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Applying virtual social networking to military environments

Jacquelyn Crebolder
DRDC Atlantic

Gerard Torenvliet
Esterline | CMC Electronics
415 Legget Drive
Ottawa, ON K2K 2B2

Defence R&D Canada – Atlantic

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Principal Author

Original signed by Jacquelyn Crebolder

Jacquelyn Crebolder

Defence Scientist

Approved by

Original signed by Francine Desharnais

Francine Desharnais

Section Head Maritime Information and Combat Systems

Approved for release by

Original signed by Calvin Hyatt

Calvin Hyatt

Chair DRP

In conducting the research described in this report, the investigators adhered to the policies and procedures set out in the Tri-Council Policy Statement: Ethical conduct for research involving humans, National Council on Ethics in Human Research, Ottawa, 1998 as issued jointly by the Canadian Institutes of Health Research, the Natural Sciences and Engineering Research Council of Canada and the Social Sciences and Humanities Research Council of Canada.

Abstract

With the advent of on-line social and collaborative technologies, our ability to connect and the way we communicate with one another have changed dramatically. Social networking platforms that allow communities to form virtually have been quickly adopted in the recreational and business worlds. They are a powerful means for communicating and for finding and linking with new as well as existing connections. In defence and security organizations teams are often not co-located. Virtual social networking might be a valuable tool for finding expertise and team members with whom to share information. This document reports on the findings from a preliminary study that examined the requirements for enterprise virtual social networking collaborative technologies within the Canadian Forces. A number of military communities participated in the study and the findings overall provide strong evidence of a broad requirement for this kind of technology that generalizes across the organization as a whole.

Résumé

L'arrivée des technologies de collaboration et des réseaux sociaux a modifié considérablement la façon dont les gens communiquent et créent des liens. Les plateformes de réseautage social formant des communautés virtuelles ont rapidement été intégrées au monde des affaires et du divertissement. Il s'agit d'un moyen efficace de communiquer et d'établir de nouvelles relations ou de maintenir celles existantes. Puisque les équipes d'organisations du milieu de la défense et de la sécurité sont souvent dispersées. Le réseautage social virtuel peut s'avérer utile pour partager de l'information avec des membres d'équipe et des experts. Ce rapport présente les résultats d'une étude préliminaire sur les besoins des Forces canadiennes en matière de technologies de collaboration et de réseautage social virtuel. Des communautés militaires ont participé à cette étude qui a permis de conclure de manière évidente que ce type de technologie est grandement nécessaire dans l'ensemble de l'organisation.

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Executive summary

Applying social networking to military environments

Jacquelyn Crebolder, Gerard Torenvliet; DRDC Atlantic TM 2011-259; Defence R&D Canada – Atlantic; January 2012.

Introduction: Military operations are often distributed and fast paced and they bring together organizations and groups who may not work together often and who may not have an opportunity to meet face to face. Often assembled adhoc to support a mission phase or the sudden onset of a crisis, distributed teams may be unfamiliar with each other and prone to change as an operation develops and new or additional support is needed. Moreover, organizations use different doctrines, procedures, cultures and language, making working together especially challenging.

Virtual collaboration is supported by technology that is developing at a rapid pace and the impact of social media in our day to day lives has resulted in dramatic changes in the way we network and interact. The virtual social networking platform provides a means for finding and disseminating information, and locating and staying connected with people; pulling together, not only strong connections that already exist, but also weaker ones in the periphery of a social network. Weak links are extremely important because they often correspond to contacts that move in circles that are distinct from an individual's own network. These contacts can offer novel information and they can be the bridges to other diverse groups. Consequently, weak links are particularly important to teams that are not co-located, where finding expertize and information beyond a group's primary network can be difficult. Although we do not know a lot about how virtual social networking works, one of the primary strengths appears to be the visibility and accessibility afforded to weaker connections.

