lived experience about social issues and oppressions into practice rather than only relying on research. The shelters used this approach with service users to validate their experiences of violence, including situations where they may not have been able to ‘prove’ their lived experiences through scientific means. These epistemologies do not need to be positioned as mutually exclusive, but they do prioritise different ways of knowing and valuing knowledge.

Yet, the staff members did not validate their own lived experiences as technology users in the same manner that they applied the ‘multiple ways of
knowing’ epistemology to their feminist practice. Anytime I spoke to a staff member who made this statement, they eventually expressed many ideas and opinions to me that indicated they did have a perspective formed by their experiences as a user of technology. However, I felt that by using the phrase “I’m not a tech person” as a preface to our conversations, they were apologising for their limited technical knowledge, and were giving me permission to disregard our conversations about technology use.

Social work, along with other 'caring professions', still remains a highly female-dominated profession, whereas creative, technical fields, such as engineering and software development, are heavily male-dominated (Paechter, 1998). Feminist theory asserts that this labour distinction has developed based on the perceived inferiority of women in technical matters – an assumption that has historically been used to exclude women and girls from these processes – and the perceived disinterest of men to be involved in caring or domestic matters – an assumption which has led to normalised expectations of men as well. Based on a ‘natural’ inability to understand masculinised, technical knowledge, women and girls were excluded from technical studies in the education system thereby perpetuating this cycle of exclusion (Paechter, 1998). Ironically, the exclusion of women from technical knowledge has been established through the use of 'biological facts' about males and females that rely on positivist knowledge claiming a naturally occurring gender binary that does not reflect current feminist perspectives on gender identity. Yet, as Light (2013) discusses, women have been involved in technological development throughout history; therefore, it is not that women have not been involved in technological
development in the past, but that their contributions to these processes have been
minimised or made invisible in the public record.

Gender imbalances in the technology sector of developed countries are most
often discussed in relation to design and engineering positions. Efforts are directed
towards increasing the number of women in these types of positions in order to
address this imbalance. Yet, men are not similarly encouraged to pursue jobs in
social service fields that are highly feminised. While social work programs actively
seek male recruits in order to address the gender imbalance in this profession as well,
the importance of including males in 'caring work' spaces has not received the same
level of public outcry or funding support for active recruitment, compared to females
in the science, technology, engineering and math fields. The focus on increasing
women’s access to technical knowledge is likely due to the fact that masculinised
technical skills provide access to significantly more social capital than feminised
'caring work' skills.

Additionally, while the gender imbalance amongst technical professions
remains an issue in developed countries, at the global scale, research suggests that
women disproportionally hold jobs in different phases of technological development.
According to Rosser (2005),

the technology workforce represents a vertically and horizontally gender-
stratified labor market, with women concentrated in the lowest-paid
positions, closest to the most tedious, hands-on making of the products
and furthest from the creative design of technology. Most women
working in the IT industry engage in the tedious, eye-straining work of
electronic assembly. Men predominate in the decision-making, creative
design sectors as venture capitalists, computer scientists, and engineers
producing startups, new software, and hardware design (p. 2).
Multinational corporations use the resources and labour of developing countries to produce and manufacture new technologies, creating racialised and gendered stratifications of labour whereby women hold the least valued positions throughout the entire process. This perspective highlights again the importance of conceptualising the relationship between technological development and society as an on-going, global process rather than static, or ‘black boxed’ at the point of implementation. It also highlights that women have been socialised to believe they cannot understand the internal logics of technology, yet they have contributed in the past, and are currently over-represented in the manufacturing processes that lead to their creation. These critical feminist perspectives raise serious questions about the use of the phrase “I’m not a tech person” that I believe warrant further examination in future research.

In summary, I have explored the discrepancies between the observational, documentary, and interview data gathered in both field sites interrogating two phrases repeated by staff: technological work is not ‘real’ shelter work, and “I’m not a tech person.” I have used STS, postcolonial and feminist theories to assert several possible explanations for the discrepancies. First, I drew attention to the fact that staff conflated technological values with neoliberal values in their work, which made it difficult for them to evaluation technology use in any way other than how it related to their neoliberal priorities. Because staff felt accountability and efficiency were important, they assumed the technology would help them achieve these goals regardless of the values embedded within the particular ICTs they used. This was refuted using STS theories on the values and political qualities of technology. Secondly, I discussed the relationship between gender, technology and labour using
feminist theories. I asserted that shelter staff separated technological work from ‘real’ shelter work with service users as a form of resistance to the broader social shift towards automation of feminised labour. By minimising their own use of technology, shelter staff conceptually separated themselves from the ethical issues surrounding this shift.

I examined the notion that shelter staff members were not ‘tech people’ by interrogating the historical and gendered nature of technology using postcolonial and feminist theories. First, I argued shelter staff members used this phrase to distance themselves from the historical associations between technological development, power and colonialism that resulted in the oppression and domination at local and global scales. I then expanded this analysis using feminist theory, exploring internalised gender expectations about technical knowledge, and the higher social value placed on technical knowledge that denies the feminist values guiding their ‘multiple ways of knowing’ approach. I argue the shelter staff members may not have felt they were ‘tech people,’ but they also had strategic reasons why they did not want to be identified as a ‘tech person’ because of what this represented to them from a critical standpoint.

These findings are problematic, simply because at the same time the staff members rejected the embeddedness of ICT use in their work, and produced documents that rendered this embeddedness invisible, they used technology daily, identified the many benefits it provided to them, and suggested new ways of integrating technology into shelter operations. Given these findings, it was clear that ICTs had impacted the shelter operations internally, and it cannot continue to be seen
as a neutral entity or an external concern. Further research on social work, gender and technology is necessary to explore some of these themes more broadly.

6.5 Implications for Shelter Policy and Practice

Identifying the discrepancies between observational, documentary and conversational data has enabled me to suggest one implication in particular for the shelters. While the shelters paid significant attention to the physical environment and aesthetic of the residences, and the tools they used to conceptualise VAW and service delivery, such as the ‘Power and Control Wheel’ (Domestic Abuse Intervention Project, n.d.), and the ‘Cycle of Violence’ (Domestic Violence Solutions for Santa Barbara County, n.d.), they did not reflect on how different kinds of materials being used to enable in the work impacted the work itself. Therefore, I recommend the shelters develop a concept of the materiality of shelter work, encompassing, but not limited to the ICT issues raised in Chapter Five. This recommendation relates to the literature review recommendation in Chapter Two to develop further knowledge about the artefacts used to enable service delivery, and the sociomateriality framework.

In shelter work, material objects embody how the shelters decided to achieve organisational goals. Despite the fact that the shelter staff members did not always feel technological work reflected the reality of ‘real’ shelter work, these materials were the visible artefacts and archives of the shelters’ work and practice approaches. For example, the electronic records become artefacts through which the stories of shelter residents, and the services provided to them, are remembered or referenced in the future. Rejecting technological work may have also been a way to acknowledge the reality of their work environment, often chaotic and fast-paced, but which would
appear simplified and neatly categorised in the database. However, the shelters did not consider how these material qualities impacted their work.

This timeless quality may be why individuals find electronic records useful for some ends, but paper records useful for others. According to Komito (1998), the material qualities of paper and electronic documents are different and neither can fully replace the other. The records are, therefore, more than just the information held within them; their material qualities also convey different meanings. For example, Komito (1998) described how the staff believed the ability to hold the paper file conveyed ownership of a case in a way the ubiquitous electronic files could not. Physically handling the paper file also enabled the civil service staff to compile and organise the information in different ways compared to the electronic copy, and assisted them in making decisions in ways the electronic files could not.

Service organisations are not the only professional and/or organisational contexts where materiality has been ignored. Hine's (2007) case study of genomic laboratories suggested similar findings. Yet, despite the lack of attention to materiality in terms of technology, the importance of the material qualities of practice tools is not completely foreign; a similar argument has been used in specific practice settings involving creative therapies. For example, arts-based research and practice implicitly draw on critical epistemology and materiality theory, arguing that the process of creating materials can have positive impacts for the service user because service users embed meaning as they create material objects. For example, photography has been used as a visual method to create knowledge about community and social issues based on the principle that “community people ought to participate in creating and defining the images that shape healthful public policy” (Wang, 2006,
In Ontario, it has been used with newcomer youth groups to resist essentialising narratives about the newcomer youth experience, and offer youth the chance to share their ideas (Wang, 2006). This approach recognises that both the process of photography and the actual photographs hold particular meanings for the photographers and the audiences, and the visual nature of the material, which does not require specific literacy skills, is why this method has been successful. These principles demonstrate an implicit attention to materiality in practice in an arts-based context that could help expand the concept of materiality to organisational practices, including ICT use. In order to better understand the relationship between shelter work and technology, the shelters will need to address the discrepancies between their practices, documents and beliefs. Only by recognising how material choices impact their practice, including ICTs, will they be able to fully accept and manage these issues proactively.

6.6 Conclusion

In this chapter, I have examined the question “How did ICTs impact the VAW shelters internally?” I presented findings from the observational, documentary and interview data; these sources suggested different answers to the research question. First, the observational data showed that ICT use was highly embedded into shelter work, as staff had developed norms for its use, and relationships with their IT consultants. It had even resulted in an exception to organisational policy to allow a male in the shelter without proper notice to residents. Conversely, the documentary data suggested that ICTs were not important factors in shelter operations. The urban shelter documents largely ignored any mention of ICT issues, while the rural shelter mentioned ICTs more frequently, but in vague, general terms.
Both shelters focused on the feminist origins and practice models of direct service delivery while rendering ICT use largely invisible. Finally, interviews with shelter staff members suggested a more complex, contradictory narrative. Shelter staff recognised the benefits of ICTs to their administrative goals, such as accountability and efficiency, but also felt they spent too much time working at their computers. They frequently told me this work was not ‘real’ shelter work, and they were not ‘tech people.’

I interrogated the discrepancies in the data by focusing on these two statements. I analysed the belief that technological work was not ‘real’ shelter work using STS and feminist perspectives, highlighting the conflation between technological values and neoliberal values in practice, and the gendered context of shelter work and automation. I then analysed the belief that they were not ‘tech people’ using postcolonial and feminist perspectives. These analyses suggested that shelter staff members did not want to associate themselves with technology because of the negative historical connotations between technology and power, and the devaluing of feminised ways of knowing in the broader positivist paradigm driving technological development. Therefore, shelter staff conceptually separated themselves from the technological aspects of their work, and their experiences as users of technology, to avoid acknowledging this embeddedness and the organisational reliance on technology that had developed over time. In response, I recommended the shelters develop a sense of materiality in their work to highlight how materials, including but not limited to ICTs, impact how their values and practices are enacted every day. This concept has not been explored in social work more generally, and may be relevant to other practice settings as well. Incorporating
critical perspectives on technology, work and gender into shelter policy and practices, and social work more generally, could help prevent simplistic and binary practice recommendations that frame workers as the barriers to successful ICT implementation. I now continue with the final analysis chapter, exploring ICTs in relation to service delivery in the shelters.
Chapter Seven: How did ICTs impact service delivery in the VAW shelters?

