8-6-2011

An Ounce of Prevention – Understanding the role of IS in ending Interpersonal Violence

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An Ounce of Prevention – Understanding the role of IS in ending Interpersonal Violence

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ABSTRACT

This paper presents the findings of an investigation into the role of social technologies in violence prevention non-profit organizational networks. The research was conducted with the cooperation of a partner organization that serves as a knowledge hub connecting various providers of services related to the treatment and prevention of instances of interpersonal violence. From our time working with this project we developed the SASA (Share and Share Alike) Framework of Sustained Knowledge sharing among non-profit partner networks. This paper presents an overview of the SASA framework and discusses its role in facilitating the creation of a sustainable knowledge contribution network for non-profit service providers.

Keywords

Non-profit organizations, social capital, knowledge contribution, virtual communities, social networks.

INTRODUCTION

The World Health Organization defines interpersonal violence as violence between individuals. According to the FBI, Uniform Crime Report, in 2009, an estimated 894,940 instances of this type of violence were reported in the United States alone. Today, numerous organizations around the U.S. work to 1) aid the victims of violence and help them repair their lives, and 2) educate the populous and prevent future acts of violence in American society. These types of organizations do not operate alone. Rather, the non-profit community devoted to this cause has a collective obligation to utilize existing technologies as effectively as possible, sharing their individual knowledge to prevent violence and aid existing victims.

The authors of this paper had the opportunity to work closely with one of these organizations as it developed and established an online virtual community designed to become the local hub for community knowledge sharing and collaboration among a network of violence prevention organizations. This project was established to mobilize the efforts of those organizations toward the common goal of health and safety in the local community. The project’s stated mission is to, through the collaboration and cooperation of multiple interdisciplinary partners, make the prevention of interpersonal violence a national priority and to encourage healthy interpersonal relationships by bringing together experts in the fields of science, practice, policy, and advocacy.

At the start of the project, this mission was conducted offline, through efforts to connect over 150 organizations around the nation from such diverse fields as healthcare, mental health, education, justice, public health and child/family welfare. Types of violence addressed by the organizations in this network include rape, domestic violence, assault, bullying, and elder abuse. Owing to this diverse range of problems, it is vital that organizations build a collective store of knowledge. Knowledge sharing within organizational alliances serves to bridge the gap in collective knowledge while allowing organizations to
maintain a necessary degree of individuality (Oxley and Wada, 2009). However, the mutually agreed upon goal of an organizational alliance is in and of itself not always a strong enough motivation for an organization to share valuable knowledge. Many times, a lack of trust in the alliance organizations or concerns for self preservation cause organizations to withhold knowledge (Levin and Cross, 2004). For many nonprofits, patient and organizational information ultimately makes up the backbone of each business, and the nonprofit organization’s ability to receive funding and support is tied into the knowledge resources the organization possesses. Therefore, sharing is on some level detrimental to organizational individuality and existence.

We are interested in looking at the reasons that organizations share information in spite of the aforementioned costs. Existing IS research has pointed to social capital as a primary motivator for contribution in these types of situations (Wasko and Faraj, 2005). We contribute to this research by expanding studies of knowledge sharing in virtual communities (Butler, 2001; Gu et al., 2007; Ma and Agarwal, 2007) to account for the unique inter-organizational aspects of non-profit knowledge sharing and develop a theory of organizational social capital’s role on sustained non-profit knowledge contribution. With this context in mind, two main problems serve as the motivation for this research. First, how can an organization motivate alliance organizations to share valuable information needed for the collective good? Secondly, what is the role of the social capital in supporting this necessary information sharing? Using literature from social capital and online virtual communities as a theoretical lens, the experiences collected from those involved in this project eventually resulted in the creation of the SASA (Share and Share Alike) framework of organizational sustained knowledge sharing. This paper presents the findings of this research, and provides an overview of the framework together with some future directions and suggestions for how the findings of this paper can be applied to the larger area of online virtual community research. The lessons learned in this effort should prove relevant for other similar organizations, where such electronic communities for collaborative learning across governmental or social services agencies that lack coordination and service integration often exact a high toll on clients (Brazelton and Gorry 2003).

**Our Place in Extant Virtual Community Literature**

Since this research is concerned with encouraging online participation within an established offline organizational alliance, we ground our definition of virtual community in a good understanding of the markers of community in a general sense. These markers consist of commonalities generally found in what society calls a community, and an understanding of these markers not only helps to conceptualize the members of a community, but also the forces that bind them together in the effort to achieve some collective goal, in our case violence prevention.

