

Getting the Feel: Email Usage in a Nonprofit Community Organization in a Low-Income Community

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Through in-depth interviews of 26 employees, this study examined how social norms and values influence email usage in a nonprofit organization in a low-income urban community. Although adequate technical infrastructure was in place, a shared norm on getting a feel in social interactions reinforced face-to-face communication as the primary mode of communication among members. This norm, coupled with a lack of computer literacy and of technical support, led to low email usage and slow adaptation to external technological change. These findings revealed the importance of improving members' technical competence to experience a feel in computer-mediated communication before initiating changes in technology use.

Keywords: Communication Technology; Digital Divide; Media Richness; Social Influence

Nonprofit community organizations are playing an increasingly important role in improving democratic processes, encouraging citizen participation in civic life, and strengthening social bonding (Lewis & Madon, 2004). Traditionally, community organizations have mainly relied on face-to-face interaction, as well as conventional communication media (e.g., telephone, postal mail, and mass media), to engage and involve their constituents (Dahlgren, 2004; Kellogg, 1999; McLeod, Scheufele, & Moy, 1999; McLeod, Scheufele, Moy, Horowitz, et al., 1999). Recent studies around the world found that community organizations are gradually expanding their Internet usage (Bimber, 1999; Dahlgren, 2000; Katz, Rice, & Aspden, 2001). However, the

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diffusion and adoption of the Internet and, by extension, email, have been uneven. Although the Internet and email have become an integral part of daily operations in many *nonprofit* organizations, such as museums and public institutions, many nonprofit community organizations have lagged behind because they must contend with different priorities and contingencies (O'Lear, 1999; Shah & Scheufele, 2006), including, for instance, lower budgets and less technically oriented staff members (i.e., employees, volunteers, and other stakeholders). Fully realizing the potentials of new communication technology to improve work efficiency in nonprofit community organizations, particularly those that serve low-income communities, depends on understanding the unique challenges these organizations face in adopting, as well as adapting to, new technologies. Results from studying this type of organization can help us gain a better understanding of issues that are typically overlooked in studies of technology use in private organizations—for example, the availability of technical support and level of technical competence among members of the workforce. In this study, we focus on email usage because email is widespread in the society and is accessible to most community organizations. Although email may not be the most effective communication medium for holding discussions or for making decisions, it can be very cost-efficient for sharing information or documents.

Many early studies on promoting the adoption and sustained usage of communication technologies in organizations focused on matching the technology to the tasks performed (Carlson & Davis, 1998). For instance, both media richness theory (Daft & Lengel, 1986; Klebe Trevino, Webster, & Stein, 2000) and social presence theory (Short, Williams, & Christie, 1976) describe how the particular characteristics of a given communication technology influence the preference of one communication medium over another to accomplish certain tasks. These technology-deterministic theories rest on the assumption that technology proceeds along a path of its own making (Campbell & Russo, 2003; Sitkin, Sutcliffe, & Barrios-Choplin, 1992). Later, empirical studies found that the adoption and use of information and communication technology (ICT) are not dependent on the features of the technology alone (Kraut, Rice, Cool, & Fish, 1998; Markus, 1994). Instead, values and socially constructed norms can also influence media choice and the adoption and usage of a given communication technology (Contractor & Eisenberg, 1990; Fulk, Steinfield, & Schmitz, 1990; Sitkin et al., 1992). This is supported by research which found that the same technology could be experienced differently across different organizations (Barley, 1990); and, sometimes, even differently across different units within the same organization (Fulk, 1993; Fulk et al., 1990). These findings laid the groundwork for the development of the social influence model of technology use (SIMTU), which proposes to explain technology use through social norms and peer influence (Fulk et al., 1990).

Therefore, we believed that the SIMTU model would provide a useful theoretical framework by which to understand the attitudes, perceptions, and norms expressed by email users in community organizations. Another aspect of this study involves the digital divide, which describes differential access to technology among people in different economic sectors in a society. As such, we thought that the digital divide would be a likely issue facing nonprofit community organizations in low-income

communities in the context of accepting or rejecting new technologies. In this article, we first introduce and briefly describe these theories, then present an illustrative case study, and finally end with an overview of possible theoretical extensions and practical applications.

