ORIGINAL ARTICLE

Bringing Technological Frames to Work: How Previous Experience with Social Media Shapes the Technology's Meaning in an Organization

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This study examines the expectations that workers have regarding enterprise social media (ESM). Using interviews with 58 employees at an organization implementing an ESM platform, we compare workers' views of the technology with those of existing workplace communication technologies and publicly available social media. We find individuals' frames regarding expectations and assumptions of social media are established through activities outside work settings and influence employees' views about the usefulness of ESM. Differences in technological frames regarding ESM were related to workers' age and level of personal social media use, but in directions contrary to expectations expressed in the literature. Findings emphasize how interpretations of technology may shift over time and across contexts in unique ways for different individuals.

Numerous studies of communication technology use in organizations have found that individuals form perceptions of technologies during the practice of work (Fulk, 1993; Jian, 2007). As employees interact with a new technology and discuss it with coworkers—comparing experiences with expectations—they evaluate its utility for completing certain work tasks (Leonardi, 2009). Through such communication, individuals create "technological frames," or expectations and assumptions regarding what technology should do and how it should be used (Orlikowski & Gash, 1994).

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Because technological frames are social constructions, different individuals can hold different views of a technology's purpose, and consequently identical artifacts can be viewed in different ways, and facilitate different behaviors (Pinch & Bijker, 1984).

The vast majority of studies on the relationship between how technological frames influence technology use in an organization and the way people work have focused primarily on technological frames that emerge *within* workplace settings. In other words, extant research assumes people first encounter a new technology at their workplaces where they are susceptible to the social influence of their coworkers. While this approach makes sense for technologies that people first encounter *within* the workplace (e.g., shared databases, automation software, and computer-based simulation tools), little is known about how workers develop interpretations of information and communication technologies (ICTs) they first experienced *outside* of the workplace, or what effect developing frames of reference prior to workplace use can have on subsequent behaviors at work.

This study looks specifically at the perceived utility of social media—a class of communication technologies commonly including blogs, microblogging, and social network sites—which has proliferated *outside* of organizations, and is increasingly being adopted by companies for internal communication among workers (Chui et al., 2012). The growing popularity of social media for use exclusively inside of organizations—what has been termed *enterprise social media* (ESM) (Leonardi, Huysman, & Steinfield, 2013; McAfee, 2009)—has attracted interest from scholars who argue that the adoption of social media within organizations might facilitate greater knowledge sharing among workers and increase awareness of behaviors among peers (Fulk & Yuan, 2013; Treem & Leonardi, 2012). Despite the potential for ESM to support more transparent and open communication among workers, emerging empirical research indicates not all workers using the technology see the benefits of using ESM for knowledge sharing (DiMicco et al., 2008; Gibbs, Rozaidi, & Eisenberg, 2013; Jackson, Yates, & Orlikowski, 2007).

This study seeks to explore why the potential and expected communicative benefits of ESM may not be realized when the technology is introduced in organizations. By exploring users' perceptions of and expectations for ESM, both prior to and after organizational adoption, this work contributes to the literature on organizational communication and technology in three distinct ways. First, it presents a theoretical lens to aid in exploring the usefulness and meaning of what the literature terms ESM, and why some people may see the technology in different ways. Previous studies have largely accepted ESM as a distinct category and used this classification to develop expectations for user behaviors and outcomes (i.e., Treem & Leonardi, 2012), whereas the current study treats the meaning of ESM as an empirical question to be examined. Second, this work addresses calls for studies of technology and organizations to consider the contexts in which users come to learn about a new technology and in which they actually use it (Fulk & Gould, 2009). Third, this research explores how initial perceptions that are developed prior to a technology's introduction into an organization may shape subsequent views and uses. As Leonardi and Barley (2008) stated, "when

we begin studies of use at the time of implementation, we de facto treat the technology that arrives as a black box because we usually do not know what its prior social history may have been" (pp. 166–167). By considering both the origin of frames related to social media as well as the application of these frames to organizational contexts, we can better understand the influences on technology adoption in organizations, and as Davidson (2006) recommends, start "looking outside the organizational 'box'" (p. 33).

To explore how technological frames developed about existing publicly available social media might affect the perceived usefulness of ESM, we explore assumptions of technologies held by employees at a large financial services company on the verge of implementing an ESM for the first time. We start by comparing overall perceptions of social media held by employees to their frames about other communication technologies that are used primarily at work. Then, we examine user responses to the potential and actual implementation of an ESM platform in their organization. The findings reveal how expectations for ESM based on previous experience with publicly available social media may pose problems for adoption of ESM, particularly among younger employees and heavy social media users.

Enterprise social media

Unlike the technologies workers may encounter in organizational settings, social media have proliferated outside organizational contexts prior to being introduced to the workplace. A recent study showed that social media's nonorganizational uses are widespread: An estimated 56% of Internet subscribers in the United States have an account on some sort of social media site, while only 35% of U.S. employees report using these same technologies in the workplace (Chui et al., 2012). This pattern makes social media relatively unique among modern communication technologies used within organizations. Many communication technologies people use today in their personal lives, such as e-mail, instant messaging, videoconferencing, and groupware, were initially deployed as enterprise applications before finding popularity in people's personal lives (Culnan & Markus, 1987). Consequently, pervasive technological frames regarding how these technologies should be used in the workplace still persist in most organizations today—a phenomenon that is not necessarily true for social media.