In the final analysis chapter, I turn my attention to the third research question: how ICTs impacted service delivery in the shelters. As I did not speak to service users, this analysis explores these changes from the perspectives of the shelter staff members only. I focus on the concept of boundaries, which arose in three different ways in the shelters: shelter staff members’ experiences negotiating boundaries with service users, boundaries with the shelters themselves, and boundaries with perpetrators of violence. First, shelter staff members wanted to maintain separation between their personal and professional lives but mobile technologies and social media made them more accessible and previously concrete boundaries became more fluid, unstable and unpredictable. Service users were able to access and communicate with them more easily and frequently. For some staff members, this was an acceptable compromise in light of the benefits provided by mobile ICTs; for others it was not.

Secondly, staff members said mobile technologies and social media impacted their working relationships with the shelters. They felt they were expected to engage with the shelters through their personal accounts to show their support but were resistant to doing so because they wanted separation from their work and home lives. Thirdly, shelter staff members stated that perpetrators increasingly used various forms of ICTs to communicate with service users and it had become increasingly difficult to help service users manage these boundaries. The new forms of communication and surveillance enabled by ICTs also created new considerations for how the shelters ensured the safety and security of residents.
I analyse these boundaries issues using two different frameworks: first, I discuss the changing context of communication and boundaries in shelter service delivery in relation the concept of the ‘network society.’ I then explore how this way of conceptualising the changing context of communication relates to existing social work research on ‘mobilities.’ Existing ‘mobilities’ research suggests that because service delivery has developed into a highly mobile practice in many other ways, such as through the increased use of automobiles for off-site working, new forms of mobile communication are simply an extension of this type of working arrangement. I then discuss the changing nature of communication and boundaries in relation to new forms of mobile communication using the concept of ‘context collapse,’ and the inherent characteristics of mobile communication. I describe why the increased use of mobile communication had led to blurred personal, professional and private distinctions, which accounted for the new tensions faced by shelter staff. I also discuss cyber-feminist theory, which supports the growing diversity of service users’ lived experiences of violence mediated through online and mobile communication. This analysis highlights that the boundary issues faced in the shelters reflect broader social changes, and need to be considered at an organisational, rather than individual level.

Finally, I discuss the implications of these findings for the shelters. While staff members told me boundary issues were important, not all staff members had expanded their knowledge to include an understanding of how technology influenced these changes. I assert that negotiating the changing nature of boundaries, in relation to service users, the organisation, and perpetrators, was a growing competency need in order to understand service user experiences and maintain a safe and secure shelter.
environment. Therefore, theories on the changing nature of communication and relationship development enabled by ICTs needed to be integrated more formally in the shelters. One of the key considerations in these boundary issues relates to ‘presence’ in service delivery. Shelter staff members were more familiar with common issues and strategies for managing boundaries in the physical world, but mobile technologies had increased the need to develop strategies to negotiate different types of ‘presence’ that had not been formally integrated into the shelters policies and practices. In doing so, shelter staff members may feel more comfortable negotiating boundaries with various groups in service delivery.

7.1 Boundaries with Service Users

The ability to establish and maintain boundaries with service users was a critical part of shelter service delivery and policy. I discussed the physical boundaries of the shelters in Chapter Five, in relation to shelter services provided in the community and how laptops were used to complete tasks off-site, but conceptual boundary issues also arose related to managing relationships with service users. Building a relationship with the service user was described as one of the most important aspects of shelter work; staff felt creating trust individually was integral to creating safe space within the shelters, and was seen as a proxy for professional behaviour more generally.

In the urban shelter, boundaries were addressed in the ‘Professional Standards Policy:’

“The Professional Standards Policy frames professionalism in relation to boundaries with service users: ‘all staff and volunteers will regard the well-being of the women and children served as their primary professional obligation,’ ‘contacts with clients and members of the public
will be carried out in a professional manner, ‘relationships are between
[the shelter] and the clients. They are not personal relationships,’ ‘staff
will not make personal calls or visits to the clients. All contact between
staff or volunteers and clients is to be through the shelters.’ Although the
policy does not mention newer forms of communication, such as social
media, it is implied they are included in these expectations.’”
Document analysis, Urban shelter Professional Standards Policy

The rural shelter has a specific ‘Technological Communication’ Policy:

“[The rural shelter] policy acknowledges that technological
communication can be used effectively to provide or facilitate the
provision of services. This acknowledgement is couched on the
assumption that staff will ‘use both the Internet and email for work
purposes in a professional manner, with a particular focus on the
confidentiality and safety of the clients and staff.’”
Document analysis, Rural shelter ‘Technological Communication’ Policy

Many staff described technological communication as ‘impersonal’ compared
to the face-to-face methods they normally employed and stated they felt it was more
difficult to build a relationship with a service user because so much communication
and meaning in their interactions was non-verbal. At the rural shelter, one of the
children’s therapeutic counsellors said that “at some point you do need that ear-to-
ear, eye-to-eye connection.” This counsellor was also responsible for running an
evidence-based programme with school-aged children designed to build empathy and
healthy relationship skills, by following the relationship development between a new
parent and a new-born baby in their community.

Despite the ambivalence about these new ways of communicating, the staff
also believed they had an ethical duty to explore these options if they were preferred
by the service users, or particularly in rural and remote areas, they were the only
ways women could access services. In contrast with other service settings, such as
therapeutic day programmes or community supports, the urban shelter practice model
was largely based on the assumption that the service user was physically present in
the shelter in order to receive services. However, this was not true for the rural shelter because it also served women and children in the community who were not residing in the shelter. Although neither shelter was pursuing tele- or e-service methods, these service delivery methods are becoming increasingly common; in these instances, practitioners and service users are more likely to be geographically separated in service delivery (Youn, 2007).

ICTs had, therefore, created new considerations about how to manage and share personal information with service users. Boundary issues involving service users were most commonly discussed in relation to mobile phones, texting, and social media use. Mobile phones created different issues for staff in managing their work tasks and communication compared to computers or landline phones, and while they enabled staff to communicate in many new ways, texting appeared to be one of the most complex issues related to maintaining appropriate boundaries in service delivery. Based on the type of work they did and the service user groups they worked with, staff members had diverse opinions on whether and how to use this method of communication. One of the most common ways staff evaluated the usefulness of texting was by discussing whether it was a 'professional' form of communication and if they were able to maintain appropriate working relationships with service users. They tried to gauge this from both the perspectives of service users and the established norms in the broader service delivery community.

As with laptops, the urban shelter did not provide staff with mobile phones, except for the Executive Director. Although it only happened rarely, if a staff member needed to work in the community they would use their personal mobile phone to communicate with the organisation and receive messages. Using personal
devices for work purposes appeared to be accepted normal behaviour. In contrast, the opposite expectation existed in relation to service users; staff members were not allowed to communicate with service users using personal numbers as this was seen as inappropriate and unnecessary given there were always staff members available to help residents in the shelter. If a specific staff member was needed when they were not at work, they would be contacted directly by the organisation, not the service user. The lack of work phones provided by the organisation did not appear to be an issue amongst the staff; staff felt the convenience of using their own mobile phones compared to a work phone was an acceptable compromise since this happened so infrequently.

Although the staff members did not use mobile phones very often in their work, they still had to navigate service user relationships while withholding personal information. In my conversations with staff members, they stated service users often asked for their personal phone numbers when they were transitioning out of the shelter in order to stay in touch. For many service users, the shelter staff members were the strongest support systems they had in place during this time of crisis and transition. According to the staff members, the service users felt on-going communication with the staff after they had left the shelter would provide support through on-going challenges and successes as they moved to independence. However, the staff said the biggest challenge specifically related to texting at the urban shelter was confidentiality. In conversation with a group of residential counsellors at the urban shelter, they agreed you must always “watch what you text” regarding any work-related issue. This attitude was based on the fear that text communication could be forwarded and used out of context by service users or other
staff. Staff told me they felt there were not enough benefits to outweigh the risks associated with this lack of control. The Executive Director also agreed with these sentiments and felt texting was not necessary so staff were discouraged from using this method. Instead, the staff members encouraged the women to maintain contact with the organisation overall, although they understood why some women wanted to establish a more personal connection in this manner.

The rural shelter took a different approach to mobile phone use as for some staff much more of their daily work occurred off-site. All staff members were required, as stated in the organisational policy, to carry a mobile phone when working off-site, although staff members were not required to take calls while driving\(^5\). Permanent work phones were provided to staff members who frequently worked out of the office. This included the Executive Director; the children's therapeutic counsellors; the youth outreach team; the housing support worker, and the legal advocates. With the exception of the Executive Director, who used a Blackberry smart phone, these phones provided basic call and text functions, not mobile data or ‘app’ capability.

Similarly to laptops, mobile phones were also available to staff members to sign out on an as-needed basis if they did not normally work outside the office. Again, these phones had basic calling and texting functionality; according to the Executive Director and the organisational policy, they were provided for safety purposes rather than to enable mobile work. With the exception of the Executive Director, neither staff members who were provided a work phone nor those who

\(^5\) Using a mobile phone while driving is illegal in Ontario, unless it is used with a ‘hands-free’ device such as a Bluetooth headset; however, staff was not expected to use a hands-free device to take work calls, even though it was legal.
were not were expected to be available or accessible outside of work hours.

According to staff members, one of the benefits of having a permanent work mobile phone was being able to give out the number to service users and communicate with them directly without having to provide their personal contact information. Although signing out a temporary phone enabled this to a certain degree, most staff members told me that it did not provide the same level of convenience because they were not assigned the same phone each time they left the office. They felt it was confusing for service users to keep track of different numbers. This was a great enough inconvenience to some staff members that they chose to use their personal mobile phones while out of the office, although this created other logistical issues because their personal contact information could not be given to the service users. For instance, the therapeutic counsellors were not provided with mobile phones and had to sign out phones on days when they travelled to the satellite locations. When one of the counsellors travelled to satellite #1, she felt that contacting the clients each week to inform them of her number was unnecessary and chose to take her personal mobile phone with her instead. This meant that clients had to call the main shelter to leave a message about cancelling or changing their appointments with the intake counsellor. The intake counsellor then relayed these messages to the therapeutic counsellor by contacting her on her personal cell phone. This process was easier for the therapeutic counsellor but created more work for the intake counsellor.

Texting appeared to be most widely used by staff working with women and youth on a scheduled basis, such as the housing support worker and the legal advocates, compared to staff who were available in person, such as the residential
counsellors, or staff who worked in the community, such as the outreach teams. In my conversations with the housing and legal advocates, they described texting as a convenient way to keep in touch with clients while working in the community; it enabled them to manage appointments and deal with issues quickly. They also stated that texting was an important form of communication for service users and being able to text was crucial to maintaining open communication and positive relationships with them. The housing support worker at the rural shelter went so far as to say: “if you don't have text, you can't communicate.”

The Executive Director also held these beliefs:

“The Executive Director] : ‘five years ago we would have never considered using text messaging with clients. Now, if you don’t have text, you can’t communicate.’ All the staff have mobile phones and soon there will be wireless internet in the shelter. ‘We like to be ahead of things here. Things are changing.’”