ICT Use in Organizations

The SIMTU

The SIMTU model counterbalances the technological deterministic tendency that characterized early studies of technology use in organizations (Carlson & Davis, 1998). As noted earlier, the theories of social presence and media richness both assume that (a) each communication medium has certain “objective” traits, (b) each communication task bears certain characteristics and aims at a single goal, and (c) users “rationally” choose a certain medium to accomplish certain goals through matching the traits of the technology with the requirements of different tasks. Later, however, researchers challenged these trait-based theories because (a) people’s perceptions of task and media are not necessarily objective, and (b) communicators in organizations can simultaneously act on multiple goals. As a result, media choices may not be rational at all (Fulk et al., 1990).

In contrast, the SIMTU model (Fulk, 1993; Fulk et al., 1990) proposes that values and socially constructed norms influence media choices. Two processes characterize such social influence: *compliance* and *internalization*. Compliance (Kelman, 1961) occurs when individual group members conform to behavioral or attitudinal norms as a result of either external pressure or internal fear of isolation. They adopt certain behaviors or attitudes, although they themselves do not believe in the corresponding norms. In contrast, internalization (Bagozzi & Lee, 2002; Kelman, 1961; Yuan et al., 2005) occurs when behaviors (e.g., adoption or rejection of ICT) are carried out after personal acceptance of other members’ attitudes, behavioral norms, perceptions, and values. Internalization is self-regulatory in that individuals compare their behavior and attitudes with those of others under similar conditions, and then willingly make cognitive adjustments when there are disagreements. Empirical research has found widespread support for the SIMTU model in explaining perceptions and usage of communication technology in organizations (Campbell & Russo, 2003) through both compliance (Campbell & Russo, 2003; Fulk, Heino, Flanagin, Monge, & Bar, 2004; Smoreda & Thomas, 2001; Yuan et al., 2005) and internalization (Yuan et al., 2005).

The “Digital Divide”

Previous studies found that online interpersonal interactions have the potential for increasing face-to-face interaction (Bimber, 1999; Castells, 1996; Hargittai, 2004; Katz & Rice, 2002; McLeod, Scheufele, & Moy, 1999; McLeod, Scheufele, Moy, Horowitz, et al., 1999; O’Lear, 1999). Although its use is spreading, online communication continues to exclude certain societies and communities (Hargittai, 2004; Jennings

& Zeitner, 2003; Katz et al., 2001). This “exclusivity” of ICT use and access is known as the “digital divide.” The term “digital divide” implies a gap between those who have access to Internet technology and those who do not (Hargittai, 2004; Jennings & Zeitner, 2003; Katz & Rice, 2002). Other dividing factors include awareness, support, education, and economic background.

Although technical competence was found to be an important factor influencing the actual usage of a communication technology (Fulk, 1993; Yuan et al., 2005), many studies chose not to examine these factors explicitly. In most for-profit organizations, provision for technology training and support is usually taken for granted (Hargittai, 2004; Jackson, Poole, & Kuhn, 2002; Lebert, 2003; Lewis & Madon, 2004; Rogers, 2003; Scheufele & Nisbet, 2002). Yet, in nonprofit community organizations, particularly those in low-income communities, the digital divide can be a major concern because these organizations typically have fewer financial and technical resources supporting ICT use. Relevant research on developing communities worldwide attributes the existence of the digital divide, as well as the resultant effectiveness of ICT use, to actual, “on-the-ground” social conditions, such as low level of literacy and education, scarcity of economic opportunities (Katz & Rice, 2002; Norris, 2000; Warschauer, 2003), or poor technological infrastructure (Hargittai, 2004; Norris, 2000, 2001). Although the digital divide between underdeveloped and developed nations (Norris, 2000) in access to technology has received much research attention, the issue of digital divide in developed countries is more likely to be overlooked when studying the adoption of new technology in organizations. Although various ICT infrastructures are widely available in developed countries (Hargittai, 2004), the resources are not evenly distributed across different economic sectors. It is, therefore, important to examine how education and access to technical support influence members’ use of ICTs in nonprofit organizations in low-income communities.

To summarize, we are interested in exploring the following research questions in this study:

- RQ1: *What media do people use to accomplish work-related communication tasks in a low-income nonprofit community organization?*
- RQ2: *What social norms influence work-related email use in this type of organization? What are the challenges for the adoption and usage of email in this type of organization? Does a digital divide exist? If so, what factors contribute to it?*

Method

Research Area

The study was conducted in a nonprofit organization in a low-income community in upstate New York. The organization was founded by neighborhood leaders in the late 1970s to improve the quality of life for residents and families in the neighborhood. The neighborhood has 80% minority residents. Twenty-five percent of the total population lives below the poverty level; 67% of the families earn less than the

national median income, and 46% of the population over the age of 25 never graduated from high school. Most of the organization's mission within this community is carried out by local volunteers with the assistance of core staff members. The organization promotes community-based projects concerning public safety, youth development and recreation, education, economic development, housing, and public infrastructure.