Communities are first typified by a consciousness of kind (Bagozzi and Dholakia 2006; Wellman and Hampton, 1999), meaning that community members have some common ground from which to form the motivations of their actions. This sense of homophily, or sameness, results in a feeling of mutual bond with members of the community, and a sense that those on the outside are in some way apart. Non-profit organizations naturally exhibit a consciousness of kind centered on the collective goal of community betterment. The struggle to succeed against terrific odds, often with extremely limited resources, creates camaraderie among organizations across many different public service issues. This feeling of being on the inside looking out helps to foster feelings of concern for the community within its user base. The second marker of community consists of shared rituals, common practices and artifacts (Bagozzi and Dholakia 2002, Pettigrew 1979). As organizations in a certain sector share experience working on specific issues, they often create similar ways of doing business. This collection of shared practices helps to solidify the bond between similar organizations. Finally, communities are typified by a sense of duty and obligation. These are often strongly present in non-profit organization alliances, which are fundamentally driven by an obligation to help the communities that they serve.

Some of the earliest virtual community (VC) research was conducted by Hiltz and Wellman (1997), who examined the nature of learning environments conducive to transitioning to an online setting. In their studies of virtual education organizations, they found that creating an atmosphere that promotes interaction and cooperation is essential to building a social cohesion among the members of the community. This early research set the stage for social considerations in virtual community research. Hilz and Wellman identified the importance of network support and the need for knowledge sharing in developing a successful VC platform. Further expansion of these concepts on the part of the authors established the social research tradition within VC research that still exists today (Hiltz and Wellman 1997, Wellman and Hampton 1999).

With the emergence of Web 2.0 social technologies and the rise of social networking (Ellison et al. 2007, Debatin et al. 2009), recent socially grounded VC studies have examined a number of dependent variables including general usage (Hu and Kettinger 2008), friendship (Jacks and Salam 2009), fraud (Chua et al. 2007) and privacy (Debatin et al. 2009, Thambusamy et al. 2010). As this predominantly social research into VC usage has blossomed, another parallel research stream has developed with a stronger focus on informational value of knowledge contribution and its impact for organizations. This
line of VC research exhibits a clear distinction between the more material *virtual communities of exchange* and their social counterparts (Dellarocas 2003, Gu et al. 2007). Especially relevant for this paper, this distinction is important to conceptualizing online social communities as agents of both social connectivity and organizational productivity.

Virtual communities of exchange primarily deal with the exchange of goods and services (Schubert and Ginsing, 1999). These are typified by a more commercial context and an emphasis on the value of informational and material antecedents to usage or contribution. For example, Dellarocas (2003) examined the value of word of mouth information in virtual communities for business use. In another related study, Dellarocas (2006) showed that carefully controlling the community dialogue has tangible benefits for the organization. Gu et al. (2007) expanded on this idea, by looking at consumer valuation of the informational assets of a network. They found that the value of a network is ultimately a function of 1) the knowledge it contains, and 2) the ability of network members to capitalize on these knowledge resources (Gu et al., 2007).

In developing the SASA framework, it was important to understand the many ways in which participating organizations value the community. Through this understanding we propose to build a more complete theory of sustained knowledge contribution that takes informational, social, and organizational antecedents of knowledge contribution into account. Ultimately, this is the gap that our paper proposes to fill. Whereas past research has considered both the informational and structural aspects needed to facilitate sustained knowledge sharing (Butler, 2001) and the social antecedents that ultimately promote knowledge contribution (Wasko and Faraj, 2005), this paper attempts to integrate the two within the unique context of the nonprofit organization. This brings our research in line with recent work such as Jones et al. (2004), which argues that VC research emphasis should not lie with the social spaces themselves, or with the informational resources contained in the spaces, but should instead consider a combination of the technological, social, and informational elements.

**RESEARCH MODEL: THE SHARE-AND-SHARE-ALIKE (SASA) FRAMEWORK**

In this discussion, we discuss the rationale for three distinct types of social capital at work in a non-profit context. Together, these categories of social capital creation (business to community, business to business, and business to governance) work to generate the kind of knowledge sharing necessary for sustained contribution to an online social network. Table 1 contains the definitions of these categories, outlining their application to the current paper and noting the different stakeholders which play critical roles in the success of the non-profit organizations.