Interview notes, Day 6 at the rural shelter

Several staff members described specific benefits of texting compared to calling. They told me that verbal communication via telephone was susceptible to being overheard by the abuser, the service user's children, or third parties, which may prevent women from disclosing sensitive information over the phone. Text enabled women to communicate with more immediate discretion if needed. They recognised that this created other confidentiality issues, as text messages were also susceptible to being discovered and read at a later date, but they felt having this option was beneficial for service users depending on the context of the situation. The rural shelter's organisational policy stated that staff must adhere to the same confidentiality guidelines when texting with service users as other forms of communication, but service users also needed strategies to maintain confidentiality.
themselves as this was linked to their overall safety and security.

Not all staff members were comfortable with the idea of texting service users and some had negative opinions about the professionalism of text messaging. One of the therapeutic counsellors stated to me that although she preferred to communicate via email or text in her personal life, she preferred to call clients using her work phone because texting seemed unprofessional, even when she had been seeing the service user regularly and felt they had established a positive relationship. She also believed that service users were less likely to cancel their appointments when they had to call her rather than having the option to send a text message, which might encourage them to come to appointments more regularly. Ironically though, she avoided calling organisations and services in her personal life and had booked a dentist appointment by email that day rather than calling because it was more convenient for her.

Despite differing opinions on the professionalism of texting, it was permitted in the organisational policy, with the stipulation that all text messages would “be typed out by the staff person who receives them and then placed in the client file following the same process as any other form of communication.” However, based on the client files I viewed in the database, staff did not appear to follow this directive nor did there appear to be any enforcement of this policy by management.

One of the challenges for the rural shelter, which was not apparent in the urban shelter, was the lack of consistent network infrastructure throughout the region it served. Even with a mobile phone, staff members working out in the community did not necessarily have adequate network service to be reached. A number of mobile phone providers operated in the area although each had different low- or no-service
zones in the shelter’s stated service area and, therefore, each presented a similar problem of unreliable service.

The Executive Director at the rural shelter told me that giving staff express permission in organisational policy to text message with service users was a way of demonstrating they understood the diversity of women's communication needs, as some women only purchased texting plans without calling minutes because they were less expensive and more reliable. If staff were not able to reach a service user by calling, she felt they needed to be flexible to the fact that she may only be able to respond later via text. According to the Executive Director of the rural shelter, “five years ago we never would have considered text messaging a woman,” but she acknowledged it had become a common practice and was enthusiastic about the opportunities it presented in connecting with rural populations who may have faced barriers to accessing services.

In Chapter Five, I discussed organisational issues related to social media use; however, the staff also discussed the challenges of maintaining professional relationships with service users from their personal accounts. At both shelters, most staff members had a personal Facebook account, although personal Twitter accounts or accounts on other networks were less common; therefore, I focus on specific issues related to Facebook as the staff members spoke about it most frequently.

One of the most widely discussed issues was the lack of clear boundaries between personal and professional content online. All the staff members I spoke with at both shelters had created Facebook profiles for personal reasons, not professional ones; the content they posted on these profiles related to their personal lives and was intended for that audience. They told me that service users would search for their
personal profiles on Facebook and try to establish friendships. Even without being accepted, making a friend request might give the service user access to personal information and content, not only about the staff member, but also about their children, significant others, family or other social circles. Although the staff stated they rejected ‘friend’ invitations from service users, discussing why with them at a later date, they were concerned with Facebook’s continuously changing privacy and security policies which could potentially make personal information visible and allow service users to ‘follow’ their profile without needing approval.

Some staff members told me they were also worried that clients could inadvertently communicate sensitive information to them via Facebook, which would not be confidential or secure, or they might inadvertently discover personal information about service users. This presented emotional and ethical challenges for them in a professional capacity – they might learn that a service user had left out certain information about her situation which impacted her eligibility for certain programmes and services, or they might discover a service user had returned to an abusive partner with her children. It was unclear to staff if they should acknowledge this information in service delivery unless the service user informed them personally. One method of avoiding these personal boundary issues was to suggest the service user follow the organisational account instead, although this did not fully address the confidentiality or disclosure issues. Staff members said this strategy also did not stop the service users from wanting to connect with individual staff members through their personal accounts as well.

The staff working with children and youth at the rural shelter cited additional conflicts regarding social media use. One staff member working with children in
schools stated she felt pressure to set clear boundaries and maintain high privacy settings, but she also empathised with children’s changing communication preferences. She said:

> It is hard to understand how they manage their relationships. For us it seems normal to do things face-to-face but for them online is ok. Breaking up or saying negative things should be done in person, but they don't think there is anything wrong with doing it online.

She also said she felt pressure to be vigilant about online boundaries because she felt the children knew more about social media than she did and might know how to access information in different ways she was not aware of. The issue of establishing social media boundaries with service users appeared to be a similar problem faced by staff in both the urban and rural shelters, possibly because regardless of geographic location a service user could locate their personal profiles online.

Both shelters had policies that clearly established the rules staff members, board members, and volunteers were required to follow regarding appropriate boundaries with service users in a broader sense. However, while the urban shelter’s professional standards did not specifically mention social media use and its impact on boundary disruptions, it did state: “All contact between staff or volunteers and clients is to be through the shelters.” The rural policy did have a small section titled *Use of technology when not at work* which simply stated: “[s]taff and volunteers are encouraged to think carefully about possible safety, confidentiality and other implications of their technological communication equipment, programs and websites such as, but not limited to, Facebook, Youtube and blogs.”

In summary, the two shelters had different views about whether using mobile
devices or texting was appropriate for the types of shelter services they provided, and how mobile phones and texting related to professional boundaries with service users. At the urban shelter, staff used their personal phones when communicating with the organisation when necessary, but calling or texting residents was seen as inappropriate and as far as I could tell did not happen during fieldwork. At the rural shelter, staff members were expected to use mobile phones when necessary and were supported to use texting to communicate when they felt it was appropriate and relevant to the service user’s needs. Each staff member incorporated mobile phone use and texting into her daily work with service users and the organisation at her own discretion, as long as this communication was via a work device, rather than a personal device. Neither shelter encouraged staff to communicate with service users via social media, as these platforms were not seen as appropriate for professional communication.

7.2 Boundaries with the Shelters

In addition to the complications related to social media boundaries with service users, staff told me it was challenging to manage their personal and work identities online. At both shelters, although to a greater extent at the urban shelter, management encouraged direct service staff to ‘friend’ and ‘follow’ the organisation on Facebook and Twitter from their personal accounts and share, like, or ‘tweet’ with them. Management said this would help the shelters build their social networks, but many of the staff members told me they did not want to engage with the organisation online. Although they clearly supported the shelters’ values and activities, showing support online was not straightforward. Staff said they felt pressure to befriend the shelter online and engage in discussions and online activities, but were reluctant
because they only used social media during their personal time, either when they were on their breaks or not working. It was exactly because they used social media in their personal time that they didn't want to create an on-going connection to their employer.

“They serve so many different areas – two municipalities, public transportation issues. Service users have to go to [nearby cities] to access sexual assault centres. Two First Nations reserves nearby. ‘There are so many different issues... so much going on,’ according to [an outreach educator]. Sometimes you don't want to go home and look at work. ‘Sometimes you just want to disengage.’”

Interview notes, Day 3 at the rural shelter

The staff members felt following or friend-ing did not help them maintain healthy boundaries with their employers. As one of the youth outreach team members at the rural shelters stated: “we want our separation, you don't want to like everything or follow everything.” A member of the accounting department at the rural shelter also told me she believed “Facebook is not meant for people that see each other everyday” and she didn't see the reason for connecting to the organisation online because it was the same content she encountered at work. It was not just the direct service staff members who were hesitant to engage with work via social media in their personal lives; the Executive Director also stated:

“‘I've been hesitant to go online myself. Suddenly everyone wants to talk to you. You get sucked into the vortex,’ according to [the Executive Director].”

Interview notes, Day 28 at the urban shelter

Despite not wanting to connect their personal social media profiles to their work profiles, many staff members did say they had, at some point, used social media to engage in social justice advocacy. A residential counsellor at the urban shelter stated to me the shelter staff often signed petitions online. Therefore, it
appeared that shelter staff members were not necessarily uninterested in using social media to follow issues that were important to them, but they were reluctant to connect with the shelters because they were, first and foremost, their places of employment, which created different dynamics than simply showing support for the VAW issue, or the shelter system, itself.

7.3 Boundaries with Perpetrators

According to staff at both shelters, new forms of communication enabled by technology have changed the nature of violence faced by service users. As I previously discussed, the shelters viewed violence as more than physical; their understandings included emotional and financial forms as well; and instances where technology mediated these different forms of violence appeared to be increasing. The staff explained that, prior to accessing shelter services, many service users had experienced complex forms of violence involving technology. For example, a residential counsellor in the rural shelters estimated that challenges associated with Facebook use and perpetrators were brought to her attention in 50% of her meetings with service users.

One of the most common concerns was the abuser’s ability to track the service user and/or her children without her knowledge, including to the shelters. GPS technology enabled physical tracking so that their whereabouts could always be known, which made it more difficult for women to approach the shelters even for outreach services, for fear of being tracked and facing adverse consequences at home.

“Social media has come up many times as an issue in safety planning. [A residential counsellor] says ‘everyone has it’ but police don’t take these forms of harassment seriously. ‘It doesn’t matter how much money you
Staff also described that service users felt frustrated that they always had to consider the possibility that their online habits could be tracked. This included browser history, email content and social media use. Even using password protection was not considered adequate as many service users told the staff they were forced to share passwords with abusers so their activity could be monitored. The shelters tried to address some of these concerns by adding targeted features to their websites. For example, they added an ‘escape’ button on the homepage that enabled viewers to quickly navigate away from the shelter page; however, this did not address concerns about browser history tracking and third-party applications that could capture this information as well.

Even if the service user had not experienced forms of violence involving technology prior to entering the shelter, staff members felt these issues were still relevant because abusers were still able to find information about the service user and her children, and communicate with them, more easily using technology. Although coming to the shelter removed the service user and children from the violent situation, having to deal with on-going communication from the abuser while trying to establish independence was an emotional challenge. Counsellors at both shelters described similar challenges faced by the service users during this time, including viewing harmful Facebook status updates or tweets about the woman and/or her children posted by the abuser, being blackmailed over compromising information released online, or having her location and/or situation exposed to her family, community or employer. Staff also stated that service users not only faced challenges
related to the abuser, but also from other members of their families and communities. Although the staff were quick to state that mobile devices were beneficial because they enabled service users to stay in contact with their support networks, they also had to manage unwanted communication from family members who did not agree with their decision to leave the relationship or home, particularly if they had children, or if the family viewed violence in the home as a private matter. Even simply viewing negative comments posted by other members of her community or her family on social media, through text message or by email, was seen as a stressful reality for service users who were already in stressful situations.

According to a counsellor in the rural shelter who had worked at the organisation for more than 10 years, new forms of technology had always required new harm reduction practices. For example, when caller ID became available for household phones, the shelter began blocking their phone number and told callers to dial another number after calling the shelter to prevent the use of the ‘re-dial’ function. Yet, the counsellor also recalled several times when the shelter’s blocked ID function had not worked and the organisation’s name had shown up when calling a service user.