Similarly, as publicly available social media have proliferated over the past 2 decades, the meanings of these technologies have evolved and shared expectations have developed regarding how these technologies are viewed. For instance, Siles (2011) describes how the concept of blogging stabilized in the early 2000s as the broad appropriation of Internet content and a shared technological platform led to the understanding of blogging as a distinct format of online publishing. Likewise, Ellison and boyd (2013) discuss the evolution and history of social networking sites and characterize these platforms as distinct, and defined by unique profiles, publicly viewable connections, and streams of user-generated content. They argue this class of technology incorporates platforms widely recognized as social networking sites such

as Facebook, LinkedIn, and MySpace, as well as other sites including Twitter, Tumblr, Foursquare, and YouTube. Given the applicability of Ellison and boyd's criteria to a variety of online spaces, Kane, Alavi, Labianca, and Borgatti (2014) favor the term *social media networks* to characterize the shared attributes of these technologies. Collectively, this previous work argues that despite significant differences in the form and level of participation across specific social media platforms, there is a shared meaning as to what constitutes publicly available social media.

Despite the explosive growth of publicly available social media for means of personal expression, only recently have organizations started to seriously consider the adoption of social media technologies to support workplace tasks (McAfee, 2009). Although limited in number and scope, studies of ESM use suggest that companies deploy the technologies inside organizations with the hope of facilitating a variety of activities, including supporting knowledge management, encouraging connections among employees, and identifying internal experts (for review, see Treem & Leonardi, 2012). In reviewing the emergence of ESM, Leonardi et al. (2013) defined the term as:

> Web-based platforms that allow workers to (1) communicate messages with specific coworkers or broadcast messages to everyone in the organization; (2) explicitly indicate or implicitly reveal particular coworkers as communication partners; (3) post, edit, and sort text and files linked to themselves or others; and (4) view the messages, connections, text, and files communicated, posted, edited, and sorted by anyone else in the organization at any time of their choosing. (p. 2)

This definition shares many aspects of the broader characterization of social media networks, with the primary distinction being the organizational context and use by workers. The study presented here contributes to our understanding of ESM by evaluating if, and how, workers in an organization distinguish the technology from other publicly available social media, and whether particular individual attributes or experiences are related to how workers perceive ESM.

One challenge for developing theory related to the meaning and significance of ESM is that while definitions of publicly available social media emerged following the use of evolving technologies over time (e.g., Ellison & boyd, 2013; Siles, 2011), current characterizations of ESM are being developed prior to a thorough understanding of how the technology will be viewed and used by workers. The potential flexibility of ESM is important to consider because the emerging literature on social media use within organizations demonstrates that individuals have diverse views regarding the usefulness of the technology. For example, in a study of a corporate blog platform at a technology firm, Jackson et al. (2007) found that light and heavy users differed in both the expectations they had as to whether the technology would provide social or work-related benefits, and the extent to which these benefits were realized. Examining a social networking platform within IBM, Dimicco et al. (2008) discovered that users had differential motivations for using the technology with workers seeing the same platform as supporting personal connections, facilitating career advancement, and aiding the promotion of projects. Finally, in a study of ESM use by engineers in

a high tech start-up organization, Gibbs et al. (2013) found that workers strategically chose instances to appropriate features of the technology, or abstain from use, in an effort to regulate transparency and knowledge sharing behaviors. Overall, these studies demonstrate that ESM can be used for a variety of social and task purposes, and that workers may have differing expectations regarding the usefulness of the technology. The diverse uses of ESM, even among a small sample of empirical work, indicate the value of investigating the different perceptions of the technology workers may have, how those expectations and assumptions develop, and if workers' views influence their ESM use.

Technological frames

Over time, groups develop ideas about how technologies should be used, and those interpretations lead people within a particular context to operate with shared understandings of technologies. Thus, technologies have an interpretative flexibility such that they can mean different things, to different people, at different times (Pinch & Bijker, 1984). This constructivist view of technology at the societal level also applies to individual interpretations of a technology in the form of what Orlikowski and Gash (1994) term *technological frames*, which explain "the underlying assumptions, expectations, and knowledge that people have about technology" (p. 174).

Frames are schemas for how individuals interpret the meaning and reality of a situation (Goffman, 1974), and individuals construct frames as they draw upon personal experiences and knowledge from previous interactions to form beliefs in a particular context. The metaphor of a frame is useful because it describes how people's perceptions are directed, and bracketed, by the cultural resources that they can draw upon, and although situations are socially constructed, the interpretation of a situation is heavily influenced by the context in which it occurs. The construct of frames is useful for studies of organizational communication technologies because it captures how workers develop an understanding of what a technology is and how it should be used through early experiences with a technology or from previous interactions with related technologies (Orlikowski, 1992). Focusing on technological frames is a sociocognitive approach that views the meaning of technologies as emergent over time as individuals interact with the technologies in a particular context, and not determined a priori by the presence of particular features (Davidson, 2002). As a result individuals, even those with some shared experiences or resources, may develop different expectations and assumptions about technologies and adopt different forms of use. Furthermore, because "technological frames structure experience, allow interpretation of ambiguous situations, reduce uncertainty in situations of complexity and change, and provide a basis for taking action" (Lin & Silva, 2005, p. 50) they serve as a helpful lens with which to consider the meaning of new workplace technologies like ESM.

