Between Us and Them: Building Connectedness Within Civic Networks

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ABSTRACT

Civic networks of community-based organizations face significant challenges in working together to combat issues facing their community (e.g., gang violence, sex trafficking). In our research, we examined how local organizations tried to build and maintain connectedness over time as a network to fight child sex trafficking. We sought to understand how technology supports the social processes of connectedness in this context. Based on our analysis of the field data from this case study, we identify three categories of activities for building and maintaining connectedness. We also find that while different technologies are suited towards supporting different aspects of connectedness, there may be gaps in how adequately social media tools support connectedness in civic networks.

Author Keywords

Interorganizational collaboration, civic networks

ACM Classification Keywords

K4.2. Social Issues: Miscellaneous

General Terms

Human Factors, Design

INTRODUCTION

In the face of large-scale social problems, e.g., gang violence, homelessness, or child sex trafficking, the combined efforts of government agencies and expert service organizations are often inadequate. Members of communities facing such issues must often self-organize, despite efforts by government and service providers to help combat these issues [3]; these community-based organizations often co-construct an information ecosystem that allows them to coordinate and share information [7]. In our work, we studied the appropriation of information and communication technologies (ICTs) in and between such

organizations, focusing on a particular social location [12]: an umbrella organization that functions as a hub in building and coordinating a multi-organizational network to fight child-sex trafficking.

Our exploration of connectedness in civic networks builds on the work of [1, 2, 4, 10]; we summarize connectedness as *interdependence between organizations that is supported by processes of information sharing*. Prior research such as [1] explored the formation of connectedness among organizations, while other studies [c.f. 4] examined properties of organizations creating such ties. We build on this work by focusing on the appropriation of ICTs (specifically Facebook, Twitter, email, and a custom website) initiated by a hub organization created to support interorganizational connectedness. This paper contributes to CSCW by illuminating the social processes of ICT-mediated connections an under-studied context, i.e. a civic network, wherein the configuration of cyberinfrastructure emerges in situ between community-based organizations. By examining the ways that low-budget community-based organizations develop and structure connectedness via ICTs, we offer findings that complement prior work on interorganizational ICT use such as [2, 10], which tended to focus on large-scale, large-budget, bespoke systems or analyses of the human infrastructure of networks.

Through this case study, we identified three categories of social processes utilized in creating connections within the network, and which could be useful as a framework for future research. We also found that social media was primarily being used for the processes of *enabling and reinforcing connections*, but not for *raising basic awareness* to initiate connections. The significance of these findings is that the configuration of ICTs in this network seems to require a more other- or group-centric rather than an individual- or "ego-centric" orientation [9]. These findings point towards an opportunity for configuring technology to better support *groups of groups* rather than just individuals.

METHODS

To understand the social processes of ICT-mediated connectedness among community-based organizations, we conducted a field study of a civic network working to fight child sex trafficking in a U.S. metropolitan region. This network is coordinated by a nonprofit organization created

for the purpose of connecting or *bridging* the other existing organizations engaged in anti-child sex trafficking efforts. As in the network/s studied by [11], establishing such a "coordinating organization" was an explicit aim of several community-based organizations in our study, as they sought to fill gaps in their network and facilitate joint activity. They vested responsibility in this separate entity to coordinate information sharing to extend the network, establish best practices, and create information systems to support those practices.

The network we studied comprised over 100 organizations. About half the organizations were faith-based, the other half were organizations seeking to revitalize the local metropolitan region by assisting at-risk communities within it. The police and governmental agencies were not part of this community network, but about an eighth of the member organizations were affiliated with government agencies to help provide victim support.

During 2008-2011, we undertook observations of interorganizational meetings, conducting interviews with organizational members of this network. We were given access to emails and documents exchanged between members of the network and the bridging organization. We observed a range of meetings from seven "start-up" meetings where community organizations began the process of working together, six monthly meetings open to the public, and nine staff meetings of the bridging organization discussing their interactions with other organizations in the network. At these meetings, we recorded observations of information-sharing challenges, types of information shared, and names of individuals with whom the information was being shared. Following each meeting, we conducted interviews with individuals and groups; subjects included the entire staff of the bridging organization (four individuals) as well as representatives from a sample of organizations (n=21) from across the network.

We employed a general inductive approach in our data analysis as we sought an in-depth understanding of ICT appropriation for supporting ties in a multi-organizational network. To identify the themes of this characterization, we coded the data across artifacts as well as within individual documents to uncover themes about current practices in using ICTs for information sharing. We first labeled the notes for categories of sharing and ICT use, and then identified sub-themes among the categories and grouped the labels accordingly. Finally we grouped the sub-themes to identify the role of technology support for connectedness. Together we analyzed the ICT-mediated social processes that facilitated multi-organization connectedness and the ICTs appropriated in this case.