Sample and Data Collection Strategies

The data for this study came from interviews of various organization members (i.e., staff members, community-based volunteers, and stakeholders). The leader of the organization was contacted to obtain permission to conduct the study. This individual also helped to identify approximately 36 organization members, including staff (mostly part time), long-term volunteers, and community-based stakeholders (e.g., community leaders and heads of peer local organizations), to participate in the study. All of these participants had an email account with the organization. Prior to the start of the project, the leader of the organization informed both staff members and volunteers about the project. Recruitment letters were then sent out to all potential participants. Follow-up phone calls were made, and emails were sent to encourage participation. Data collection lasted 2 months, from March to May 2007. As a result, 26 respondents, roughly 72% of the entire population of the study ($N = 36$), participated in the study. At the beginning of the interview, participants were informed about the voluntary nature of their participation, and were assured of the confidentiality of their responses. Each interview lasted from 30 to 60 min. The completed interviews included 19 staff members (out of which 7 are full-time employees), 6 volunteers, and 1 stakeholder. Among them, 73% were more than 40 years old; 61.5% were women; 65.4% lived in the target community, having a similar socioeconomic status within the community served by the organization; and 31% had completed a college education. Table 1 provides a summary of participants' level of education based on different employment categories.

All interviews were audio-recorded. The interview questions were largely semi-structured and open-ended to allow further probing (Campbell & Russo, 2003; Knorr Cetina, 1999; Miles & Huberman, 1994; Rubin & Rubin, 2005). The complete interview guide can be found in the Appendix. Flexible question ordering was also used to allow for spontaneous inquiries. At the start of each interview, respondents were asked to describe their job responsibilities and routine daily tasks, along with their experience with computer applications and email use. They were then asked for their preferred way of communicating with colleagues and whether they were aware of their colleagues' attitudes and preferences toward email usage. Most importantly, they were asked to share their thoughts about email use and how this technology met the needs of the organization and fit the community's overall economic situations. This approach was based on the SIMTU model in that we emphasized respondents' perceptions of others' attitudes toward email usage; and in the SIMTU paradigm, the driver of social influence is the perception of others'

Table 1 Education and Organization Membership

Level of education	Staff 9 a.m.–5 p.m.		After-school staff		Volunteers		Stakeholders	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
(A) Some high-school education	—	—	1	3.8	—	—	—	—
(B) High school graduate	2	7.7	4	15.4	—	—	—	—
(C) More education than high school, but less than a bachelor's degree	1	3.8	1	3.8	1	3.8	—	—
(D) Some college	3	11.5	3	11.5	1	3.8	1	3.8
(E) Bachelor's degree	2	7.7	1	3.8	2	7.7	—	—
(F) Master's degree or higher	1	3.8	—	—	2	7.7	—	—

attitudes and behaviors (Fulk, 1993; Fulk et al., 2004; Yuan et al., 2005). Toward the end of each interview, respondents were asked to fill out a brief questionnaire about their age, gender, and tenure in the organization.

Results

Face-to-Face Communication as the Norm

RQ1 asks about members' preferred mode of communication and why this choice was made. The response was unanimous: Everyone interviewed preferred face-to-face communication. Almost 90% of participants stated that communication with peers and constituents would be best received, understood, and respected when done either face-to-face or over the phone. Qualitative data analysis revealed two major explanations for participants' media preference. First, they thought face-to-face communication was most compatible with the organization's communication needs because (a) the organization was small, (b) members (especially employees and volunteers) all worked in close proximity, and (c) 65.3% of the respondents resided in the community served by the organization. Participants related to their peers and constituents as family members, leading to a preference for face-to-face interaction over email messaging, which was considered more "impersonal." Second, the organization has a strong norm favoring "getting a feel" in social interactions, and most members thought that immediate feedback with nonverbal cues was a unique benefit of face-to-face communication. For instance, one staff member commented:

I think I like face-to-face because I get reaction, and I am used to talking to people. It's a lot better. You get the tone, immediate expression that you can't get in print, and you can see it . . . to get a feel for something. It is more respectful; I mean, if there is something I would like to ask my boss, I don't think I should write an email to them, like I'm too busy to go over there and talk to them. It also has to do with the size of this organization, you know—it is small, and I'm used to bigger places where we used to use emails much more You can't run around campus talking to everyone face-to-face, but here it's definitely possible.

Within this organization, the emphasis on relationship development and the norm of “getting the feel” were so strong that when face-to-face interactions were not feasible, 79% of staff members preferred using phone calls to communicate with their peers.