However, it was particularly difficult for the staff members to develop strategies to manage mobile forms of communication because women and children often brought their own devices into the shelter:

“Residents bring their own IT with them into the shelter now. ‘Are we liable when women use their own electronics in our space?’ says [a residential counsellor]. ‘Kids have iPhones and know how to use them. But what about pictures, privacy settings and backups on Dropbox?’ There seems to be many more questions surrounding these issues than answers.”

Transcriptive notes, Day 19 at the urban shelter
In the past, the rural shelter had provided residents with mobile phones with call and texting functionality when they had to leave the shelter for safety reasons, but residents had started to bring their own devices that had many different capabilities, such as GPS, photos, videos and other applications. In addition to communicating with women, shelter staff described new ways abusers were communicating with children, both their own children and other children the woman may have from previous relationships. Although in the past the shelter staff had helped service users monitor and control children’s access to the abuser and communication with the abuser, they felt this was becoming increasingly difficult. According to one of the child therapists at the rural shelter, most older elementary school children she worked with had their own mobile phones, and it was difficult for service providers to help women minimise inappropriate communication with their children because the child could be reached instantaneously and without the staff or service user’s knowledge. The child counsellors did say to me that mobile devices were beneficial for children because they could call for help more easily, but also felt they helped abusers put children in the middle of issues more often. Although only the rural shelter offered specific services for children, staff at both shelters voiced similar concerns about the issues facing children and also appeared to be conflicted about whether this was an acceptable compromise.

While both shelters debated whether to provide wireless internet access, I was not privy to any conversations about limiting the use of mobile devices in the shelters entirely. Instead, residential staff members at both shelters were more interested in learning how to mitigate the identified risks. The ability to understand the changing
capabilities of mobile devices and foresee potential issues appeared to a constant issue for the residential staff primarily in relation to service user behaviours, despite the fact that, as I described above, most staff members had either work or personal mobile phones with them in the shelter as well. I did not witness any discussion about how to manage the risks of mobile phone use by staff despite the fact that many staff had admitted to me that they did not understand the devices very well. It seemed to me that staff were placing very high expectations on themselves to understand how to manage mobile devices despite the fact that they had no training or specific knowledge of best practices about these issues, nor were the shelters pursuing training opportunities on these issues for them.

The urban shelter had not formally incorporated any tools into their practice; however, the rural shelter had a technology version of the ‘Power and Control Wheel’ (National Network to End Domestic Violence, 2008), as mentioned in Chapter Six. This version of the wheel identified some of the practice issues raised by the counsellors – monitoring and stalking through GPS or webcams, intimidation by posting inflammatory comments, and emotional abuse through electronic forms of communication. Issues faced specifically by children were also mentioned. For example, the wheel identified that either parent could monitor a child’s location using a mobile device, but this made it more difficult for service users to keep their own locations confidential when they were with their children in the evenings or on weekends.

These findings are also supported by related government reports in Ontario: “perpetrators of domestic violence are increasingly using a variety of technologies, including telephone, surveillance and the Internet, to harass, terrify, intimidate,
coerce and monitor their victims” (Annual Report of the Domestic Violence Death Review Committee, 2010, p. 34). However, another issue voiced by the staff was the lack of legal guidelines or ramifications for online harassment that made follow-up difficult. Although the rural shelter had informal policies that service users could not post photos or talk on mobile phones in common areas to protect confidentiality, a residential counsellor at the rural shelter stated that “social media is huge and not much can be done… legal hasn’t caught up with what happens,” and police were “unlikely to follow up on online harassment unless it is a serious death threat… not just ‘I’m going to kill you.’” The staff members were not sure what would constitute a more serious threat and also were not able to predict what the police response to such a threat would be. This made it difficult for them to advise service users on the best course of action if they were experiencing technologically-mediated threats or violence.

Although the technology ‘Power and Control Wheel’ (National Network to End Domestic Violence, 2008) identified relevant issues, it did not offer suggestions for how to respond to these challenges. Practical suggestions related to technology use were also not identified in safety planning documents for staff at the rural shelter. The few recommendations that addressed mobile phones referred to having the phone accessible at all times, and keeping the number a secret, rather than addressing newer features related to GPS and mobile applications. For children, the recommendations focused on teaching them how to use a payphone to call for help and how to make a collect call. Although these are important skills, particularly in areas where mobile and/or internet service is not readily available, the inclusion of information about mobile phone use had not been incorporated formally into the
safety planning practice materials; therefore staff were left to develop their own knowledge base about best practices in this area and this was not done in any systematic way.

7.4 The Changing Context of Communication and Boundaries

These findings suggest that shelter staff members had to simultaneously negotiate three different sets of boundaries in light of technological change – with service users, with the shelters, and with perpetrators. In this section, I analyse the changing context of communication and boundaries in service delivery using the concept of ‘network society.’ This concept has been used and adapted in different disciplines to describe how mobile technologies and communication enable different types of information sharing than previously possible. First, I begin with a discussion of the concept of boundaries in social work more generally. The concept of boundaries has received thorough attention in academic social work literature and by governing associations of practice. The OCSW-SSW Code of Ethics (2008) states that registered social workers are expected to

Establish and maintain clear and appropriate boundaries in professional relationships for the protection of clients. Boundary violations include sexual misconduct and other misuse and abuse of the member's power. Non-sexual boundary violations may include emotional, physical, social and financial violations (p.12).

The organisational policies of both shelters mirrored these expectations. However, how technology relates to boundaries and boundary violations is not discussed in the Code of Ethics (OCSW-SSW, 2008).

Boundaries have generally been seen as beneficial to both the service provider and the service user because of the unequal power dynamics in the service relationship between the service users compared to the service provider. While the
service provider has access to a great deal of sensitive information about the service user, this is not reciprocal. Depending on the nature of the service provider’s duties, the service provider may have a significant amount of power within the working relationship and may need to use this information to make complex and life-altering decisions that the service user may not agree with (Blake, 2004). Establishing appropriate boundaries is the service provider's responsibility to ensure they do not mislead or exploit the service user (Reamer, 2003). However, despite the fact that professional training and evaluation bodies teach social work students about the important of maintaining professional boundaries, boundary violations do occur and continue to be a professional concern. The OCSW-SSW frequently prints guidance about boundaries and boundary violations in its newsletter or online. Trimberger (2012) has argued that in addition to professional guidelines about boundaries, social workers also take other factors into account – organisational policy and culture, supervisory relationships, and personal development and past experiences – when making boundary decisions in service delivery, although she does not develop this argument in relation to technology issues.

Recent social work research has reflected specifically on how technologies have impacted the traditional notion of professional boundaries. According to LaMendola (2010), mobile phones are ‘portable communities’ that social workers use to create networks of practice. These networks enable social workers to provide services, communicate about services and survey others despite differences in time and space. Kimball and Kim (2013) discuss social media use by social workers and argue that social workers must consider “virtual boundaries – the limits social workers place to guide their social media use – to create intentional online personas”
(p. 185). They suggest that these boundaries must be considered in many different ways; for example, while boundaries with clients online are often discussed in literature and training, how to maintain appropriate boundaries with colleagues, other professionals and the social work profession are not as clear and these areas require further research.

To further expand on the nature of technological boundaries, I return to the concept of the ‘network society’ I discussed in Chapters One and Two. As mentioned, there are four characteristics of complex systems, which form the basis of the concept of the ‘network society.’ These related to the shelter data in the following ways:

1. Non-linearity: Information, technologies and communication do not develop in a linear fashion. They are governed by non-causal determinism (Warren, Franklin, & Streeter, 1998). When change happens “it is frequently disproportionate and unpredictable” (Ramalingam, Jones, Reba, & Young, 2008), p. 8). Therefore, the fact that shelter staff members found it difficult to manage information online reflects the very nature of the ‘network society;’ the outcome of information sharing and communication between shelter staff, service users, the shelters themselves, and perpetrators cannot be predicted.

2. Multifinality: Networks may originate due to similar circumstances, but will develop in different ways as minor differences between the original networks are amplified (Warren et al., 1998). In the shelters, this may account for why each shelter had different strategies for ICT use, as they built on previous decisions. Although they had similar practice models, they faced different boundary concerns related to their unique contexts, such as rural issues, disclosure of the shelter locations, social media strategies, etc.

3. Self-organisation: Networks organise themselves spontaneously (Hudson, 2000). While the shelter staff members could control their own ICT use, such as the quality of records in the database, or social media use decisions, they were not in control of other staff members, service users.

4. Attractors: Attractors are the patterns found amidst apparent randomness in complex systems. Complex networks settle into meta-patterns around attractors, where change is neither completely randomized nor predictably ordered (Hudson, 2000; Ramalingam et al., 2008). This may account for why, despite different organisational strategies to many issues, they shelter staff members faced similar boundary challenges. The constant tension between
supporting service users and maintaining boundaries may be a consistent attractor in shelter work, including but not limited to ICT issues.

These characteristics suggest that the growing complexity of the ‘network society’ more generally accounted for some of the challenges shelter staff members faced in establishing boundaries with various groups. The ‘network society’ is, by nature, a highly unpredictable and inter-linked system that prioritises connectivity over independence of any particular aspect of the network, such as the shelter or an individual shelter staff member. The lack of privacy in the networked society also reflects intentional design features created to simultaneously entice users to connect and meet their growing desires for greater connectivity with others online (Boyd, 2008). These design choices relied not only on the assumption that users wanted to actively create and share content with their ‘networked public,’ but how users had been using social media thus far to interact with their audiences as well. Without enabling users to create and be part of an audience, social media platforms lose their social value; users have responded positively to this increased connectivity rather than despite of it. This trend has continued, although as mentioned by boyd (2008), concerns about privacy control decisions have been voiced by users when they felt they no longer had enough control over their own settings.

One emerging body of literature that has attempted to address the challenges specific to mobile work is ‘mobilities’ research, as mentioned in Chapter Two. The data suggested that different types of technologies have expanded the ways that people, materials and information flow. This is a research approach worth pursuing further as it relates to the challenges faced by urban shelters staff in managing service user and organisational relationships and the challenges faced by rural shelter
staff more generally in relation to their highly mobile work across vast distances. But, the 'mobilities' framework also suggests that this is not a new phenomenon. Ferguson (2008) highlights that the automobile has also had a significant impact on service delivery mobility. This reflects my argument in Chapter One that previous technological changes have also been transformative for their time.

Although I did not focus on automobiles in relation to shelter services, Ferguson’s (2011) discussion of these forms of technology is also relevant to the rural service delivery model. Just as vehicles revolutionised the time and space where social work could occur, therefore blurring the boundaries of personal and professional space, mobile technologies have enabled new forms of work and lifestyle behaviours in the office, in the community and at home; changes which impact how practitioners manage and define boundaries in time and space. This blurred boundary is not specific to social work; organisational literature highlights how many different sectors have been impacted by mobile technology uptake. The research focus on fluid networks and movement also relates to different bodies of STS literature, which use networks as a starting point for analysis rather than organisations (Beaulieu et al., 2007; Dirksen, Huizing, & Smit, 2010). Further research from a ‘mobilities’ perspective could be a useful approach to the specific challenges posed by characteristics of the ‘network society.’