Regarding frames of ESM, extant communication theory indicates different reasons why some workers may develop frames that social media technology is useful within organizations, and others may see social media as inappropriate within

certain contexts. For instance, the social information processing model of technology adoption argues that familiarity with a technology before it is implemented in the workplace may aid use of workplace technologies (Fulk, Steinfield, Schmitz, & Power, 1987). Additionally, prior exposure may allow individuals to develop technology-specific competence that increases the likelihood of use (Yuan et al., 2005). The assumption is that individuals will be more comfortable with, knowledgeable about, and amenable to new technologies if they have previous positive experiences to draw upon.

This social information processing model informs the widespread belief that individuals with heavy experience using social media outside of work will want to use these technologies in organizational settings. As Dimicco et al. (2008) noted in describing assumptions for ESM use at IBM, "given the popularity of social networking sites on the Internet, it is expectation that employees will use a company-sponsored tool" (p. 711). Specifically, companies expect that younger employees entering the workplace will want technologies that replicate the connectivity and engagement that social media technologies afford, and that these new employees are more comfortable with social interactions at work (Leidner, Kock, & Gonzalez, 2010; Rai, 2012). Cummings (2013) suggests that because of the desires of this demographic "Companies are scrambling to provide social networking capabilities within an organizational environment to meet the increasing demands of many young employees" (p. 40). Organizational leaders believe that young people, who have significant experience with social media outside of work, will want and use these technologies in the workplace. Yet this belief is based on the assumption that social media will have a similar meaning for users interacting with publicly available forms of the technology outside of work as it will for workers interacting with the technology within an organizational setting.

Although the current bias in the literature is that the use of ESM will have positive consequences (Gibbs et al., 2013), there is also good reason to suspect individuals' frames regarding social media may not align well with organizational goals. Specifically, the personal expression of preferences, opinions, and relations commonly associated with social media use outside the workplace may clash with workplace communication norms. Workers often seek to communicate more professionally in organizations, avoiding behaviors lacking appropriate workplace decorum (Cheney & Ashcraft, 2007). This desire to appear more professional means that individuals often regulate how they communicate in workplace environments in part by "suppress[ing] private emotions in the public sphere of the organization" (Miller, Considine, & Garner, 2007, p. 711). Given the open, expressive perception of social media, individuals' existing frames for the technology may be incongruent with expectations for appropriate or effective work behaviors.

This study not only explores the technological frames workers have of social media broadly, but also asks how individuals interpret this technology across different contexts. As Davidson's (2006) review of the literature noted, although those who research technological frames have studied a number of organizational settings, "they have

shown little interest in *how* individuals and groups come to have the frames they have" (p. 33, emphasis added). Focusing solely on technology use within work settings as the context where technological frames develop has been a valid approach because most workplace technologies emerged within organizational settings. For instance, although it is nearly ubiquitous today, e-mail was originally confined largely to organizational use for the better part of the 1980s, and when e-mail became widely available outside of organizations it had been in existence for several years, allowing for norms around use to be solidified. Similar to e-mail in its early years, it is unlikely individuals would have had previous, nonorganizational engagement with the use of other technologies studied from a frames perspective such as enterprise resource planning systems (Davidson, 2002) or computer simulation tools (Leonardi, 2009). Unlike organizational communication technologies previously studied from a technological frames perspective, social media technologies have proliferated among general consumers for more than a decade prior to adoption in organizations. In order to explore the development and consequences of frames related to social media use in organizations this study considers three related research questions: (a) Across work and nonwork contexts are there differences in technological frames workers have for communication technologies used primarily in the workplace (e.g., e-mail, file repositories, and instant messaging) and publicly available social media technologies (e.g., blogs, social networking sites, and microblogging)? (b) Are there differences in the technological frames workers have regarding the potential usefulness of ESM, and if so what are the reasons for these views? and (c) What is the relationship between technological frames of ESM and actual use of the technology in organizations? These questions are addressed using interview responses from employees at a large financial services company implementing a new ESM tool.

Methods

Research site and sample
This study was conducted within one of the largest financial service companies in the United States. Headquartered in the Midwest, American Financial (a pseudonym, as are all participants' names reported herein) offers credit cards, banking services, and loans to over 50 million customers. American Financial employs over 10,000 individuals. To foster new talent in this sizeable firm, American Financial developed a rotational leadership program with six business tracks: Analytics, Information Technology, Finance, Marketing, Operations, and Consumer Strategy. This study focuses on individuals in the leadership program for two reasons. First, employees in the program are in a generational cohort (born between 1980 and 1990) that is likely to have had experience with social media (Zickuhr, 2010) and whom many suspect will be the earliest and most eager adopters of ESM (Chui et al., 2012; Cummings, 2013; Leidner et al., 2010). Second, limiting respondents to this group meant interviewees would have been employed full-time at American Financial for a similar, and relatively short, period of time, which limited the potential influence of organizational culture

or social influence among workgroup members on technological frames. Interviewees noted that the majority of workplace communication occurred within teams, and since leadership program employees were spread among the organization they had limited interaction while working on tasks. However, nearly all employees noted the culture at American Financial encouraged collaboration, and interviewees specifically mentioned that it was acceptable to initiate conversation with other workers regardless of organizational rank or department.