<table>
<thead>
<tr>
<th>Category</th>
<th>Definition/Stakeholders</th>
<th>Application</th>
</tr>
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<tbody>
<tr>
<td>Business to Community Social</td>
<td>Community with regard to social capital consists of local “groups, clubs, churches, educational institutions, advocacy groups, and a myriad more” (Lewis, 2005, pg. 240).</td>
<td>Refers to the local groups and agencies with which the non-profits engage in knowledge sharing</td>
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<tr>
<td>Capital</td>
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<tr>
<td>Business to Business Social</td>
<td>Business with regard to social capital refers to the relationships in which firms engage to explore and exploit opportunities created through knowledge sharing (Im and Rai, 2008).</td>
<td>Refers to the long-term inter-organizational relationships in which non-profits engage with others in the national network for the purpose of knowledge sharing</td>
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<td>Capital</td>
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<tr>
<td>Business to Governance Social</td>
<td>Governance with regard to non-profit social capital refers to “nonprofit victim services, law enforcement, prosecution, the courts, and the medical community [which] hold perpetrators accountable” (Zweig and Burt, 2007, pg. 1150).</td>
<td>Refers to agencies which govern/protect citizens and with which the non-profits engage in knowledge sharing</td>
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<td>Capital</td>
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Table 1. Categories of Non-profit Social Capital.

**Business to Community Social Capital**

Most non-profit organizations hold knowledge regarding social problems in their communities (Smith, 2010). Their existence and involvement within the community creates community social capital which organizations draw on to serve the populous. Research regarding community social capital is extensive within the organizational sciences including studies in mental health, community involvement and volunteers (Ashcraft and Kedrowicz, 2010; Lewis, 2005). In the IS literature, research on social capital and communities is scant. Preece (2002) discussed how information technology could facilitate the growth
of social capital following the Twin Towers terrorist event in 2001. Also, in their 2005 investigation of contributions to electronic knowledge repositories, Kankanahalli, Tan and Wei note that “… social capital provides the conditions necessary for knowledge exchange to occur” (pg. 116). Within the current paper, business to community social capital is examined specifically with regard to the individual organizations’ ability to generate much needed social capital through the sharing of valuable organizational knowledge.

Reduced Stigma

We define two types of community social capital. First, as organizations that address social problems, NPOs work to increase awareness and reduce social stigmas. In the social and organizational sciences, stigma has been defined as “a label that evokes a collective stakeholder group-specific perception that an organization possesses a fundamental, deep-seated flaw that deindividuates and discredits the organization” (Devers, Dewitt, Mishina and Belsito, 2009, pg. 165). We define stigma as the negative label placed upon the social problems that NPOs address and the individuals with whom they work. Increased awareness through knowledge sharing will allow the partner organizations to increase community awareness of social problems, thus reducing the negative stigma.

![Figure 1. Theoretical model of non-profit social capital and sustained knowledge contribution.](image)

Community Partner Connectedness

As members of a community, NPOs tend to partner with other community members and/or organizations, forming alliances to address social problems. Lewis (2005) noted that “social capital is built when groups of individuals voluntarily come together in a local community to get work done, join a cause, or enjoy an activity” (pg. 245-246). When NPOs are hubs of information, they have a higher centrality within the information network. However, if they are more of an outsider looking in they have a lower centrality within their networks. Social networks and the idea of centrality have been studied extensively in the management and social science literature. Liu and Ipe (2010) refer to an individual’s network centrality as “a measure of how closely he or she belongs to a group” (pg. 243). Within the IS literature, network centrality is viewed as “the number of ties an individual has with others in an organizational unit” (Sykes, Ventkatesh & Gosain, 2009, pg. 375). We consider both the strength and number of network ties when examining the centrality of NPOs within their community. The greater number of strong ties NPOs have within their community affects the amount of social capital which can be gained and
utilized. The gains in social capital can then be contributed to the knowledge base for the benefit of all NPOs. Business to Business Social Capital

**Business to Business Social Capital**

**Ambidextrous Business Intelligence (BI)**

Just like any business, non-profit organizations face certain marketplace realities that must be addressed if any significant objectives are to be reached. For this reason, they require access to valuable business intelligence (BI). Business intelligence is information that allows an organization to stay ahead of changes in its respective market (Jourdan, Rainer and Marshall, 2008). The types of change helped by accurate BI can consist of actions on the part of competitors, changes to the competitive landscape, technological innovations, or other general changes to the business environment (Vedder, Vanecek, Guynes, and Cappel, 1999). The last several years have seen a veritable explosion of interest in business intelligence, owing to the well documented success of large for-profit organizations such as Continental Airlines, which has realized a 1000% return on investment related to business intelligence expenditures (Watson, Wixom, Hoffer, Anderson-Lehman, and Reynolds, 2006). Despite the increase in general interest around BI, research extensions to the non-profit community have been fragmented. Nevertheless, as BI assumes an increasingly important role in top performing organizations, it should be included in discussions of non-profit efficiency as well. For this reason it warrants inclusion in the SASA framework.