7.5 The Changing Nature of Communication and Boundaries

The second consideration derived from the findings is the changing nature of communication. This can be analysed by examining how information is accessed and shared. First, as described in the findings, the separation between public and private domains has been blurred. Although speaking specifically to research on Twitter,
Marwick & Boyd (2010) describe this as 'context collapse.' ‘Context collapse’ refers to the way “users address multiple audiences through a single account, conscious of potential overlap” (p. 120), while “strategically concealing information, targeting tweets to different audiences, and attempting to portray both an authentic self and an interesting personality” (p. 122). Although the creator may envision a particular audience for their content, this does not necessarily reflect the reality of how the content will be seen or shared by others. Web content can be edited and shared over multiple platforms, including platforms the shelters were not even using. This loss of control over both the content and the context can be worrisome for organisations whose work is both highly context-specific and, at times, controversial, particularly for those who rely on their positive public image to appeal for donations. (see D’Arcy & Young, 2012).

Cyberfeminism, as mentioned in the literature review, may be relevant to understanding the impact of the ‘context collapse’ in the shelters. The fact that cyberspace failed to live up to the utopian ideal of a non-gender-conforming space relates to the shelter staff’s comments about service user experiences of violence via the internet. Rather than being a safe space where a service user would be disembodied from her gender or physical experiences of violence, the internet has enabled users to connect physical bodies with digital presences with precise accuracy. Not only can users intentionally expose their exact locations, thoughts, friends, employers and/or contact information, others can do this as well, as was discussed in relation to GPS tracking used to stalk and harass victims. Corporate-owned data also enables third parties to gain control over this information and sell it or use it in their own best interests. The conflicting arguments within cyber-
feminism, regarding the oppressive and emancipatory potentials, reflect what the shelter staff shared with me during fieldwork. While they understood that the internet helped service users connect to resources and mobilise around social issues, it also presented new boundary issues because of the mobile nature of the communication. The tensions between these opportunities and challenges warrants further research in social work.

ICTs have also changed the nature of communication itself. boyd (2010) describes the differences between traditional forms of communication and social media communication using four descriptors, many of which are relevant to other forms of digital communication as well: persistence, replicability, scalability and searchability. Digital communication is persistent because the content may be recorded and archived; this is a feature embedded in the medium itself. Even if the user deletes the content later the medium may still have the original communication or a copy elsewhere. This makes it difficult for service users to fully escape threatening or negative communications from the perpetrator because they do not have control over how these communications are forwarded or copied even after they have deleted them from their own or their children’s mobile devices.

The second feature of digital communication discussed by boyd (2010) is replicability. Replicability refers to the fact that the content can be replicated an infinite number of times and retain all the original characteristics of the original. This makes it difficult to determine the original source of the communication or if the content has been tampered with without checking the code itself. Based on the findings, the fact that content could be replicated meant service user information could be either intentionally or unintentionally shared with a wider audience than the
original content was meant for. This feature may put service users at greater risk because due to the exact replicability of the content, it is difficult to determine how the original way sensitive information was shared in order to create preventative strategies for other service users. Creating strategies that reduce the harm of replicability requires an on-going understanding of the sharing capabilities of various devices and social media platforms, which change constantly.

The third characteristic is scalability. Not only can content be easily replicated and shared with multiple audiences, the content can be shared by users outside the original intended audience, across platforms the service user may not use or even be aware of, and with increasingly larger audiences potentially viewing the content. This creates the potential for high visibility even if the original content was created for a specific audience that the service user thought they had control over. The scalability of digital communication essentially means that the perpetrator may always be part of a potential future audience even if the service user believes they have cut off all ties. The communication may scale to the perpetrator if they still have access to the children, the woman’s employer, or other mutual family and friends.

The final characteristic is searchability. Digital content can be located using various search strategies, and given the characteristics previously mentioned, can usually be located in some form regardless of whether steps had been taken to remove the content for all possible locations. Many web applications also perform routine searches for the user in order to provide personalised content. In terms of the VAW, these features would also make it possible for service users to keep or find digital communication to use as proof of threats or harassment compared to spoken
word. In theory this feature should make it easier for women that have experienced violence through digital means to prove these experiences in court, which is currently a challenge as I discussed in Chapter Four. Unfortunately, based on the staff comments from fieldwork, law and policy have not caught up to these changes yet and digital violence is not taken as seriously, despite the fact that it often produces more concrete proof due to its inherent nature. Additionally, as was mentioned by (Dimond et al., 2011), because of these features of digital technology, the ties between service users and perpetrators of violence may never fully be severed.

The persistence of these ties created new challenges and realities for shelter staff. Although leaving a violent partner has carried a strong meaning for service users in the past, with new technologies available “it is not clear that physically leaving severs ties or abuse” (Dimond et al., 2011, p. 417). Ironically, mobile devices have both enabled women to access services regardless of their geographical locations, and intensified the fear of disclosure of their locations after leaving a violent situation. Given that research has demonstrated that the time immediately following leaving a violent situation can be one of the most vulnerable and dangerous times for a woman in the cycle of violence (Annual Report of the Domestic Violence Death Review Committee, 2010), managing these security needs can be challenging. Even when survivors do attempt to protect their information online the prominence of aggregated data, and constantly changing privacy settings, can create inadvertent disclosure of sensitive information even without their knowledge. According to Dimond et al. (2011), designers often assume families are coherent, stable units, and all members wish to be connected online. Unfortunately, social media privacy settings do not offer a level of customisation that might be
needed by survivors of violence to protect their information from specific audiences and remain connected with others. This places VAW survivors in the challenging position of either choosing to use social media and accepting the risks, or opting out of the network entirely, which could reduce a woman’s access to her support system. Ironically, some of the boundary issues faced by the staff in relation to their own personal information related to their understanding of the issues service users faced, although not with the same risks to personal safety. According to Dimond et al. (2011), “there is a need to develop best practices around safe technology use and for the dissemination of this information to domestic violence advocates, staff, and survivors” (p. 420).

Children’s needs with respect to mobile communications are necessary in the shelter context as well. In specific reference to child protection social work, May-Chahal et al. (2014) have argued that assessment of children’s vulnerabilities must consider the characteristics of online communication as well, which requires a conceptual shift in the profession towards “an ontology of childhood in a digital world that is neither online nor offline, but both” (p. 597). They suggest that children are at risk of different types of predatory behaviour online compared to offline that is equally important for social workers to understand in their work with vulnerable children and youth.

Incorporating new understandings of boundaries based on the nature of digital communication enabled by ICTs may help the shelters develop more holistic understandings the changing nature of service delivery more generally. Learning to work with and navigate the inevitably uncertainty when working with people has been both a tension and strength in social work practice (see Taylor & White, 2006;
Shelter staff members could see how the changing context and nature of communication impacts boundaries in broader society and, therefore, in shelter work. Using the concepts of ‘network society’ and ‘context collapse,’ and exploring the nature of digital communication may help the staff develop practical strategies to use in service delivery and feel more confident and comfortable integrating this type of analysis into their work with service users.

### 7.6 Implications for Shelter Policy and Practice

Although there was some acknowledgement of these broader changes in the organisational resources (as I mentioned in Chapter Six), there were no specific best practice guidelines for staff members to incorporate new knowledge about technology. Therefore, while staff felt a greater understanding of these issues would benefit them in their work with service users, shelter staff members were left to manage these issues on their own. The idea that mobile technologies and communication raise new concerns about managing boundaries in healthy and appropriate ways is not, in fact, a new one (see Matusik & Mickel, 2011). A common theme in this research has been managing ‘work-life balance’. Research on work-life balance has largely focused on the increased ability of staff to complete work tasks while outside the office and how this relates to priorities, and work performance. Although work tasks can encroach on personal and leisure time due to this increased mobility of work, accessibility and willingness to work while ‘off the clock’ have become factors in determining career progression in some sectors (Towers, Duxbury, Higgins, & Thomas, 2006). However, the data from the shelter case studies did not indicate that the shelters supported mobile device use while off-site so that shelter staff could complete more work: they were not expected to be accessible outside of
work times. Instead, the shelter staff struggled with determining how to manage blurred boundaries in multiple contexts. This required the staff to consider how to expand their harm reduction approach to ensure the safety and security of service users while maintaining appropriate boundaries that helped them manage their personal private lives. In light of the characteristics of the ‘network society,’ ‘context collapse,’ and the nature of mobile communication in service delivery, this was a difficult task. Therefore, the findings suggest that negotiating multiple blurred boundaries was a competency concern for shelter staff members, but they lacked guidelines at the organisational level.

While previously they had focused their attention on managing boundaries in the physical world, shelter staff members needed to consider new ways of managing their ‘presence’ in different capacities. Social work has had a contradictory relationship to the concept of presence. On one hand, training prioritises face-to-face service delivery approaches by focusing on topics such as observational and non-verbal communication; in contrast, according to Mensinga (2011), “although the body is recognised as an essential component of ‘nonverbal’ communication in micro skill training…it is rarely mentioned as a source of theorising or explored as an integral component of reflective practice” (p. 651). Therefore, embodiment, in relation to physical presence during service delivery, has been an implicit focus in social work education, while understanding how to form relationships and establish boundaries that are not based on an assumption of physical presence have not.

LaMendola (2010) examines ‘presence’ in social work and questions to what extent being physically present should be, or currently is seen as, a condition of ‘doing’ social work: “an expanded notion of presence for the profession means
blending face-to-face encounters with those that are not... all flows of social presence must and can be connected and directed in the conduct of social work practice” (p. 117). According to LaMendola (2010), social work training prioritises face-to-face communication despite the fact that technological communication is now ubiquitous. Additionally, Hitchcock and Battista (2013) argue that social media use should be supported in social work education, as new social work students may have different ideas about the concept of ‘presence’ in their own lives, or in the ways they wish to ‘do’ social work. By expanding their organisational and individual understandings of ‘presence’ as it relates to different kinds of boundaries in service delivery, the shelters may be better able to conceptualise how their own identities and relationships have changed, including but not limited to those with service users, the shelters and perpetrator.

7.7 Conclusions

In this chapter, I have discussed findings related to three different types of boundaries negotiations faced by shelter staff members in their daily work: with service users, with the shelters themselves, and with perpetrators of violence. Shelter staff members told me that they felt new forms of mobile technology had created new forms of communication and information sharing that were difficult to manage. Boundaries with service users were made more difficult due to mobile communication, texting and social media. They also struggled to maintain boundaries between their personal lives and work lives despite the fact that the shelter management wanted them to engage with the shelter accounts via social media. Finally, they struggled to understand and incorporate new harm reduction practices to help service users manage boundaries with perpetrators, and maintain a
safe and secure environment in the shelters. Because there were no specific organisational guidelines on how to manage these boundaries, shelter staff members did this on an individual basis.