In 2011, managers at American Financial decided the organization would adopt an enterprise social media technology. Management specifically cited that their motivation for implementing the technology was to encourage increased communication and knowledge sharing among workers. The ESM platform, named A-Life, was a customized version of a product developed by Jive Software, a company specializing in "social business platforms." Features of A-Life included the ability to create individual profile pages with pictures, personal interests, and organizational roles; the option to establish connections with other coworkers and follow their contributions; the choice to form or join discussion groups; and the potential to write blogs, tag or rate content, and create polls. Upon introduction, American Financial managers explicitly labeled A-Life as an "online platform" and did not refer to it as a social networking site. Although the system shared many of the features of social media that encourage social relationships, A-Life also allowed individuals to share uploaded files, and members of groups could establish projects supported by project management features like task assignments, shared calendars, milestones, and document management. Although the features and appearance of A-Life made the technology easily recognizable as social media, the platform was distinct from the specific social media technologies workers used outside the organization.

Data collection

The authors conducted two rounds of interviews with employees from the most recent leadership program cohort across all six business units. First, we interviewed 58 workers prior to the implementation of A-Life to understand employees' use and perceptions of various technologies. The majority of respondents began full-time work in one of the divisional leadership programs during July 2011 (and all but six employees started within a single 2-month period). Employees ranged in age from 20 to 33, with a mean age of 24.33 and a median age of 23 (for more information about respondents, see Table 1). At the time of the first interviews, participants were in the first 6 months of their initial leadership program rotation and would soon be moving into another role within American Financial. All were college graduates, with 17 participants having earned a graduate degree. Thirty participants had previous jobs prior to coming to American Financial, whereas others joined the company straight out of school without work experience. In addition, 20 individuals had served an internship with the organization prior to acceptance in the leadership program. Only one of the workers interviewed mentioned having familiarity with an ESM platform in a previous organizational context.

Table 1 Attributes of Respondents at American Financial

Name	Months at AF	Age	Grad. School	Work Exp.	Intern at AF	SM Mention		SM Use	Frame of ESM
						Facebook	LinkedIn		
Aaron	20	24	No	No	No	Yes	Yes	Light	Opt
Abby	6	23	No	Yes	Yes	No	Yes	Heavy	Skep
Aiden	11	23	No	No	Yes	No	No	Light	Opt
April	5	22	No	No	No	No	No	Light	Skep
Blair	5	23	No	Yes	No	Yes	No	Light	Skep
Bob	6	24	No	No	No	Yes	No	Heavy	Skep
Brad	6	23	No	No	Yes	No	No	Light	Skep
Brian	6	22	No	Yes	Yes	No	No	Light	Opt
Callie	5	22	No	Yes	No	No	No	Heavy	Skep
Camille	5	22	No	No	No	No	No	Heavy	Skep
Dan	4	23	No	No	Yes	Yes	No	Heavy	Skep
Darryn	5	26	Yes	Yes	No	No	No	Light	Skep
Dave	5	23	No	Yes	No	No	No	Heavy	Skep
Debra	7	23	No	No	Yes	No	No	Light	Skep
Edward	5	32	Yes	Yes	No	No	No	Heavy	Skep
Elijah	5	30	Yes	Yes	No	No	No	Light	Opt
Ericka	5	20	Yes	No	No	No	No	Light	Skep
Esau	5	22	Yes	Yes	No	No	No	Heavy	Skep
George	11	23	No	No	No	No	No	Heavy	Skep
Guowei	5	26	Yes	Yes	No	Yes	No	Light	Opt
Hank	6	24	No	No	Yes	No	No	Light	Opt
Harry	5	28	Yes	Yes	No	No	No	Light	Opt
Jack	7	23	No	No	No	No	No	Light	Opt
Jeff	5	24	No	No	Yes	Yes	No	Light	Skep
Jenny	7	22	No	Yes	No	Yes	No	Light	Opt
Jessica	5	28	Yes	Yes	No	No	No	Light	Opt
Jim	5	29	Yes	Yes	No	No	No	Light	Opt
Joel	7	24	No	No	No	Yes	No	Light	Opt
John	7	23	No	No	Yes	Yes	No	Light	Opt
Jorge	5	22	No	No	No	Yes	No	Light	Skep
Joseph	5	22	No	No	No	Yes	Yes	Heavy	Skep
Kelly	6	33	Yes	Yes	No	No	No	Light	Opt
Kevin	5	22	No	No	No	No	No	Heavy	Skep
Laura	5	24	No	No	Yes	Yes	No	Heavy	Opt
Leah	5	23	No	Yes	Yes	No	Yes	Light	Opt
Leo	5	20	No	No	No	Yes	Yes	Light	Opt
Lisa	6	28	Yes	Yes	No	No	No	Light	Opt
Maria	5	22	No	Yes	No	Yes	Yes	Heavy	Skep
Marie	7	22	No	No	Yes	No	No	Light	Opt
Matt	5	23	No	No	Yes	No	Yes	Heavy	Opt