Email Not Preferred for Internal Communication, Despite its Potential Benefits

For RQ2, we examined how participants used email for their daily work and whether they thought the technology was useful. As mentioned earlier, email might not be as effective as face-to-face communication for decision making, it can be very useful for sharing or distributing information about events or meeting minutes. Knowing their preference for face-to-face communication, we were still surprised by the low level of actual email use for work-related communications: (a) Only 27% of respondents stated that emails were necessary for their daily work, and (b) 73% of them reported being able to do their work without using emails at all. During our interview with the organization’s leader, we learned that email was introduced to the organization around 7 years ago. Everybody got an organizational email account, with the organization’s domain name, around the same time. However, because the organization had no on-site technical support, and the server was maintained off-site, the diffusion of email usage has been very slow. Organizational members seldom used emails for internal communications, and they showed a definite preference for word-of-mouth, phone calls, fliers, notes, memos, and snail mail as means of communicating both inside and outside the organization, albeit only with community members, not stakeholders. Despite the preference for face-to-face internal communication, organization members were able to articulate many of the commonly identified advantages of email communication:

- Ease of including attachments—50% commented on being able to send complete documents via emails to service providers and agents outside the organization.
- Accessibility—42.3% commented on being able to send information at any given time.
- Speed—30.7% commented on being able to get information in or out quickly:

...It’s easier. We get information faster from our funders. All types of current grant information are sent to you on the same day. I mean, even with the State, they are updating every contract online. I can check my status online... they can send me an email, and I can download what I need to do, sign it, and then email it or fax it back to them, whereas if we were to rely on U.S. postal services, it would have taken us a week!

- Multiple addressees—19.2% commented on being able to send information simultaneously to multiple people.

However, despite these acknowledged advantages, all respondents believed that emails were appropriate *only* for communication with stakeholders outside the organization and community, such as various municipal authorities. Respondents

did not find email usage desirable for communication internally or with community members:

... [S]he [the organization's director] wouldn't [switch all communication to email] and it won't be good because we need to talk to each other... [T]hat's how she is. She prefers face-to-face. She uses emails only when she has to. I mean you have to communicate with funders. With them you have to use the emails. She prefers face-to-face with us, and in this community. It is better; I mean... It's a whole different energy.

In fact, the only two staff members who reported more work-related email usage were in charge of developing and maintaining stakeholder relationships. They said that roughly 40% of exchanges with service providers or municipal authorities took place via emails because they needed to comply with the external stakeholders' preferences and requests:

Everyone [outside of this community] uses emails... everyone that we deal with: all of the funders, the organizations that we're involved with... it's a new way of communication. It just is. As much as I may not... and it's not that I don't like it, but there's so much of it, you know what I mean; no one picks up the phone anymore... And I tell everybody, "If it's urgent, call me on my cell. Don't send me an email." Because I don't know when I'll get to it... I might get it on the next day... But it is a new age, and we are trying to improve... we have to be on top of it ourselves; can't be hypocritical about it.

Obviously, participants (a) had realized the importance of email communication in contemporary society, (b) had felt the urgent need for them to adapt to this social change in order to better serve their constituents and communities, and (c) had realized the potential benefits of email communication for their work. Notwithstanding these merits, the organization still expressed a strong norm favoring face-to-face communication. The social norm that emphasizes on "having a personal touch" and "getting a personal feel" from social interactions cast email communication in a somewhat negative light. Among those staff members who were less involved with the development of stakeholder relationships, reluctance to use email for work-related communication was widespread.

Markus (1987) pointed out that diffusion and sustained usage of communication technology require a critical mass; therefore, the lack of other supportive users of a common communication technology can discourage adopters from making further use of the technology. In this study, 50% of the participants also stated that having observed others' rejection of email use or expression of distrust in the usefulness of this medium discouraged them from using this medium. An early email adopter in the organization reported using other communication methods (e.g., face-to-face interaction) to confirm or follow up on emails sent to other colleagues:

There are people here who do most of their work on the computer, so they use their email most. It makes things easier. The problem is that most people don't respond to emails as a primary communication method, and [then] I have to follow-up with a phone call... I have to go down to their office and see them to remind them of the memo [that was sent by email].

In fact, although around 37% of respondents reported sending emails to their colleagues, only 16% said that they had either replied or confirmed receipt of the message. Thus, as suggested by Markus, the absence of a critical mass of, in this case, email users not only halted, but also reversed, the technology diffusion process.