I then argued that these challenges were not limited to shelter or social work contexts; they reflect broader changes in communication and information sharing enabled by the transition to the ‘network society,’ defined by complex and non-linear systems and relationships. This relates to social work research on ‘mobilities’ that provided a temporal context to the changing nature of service delivery through the examination of a different technology – the automobile (Ferguson, 2008, 2010, 2011). I then explored the changing nature of communication using the concept of ‘context collapse,’ which asserts that the nature of mobile communication itself as persistent, replicable, scalable and searchable, has blurred boundaries between public, private and professional spheres. The shelter staff members voiced experiences that reflect these broader changes and gender-specific challenges identified in cyber-feminism as well, supporting the cyber-feminist assertion that technology has not created a gender-neutral utopia, but rather has simply become another landscape in which gender mediates lived experiences. Therefore, I assert that shelter staff members have negotiated blurred boundaries both because of the broader social changes impacting the context and nature of communication, and the specific issues related to the gendered experiences of violence enabled through these forms of communication and information sharing.

The implications of these findings suggested that the shelters incorporate broader understandings of these changes at the organisational level so that all shelter staff members develop an understanding of the implications for their work. These
issues relate to the broader nature of ‘presence’ in shelter work, and how shelter staff members implicitly focused on boundaries related to physical presence rather than new forms enabled by the ‘network society,’ and the ‘context collapse.’
Chapter Eight: Conclusions and Implications for Social Work

This key contribution of this research is my claim that approaching technology and social services from an oppositional perspective risks overlooking vital issues of *agency, materiality* and *presence* in social work theory and practice. This risk is real and its consequences have been evident in my own professional life: in the other contexts in which I have worked and studied, technology was treated as a either a medium through which to provide services or a niche area of research, rather than a consideration in its own right. Despite my academic background in social anthropology and social work, I only became aware of the wealth of existing theory and research on technological change available in other fields through undertaking this PhD research. As I mentioned in Chapter One, my initial interest in the topic derived from my practice experience. Through developing expertise in this area of scholarship and exploring its relationship to social work, I have come to recognise the many important contributions it can make to future social work research.

This thesis has explored the relationship between VAW shelters and ICTs, demonstrating the benefits of a cross-disciplinary case study approach in social work research. ICTs were found to be relevant to theoretical, emotional, practical and material issues happening in the shelters, requiring shelter staff members to continually balance feminist and neoliberal values and priorities, both of which they stated were valuable to their work. In this final chapter, I discuss the key findings of the research, and its implications for social work theoretically, methodologically, and practically. I also reflect on the limitations, what I have learned through the research process, and how I plan to apply this learning to my own practice model and future research endeavours.
8.1 Key Findings

At the beginning of this thesis, I outlined how I came to be interested in the relationship between social work and technology based on my past experiences, and why this relationship is an important consideration in the profession’s development overall. I presented the findings of a social work literature review that highlighted several new considerations and areas for future research: social work literature has tended to conflated technological development with neoliberalism, and the historical context of the relationship has not been addressed; there is no definition of technology in social work; the physical properties of technology as they relate to social work practices have been ignored; little is known about the life cycle of technology before and beyond implementation in social service organisations; and Wastell and White's (2013; 2014) review of social care informatics presents some of the only examples of successful collaborative projects between social workers and IT professionals despite the call for greater collaboration.

Data collection and analysis were presented in Chapters Four, Five, Six, and Seven. Chapter Four set out the organisational, practical and policy contexts in which the VAW shelters operated, and presented introductory data from both shelters about organisational structure and services. Two key changes in shelter operations were identified as relevant to the contexts in which the shelters operate and make decisions about ICT use – the growing institutionalisation of shelter services, and professionalisation of shelter staff. Both of these broader social changes contributed to the changing nature of the shelter system, and how the shelters rationalised and made decisions about ICT use.

The three key findings of this research derive from the analysis chapters. In
Chapter Five, the findings highlighted the on-going nature of organisational decision-making about ICTs, and the shelters’ *agency* in technology matters. Both shelters made decisions about these technology issues throughout fieldwork, although they did not always make the same decisions because they had different goals and strategies. In contrast to arguments and assumptions in the social work literature, it was clear the shelters were neither forced to use technology nor passive consumers of it. The ‘social shaping of technology’ and ‘biography of artefacts’ frameworks (see Pollock & Williams, 2009; Williams & Edge, 1996; Williams & Pollock, 2009) further supported this finding by highlighting the importance of different stakeholders that exert agency in technological negotiation and development at different stages of development. Providing a temporal context to social work’s relationship with ICTs can help prevent ‘black boxed’ approaches that minimise or ignore how social service organisations exert their agency before, during and after implementation as well. Future research should take this agency into account rather than assume social service organisations do not have choices in their own organisational practices, or they do not wish to incorporate technology, or neoliberal practices into their operations at all.

The second key finding, explored in Chapter Six, related to *materiality*. Given the discrepancies between the different data sources, I argued that the shelter staff were able to ignore the embeddedness of ICTs in their daily work by relying on oppositional conceptualisations about ‘real’ shelter work and ‘tech people.’ Shelter documents also made these relationships invisible. STS literature on the values of technology (see Joerges, 1999; Latour & Woolgar, 2013; Winner, 1980) emphasised how the shelters had conflated neoliberalism to technology in a similar manner found
in the literature review. Exploring technology independently from neoliberalism enabled a more balanced analysis of how ICTs related to shelter operations. Postcolonial and feminist literature helped draw attention to the gendered natures of both social work and technological development, and may be a useful framework for further research focusing on why social workers have conflicting relationships to technology use in their work. However, these beliefs must also be challenged and interrogated to prevent essentialist views on women’s experiences with technology around the globe and at various stages of technological development. Developing a greater understanding of the materiality of social work may force organisations to consider how material artefacts enable practices to be done and how competing values and practices are negotiated in this process.

The final key finding explored in Chapter Seven related to presence. This chapter explored three different boundaries issues experienced by the shelter staff members, in relation to technological change. Boundaries were a concern in the shelters because the staff members were not supposed to create non-work-based relationships with service users, but different forms of digital communication made it more difficult for the staff members to separate personal and professional identities. Competency was an issue in relation to how the staff analysed service user experiences related to technology and developed relevant practices to address them. Both of these themes relate to the broader concept of presence in service delivery. Face-to-face service delivery was taken for granted as the best form of service delivery in the shelters. Staff preferred face-to-face methods to the point that they didn’t consider technologically-mediated service delivery to be a relevant option. Further research is needed to understand and unpack the possible philosophical or
emotional reasons for the organisational, individual and professional preferences for face-to-face service delivery in an era where different types of service delivery models are or could be made available via ICTs and many service users face barriers that are not necessarily related to their physical proximity to services. Developing a stronger grasp of technology issues in social work education and continuing development may help social workers reflect on organisational issues in different ways, and prevent framing practice values and technological values as a dichotomy.

8.2 Theoretical Implications

The findings in this thesis highlight the need for broader understandings of how technological and social change influence social work. This requires a conceptual shift from seeing technology as a practical issue to understanding it as a theoretical issue as well. Currently, social work education has been more focused on creating standards for technological literacy, as a skill set social workers should acquire in order to perform work tasks (see Youn, 2007). Theoretical knowledge about technology is not yet systematically incorporated into social work education in the same manner. This thesis highlights that technology is a theoretical issue in social work in its own right. Knowledge about technology should not be segregated from other course material, or conflated with more recent concerns about neoliberalism; it should be actively infused into the history of the profession itself, and into discussions that revolve around key social work concepts, such as communication, boundaries and relationships.

As I have demonstrated, there are many relevant theories available in other disciplines that social work researchers can draw on in order to move our own research agenda forward. I have demonstrated the relevance of three other disciplines
in my analysis – STS, organisational studies, and critical feminism – and this highlights the variety of approaches that could be used in conducting further research. Although I prioritised breadth in my discussions, any of these paradigms or concepts could be the basis of its own research project. Cross-disciplinary theories can be tested for their relevance in social service settings and adapted to better meet the profession’s research and practice needs.

STS, organisational studies, and feminist theories addressed different issues and needs throughout the process of this research. STS specifically addressed other possible theoretical conceptualisations of technology. Rather than viewing technology as a set of discrete objects implemented with deterministic outcomes, these other options enabled more holistic analyses. For example, framing technological development as an on-going process added a temporal context that enabled a discussion of the shelters’ relationships to technology throughout their history rather than treating changes as ahistorical and de-contextualised events. Examining this process also provided a different perspective on the shelters’ agency over time; for example, how they perceived their options and made decisions about what to use based on what was available to them, how they chose to evaluate these options, and their beliefs about how it would benefit their work, rather than seeing themselves as subordinate to external forces that decided for them. Pollock and Williams (2007) have noted that organisational researchers have tended to begin fieldwork when new ICTs have been procured and implemented, focusing on the ‘implementation story.’ Because I was able to collect data in the urban shelter prior to the procurement of Dreams, the data highlighted unique organisational issues at a point in time prior to procurement, which has not been as well-researched. Given the
urban shelter staff members had considered giving up on the negotiations and pursuing other options, there is still much to learn from the data about technological decision-making outside of the implementation stage: “By the time a technology selection process is identified and access negotiated, by social science researchers many of the key decisions will already have been made” (Pollock & Williams, 2007, p. 139). STS theories also highlighted the importance of the user’s perspective within this process. Instead of perceiving shelter staff to be reactive or uninterested in technology use, I was able to see the different attitudes and beliefs they brought with them to their work and how these impacted their behaviours and relationships with others in the professional context.

I began to explore organisational studies research during fieldwork because some of the differences between the shelters appeared to be due to management style and internal structure rather than individual or professional differences. For example, because the rural shelter offered so many additional services, its IT needs were quite different compared to the urban shelter. If I had continued to use only STS theory to analyse the data, I would not have been able to articulate how the organisational policies, norms, and culture impacted the different choices and beliefs I encountered in each shelter. Using organisational studies theories, I developed and incorporated broader understandings of how the grassroots, feminist history of the VAW advocacy and shelter movements contributed to the shelters’ policies and practices. These considerations are lacking in existing social work research on technology that attempts to understand implementation issues such as barriers to use, technological literacy and financial allocations for technology.

Although I also encountered materiality theory in STS, organisational studies
research strengthened my understanding of how materiality related to shelter practices. Orlikowski and Barley (2001) specifically advocated for greater theorising on the materiality of organisational practices, which was not a gap I originally considered of great importance in the literature review but was a theme that arose from the data, particularly in relation to technological values and staff beliefs about the importance of the materials they used to complete their daily work. This highlighted that “neither a strictly constructionist nor a strictly materialist stance are adequate for studying technologies in the workplace. Elements of both perspectives are required” (Orlikowski & Barley, 2001, p. 149). I have tried to incorporate this approach into my analysis to show how organisational studies and materiality are useful cross-disciplinary theoretical connections emerging from this research.

Finally, the third theoretical connection in the research is to critical feminist theory, specifically the areas of feminist STS, techno-feminism and cyber-feminism that address gender, technology and power issues in depth. Critical STS and organisational research address some of the issues specific to technology and critical practice, but in the context of shelter work, I needed more detailed information about the relationship between gender and technology and how it might relate to feminist practice in the context of the shelters. Therefore, although these theories may not necessarily be explicitly relevant to all practice contexts in the same way STS or organisational studies could be, they did bring concepts and ideas related to the gendered histories of social work and technological development that continue to impact access to technical knowledge and skills on a broad social level.