Table 1 Continued

Name	Months at AF	Age	Grad. School	Work Exp.	Intern at AF	SM Mention		SM Use	Frame of ESM
						Facebook	LinkedIn		
Michael	7	23	No	No	No	Yes	No	Light	Opt
Michelle	5	29	Yes	Yes	No	No	No	Heavy	Opt
Molly	5	24	No	Yes	Yes	No	No	Light	Opt
Nick	5	25	Yes	Yes	No	No	Yes	Light	Opt
Noah	5	23	No	No	Yes	No	No	Heavy	Skep
Patrick	7	23	No	No	Yes	No	Yes	Heavy	Opt
Peter	7	32	Yes	Yes	No	No	No	Light	Opt
Raul	17	27	Yes	Yes	No	No	No	Heavy	Opt
Sam	7	23	No	Yes	Yes	Yes	No	Heavy	Skep
Sara	5	23	No	Yes	Yes	No	No	Light	Skep
Seve	12	24	No	Yes	No	No	No	Heavy	Skep
Sue	8	27	Yes	No	No	No	No	Heavy	Opt
Tad	7	22	No	Yes	No	No	No	Light	Opt
Tim	5	22	No	No	Yes	No	No	Heavy	Skep
Tina	6	32	Yes	Yes	No	No	No	Light	Opt
Veronica	5	22	No	No	Yes	No	Yes	Light	Opt
Vicky	6	24	No	Yes	No	Yes	No	Heavy	Skep
Zach	5	24	No	Yes	No	Yes	No	Heavy	Skep

Opt = optimistic ESM frame; Skep = skeptical ESM frame.

During the first round of interviews, the researchers followed a semi structured interview protocol (Kvale, 1996) to ask questions about each employee's use and perceptions of various technologies so that data could be compared across participants. Interviews began with discussion of workers' daily job responsibilities and communication patterns. Employees were asked to reflect on all the different communication technologies they used in the workplace, to explain different media choices, and to describe the relationship between media choice and job effectiveness. The latter half of the interviews resembled free-response questioning by prompting participants to give their basic impressions of a number of different publicly available social media technologies (blogs, social networking sites, and microblogging), specific publicly available social media platforms (Facebook, LinkedIn, and Twitter), and other digital communication technologies used in the workplace (e-mail, shared folders, and instant messaging). When possible, interviewers made efforts to probe further into how impressions of technologies were formed. Finally, at the end of the interview, employees were presented with a hypothetical scenario about an American Financial sponsored social media technology. The hypothetical technology was referred to as a "social media platform inside of American Financial," and the protocol did not specifically compare the imaginary technology to existing social media platforms

such as Facebook, LinkedIn, or Twitter. To help differentiate this ESM from publicly available social media, workers were told the technology would "only be available to American Financial workers." Workers were asked about their anticipated use of this hypothetical technology, the expected use of others, and thoughts regarding any potential communication changes that might occur in the organization. Interviews took place in private conference rooms at American Financial and ranged from 45 to 70 minutes. They were audio-recorded and later transcribed verbatim.

In January 2012, A-Life was implemented, as a pilot program, in several divisions across the company. We returned in January 2013 to conduct follow-up, semi structured interviews with 22 of the 58 employees who were interviewed at the outset. The goal of these interviews was to learn if and how employees actually used A-Life, what assumptions or expectations they had of the technology following implementation, and if there were any consequences associated with use or nonuse of the technology. These follow-up interviews ranged from 25 to 50 minutes and were also transcribed verbatim.

Data analysis
Data from the first interviews were analyzed following a constant comparative technique (Glaser & Strauss, 1967). In an iterative fashion, we moved back and forth between the interviews and an emerging structure of themes related broadly to the research questions guiding this study. This was performed through several rounds of coding among three of the authors. To begin, two of the authors engaged in open line-by-line coding (Strauss & Corbin, 1998) related to the first research question looking for how participants discussed technology use across both work and non-work contexts. Specifically, transcripts were reviewed with four interrelated questions in mind: (a) For what purposes do individuals use communication technologies at work? (b) Are there differences between technologies used at work and technologies used outside work? (c) What are the perceptions regarding different publicly available social media technologies? and (d) What experiences do individuals have with publicly available social media technologies? We also coded for individual attributes including age, gender, educational background, tenure, work experience, and level of social media use. Attributes were derived from information that was self-reported by workers. In evaluating level of social media use, coders reviewed additional comments made by each participant regarding experiences using social media to validate the self-reports, and in all cases the label workers applied to themselves was retained. Although no precise criteria were developed for the categorization of level of social media use prior to coding, a natural cut point emerged whereby heavy social media users noted using publicly available social media multiple times a day, and light users did not. Two authors completed this open coding process individually, and then met with another author to compare results and resolve any discrepancies.