We attempt to stay abreast of the current BI literature by further differentiating the general concepts of BI into two subconstructs derived from a synthesis of literature in both BI and literature on organizational ambidexterity (March, 1991; Gupta and Govindarajan, 2000). We conceptualize effective BI as intelligence practices that differentiate between BI for Exploration (outward facing applications) and BI for Exploitation (applications internal to the organization).

Organizational ambidexterity focuses on the organization’s ability to simultaneously balance outward facing activities with the internal maintenance and operations of the organization (March, 1991). Organizations that exhibit a high degree of ambidexterity are able to go out into the surrounding business environment and identify problems and opportunities, while at the same time converting the externally discovered opportunities into internal success (Gupta and Govindarajan, 2000). Said a different way; “exploitation involves learning along an existing technological and stakeholder trajectory, while exploration involves learning along a trajectory distinct from existing ones (Bryson, Boal, and Rainey, p. 3; 2008). Recent research has argued that all public organizations must maintain some proficiency with ambidexterity (Bryson et al., 2008).

We propose that the need for ambidextrous applications of BI technology motivates organizations towards the common goal of sustained knowledge sharing. Ambidextrous use of BI technologies allows the organization to respond to turbulent and disruptive technological changes. Through an understanding of the surrounding technological environment, disruptive technologies fail to catch the organization completely unaware.

**Business to Governance Social Capital**

In the process of effectively addressing social problems, many NPOs collaborate with organizations which operate to govern/protect citizens (Zweig and Burt, 2007). Examples of protective service organizations are law enforcement and health and family services. In social science research, governance “collaboration represents a longer-term integrated process through which parties who see different aspects of a problem constructively explore their differences [and] search for solutions that go beyond their own limited vision of what is possible” (Thompson and Perry, 2006, pg. 21). The IS literature focuses more on the structure of these types of collaborative networks. Schilling and Phelps, (2007) noted that the structure of the network affects the quantity and intensity of information diffusion throughout the alliance (Schilling and Phelps, 2007). Business to protective services capital is examined here specifically with regard to the NPOs knowledge contribution to the larger network. We discuss how information systems can facilitate the sharing of knowledge gleaned from business to protective services social capital. In order to do so, we define two subcategories of this type of social capital.

**Disclosure Requirements**

NPOs dealing with certain social problems are mandated by laws to disclose certain pieces of information. Professionals who work with children such as social workers and physicians are required to report any instances of abuse and/or neglect. Within the social sciences literature, the effectiveness of mandatory reporting has been studied (Steen, 2009; Hollenbeck, 2001). The current paper evaluates the disclosure requirements between NPOs which address domestic violence and protective service agencies. We examine how this business to governance social capital leads to knowledge contribution in the larger network and how information systems can facilitate this contribution.
Shared goal of patient safety

In addition to reporting, NPOs in our domain of interest frequently encounter victims of abuse. These victims may be individuals beaten by their significant other, children who have been neglected or even elders who have suffered abuse. A key element of serving these types of populations is getting the victim to safety and/or keeping them safe. The social science literature defines safety as the civil protection orders which can be provided to individuals (Cerulli, Edwardsen, Duda, Conner & Caine, 2010; Kethineni & Beichner, 2009; Spooner, 2009). IS research has examined safety, focusing on healthcare patients as well as on sensitive patient information (Miller & Tucker, 2009; Waldo, 2001). In the current paper, the shared goal of patient safety adds to the NPO’s collective knowledge contribution proportion to the organization’s business to protective services social capital. This collaboration keeps victims of abuse and their private information safe.

DISCUSSION

The paper focuses on knowledge sharing for the collective good and how social information systems can support knowledge sharing. The results of this paper are aimed at connecting organizations which address interpersonal violence to examine how organizations access and share knowledge. The idea of virtual communities is introduced as a solution for bridging communication gaps within the organization. Additionally, three types of social capital are introduced: business to community, business to governance and business to business. These categories distinguish three aspects of non-profit organizations which affect their knowledge contribution. The social capital gained through the knowledge shared within these three categories is critical for the non-profit organizations’ effectiveness in serving their populous. Collectively, the facets of this paper bring together the informational and structural aspects which facilitate knowledge sharing along with the social aspects which empower organizations to share knowledge. It is our hope that the SASA framework, in addition to making a substantial contribution to extant academic theory, will provide a knowledgeable and efficient roadmap for practitioners interested in practical implementations.

REFERENCES