Results: As part of a larger research project investigating virtual social networking and its application to the military domain, a high-level requirements analysis was conducted on eight military communities to understand the collaborative work of groups within the Canadian Forces and the potential for virtual social networking tools. Of particular interest was whether virtual social networking could support interoperability, by expanding social networks and improving the ability to locate resources and expertise within distributed teams. The findings point to twenty-four requirements in total, nine of which were shared by at least three of the communities interviewed. That such a broad set of requirements was found in a small sample of CF communities leads to the belief that the overall requirement for social networking generalizes across the CF and is very strong indeed.

Significance: It is critical that military domains stay abreast of modern technologies and that the implications and requirements for web-based applications are understood, not only to provide appropriate modern-day support to operations but also to afford an equal playing field against the capabilities of adversaries. Furthermore, military environments are unique and new technologies should not be implemented without appropriately investigating the implications and requirements, as well as modifications that might be required to fit those environments. This research program provides understanding of a relatively new technology that could impact on the interoperability of groups working within joint, coalition, and multi-organizational operations.

Future plans: The ultimate aim of the larger research program is to examine the effects of using an enterprise-class virtual social networking platform on one community within the CF. A military group has been identified and an in-depth investigation will be applied to this group by providing them with a social networking platform and monitoring network behaviour and development.

Sommaire

Applying social networking to military environments

Jacquelyn Crebolder, Gerard Torenvliet; DRDC Atlantic TM 2011-259; R & D pour la défense Canada – Atlantique; janvier 2012.

Introduction : La dispersion fréquente et le rythme accéléré des opérations militaires réunissent des organisations et des groupes qui ont rarement l'occasion de collaborer ou de se rencontrer. Puisqu'il s'agit habituellement d'affectations spéciales pour appuyer une mission ou répondre à une crise soudaine, il arrive que les équipes ne se connaissent pas et qu'elles soient prédisposées à changer selon l'évolution des opérations et l'aide nécessaire. En outre, les doctrines, les procédures, les cultures et les langues de chaque organisation diffèrent, ce qui complique davantage la coopération.

La collaboration virtuelle est soutenue par une technologie qui évolue rapidement. L'arrivée des réseaux sociaux a modifié considérablement la manière dont les gens communiquent et interagissent au quotidien. La plateforme de réseautage virtuel permet de trouver et de diffuser de l'information, en plus de localiser des ressources et de rester en contact. Les réseaux sociaux permettent non seulement de maintenir les liens principaux qui existent, mais aussi de renforcer ceux de second rang. Ces derniers sont très importants puisqu'ils représentent un groupe de contacts distinct gravitant autour du noyau de relations personnelles d'un individu. Ces contacts fournissent de l'information inédite en plus de servir de pont avec divers autres groupes. Ainsi, les liens secondaires sont particulièrement importants pour les équipes dispersées dont le milieu offre difficilement de l'information ou une expertise autre que celle de leur réseau primaire. Même si le fonctionnement du réseautage social virtuel est encore peu connu, l'une des principales forces semble être la visibilité et l'accessibilité favorisées des relations secondaires.

Résultats : Dans le cadre d'un projet de recherche plus vaste portant sur le réseautage social virtuel et son utilisation dans le milieu militaire, une analyse des besoins de haut niveau a été effectuée dans huit communautés militaires afin de comprendre la collaboration des groupes au sein des Forces canadiennes et de déterminer les outils de réseautage possibles. Un intérêt particulier était la possibilité de soutenir l'interopérabilité à l'aide du réseautage social virtuel en agrandissant les réseaux sociaux et en améliorant la capacité à localiser des ressources et de l'expertise au sein des équipes dispersées. L'étude a permis d'identifier vingt-quatre besoins au total, dont neuf étaient communs à au moins trois des communautés participantes. Le fait qu'un tel nombre de besoins soit découvert avec un petit échantillon de communautés militaires porte à croire que tous les besoins en matière de réseautage social sont grandement nécessaires dans l'ensemble des FC.