Next, we engaged in a phase of axial coding (Strauss & Corbin, 1998) in which the raw text segments were grouped into responses that were conceptually similar. This phase of coding addressed the first research question and revealed two distinct

categories regarding how workers broadly viewed communication technologies primarily used in the workplace (e.g., e-mail, file repositories, and instant messaging) and publicly available social media technologies (e.g., blogs, social networking sites, and microblogging). We examined the results to see if these two technological frames of communication technologies primarily used in workplace and social media technologies varied based on individual attributes, and no systemic differences were found at this stage.

To address the second research question, we then returned to the interviews to analyze employees' specific opinions about the usefulness of social media within American Financial (i.e., an ESM technology), and selective coding revealed one group of workers who were skeptical of ESM and another who were optimistic about its usefulness. The selective coding of views of an ESM was performed exclusive of other rounds of classification, and therefore was done blind to the attributes of the workers. Once these groups were established we matched results to the earlier coding of individual attributes—creating a matrix of individuals, opinions of social media within American Financial, and attributes—in order to identify potential differences between the groups. Two attributes emerged as relevant differences between those skeptical of ESM in American Financial and those optimistic about the ESM: age and level of personal social media use. The different frames regarding the usefulness of ESM are detailed in the findings section.

Finally, for the third research question, we analyzed workers' perception of ESM at American Financial by coding the 22 interviews conducted in January of 2013 after A-Life's implementation for statements that employees made about why they chose to either use or not use A-Life. Twelve of these participants were young, heavy users of social media outside of the workplace before A-Life was implemented and 10 were older, lighter users of social media. We purposely sampled on these dimensions because it would have been difficult to disentangle the independent influence of age and level of social media use, and this approach provided a more reliable and valid comparison. Studies of technological frames often draw on perceptions at a single point in time (Gal & Berente, 2008), and these additional data following the implementation of A-Life allowed us to explore whether differences in anticipatory frames regarding ESM resulted in differential use of an actual ESM present in the organization. During analysis, we paid particular attention to discussion from respondents regarding the motivations for why they did or did not interact with A-Life.

Findings

We discuss our findings in three parts corresponding to our research questions. First, we explain employees' existing technological frames for various ICTs available both inside and outside organizational contexts. Second, we discuss employees' technological frames of ESM and the reasons for these views. Third, we reveal how workers responded to the introduction of an ESM platform at American Financial.

Different frames for different contexts

The first step in our analysis focused on differences regarding the usefulness of ICTs respondents used both within and outside of the workplace. Comments from workers revealed two different types of technological frames—those of (a) ICTs used primarily within the workplace and (b) social media used primarily outside of work. These technological frames are presented in Table 2 and described in more detail below. Our specific focus was on the perceived utility of these technologies in the contexts of respective use—the reasons why an individual would use a particular technology in a certain way. These comments regarding usefulness reflected a particular type of technological frame: *technology in use*, a construct established by Orlikowski and Gash (1994) that "refers to people's understanding of how the technology will be used on a day-to-day basis and the likely or actual conditions and consequences associated with such use" (pp. 183–184). By analyzing how people actually interpreted the use of technologies, we avoided a priori assumptions about what technologies can or will do in a context and foregrounded individual interpretations of technologies. Similarly, categorizations of what technologies were used at or outside of work were based on respondents' comments and not imposed by the researchers. The remainder of this section provides a more substantive analysis of the similarities and differences in technological frames among contexts.

Technological frames of ICTs used primarily within the workplace

We asked workers to discuss their assumptions about and actual use of various ICTs, both inside and outside of work. Not surprisingly, individuals consistently associated frames for ICTs primarily used at work—e-mail, instant messaging, and file repositories—with task-oriented activities (employees did not mention use of other technologies, such as texting or videoconferencing, for work tasks at American Financial). For example, in describing workplace communication employees mentioned using e-mail to record task-related communications and document assignments, sending instant messages to ask quick questions, and putting material into shared folders to store project files. In all of these instances, workers used these ICTs at work to address specific task needs, and similar technological frames were present across these tools.

Interestingly, when individuals used these ICTs outside of work they still associated the technologies with task-oriented activities. Although these technologies were easily available outside of work, and respondents used them often, they were viewed as largely instrumental and therefore associated more with organizational settings. As Will noted, "E-mail seems a lot more of a work thing, I don't e-mail as much at home." Table 2 demonstrates the consistency of frames for these ICTs across organizational and nonorganizational use. Debra's comment represents how these technologies were viewed as serving a task role across contexts: "I send e-mails sometimes just if it's planning an event with [a] group." For all workers interviewed, technological frames for ICTs primarily used at work were largely consistent in organizational and