These theories also highlighted the complexity of the benefits and challenges faced by marginalised individuals and groups, such as how service users used social
media to connect with support systems while simultaneously trying to protect their personal information and locations from perpetrators. Service users are not usually the key stakeholders considered in STS and organisational research, which tend to focus on technology use in the context of for-profit needs, values and goals. One of the key limitations of this research is that I chose not to include service user perspectives based on negotiations with the shelters related to ethical issues (as I discussed in Chapter 3). Future research may wish to combine the perspectives of management and direct service staff members with service user perspectives to accomplish the anti-oppressive values of research and practice more fully. Therefore, although I did not speak to service users, critical feminist theories highlighted specific issues related to gender amongst marginalised individuals and communities, compared to normative users who are assumed to have access and be technologically literate. Other areas, such as critical disability studies or postcolonial studies, may be more relevant in other practice contexts but can still provide similar contextual and theoretical contributions. There are many other theories within these three fields that I did not explore in this research, and I encourage other social work researchers to consider pursuing these, or other, cross-disciplinary theories in future research.

This thesis has noted the tendency in social work to conflate critiques of technology with critiques of neoliberalism. I have presented findings and analysis that highlight many different considerations impacting an organisation’s relationship with technology beyond the neoliberal context in which it is embedded. My findings also suggest that the opposition between social work and neoliberalism may need to be further deconstructed, as the shelter staff members stated they felt some neoliberal values benefitted their work. They told me numerous times that they enjoyed the
efficiency of computers, mobile devices and databases, while also describing the challenges involved in their use. Although this sentiment requires further interrogation, the ways organisations balance various sets of values and priorities is an important issue worthy of further consideration in social work research on ICTs to prevent essentialising a particular ‘social work’ experience or relationship to technology.

The final theoretical implication of this thesis is the contrast between urban and rural contexts in both service delivery and technology issues. While the findings from either organisation cannot be fully generalised to all urban or rural settings, the contrast between the two cases provided valuable insights into technology issues that may have been less visible had I only researched urban settings, where my own knowledge and experience with both technology and social work are based. The rural shelter faced different challenges than the urban shelter with respect to infrastructure, connectivity, and mobility in their work. However, both shelters also had similar needs related to procuring and implementing computers and software packages, and developing relationships with IT consultants that understood their needs. The unique contexts of each organisation highlighted the complexity of both types of service delivery, and the importance of being mindful of geographic location of both the organisation and the service users when considering ICT issues.

8.3 Methodological Implications

My research contributes to growing social work use of ethnographic methods to create practice knowledge, generating what I believe to be one of the first critical ethnographies on technology in social work. A key methodological contribution has been using the organisation as a unit of analysis, rather than the profession as a
whole, a specific type of technology or software, or the individuals. In the reviewed literature, social work research on technology tended to use a professional-level lens of analysis that essentially separates technology issues from the organisational contexts in which service providers actually practice and provide services. As described above, drawing on organisational studies literature highlighted new theoretical considerations, but using the organisation as the unit of analysis also highlighted lived realities service providers face in their daily practice, including how to manage and balance professional, organisational, and social values and priorities, and how to work in inter-professional contexts where many colleagues are guided by different values and priorities. Most social workers do not work in organisations that exclusively employ other social workers. With the growing push towards inter-professional practice, most social workers work with other professionals in their organisation, liaise with them in the community or are employed in positions that do not necessarily require social work registration with the relevant governing body.

Therefore, while developing guidelines for best practices for the profession is important, service providers are only able to adhere to these guidelines within the context of organisational policy and practice norms. The organisational context may not reflect social work’s professional value base or practice model, may speak to issues broadly in order to be widely applicable in an inter-professional working environment, or service providers with social work training may not be registered with the relevant governing body. In these instances, service providers may have to prioritise competing goals and values, and may do so differently compared to their co-workers. I chose to use the organisation as the unit of analysis for the case studies.
because it takes these differences into account and using existing structures and policy as frames for the research scope can stabilise comparisons between organisations (Abbott, 2000; Yin, 1981a).

However, negotiating access in order to conduct a critical ethnography on technology in the shelters presented practical challenges, and I will take forward many lessons for future research. As mentioned in Chapter Three, I was not able to conduct the types of interviews I had originally planned due to resistance from the shelters, and subsequently while conducting fieldwork, resistance from individual staff members that did not want to give up their time to participate. While critical ethnography offers many advantages for this research area, greater clarification and stronger negotiation of mutually beneficial fieldwork agreements would benefit future research to enable semi-structured interviewing that could build on the emerging themes in this research.

The reviewed social work literature also either did not specify what types of technology were included in the analysis, or focused on one particular type outside of the broader organisational context in which it operated on a day-to-day basis. Rather than using this approach, I collected data on multiple types of ICTs that formed the organisational network of technologies embedded with each other, and examined how all of these ICTs contributed to the daily culture and practice approach in the shelters. This enabled me to maintain my focus on the lived realities of the shelter staff members and better understanding both their strategic use of ICTs and how ICT issues became embedded in their daily work, rather than focusing on the ICTs themselves.

The second methodological contribution of this research arose during
fieldwork as a result of this approach, specifically as I began to work with online and mobile data. When I designed this research project, I used the physical site of the organisation as the basis for the unit of analysis without considering the ways technology has enabled staff to maintain a connection to work beyond physical walls. Although the physical boundaries of the organisation were a starting point for data collection, shelter work did not always occur within these physical spaces. It happened in the satellite offices, in the community and on the road, partly because of the opportunities new mobile technologies provided the shelter staff to work flexibly.

The issue of fluid boundaries enabled by technology in case study research has also been discussed in methodology literature in STS. Beaulieu et al. (2007) have explored the benefits and the limitations of using physical boundaries as parameters and alternative methodologies have developed, such as multi-sited ethnography (Hine, 2007), connective ethnography (Dirksen et al., 2010), and strategic ethnography that has a multi-sited and longitudinal emphasis (Pollock & Williams, 2010). This could be an interesting approach for further study as these methodologies follow the networked nature of technology through organisations rather than using the pre-existing boundaries to define the research field.

Like other research design choices, each methodological approach creates different considerations. Setting boundaries for the case studies must be done considering other contextual and research factors. In these cases, while I did find the organisation’s pre-existing boundaries useful in managing the scope of the project and the amount of data collected, I was also forced to leave out different actors and themes that were important at a broader level. For example, the Executive Director at the rural shelter informed me that in the past there had been an online network for
VAW shelters across Ontario called ShelterNet that helped the organisations connect to one another and make referrals. She stated that the network had gone offline without notice and many shelters were not sure why because they felt it had been a valuable resource. I decided not to pursue ShelterNet’s mysterious disappearance, because it would have drawn my time and attention to ICT issues outside of the organisation itself. Although this data may have identified useful ICT issues at the provincial level it did not seem relevant to the methodological boundaries I had chosen prior to fieldwork.

A further methodological approach, conceptualising technology as material culture, was one that only emerged as relevant during fieldwork, but is one that should be taken forward in future research into ICTs in social work settings. The materiality of social work, in relation to technology or on a broader scale, does not appear to be a research priority, yet the material qualities of different types of ICTs have been critiqued in the social work literature for not reflecting or relating to the realities of practice. Using a methodology that focuses on the material aspects of technology and the material culture of social work overall can help avoid the gaps identified in the current organisational literature (Orlikowski & Scott, 2008; Orlikowski, 2006, 2007). This could include building an awareness of the historical and present-day material culture of social work, as well as potential future concerns. Although different types of material culture, such as paper case notes, had been used in the past, the technology used in the shelters was not created by the shelter staff members or service users and required more significant collaboration with other professionals with technical knowledge to maintain them. The significance of this power shift in material culture may be a useful starting point for future research. In
future research, the physical boundaries of the organisation, the networked approach or the material approach could all be relevant to social work issues depending on the nature of the research questions. As with all research design choices, these options should be considered in the broader context of the research.

8.4 Practical Implications

The practical implications of this research for social work are not possible to fully pin down, as technological changes are not finite. Using the process-oriented approach described in Chapter Five, they can only be thought of as part of the ongoing relationship between society and technology that will continue to result in new communication and relationship trends relevant to social work practice. Therefore, the challenge facing social work may be not simply to research and understand current issues, but how to develop a more proactive and flexible approach to practice that enables social workers to anticipate changes over time and prepare to incorporate new developments into social work education and training. This new approach would enable social workers to better understand service user needs, and articulate how these changes might impact interventions and healing processes in service delivery.

Unfortunately, because technological changes have happened at such a rapid pace, there is limited empirical evidence to support evidence-informed practice or guidelines yet (see Reamer, 2013). Cross-disciplinary research can be useful for filling these gaps, but may not directly address social work values, ethics or practices. The shelters had different approaches to this dilemma. The urban shelter did not support text messaging based on the rationale that service users should not need to use this method because of all the other resources available to them. There
was no evidence to suggest that it would be more beneficial than the existing practices, therefore it was not considered. On the other hand, the rural shelter found value in these methods for certain service users and allowed this practice because it appeared to better meet their needs. Choosing not to incorporate a particular technological method to avoid dealing with the practical and/or ethical challenges, or waiting for empirical evidence to support using a particular technology, are not uncommon approaches. According to Reamer (2013), when social media first emerged many service organisations chose to ban access altogether until their use became more prevalent and the organisations decided social media use could benefit them.

In addition to developing practical strategies to deal with how technologies have changed the profession or have changed service user experience thus far, social workers should also anticipate broad social changes in communication, identity formation and community building over time to avoid being in the position described by Mishna, Bogo, Root, Sawyer, & Khoury-Kassabri (2012), where social workers felt “[technology] just crept in” (p. 277). The issue of ‘presence’ in social work in the future will continue to be challenged by new technologies that enable users to access services, information and society in ways that are disconnected from their physical locations.

The changing nature of boundaries and continuing professional development are two key issues in social work education and training. Although some research has addressed how technology has created specific ethical and practical dilemmas for social workers, this literature has not addressed broader theoretical issues related to how technology has changed the ways individuals and groups communicate, create
identity, and form relationships and communities. Moving forward, the issue of presence will relate to the fundamental issue of how social work engages with service users in order to perform social work.

8.5 Final Reflections

This research has expanded my understanding of technology and its relevance to social work practice in ways I could never have imagined. Despite the fact that colleagues have often described me as ‘tech-savvy’ (possibly simply due to my age), the process of connecting my lived experience to the vast amount of cross-disciplinary theory about technology has been overwhelming at times. I have struggled to communicate my ideas to broader social work audiences that are not always interested in reflecting on technology, or not interested in examining it outside of current neoliberal issues. Now STS and organisational studies are familiar to me, but I do recall a time when I did not think about ICT issues using these frames. I try to remember this when preparing to speak to social work audiences.

One of the challenges moving forward will be to consider how this research, and my future research endeavours can be translated in relevant ways for different audiences including a diverse range of social work practitioners with various levels of interest in the topic overall, social workers in management positions with the ability to shape organisational policy and practice, and social workers in policy development who ultimately shape the macro-level contexts I discussed in Chapter Four.