Importance : Il est essentiel que les milieux militaires restent à l'affût des technologies et que les répercussions et les exigences en matière d'applications Web soient comprises, non seulement pour fournir aux opérations un appui moderne, mais aussi pour assurer un environnement équitable contre les capacités ennemies. En outre, les nouvelles technologies ne devraient pas être mises en œuvre sans un examen approprié des applications, des besoins et des modifications pouvant être nécessaires pour correspondre aux environnements militaires uniques. Ce programme de recherche permet de comprendre une technologie relativement nouvelle pouvant

avoir des répercussions sur l'interopérabilité des groupes participant à des opérations interarmées, multiorganisationnelles et de coalition.

Plans futures : L'objectif du programme de recherche plus vaste est de déterminer quelles conséquences l'utilisation d'une plateforme de réseautage virtuel d'entreprise pourrait avoir sur une communauté des FC. Une analyse approfondie sera effectuée en fournissant au groupe militaire identifié une plateforme de réseautage social et en examinant le comportement et le développement du réseau.

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1 Introduction

1.1 Background

Technology supporting distributed collaboration is developing at a rapid pace, and in corporate and social worlds more traditional methods for connecting and communicating have often been superseded by internet-enabled social media tools. The web-based social networking platform, like Linkedin and Facebook, is one example, having replaced email in many personal and business communities. The rapid adoption of this kind of technology and the speed at which it is developing is nothing short of remarkable. Facebook for example, has grown in a few years from a handful of college students to 500 million users, half of whom log on to the site every day, and where 30 billion pieces of content, including photos, videos, new stories, comments, and web links, are shared monthly [1].

The impact of social media in our day to day lives has resulted in radical social change in the way we network and interact and as such, social networking could be described as a disruptive technology. Through this kind of advancement in technology, long-standing channels for communicating one to one (e.g., phone, letter) and broadcasting one to many (e.g., newspaper, email) have been supplemented by social platforms (e.g., Facebook, Ning, LinkedIn) where people come together virtually, and connect and interact on the basis of many to many. The speed at which information can be shared using social media has resulted in an ability to transmit world events and news in real time while simultaneously reaching an audience that spans the globe. As a result, when catastrophe or crisis hits, the first reaction, particularly in the public realm, is to relay current status, and transmit and dialogue using social media.

In light of the social change spawned by virtual social networking platforms, and the impact they have had, and continue to have, we look to our defence and security organizations and are immediately faced with the sobering observation that the use and availability of social media in these environments is sorely lacking. There are obvious hurdles, since issues revolving around security, cultural change, and trust, to name a few, are difficult matters to handle at the best of times, and more so in light of the speed at which social media has been introduced and emphatically embraced in the civilian world.

Nevertheless, the popularity and success of virtual social networking in the business and recreational worlds strongly implies that this type of collaborative application could play an important role within defence and security. Often these operational environments involve distributed teams that come together and change quickly, and where members, having never had the opportunity to meet face to face, rely on technology-mediated communication. Frequently teams are made up of multi-national, multi-agency component members that bring further challenges to the distributed mission through different languages, culture, procedures, etc.

Traditional establishments, like national defence and security organizations, tend to readily adopt document management platforms (e.g., Microsoft Office Sharepoint) that are built on sharing and exchanging material between members of established closed communities. This type of application meets the needs of collaboration from the point of view of document sharing and it provides a virtual work space for communities and groups. However, this kind of technology tends to be lacking in the social aspect of collaboration, which is, in fact, the forte of social networking platforms. The ability to interact with people formally and informally, and to communicate in real time, are basic components that build inter-personal relationships in the real

world. Web-based social networking provides a mechanism for experiencing similar functionality to aid in creating and developing relationships virtually.