Table 2 Technological Frames Expressed by American Financial Workers

		File Repositories	E-mail	Instant Messaging	Social Media
Outside the Workplace	Types of ICTs	Dropbox, Box	Gmail, Yahoo Mail, Hotmail	AOL Instant Messenger (AIM), GChat (Google Chat)	LinkedIn, Facebook, MySpace, Twitter, Google+, Tumblr
	Technology in use	Served as a communal space where individuals could contribute, store, and access shared material.	Allowed users to document and archive communication and interactions related to specific tasks (e.g., assigning work, information follow-up, and scheduling). Users perceived that they could identify, select, and limit recipients of messages.	Supported quick, informal exchanges of information and questioning. Users could communicate with a selective audience without having to broadcast information to a larger group.	*LinkedIn:* Regarded as a space to find information related to job opportunities or to develop a professional profile. Represented one's professional network and identity as a public display of skills, prior work experiences, and work history. *Facebook:* Used to communicate with, and keep track of, family and friends through sharing personal and social information. Also served as a source of procrastination and a hindrance to productivity. *Twitter:* Used for entertainment and a means of personal expression to be seen by a group of individuals in an open setting.
Inside American Financial	Types of ICTs	Shared folders on the corporate intranet	Lotus Notes	IBM Sametime	Enterprise Social Media platform (A-Life)

Table 2 Continued

	File Repositories	E-mail	Instant Messaging	Social Media
Technology in use	(Same as Nonorganizational Use)	(Same as Nonorganizational Use)	Helped facilitate rapid responses from coworkers, especially when used for confirming information or requests for specific material.	Some workers viewed the ESM as not useful for organizational tasks. They felt an ESM would be distracting and promote personal communication that is inappropriate for work. Some workers felt an ESM might be useful for work by increasing communication and making employees more aware of the work of colleagues.
Exemplar Quotes	"[Shared folders] are helpful, just because it's one way if you want to try to find out what has been done before or you can find stuff form the past and find information that is there" (Harry).	"I use [e-mail] anytime that I want a recorded answer that I can come back to in the future" (Brad); "I don't really get important e-mails [outside of work] anymore now that I'm not in school and have no group projects going on" (Sara).	"I use [IM] constantly. It's quicker, and the quicker something is the better, so I like it" (Dan).	"Facebook is a way to keep in touch [with people who] maybe I don't see all the time" (George); "[I used LinkedIn] to generally know what the other people professionally are doing"; (Raul). "Oh, I tweet all the time. I don't use it for work though" (Vicky).

nonorganizational settings: These technologies were seen as useful for instrumental and task purposes.

Technological frames of existing publicly available social media
Unlike ICTs used primarily at work, technological frames of existing social media platforms were not connected to use at work. Individuals noted rarely, if ever, using any social media while at work, in part since the organization blocked some social media sites like Facebook. Even when respondents were asked about the potential usefulness of existing social media at work, they struggled to conceive of ways that social media might fit with work tasks. For example, Vicky expressed that "there are just like 18,000 different better sources of getting information that you need rather than, you know, going on the company's Facebook." Consistently, employees did not consider publicly available social media a relevant ICT for a work setting.

However, all workers noted that they had used social media for several years (some more than a decade) *outside* of work. Through their personal use of social media, individuals developed ideas about how social media should be used. In contrast to the task-oriented frames of existing workplace technologies, employees associated social media with active and personal social interaction — interacting with friends on Facebook, professional networking on LinkedIn, and sharing updates on Twitter. Social media use was seen as a means of entertainment, relationship maintenance, or a distraction, but was not associated with accomplishing any specific tasks. Jim's comment was representative of how workers described the usefulness of social media outside of work: "staying in touch with friends, getting entertainment, and looking at photos. I think mainly just fun and entertainment is the main benefit I get out of it." When asked why he used social media, Will responded, "The relationship aspect of it. Just being able to keep in touch with people." Overall, American Financial employees expressed a distinct technological frame for existing public social media: ICTs that are used outside of work for maintaining relationships and entertainment.

Anticipatory frames regarding enterprise social media
Workers were largely consistent in their existing technological frames for ICTs primarily used at work and existing public social media. However, when asked about the implementation of a hypothetical social media technology within American Financial, employees differed in how they felt the technology would and should be used. One group held a skeptical frame, whereas the second group carried an optimistic frame of how social media might benefit the organization.

Skepticism about ESM
Many employees were skeptical about the usefulness of social media at American Financial. These individuals associated social media with personal interaction and expression, which was incongruent with their perceived purpose of workplace technologies. Skeptical employees had difficulty imagining how ESM could be used for task-oriented activities. Instead of shifting their perceptions of the technology and

considering how social media might afford opportunities for task-related communication, individuals felt the potential introduction of a social media technology at work would (a) distract employees from tasks and (b) deter information sharing.

First, individuals skeptical of social media within the organization commonly believed that social media would hinder efficiency at work. For example, when asked about her expectations for a hypothetical ESM Camille commented, "I feel like that would be a big distraction at work," and Darryn saw social media at work as a tool "that can make you waste a lot of time." According to employees, workers held these assumptions because they commonly used social media outside of work as a distraction from daily life or for procrastination. Based on experiences with existing technologies, individuals felt that social media contained "noisy," superfluous content with little task-related value. Because employees perceived social media as a platform for social, rather than task-oriented communication, they believed workplace social media would impede productivity.

Second, employees expressed reluctance to share information over ESM. The open, personal nature of communication individuals associated with existing social media was explicitly the type of communication many employees wanted to avoid at work. Tim commented on the danger of saying something inappropriate on ESM, noting "Sometimes other people just do not need to see [personal] things." People equated information sharing via ESM with the type of sharing that occurs on external social media platforms. As Debra commented, "I feel like my outside life is my outside life, and I wouldn't want any of the things I put on Facebook to influence maybe how people saw me in the workplace, too." Employees in this first group presumed an internal social media technology would reflect similar social and personal information shared on sites such as Facebook and Twitter.