CASE STUDY: BUILDING CONNECTEDNESS
Prior work has demonstrated two types of connectedness in civic networks: transactions and social bonds [1]. Transactions are ties "involving exclusively the exchange of information and resources necessary to the pursuit of shared collective goals." In contrast, social bonds are deeper connections, often tied to identity or strong interpersonal interactions. Social bonds create tight clusters of interconnected organizations in a network while transaction ties tend to bridge between these tight clusters.

Connectedness in Civic Networks
Within the civic network we studied, both types of connectedness were evident. We identified three distinct social processes in which connectedness was instantiated:

Raising basic awareness through gathering and disseminating information about contact details, organizational goals, capabilities, and opportunities [13].

Enabling connections, through face-to-face meetings, updates, and encouragement to exchange basic awareness information in order to foster informal coordination [1, 11]. Through connection enabling processes, organizations may achieve a functional agreement to begin assessing the feasibility of working together towards a common goal.

Reinforcing connections, through follow-up meetings, joint events, and other opportunities involving multiple organizations in the network [1, 4]. These activities bring organizations together to engage in the actual work of coordinating to fight child sex trafficking jointly.

A range of ICTs were used by members in this civic network to support these three social processes for creating and sustaining connectedness—from cellphones, to email, to custom websites, to social media. Below we present findings from our field data analysis to illustrate the ways ICTs (specifically Twitter, Facebook, email, and a custom website) were appropriated to support the creation of both transaction ties and social bonds.

Raising Basic Awareness
A lack of *basic awareness* about other member organizations' activities and capabilities in anti-child sex trafficking efforts posed a challenge for some members of the network [13]. Such awareness is a necessary pre-condition for more complex relationships among organizations, including collaboration, cooperation, coordination, implementation, and evolution [5]. However, the organizations we studied were critically hindered in some of their efforts (e.g., legislative advocacy and petitioning where a high volume of participation is needed) due to a lack of awareness beyond their immediate social circle. That is, clusters of organizations were often in silos of awareness. Also lacking were persons with overlapping memberships in multiple circles who could act as bridges [6] between these silos.

This network's process of building greater awareness among its member organizations followed a trajectory that occurred over a span of 2 years. Initially, the organizational members we interviewed primarily relied on word-of-mouth for learning about the existence and activities of other organizations also fighting child sex trafficking.

Being aware of these silos, they began organizing start-up meetings to increase awareness and encourage interorganizational coordination. After introductions were made at these face-to-face start-up meetings, organizations then determined whether further connection would be fruitful, often resulting in follow-up meetings to facilitate the process of enabling these connections and to begin the process of reinforcing them. The organizations that were the most energetic in reaching out to others soon assimilated connections brought in by other organizations. Other organizations desiring to connect joined an email list created by those organizing the start-up meetings. The email list was forwarded to others who had not joined and became a primary tool for raising basic awareness.

During these meetings, organizational members would inquire about the status of current efforts as a whole. They often asked questions related to where the nexus of overall activity was in the fight against child sex trafficking, and "who was doing what" in terms of the overall flow of activities, and whether or how the actions of one organization could contribute to the overall efforts of the community. We believe a significant commonality underlying these questions is that they point to a need for what we call a *whole network perspective*—that is, a perspective informing basic awareness at the network-wide level rather than simply details about singular entities. Our analysis of the follow-up interview data of these organizations about this perspective indicated they were seeking a bird's eye view of the community, integrated with specific details about each member fighting child sex trafficking. Additionally, this bird's eye view needed to convey more than just membership but also *commitment* over time to specific aspects of the overall community effort e.g. prevention, advocacy, restoration, etc.

In an attempt to provide this perspective, the organizations we studied created a custom website (developed by the hub organization) listing the organizations as partners in the fight against child sex trafficking. This listing detailed organizations' contact information, and details of each organization's mission, capabilities and opportunities were aggregated and made available to members of the network via a password-protected directory on the group website. What we find interesting here is that Facebook and Twitter were not used at this time to obtain a whole network perspective. The time and expense invested by this organization in creating a custom website to help facilitate *other* awareness points toward a gap in solely using a combination of Facebook, Twitter, and email to support the basic awareness needed by a civic network.

Connection Enabling and Reinforcement
This specialized directory listing supplemented existing practices of member organizations in finding each other (i.e., through word-of-mouth, meetings, and email lists): member organizations used the directory to peruse other organizations and select ones to engage with in face-to-face

meetings or joint events. Additionally, the website provided member organizations with a persistent visible representation of how connectedness in the network was maturing and solidifying, and prompted them to consider how it could be extended and strengthened further.