Virtual social networking represents an evolutionary step in the process of finding and disseminating information. It is critical that military operational domains stay abreast of modern technologies and that the implications and requirements for web-based applications are understood in those unique environments [2]. Not only to provide appropriate modern-day support to operations but also to afford an equal playing field against the capabilities of their adversaries. Military environments are unique and new technologies should not be implemented without appropriately investigating the implications and requirements, as well as modifications that might be required to fit those environments. As an example, in the late 90s the advent of chat and email hit the Navy with little preparation. While enthusiastically embraced as a major advancement in communications by military personnel on board ship, there were unexpected side effects in the management of commands and traceability of actions. Efforts to use chat logs to reconstruct command and control flow were found to be nearly impossible. However, despite these problems, chat is currently used extensively as a valuable means of communication between military platforms [3].

1.2 Social linkages

Any social network is made up of connections or links between individuals. Strong links represent connections that are close, the people an individual knows most about and interacts with most frequently. Strong links tend to form based on a common bond, such as relatedness or a shared interest, and because of their network proximity they are easy to access. Weak links, on the other hand, are those connections that sit out toward the periphery of a social network. Weak links are diverse and varied and have less in common with the centre node, the individual who owns the network [4]. However, weak links are extremely important, especially in the context of distributed groups of people who are working together, because weak links move in different social circles and consequently they are a source of new people and novel information. Granovetter [5] points out that weaker links provide access to information and contacts beyond those available in an individual`s own social circle. Weak links can also be the bridges between one network and another. Consequently, weak links are important to distributed teams where finding experts and information beyond a team’s primary circle is challenging.

Virtual social networking provides a means of making those weak links visible and connectable since in social networking web platforms all connections, whether they are weak or strong, are notified of any activity within the network. Those weak links are brought to light through passive observation of the network as a whole. A user simply has to log on to the network site to watch activity within their network of links. Not only are peripheral links made visible, but the activity around them is observable and, since weak links are inclined to move in different, unique circles, the activity and information contained within those activities can be relatively novel. Activity means sharing, which can occur in many forms including posting short text comments (like the short status update on Facebook or Twitter), blogging, or sharing web-links, photos, videos, etc. By making weaker links and their actions visible through network observation, one of the greatest strengths of virtual social networking is that individuals can become aware of people previously unknown to them or people with whom they have little knowledge. Depending on the amount of activity and the kinds of information shared these connections that were once unknown can become familiar. Consequently, sources of expertise, resources, and information, of which the user might otherwise have been unaware are brought to light and are easily accessed.

1.3 The distributed team

Teams that are not co-located face unique challenges. Military and security operations are often distributed, fast paced, complex and fluid, bringing together organizations and groups who may not work together often and who may never have the opportunity to meet face to face. Often assembled adhoc to support a mission phase or the sudden onset of a crisis, distributed teams may be unfamiliar with each other and prone to change as an operation develops and new or additional support is needed. Moreover, nations and organizations use different doctrines, procedures, cultures and language, making working together especially challenging.

Distributed teams rely on technology to communicate and collaborate, but technology can increase ambiguity and artificiality, and add a time lag to interaction which can affect the natural exchange of dialogue and ideas [6]. Those rich visual and auditory cues that inform us about the speaker and provide context to the conversation, like body language, facial expression, and tone of voice, are lacking or may be misinterpreted in technology-mediated conversation [7] [8] [9]. All in all, communication in virtual teams is reduced in quantity and quality [10], resulting in difficulty becoming familiar with other team members, and in ensuing challenges in building trust between teams that are not co-located. Conversely, collaboration tools that are designed with these difficulties in mind could help support the process of linking and interacting within distributed teams.