At this point in the process, I return to the questions I posed in Chapter One:

• Does being a social worker in the 21st century mean I must use ICTs in practice?
• Does being a social worker in the 21st century mean I must enjoy using ICTs in my practice?
• Must service users consent to and/or enjoy the use of ICTs in order to access services?

Based on my research experience, I do not have conclusive answers to these questions. Being a social worker or a service user in the 21st century in a developed country will most likely involve the use of ICTs in practice in some capacity, but the connection between using them and enjoying them is less clear. New developments in technology will certainly impact the profession, and these changes will likely impact the nature of social work, community development, and ‘caring’ work more generally at multiple levels. My own research interests have evolved over time to include emerging issues I had not considered before, such as the development of artificial intelligence related to caring work, and the relationship between experiencing joy and using technology.

Debates on the broader social implications of emerging forms of technology are taking place in other fields, and social workers may be able to contribute an important perspective on the practical, conceptual and ethical implications of social and technological change. At this stage of the current debates, these implications are often described as homogeneous; as though emerging technologies will have uniform effects on humanity. This homogeneous framing has led to ethical and moral debates which erase diversity of lived experiences, despite the fact that current research about other technological issues, such as the digital divide, has specifically highlighted that users do not experience technology in homogeneous ways, and marginalised groups face additional barriers to accessing technical knowledge and remaining in control of
their own technology use. As an early career social worker and researcher, I look forward to the future possibilities of the researching these issues in relation to the profession, and broader society.
9 Bibliography


Canadian Association of Social Workers. (2014). *Social Media Use and Social Work Practice*.


Not-for-Profit Corporations Act (2010). Ottawa, ON.


10 Appendices

10.1 Appendix A: Letter of Introduction to the Research

[Insert Date]

Dear [Insert name of Executive Director],

My name is Janan Dean and I am a PhD student in Social Work at the University of Edinburgh (Scotland), although I am originally from London, Ontario and am completing my fieldwork in southwestern Ontario. My research is about the increasing use of information technology (IT), such as electronic record-keeping and social media, in shelters, and how IT use fits overall in addressing the issue of domestic violence.

I will be conducting ethnographic research with shelters in southwestern Ontario for this research. I am looking to complete an urban case study in fall 2012, and a rural case study in winter/spring 2013. I am reaching out to you to see if you would be interested in participating in this project. I would be grateful for the opportunity to discuss my research project with you further, and the possibility of working with your organization.

I have spent a considerable amount of time examining IT-related issues in the social services from many different perspectives, and in exchange for your participation I would be happy to discuss ways that my knowledge and findings may be useful to you during and after the process.

Thank you for your time. I plan to follow up this email by telephone in the following week and look forward to speaking with you then.

Sincerely,

Janan Dean, MSW
PhD Student, University of Edinburgh
J.S.Dean@sms.ed.ac.uk
10.2 Appendix B: One Page Summary of the Research

'ICTs and Service Delivery' Research Details – Janan Dean
Prepared for [Name of organisation]

My Student Details:
• Degree sought: PhD in Social Work, incorporating Science and Technology Studies (STS – the study of the social impacts of technology) and Techno-feminism
• Fieldwork: Nov 2012 – Feb 2013 (case study #1) and Feb 2013 – June 2013 (case study #2)
• Expected Completion of Dissertation: August 2015 (currently in 2nd of 4 years of study)
• Area of Interest: Use of information and communication technology (ICT) in the social services

Preliminary Literature Review Findings:
• Current research focuses on evaluation of ICTs as tools for recording and delivering services
• There is literature explaining the problems of the neoliberal rationale for ICT use in the social services, but there is little research documenting the day-to-day issues faced by organizations
• Research tends to focus on social workers as individuals engaging with ICTs, therefore there is little knowledge or analysis at the organizational level, especially in specific settings

Research Framework:
• Given these findings, I am applying an STS framework, the Social Shaping of Technology, often used in business case studies, to social service organizations. Rather than focusing on the individual user, it frames ICTs as ongoing processes involving a network of actors simultaneously making decisions about design, implementation, maintenance and repair
• I also use techno-feminism to highlight the ongoing exclusion of many groups from technological processes and possible implications of these unequal power dynamics

Research Design:
• Methodology: qualitative multi-sited ethnography – Two case studies (one urban, and one rural) with a domestic violence service provider as the starting point for each. I will also reach out to different actors in other stages of the technological process, and/or networks in the community
• Methods: Documents (the organizational rhetoric about ICTs); Interviews with staff; Participant observation of staff (to observe ICT norms and incidences, such as server crashes); Visual analysis of ICTs (learning how information is organized within particular programs)

Why I'd Like to Work with [Name of organisation]:


• As I have not been able to locate any similar research, I'd like to gather the broadest data possible. As the largest high-security shelter in Canada, I believe the data and findings from [name] will be both unique in its complexity and relatable in its coverage to other organizations
• [name] incorporates feminism into organizational policy, which is congruent to my approach

Goals for Research Findings:
• Provide copies of final dissertation and articles and/or conference proceedings
• Provide a summary presentation of findings and other relevant outputs as negotiated

If you would like to be involved in this research, I anticipate the following 'Next Steps':
• Creating a Memorandum of Agreement outlining the proposed research actions and timelines
• Determining the level of consent, logistics and processes of approval required
• Identifying any specific related research outputs that would be useful for your organization
10.3 Appendix C: Urban Case Study Memorandum of Agreement

MEMORANDUM OF AGREEMENT – October 30, 2012
Research Project: “Information and Communications Technology Use in Domestic Violence Service Delivery”

Written by: Janan Dean, PhD student at the University of Edinburgh
Written for: [Name of organisation]
Re: Research activities to be conducted Nov. 2012-Feb. 2013 inclusive as per ethics approval

1) Interviews
1. To be conducted with staff and volunteers, including but not limited to:
   1. [Both shelter sites]
   2. Management, Frontline and Administrative staff
2. To be conducted with staff from external organizations whose work relates to the use of ICTs in [Name of organisation] (subject to consent), including but not limited to:
   1. Software designers and developers
   2. Technical support personnel
   3. Web designers and graphic designers
   4. Manufacturers
   5. Policy makers

Support needed from organization: ability to speak to staff on fieldwork days, contact information for other organizations

2) Paper Documents
1. Analysis to involve existing organizational materials, including but not limited to:
   1. Annual report brochures and organizational promotional materials
   2. Computer training and technical support manuals

Support needed from organization: access to brochures and other promotional material, access to computer training manuals and technical support documents available to staff

3) Electronic Documents
1. Analysis to involve ICTs and programs used, including but not limited to:
   1. The current database system for record-keeping
   2. The new database system being introduced

Support needed from organization: access to a computer to analyze systems, access to the electronic systems (necessary passwords etc), access to a printer for necessary screen shots (any identifying information to be removed where applicable)

4) Observation
1. To be conducted on site approximately 2 days per week concurrently to the other above listed data collection activities
   1. ie. ongoing note-taking about informal discussions, observations and
events occurring during the 'regular' work day, such as server crashes

**Support needed from organization:** access to a workspace on these days, general support to be involved in the day-to-day activities of the organization

Thank you for your ongoing support of this research project.
10.4 Appendix D: Rural Case Study Memorandum of Agreement

MEMORANDUM OF AGREEMENT – February 1, 2013

Research Project: “Information and Communications Technology Use in Domestic Violence Service Delivery”

Written by: Janan Dean, PhD student at the University of Edinburgh
Written for: [Name of organisation]
Re: Research activities to be conducted March-June 2013 inclusive as per ethics approval

1. Interviews
   1. To be conducted with staff and volunteers, including but not limited to:
      1. [Various site locations]
      2. Management, Frontline and Administrative staff
   2. To be conducted with individuals from external organizations whose work relates to the use of ICTs in [Name of organisation] (subject to consent), including but not limited to:
      1. Software designers and developers
      2. Technical support personnel
      3. Web designers and graphic designers
      4. Manufacturers
      5. Policy makers

Support needed from organization: ability to speak to staff on fieldwork days, contact information for other organizations

2. Paper Documents
   1. Analysis to involve existing organizational materials, including but not limited to:
      1. Annual report brochures and promotional materials
      2. Computer training and technical support manuals

Support needed from organization: access to brochures and other promotional material, access to computer training manuals and technical support documents used by staff

3. Electronic Documents
   1. Analysis to involve programs used, including but not limited to:
      1. The current database system for record-keeping
      2. Electronic communication related to technical matters

Support needed from the organization: access to a computer to analyze systems, access to the electronic systems (necessary passwords etc), access to a printer for screen shots (any identifying information to be removed where applicable), printouts of relevant email communications

4. Observation
1. To be conducted on site approximately 2 days per week concurrently to the other above listed data collection activities
   1. i.e. ongoing note-taking about informal discussions, observations and events occurring during the 'regular' work day

Support needed from the organization: access to a workspace on these days, general support to be involved in the day-to-day activities of the organization

Thank you for your ongoing support of this research project.
10.6 Appendix F: Rural Shelter Organisational Flow Chart
10.7 Appendix G: Power and Control Wheel

**Physically Violent Behaviors**
- Threatening to hurt the target or to commit suicide
- Forcing the target to return to a violent and abusive relationship
- Physically hurting the target

**Emotionally Violent Behaviors**
- Preventing the target from being happy or from doing things they enjoy
- Isolating the target from friends and family
- Violating cultural taboos

**Economically Violent Behaviors**
- Preventing the target from working or keeping a job
- Preventing the target from accessing money or financial resources

**Using Children**
- Using children to interfere with the relationship
- Using children to threaten the target

**Using Isolation**
- Controlling what the target does, who she sees, and where she goes
- Limiting the target’s outside involvement

**Using Male Privilege**
- Treating the target like a servant
- Making the target accept the “master of the castle” role

**Using Coercion and Threats**
- Making or carrying out threats to do something to hurt the target
- Making or carrying out threats to do something to hurt the target

**Using Intimidation**
- Making the target afraid by using looks, actions, and gestures
- Smashing things or destroying her property

**Using Emotional Abuse**
- Putting the target down or making her feel bad about herself
- Calling the target names
- Making the target feel guilty

**Minimizing, Denying, and Blaming**
- Minimizing the extent of the abuse
- Minimizing the target’s concerns
- Minimizing the effect of the abuse

**Appendix G: Power and Control Wheel**

DOMESTIC ABUSE INTERVENTION PROJECT
202 East Superior Street
Duluth, Minnesota 55802
218-722-0781
www.duluth-model.org
10.8 Appendix H: The Cycle of Violence

[Diagram of the Cycle of Violence]


- **Denial**: Perpetrators, victims, and society at large minimize violence in relationships. Minimizing the abuse or acting as if it did not happen. Denial keeps the cycle going.

- **Explosion**: The actual abuse: physical, sexual, emotional, verbal, financial, ...

- **Honeymoon Phase**: Abuser sorry and apologetic. Abuser makes promises. “Hearts and flowers.” Idealized and romantic. This phase often disappears with time.
10.9 Appendix I: Technology Power and Control Wheel