In addition, the prevalence of junk mail was annoying to many, making email usage even less desirable. Specifically, 36% of those who used emails regularly for their work stated that “spam” (i.e., junk email) contributed to their hesitation to use emails more. The average number of spam emails received by participants was 25 per day, and 77.3% of the respondents stated that there were times they preferred to not check their email accounts to avoid the daily annoyance of sorting out spam from work-related emails:

It's all junk mail. I wish there was a way I could have stopped [them]. Most of my emails are junk mails I mentioned it to others, and they told me that they get the same.

In a sense, these complaints revealed the respondents' frustration over the inaccessibility of technical support, as well as their own lack of technical competence. Fifty-four percent of the staff members who had a computer with online access used their work-related email account for some personal use. Although this personal use contributed to the very problem that they complained about, many of them did not realize that they had themselves invited some of the junk mail problems by their inappropriate use of the organizational accounts. Access to technical support to help blocking these emails at the organizational level would definitely support wider adoption and continued usage of communication technology. Yet, in this community organization, budgetary constraints limited such assistance, even for such a rudimentary task as filtering out spam. This shows the presence of a type of “digital divide” not commonly seen in for-profit organizations where, for example, ICT support would have already launched programs to automatically block spam.

Finally, in addition to the technical gaps within this nonprofit community organization, the existence of a digital divide in the community that the organization serves caused additional concerns. Questions were raised about how fast organization members should or could adapt to the trend toward more extensive email usage in order to properly serve the community at large because email has the potential of distributing information about events, workshops, or job opportunities to many community members at a very low cost to the community organization. As described earlier, computers were not widely accessible to many in the community because most residents lived below the national median income. More than one-half of the respondents perceived their organization to be an empowering agency. Forty-two percent believed that using online technology and email communication was relevant to the organization's mission. However, these respondents also stressed the need to be realistic about achievable goals, as described by this stakeholder:

There are some ways you can construct that [online technology], use different sources in the community, to make technology accessible, but you also have to deal with . . . the lack of structure at home, so with these [challenges] the Internet does

not have the same impact on this urban neighborhood, as it would in the rest of the region, based on the fact of economics.

Thirty-five percent of the respondents, including five prominent staff members, three volunteers, and one stakeholder, maintained that the basic computer needs of the community must be addressed before email could be used as a common platform to exchange community-related information. Some solutions to the problem of digital divide in the community had previously been worked out. First, the organization included in its mission statement the objective of providing IT education to adults and youth as a key to becoming a productive member of the community. In addition, the organization already had a list serve containing the names of 200 residents receiving information of general interest to the community on a regular basis:

... [E]ven if most community members don't have [access to] emails, they would go to places, like their church or local businesses, where things we send out by email are posted on the board.

In this way, although emails could not be directly sent to many in the community, other organizations or social agencies could provide the necessary outreach and relay messages.

Discussion

A Summary of Our Key Findings

This research examined the impact of social influence on email usage in a low-income community-based nonprofit organization. Because community organizations are playing an increasingly important role in civic engagement, it is important to study the theories that have been widely used to explain technology use in business organizations and the extent to which they can be applied to *community* organizations, particularly those with limited resources. We focused on email usage in this study because, of all the major online communication technologies available, we thought that email would be most desirable for information dissemination in this resource-poor organization for the following reasons. First, emails can reach a large audience at minimum cost. Second, sending emails does not require the sender to have any special background in graphic design or programming. Given the wide reach of emails in contemporary society, we anticipated that emails would be well received in nonprofit community organizations for sharing and exchange information about community events or workshops, particularly those that operate under tight budgetary and resource constraints. In addition, email use is a common communication tool expected of prospective employees in both nonprofit and private organizations; thus, expanding use of this technology in a community organization would establish a model for community members who want to gain competence in using this technology and thereby expand their own employment opportunities.

However, in this study, we found slow adoption and low email usage among the members (staff members, as well as community-based volunteers and stakeholders) of this upstate New York community-based nonprofit organization. Despite their awareness of email as an efficient means of exchanging and sharing information, organization members still preferred to use traditional communication media such as face-to-face interaction or postal mail as their main methods of communication for sharing information and announcements of events or workshops. Emails were primarily used for communicating with external stakeholders and (potential) funding agencies (e.g., state and municipal, as well as private, foundations). Word-of-mouth was frequently mentioned as a preferred means of communication for both complicated tasks that required “getting a feel” immediately and simpler tasks that did not require any feedback (e.g., event announcements because it was considered more personal). In contrast, people considered emailing impersonal and not as respectful. Although the capability of email to reach out to many people simultaneously was considered compatible with the organization’s mission, and emailing was considered a future trend, few felt that it was currently suitable for internal communication. As a matter of fact, because the internal social norm was so overwhelmingly in favor of face-to-face interaction to get a feel, those few prominent staff members who did use email regularly for external communication failed to effect wider adoption internally or change the social norm, although they believed that the technology had some value and represented the future. As a result, email, which was considered a more efficient way of communication than face-to-face interaction by some email senders, became the least efficient strategy when email messages required follow-up phone calls or personal visits.