1.4 The collective knowledge base

Web-based social networking applications may also provide significant benefits to finding experts when teams are distributed and unfamiliar with each other. One of the key issues that arises within multi-team distributed operations is the knowledge of who to turn to for expertise. 'Who knows what?', or an awareness of knowing what other team members know, makes up a team's collective knowledge base, termed transactive memory [11][12], and research shows this is an essential factor in team performance [13]. Unlike a shared mental model, whereby team members share common knowledge and information, transactive memory refers to a group-level collective system of knowledge and the awareness and understanding of where to find the source of specific expertise within a team, or team of teams [14]. A distributed knowledge system serves to reduce individual cognitive load, enlarge the collective pool of expertise, and minimize redundancy. Furthermore, since situation awareness is a basic component of good decision making [15], and depends to a large degree on the information available, team members in military and security operations need to find sources of expertise quickly so that information can be accessed and delivered in a timely manner to support well-informed decision making.

1.5 Investigating virtual social networking in the military domain

Investigating virtual social networking and its application to the military domain was the goal of the research conducted. Our objective was to understand where, within the military organization, virtual social networking might be an appropriate collaborative tool, and to understand the implications and impact of introducing this kind of technology into this environment. Of particular interest to us was whether virtual social networking could support interoperability, by enlarging social networks and improving the ability to locate resources and expertise within distributed teams.

As part of a larger research program, a preliminary study was conducted to understand the collaborative work of groups within the Canadian Forces (CF) and the potential for their work to be supported by virtual social networking tools. In this preliminary study a high-level requirements analysis across a number of groups within the CF was carried out. The ultimate aim of the larger research program is to research the effects of using an enterprise-class virtual social networking platform on one community within the CF. However, this broader requirements analysis would ensure that the more focused research would investigate how virtual social networking tools address reasonably generic work requirements. As a consequence, the results should hopefully generalize across the CF, and not just apply to the selected test community. The study is described in the sections that follow.

2 Method

The research team had access to eight different military communities, including operators at an operational control centre, information technology and intranet developers, land forces operators, intelligence analysts, military family support staff, and psychological operations. Each community provided between two and eight personnel for the research.

In keeping with the exploratory nature of the research, an interview protocol was developed to support two-hour long semi-structured interviews with each group of personnel. In addition to standard interview elements to introduce research personnel and develop a shared context for the interview, this protocol was designed to elicit information about the different ways in which each group collaborates to do their work, and the challenges of this collaboration. The researchers tried to develop an understanding of collaboration through the perspectives of information sharing, expertise location, and methods for bringing new knowledge into each group. As much as possible, we tried to ensure that discussions around these first points did not deal with technological support, but rather focused on human requirements. In the final portion of the interview, participants were asked about the potential for technology to support their collaboration, and the potential benefits and risks of these technologies.

Three to four researchers participated in each of these interviews, with one researcher leading the discussion and the others recording notes. Interview results were discussed in debrief sessions following each interview, and the various interview records were then consolidated and reviewed to develop structured accounts of each interview. Following this, we analyzed the consolidated accounts to identify evidence which was further analyzed to develop specific requirements to support the collaborative work of each community. The importance of each requirement in light of the overall work of each community was assessed informally, so that the requirements within each community could be prioritized. The requirements for each community were then further analyzed for commonalities, from which a consolidated set of requirements across all of the communities interviewed was developed. The priorities of each requirement across all communities were aggregated and were used as a basis to discover the most important ones.

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3 Results

The interviews and subsequent analysis of the interview records led to the identification of 24 different requirements that, if addressed, have the potential to support the collaborative work of the communities interviewed. Fifteen of these requirements were expressed by at least two different communities, and nine were expressed by three or more communities. Some of the requirements are supplemented by solutions proposed by the participants themselves. Based on the subject matter of the interview this is perhaps not surprising, and at least serves to show that the interviewees were engaged. It should be noted however that their experience in collaborative technologies might be limited.

The nine requirements shared by at least three communities are described below:

- **Expertise contributions.** Personnel indicated that the CF currently has no easy means of allowing individuals to share expertise and experiences informally, except through face-to-face meetings (typically through socializing outside of work). They perceived a requirement to be able to share this type of information more broadly. This would help new personnel to learn, and would also help personnel to locate real experts by their contributions. Blogs were proposed as the most common means for fulfilling this requirement.