For example, one organization (P14) that focused on prevention had developed a strategy of providing weekend mentoring opportunities for at-risk youth in 2009. In 2010, P14 sought to expand its offerings by partnering with summer camps for these youth. P14 was part of the initial start-up group of organizations in the network. After working through the process of building their basic awareness by attending face-to-face meetings and joining the mailing list, P14 initiated a connection-enabling process for collaborating with another community organization to jointly offer summer camp for at-risk youth.

ICTs facilitated P14's efforts in several ways. First, the website directory listing of organizations willing to work together provided a foundation for P14 to initiate connection-enabling and reinforcing processes with any of the organizations listed. The initial process of creating a connection was completed such that when P14 was ready, it was able to immediately initiate meetings with potential partners. Through the custom website, P14 could message other organizations by posting opportunities for joint coordination activity, thus enabling a bi-directional means to foster connections. Additionally, organizations collaborating with P14 used Twitter and Facebook in efforts to strengthen connectedness by further broadcasting (retweeting) and responding to opportunities posted by P14. We note here that these tweets and Facebook postings did not reflect basic awareness-raising within the network. Instead, the content of the social media activity revealed the reiteration of collaboration opportunities that had been initially posted elsewhere, especially on the custom website, and which relied on connections formed earlier.

In another example of how the online directory listing was used, when this civic network stepped up efforts to encourage state senators to vote "yes" for a bill that would secure more protection for victims of child sex trafficking, the coordinating organizations encouraged everyone in the network to change their Facebook profile picture for individual and group pages to indicate support for this particular bill.

These two examples illustrate that while the custom website helped to support all three types of social processes for creating and sustaining connections within the network, social media only supported connection-enabling and reinforcing activities. That is, organizations in this network did not use Twitter and Facebook until basic awareness had already taken place, even though the functionality of these systems could have partially supported it. Based on our analysis of the data, we infer that these organizations preferred to attain a level of common agreement in terms of goals and coordination efforts before utilizing social media

ICTs. Once some level of agreement was reached, those in the network used social media tools to bring attention to information being distributed elsewhere in order to enable and reinforce connection rather than adopting these channels to continue to raise basic awareness.

DISCUSSION

In our case study, we examined a *group of groups* attempting to build connectedness by cobbling together a combination of ICTs built for individuals managing information sharing. Previous work on grassroots political campaigns identified forms of ICT-based miscommunication and communicative overload that can result from such cobbling together of ICTs [6]. Unsurprisingly, we observed similar mishaps, such as data fragmentation due to data storage in multiple "stand alone" applications, incomplete or redundant messaging as not everyone in the network used social media tools and each organization maintained different email lists. Also, the "noise" in these social media channels, especially Twitter, seemed to render the raising-basic-awareness process less effective than word-of-mouth, emails, meetings, or online directory listings.

However, in addition to the above issues, our data suggests an underlying gap between these cobbled technologies and the needs of this civic network. We believe this gap arises from email, Twitter, and Facebook being primarily oriented towards the needs of the *individual* user. That is, the features, functions and data visually represented by these tools are designed primarily to support connectedness among individuals, or between individuals and groups. Such ICTs are effectively "ego-centric" technologies [9], as they are geared toward the needs of individuals. The features and functions of these tools did not adequately inform the basic awareness that network members needed to establish connectedness, i.e., an overview of the entire network, meaningful categorizations of organizations within this specific network context, and a sense of the commitments of member organizations in the network.

To begin to address this gap, network members began to rely on a custom website that was explicitly designed *by* the bridging organization *for the network*. The coordinating group sought to enhance basic awareness within the network by increasing visibility. They did so by creating an online directory listing on a custom website. With this listing they formalized and publicized the *commitments to collaboration* that these community organizations had made. They also provided an overview of the network such that members could see the possibilities for coordinating activities. Consequently, this listing was used to instantiate and *make visible* these commitments to interorganizational collaboration. Connections represented in social media tools likely do not adequately convey a *comprehensive network overview* nor convey the *weight* of organizational commitment to the network over time. We infer these are the primary reasons why social media tools were not appropriated to support basic awareness in this network.

CONCLUSION

The findings we present in this paper indicate that there is a critical need for low-cost, more group-centric technologies for maintaining connectedness between community-based organizations over an extended period of time. Our work offers a lens for better understanding a context of an informal civic network where such connectedness needs to be supported as a first step in designing such technologies. This lens can help guide how more group-centric ICTs can be leveraged to create connectedness in civic networks. In future work, we plan to explore design approaches to supporting the processes of awareness-raising in this community-based context.

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