Media Choice: Media Richness or Social Influence?

Based on these findings, a reflection on the applicability of different theories may be useful for both future empirical research and theoretical development. Do the findings garnered from in-depth interviews with all strata of organizational membership support the media richness theory, the SIMTU model, or neither? As discussed earlier, those trait-based theories, including media richness theory and social presence theory, primarily focus on how the intrinsic characteristics of a communication technology determine the manner of its use. The SIMTU model, in contrast, emphasizes how social norms play a predominant role in influencing how a technology is used, sometimes despite its technical affordances. For instance, people have creatively adapted to the technical constraints of email and invented emoticons to express complicated feelings through an otherwise lean medium (Walther, 1996). Comparing and contrasting our data in relation to these two theoretical perspectives, our findings seem to support both, albeit to varying degrees.

Consistent with the predictions from media richness theory, face-to-face communication was considered the richest media in terms of both getting immediate feedback and conveying personal closeness. In contrast, emails were considered

impersonal, disrespectful, and not productive unless followed up with personal visits or phone calls. However, different from the predictions of media richness theory, which stresses the importance of matching communication media with task complexities, the findings also showed that people did not perform the matching step, but rather sought out interpersonal means of communication, irrespective of task complexity or ambiguity. On the other hand, the key premise of the SIMTU model, as explained earlier, is supported by the fact that “getting a feel” was a strongly favored organizational norm in this case study, which, in turn, makes interpersonal communication a favored communication medium for all communication tasks, despite the acknowledged potential benefits of email for disseminating information. It was interesting to observe, however, that most organization members were very clear to distinguish in their minds what communication media would be suitable for either internal or external use. Many participants believed that email was impersonal and therefore inappropriate given that the organization was small in size and that people worked in close proximity. Is email really impersonal or disrespectful? Are size and proximity really the determinants of high versus low levels of email usage in an organization? Previous studies (e.g., Markus, 1994), which triggered the development of the SIMTU, found that emails could be used adaptively to convey a variety of emotions. For instance, of all the different forms of communication media available, Haythornthwaite and Wellman (1998) found that email was one of the most frequently used media to maintain friendship ties. In contrast to the concerns of participants in the case study, emails actually created a bonding experience among group members in their study. Moreover, in comparison to face-to-face communication, emails can also be inclusive of those who cannot otherwise participate in an ongoing face-to-face discussion. Its asynchronous nature actually makes it possible for one person to socialize with a large group of people with one single message, but at a time that is convenient for all members of the group.

Still, if participants believed that this communication technology was compatible with many elements of the organization’s mission, including interaction with stakeholders, then why were adoption and usage of email so low? In support of the SIMTU model, past research on technology use in private organizations has repeatedly found that members could turn lean media into rich ones for communication. Although we did not find this to be the case in our study, we observed that many respondents did believe that email could help in developing and maintaining relationships with external stakeholders and perhaps, to some extent, co-workers as well. However, the finding of a reverse trend of internal usage prompted us to search for an explanation beyond organization size, proximity among its members, and the claim of impersonality. We concluded that a digital divide existed inside this community organization, as well as among those in the larger community, and that this was the fundamental reason causing low adoption and low usage of email in this organization. We further believe that this digital divide imposed limits on the ability of people to understand and use technology adaptively, as has been found in studies of private organizations (Barley, 1986).

The Issue of the Digital Divide

In this case study, a digital divide was found in both the community organization and larger community, in two colliding domains. The first domain involves the community served by the nonprofit organization. Most of the organization's members and constituents did not regard email use as a real necessity for helping to manage community activities, except for keeping and maintaining connections with the stakeholders. Such a sentiment could be traced back to the social and economic situation of the community where many individuals live with limited financial means. In comparison to higher income communities where residents already view email and the Internet as intrinsic parts of their lives, residents of this low-income community must respond to different exigencies and priorities, such as job security and safe housing, which make adoption of a new communication technology a low priority.