- **Enhanced personnel search** (people/role/expertise)**.** The most frequent means of searching out expertise in the CF is to ask a supervisor or to contact a peer. Tasks involving the location of diverse types of personnel could be helped through a searchable online database of CF personnel, and this information could be made even more useful if searches on expertise contributions could cross-link to the personnel database or vice-versa.

- **Multiple source contribution space.** A collaborative means of compiling a database was indicated as a requirement, especially in contexts where information from diverse sources is compiled to develop intelligence. Personnel suggested that a wiki-style database could be a productive means of aiding collaboration. The CIA's Intellipedia is a useful model for this, and has been shown to be highly successful at helping intelligence organizations to see and understand complex patterns in intelligence data [16].

- **Integrated solutions.** Many of the communities interviewed were concerned that our work could result in the introduction of yet another software system for CF personnel to use. If a new technology solution is to be successful, it must be well integrated with operators' workflows, and not just another system for operators to check. It needs to be a platform that will replace and reconfigure old workflows.

- **Enhanced searching techniques.** CF personnel indicated a requirement for a means to search documents by the actual meaning and importance assigned to them by other consumers, rather than relying on metadata schemes that allow authors to make documents searchable by what was important to them when they wrote the document. As such, there is a requirement in the CF for technologies like social bookmarking (which allow people to search each others' internet bookmarks) and rating (which allow people to see which content others felt was relevant or useful).

- **General announcement capability.** CF personnel report that it can be costly to find answers to non-urgent but important questions, and that they would benefit from an ability to post questions to a public place where others could address them as they are able. Crowd-sourcing expertise could be an inexpensive and effective way of helping people to share expertise in important but non-critical situations.

- **Social networking and traversal of weak ties.** The challenges CF personnel have especially in finding experts in the broader CF network indicate a requirement for a basic social networking function. This function would allow users to develop profiles and indicate their strong ties by linking themselves to the colleagues they are acquainted with. The most important benefit of this in the CF context would be the ability to find and exploit weak ties in order to find and disseminate new expertise and ideas.

- **Information accreditation.** Contributions to a CF social networking system must be attributed. The operators we spoke with indicated that they need to know the source of any information in a CF system, and that the data needs to be correct if it will be published in a forum where people might use it to make decisions. The undercurrent of these types of comments is likely due to associations of a CF social networking system with social tools like Facebook and Myspace. Fortunately, enterprise-level social networking tools are fully attributed and there is strong evidence that the peer-review that is inherent in a social networking system actually fosters data correctness (see the on-line public encyclopedia, Wikipedia as an example).

- **Communities of practice.** In addition to providing a basic capability to network and expose and make use of weak ties, CF personnel would benefit from the formation and maintenance of communities of practice to share best practices across units and civilian areas. The CF currently has some software support for communities of practice, but the fact that these tools are not well-integrated into the overall toolset provided to CF personnel, means that it is difficult for a critical mass of users to coalesce around them.

4 Discussion

A number of observations can be made about the nature of these requirements in general:

- Some of the communities interviewed had specific workflows that could be supported by any toolset that can capture and support workflow execution. Even if the workflows are not collaborative, if these more-or-less standard work processes were supported in the context of a social networking platform, it could drive the use of the platform.

- There are broad requirements for social networking tools across the groups we interviewed. Given our understanding of enterprise-level social networking and of the work performed by the groups we interviewed, there is strong evidence that social networking tools could support much of the work of these groups.

- The requirements are focused on finding and sharing expertise. Three of the four most prominent requirements (expertise contributions; enhanced personnel search; multiple source contribution space; integrated solutions) deal with either documenting techniques and expertise or finding experts in the CF. While core social networking requirements were also expressed (e.g., social bookmarking; communities of practice; social networking, profiles, and traversal of weak links; forming networks around strongly tied groups), these are just the plumbing that CF operators hope will help them to get at expertise.

- Information sharing is a second focus, and is tightly linked to expertise sharing. Four of the six most prominent requirements are also concerned with information. Expertise contribution is, at its core, about capturing information related to expertise so that it can be used by others; elements of the workflow support requirement speak to sharing of information; multiple source contribution tools aim to foster information sharing by making it easy to publish new and correct existing information; and social bookmarking is all about leaving trails for others to find the same information you have.

- The challenges CF personnel have in finding experts in the broader CF network indicate a requirement for a basic social networking function. This function would allow users to develop profiles and indicate their strong ties by linking themselves to the colleagues they are acquainted with. The most important benefit of this in the CF context would be the ability to find and exploit weak ties to find and disseminate new expertise and ideas.

- Social networking (that is, finding and making use of weak links) is not a current part of formal CF practices. As a military organization, the CF is hierarchical. Information flows readily up and down chains of command, but does not flow as well across the hierarchy. We did not find much evidence of operators looking to build networks, but only to adopt the network used by the last person in their current position. While there is great potential for social networking in the CF, that potential will only be realized if the CF can learn to develop networks across the hierarchy. This is the promise of social networking, but will also be the challenge in its implementation in the CF.

- Operators will only adopt a social networking system that does not involve extra work. All of the operators we spoke to indicated that their work-day is full and that they do not have time to work with ‘yet another system’. The requirement for an integrated solution

speaks to this, and the operators who voiced this requirement did so with passion. If it is to be used, a social networking system will need to function alongside current tools (email, document storage, etc.) instead of being another system to check.

- The up-and-coming generation of CF workers will likely expect these tools. Since the data from our interviews were analysed at the group level, and since the groups we interviewed contained diverse types of personnel, individual-level expectations did not come through. An important observation at the individual level however was that the more junior the personnel we interviewed, the more enthusiastic they were about the potential for these tools. We expect that the time is coming when new recruits will expect that these tools will be at their disposal in the same way that they expect to be provided with a computer and other work necessities.

The findings from this work must be tempered with the knowledge that this was not a general requirements analysis that just happened to find a set of requirements pointing to a need for social networking tools. Rather, it was known by participants that we were investigating three categories of social networking requirements (networking, sharing information, and locating expertise). Nevertheless, these results make a strong argument for social networking. Even though requirements were different from community to community, each community's requirements could reasonably be supported by the core elements of a social networking toolset along with extensions specific to each community's work. That such a broad set of requirements was found in a small sample of CF communities leads us to believe that the overall requirement for social networking generalizes across the CF and is very strong indeed.

5 Conclusion

In general the evidence from this broad-based analysis points to several capabilities that are missing in the working environments of those interviewed that could be served by a social networking platform. Virtual social networking technology would provide the ability for personnel to build networks of connections that include information about members, find sources of expertise within distributed teams, provide a place for multiple contributors, and a means of tagging searched material so that others can benefit. Future work will take this analysis further by providing a select group of military personnel with a social networking platform so that the development of individual and group virtual networks and the way the software is used can be observed.

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With the advent of on-line social and collaborative technologies, our ability to connect and the way we communicate with one another have changed dramatically. Social networking platforms that allow communities to form virtually have been quickly adopted in the recreational and business worlds. They are a powerful means for communicating and for finding and linking with new as well as existing connections. In defence and security organizations teams are often not co-located. Virtual social networking might be a valuable tool for finding expertise and team members with whom to share information. This document reports on the findings from a preliminary study that examined the requirements for enterprise virtual social networking collaborative technologies within the Canadian Forces. A number of military communities participated in the study and the findings overall provide strong evidence of a broad requirement for this kind of technology that generalizes across the organization as a whole.

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Social networking; military requirements; technology; collaborative; distributed teams

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