The second domain involves the community organization itself. Within the organization, many of the respondents had no college education and had very limited experience with computers or email. Furthermore, many of these individuals owed their employment to their individual membership in the community served by the organization—a common bond unrelated to technological issues. Although limited funding was allocated to develop infrastructure and expand training and technical support for email use among the organization's members, many staff members still felt they did not have the skills required to self-manage computer-related problems, such as blocking spam emails, as detailed earlier.

Therefore, comparing for-profit business enterprises with nonprofit community organizations, we believe that the presence of a digital divide barring access to both necessary technology and technical support is a key factor influencing the level of adoption of email usage. In our case study, we found that many members believed in the utility of email, but there was a strong shared frustration with many of its mechanics including, for example, blocking spam. Here, the exercise of a social norm in “deciding” group preference gives further support to the SIMTU model, although the influence of the digital divide, as described earlier, cannot be underestimated in the context of choosing whether to adopt a particular communication technology.

It is interesting to note that data collected indicate that 23% of organization members use their cell phones for text messaging, the majority of which is used for social purposes; and 20% of organization members stated that they prefer text messaging to email use, and that they would not mind receiving organization-related information through this medium. Two staff members who also resided in the community suggested that one-fourth of the local high school students carried cell phones, and an additional 30% of community residents used this medium often, as well. Another young staff member, who reported an extensive use of cell phone text messaging (an average of 30 messages per day), reported a wide local social network of teens and young adults (ranging in age from 16–24) who generated and received 15 to 25 text messages per day. The purpose for using this means of communication, as

reported by this individual, was mainly to share information about social events and activities and to organize meetings and social gatherings:

For this community, face-to-face is the best, but in a community so diverse, it's always good to have other means of letting people know what's going on.

These findings mirror similar lower level of Internet connectedness among community members within a given geo-ethnic community as found in other minority groups (Wilkin & Ball-Rokeach, 2006). Although its actual percentage was still lower than email use, cell phone usage commanded a rising trend and a positive evaluation. Respondents, regardless of age or gender, said that cell phones were affordable and available to more people in the community. Furthermore, cell phone text messages are free of unwanted solicitation, at least for now. Comparing the advantages and disadvantages of using email versus cell phone text messages to reach out to a large community—at least for the purpose of sharing information with the community—and the differences in people's attitude toward both, it seems that organizational size, physical proximity, and the emphasis on being personal in communication may be less important reasons for members' preference for face-to-face communication over email use. The presence of the digital divide, which is manifested by limited access to both computer equipment and technical support in both the community organization and the immediate community, may be the actual barrier that prevents the wide adoption of email for some communication tasks. It should be noted that email is not suitable for all communication tasks. However, it does have its advantages over face-to-face communication for certain communication tasks (e.g., information sharing).

Theoretical Implications

In our case study, consistent with predictions based on the SIMTU model, we found that social norms had a strong influence on people's media choices. In addition, we also observed that many interviewees were conflicted in their use of the "new" email medium. On the one hand, peer familiarity was driving them toward the use of more personalized, face-to-face methods. On the other hand, the practicality of yielding to the communication preferences of outside stakeholders exerted more pressure on members to make use of email technology. These findings imply that the SIMTU model could be further enriched by adopting an open system perspective, which emphasizes the importance of the influence of the external environment on the internal dynamics of a system. Because an organization is embedded within the larger social environment, an organization's resource exchange relationships with the outside can act to bring about internal change (Scott, 1998). As shown in our study, frequent interaction with the outside environment had, in fact, caused changes in some people's choices of communication media. Furthermore, adequate technical support, if it had been available, could have supported those choices and brought about dramatic changes to the organization's norms regarding technology use, thus bringing the organization more in line with societal trends.

Second, future theory development on organizational media choices should also give more credence to the connections among theories reflecting different points of view. As discussed earlier, our findings showed support for both media richness theory and the SIMTU model. On one hand, consistent with the media richness theory, many people considered email a lean media for their job. On the other hand, email was disliked, not because it was a bad match with the task, in accordance with the predictions of media richness theory, but because its use went against the social norm in this case study, in accordance with the predictions of the SIMTU model. Yet, we failed to observe any evidence of members' creativity in turning a lean media into a rich one, as found in many other SIMTU studies of business organizations. Taken together, these findings highlight the importance of elucidating connections among different theories and identifying contingency factors that will influence the extent to which the use of a given technology will be influenced more by its technical features than by the human capacity to use it creatively and adaptively, and vice versa. Comparing and contrasting findings from studies on both for-profit organizations and nonprofit community organizations, it seems that technical competence and access to technical support may be two key factors priming human creativity in the context of adopting a technology. Simply stated, when people believe they have more competence in the operation of a technology, they will have more confidence in their individual ability to adapt that technology to their communication needs and social norms, thus supporting the SIMTU model. Future theory development should recognize the importance of identifying the contingency factors that can influence the relative predictive power of each theory. A more integrative theory can then emerge out of this effort.

Practical Implications

The case study revealed that lack of technical competence and support were the main factors curbing the spread of email use and Internet communication technologies in this nonprofit community organization, as well as the low-income community it served. As a prominent figure in the community suggested, the community organization's mission to minimize the digital divide should concentrate on the things that matter most: making good education affordable and accessible, and promoting good work ethic. By implementing after-school training courses sponsored by local businesses to improve people's computer literacy and technical competence, a change in the community's attitude toward online communication media may be realized.

Although email use was found to be far from a popular communication medium among community members, making information available throughout the community remains important for improving community bonding and civic engagement. Given the social and economic constraints of the constituent community, nonprofit community organizations should be more creative in their communication strategies. One way is to establish a steady flow of information via email with community entities, and not individuals, that have access to computers and online communication. The studied organization has successfully implemented that approach by creating an e-list serve, including churches, block clubs, and lay leaders within the

community. The organizations can then spread community information through interpersonal interactions. Another option is to explore electronic messaging via cell phones. Although few residents in the community have computers or Internet access, many of them have phones. Our findings suggest that text messaging is becoming a normative form of communication among young people. As this type of communication becomes more accessible, information flow among staff members and between the organization and constituent groups may be expanded to this medium.

This research can be extended in three ways. First, this study examined a single nonprofit community organization in a specific urban community and setting. Hence, our findings may not be conclusive about what contextual factors are most crucial for influencing technology use in organizations. Further research should apply SIMTU to other nonprofit community organizations that have similar social agendas and similar settings (i.e., urban community). Such a comparative study can help to cross-validate the results from this study. In addition, conducting similar research in business organizations can also help researchers further define how contextual contingencies can influence technology use in organizations. Second, in this research, we focused on how using emails could engage more constituents. Because emails were not as well received as text messaging through cell phones, future research on improving civic engagement in disadvantaged communities may consider whether other technologies could be a better alternative to emails in sharing news about new resources, opportunities, or events taking place in the community. Finally, in this research, we mainly focused on gaining a better understanding of how people make choices about different communication media and the role that social norms play in that selection process. We did not study how and when changes in norms could be initiated and implemented. Yet, these are important topics for extensive future research to help decide what intervention programs could be launched to change an established norm when needed.

Conclusion

Extensive studies have been done to document how, in an information age, the digital divide in access to technology between high- and low-income communities, as well as between nonprofit organizations serving these different communities, can result in differential access to opportunities for employment, social mobility, civic engagement, and so forth. Our case study on email usage in a nonprofit organization serving a low-income community shows that to narrow the aforementioned gaps among people from different sectors of a society, decision makers should also pay more attention to the divide in technical support, in addition to the divide in access to the technology *per se*. Without adequate technical support, the introduction of a new communication technology that has the potential to ease a low-budget organization's financial burden will not be able to bring real benefit to the organization. We believe that with adequate technical support and improvement in computer literacy, members of the organization will be able to maintain their norm of "getting a feel in social interactions" also through email communication.

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Appendix: Interview Guide (Shortened)

General questions:

1. Please describe the kind of work you do in this organization. How long have you been doing this work? What are your job responsibilities and how do you do what you do?
2. [Information exchange preferences] – How do you get information about “things” such as new activities, management messages and so forth at NGO (e.g., office mailbox, face-to-face, memo on desk, phone, email, post, billboard, etc.)? How do you inform others at NGO on activities or messages (even trivial things, such as change of schedule) related to your work? Give me an example.
3. [Expertise & level of comfort] When you use computer and the Internet, what is most difficult? Why is that?

Perceptions of use:

- [Norms of email use] How would you describe the norms for email use here at NGO? When was it introduced? By whom? How many people here (staff, volunteers) actually use email in their work?
4. [Norms of media use] Tell me about the ways NGO informs the community and other stakeholders (e.g., the municipality, partner-organizations, etc.) about activities, actions, decisions, etc? What is the preferred way to disseminate information?
 5. [Norms of email use] In your opinion, how would you characterize others’ email use (e.g., types of use, frequency, purposes, etc.)?
 6. [Effectiveness] What kind of support, if any, does email use have from people at NGO? What impact, if any, has the use of email had on others’ work in the daily context?

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