Optimism about ESM

The second group of employees was more optimistic. They welcomed the possible implementation of social media to American Financial because they felt it would increase knowledge sharing, and facilitate relationship building. In other words, they believed ESM could support organizational tasks. These individuals discussed ESM use as a way to easily share thoughts, ideas, or materials. As Aiden described, "I think it will be good to have a network site where you share with anybody the questions you have and people could respond." Social media advocates thought the technology would generate a greater volume and diversity of organizational knowledge. Guowei speculated that social media at American Financial might "broaden your horizon on a topic or probably have more people involved."

Specifically, these optimistic employees believed that social media might increase communication across organizational silos that normally impeded the ability to learn about colleagues' activities. Elijah commented that "different departments … could be putting updates on certain types of projects. It could be useful … because a lot of times I'll just find out through some e-mail chain two months later." Individuals noted that most existing workplace communication occurred within (not across)

workgroups or project teams. With traditional workplace ICTs, employees had limited insight into the broader skills, expertise, and resources potentially available to them within the company. With ESM, however, individuals like Harry were optimistic about social media's potential to serve as both an active and passive source of knowledge sharing: "It pulls up all your lists of resources. It would be like 'Hey, this is Trent, hey this is Kelly,' and you could talk to them about things. Or you need database changes or something, here is the database team, here is the [technology] team, here is the list of their contacts, here is the manager." Workers optimistic about ESM felt they might communicate knowledge to and access information from more colleagues than was possible with current workplace ICTs.

Whereas skeptical employees felt that personal aspects of social media conflicted with the professional nature of work, optimistic employees viewed greater personal expression as a way to establish, broaden, and deepen relationships among coworkers by mitigating communication barriers. Guowei commented that with social media, "you do not need to go through your reporting manager or some other people to refer you to specific people. You can just message him or her and introduce yourself, so this can help you to build the relationship." By easing connectivity among workers, employees believed that ESM would increase the volume and diversity of communication among workers and encourage professional networking that could help them solve future problems, access resources, or find collaborators. As Tad stated bluntly, "A lot of people don't see the actual uses of social media, which is networking. And the number one thing you want to do in your company is network, get to know people." As this comment indicates, optimistic individuals viewed ESM as an effective tool, and not frivolous technology.

*Reasons for skeptical or optimistic frames of ESM*
Workers' comments alone provided limited insight into what factors might be influencing these frames of workplace social media. To investigate possible factors influencing the development of frames, we classified interview participants as having either skeptical or optimistic frames. We then reviewed our coding scheme to identify which factors, if any, were common to one of the groups, but not both. Responses allowed us to compare groups on the basis of age, gender, previous work experience, whether they had interned at American Financial, whether they compared workplace social media to existing social media technologies (specifically Facebook and LinkedIn because no other tool was mentioned more than once), and their level of social media use outside of work. For each variable we created a 2×2 table listing the number of respondents in each group, and due to the small sample size, we conducted Fisher's exact tests to determine the probability that the distribution represented a significantly uneven difference among groups, and we could reasonably reject the null hypothesis that the groupings were achieved by chance.

We found that skeptical and optimistic employees differed in two distinct ways: by age (younger vs. older) and by level of personal social media use (light vs. heavy). Due to the somewhat narrow age range, age was tested using two different categorization

schemes. In the first test we established a cut-off point between younger and older employees, at the age of 24 years. This age was the median for the sample and was also the age at which individuals would likely have graduated college and had some work experience. By dichotomizing this variable, we found that age was associated with a significantly uneven distribution of frames with younger workers more likely to be skeptical of ESM and older workers as more optimistic (Fisher's exact test, $p = .018$). Coding supported the assumed relationship between age and work experience by revealing that only 11 of 33 (33.3%) respondents 23 years old or younger indicated previous work experience prior to joining American Financial, while 18 of 25 (72%) respondents 24 years or older reported having worked in an organization. However, Fisher's exact test of the distribution based on previous work experience alone was nonsignificant. Because of the large number of workers 23 and 24 years old, we conducted a second, more conservative analysis of age differences looking at those 25 years or older versus those younger than 25, and this analysis also produced a similarly significant difference in the distribution of frames (Fisher's exact test, $p = .003$) With the exception of one younger employee who had a master's in business administration (MBA), this division also corresponded with those who had graduate degrees (older employees) and those who only had undergraduate degrees (younger employees). Because most employees joined American Financial around the same time, there was not enough variability in tenure to test whether time at the organization related to technological frames. However, we did test whether differences in technological frames existed between those who previously held internships with the company and those who did not, and we did not find a significantly uneven distribution based on this attribute. There was also no significant difference in technological frames related to the gender of the workers.

Similarly, we used responses of employees to classify workers as either having a heavy or light amount of personal social media experience, and we found a significantly uneven distribution of frames with high social media users more likely to be skeptical of ESM, and low social media users more optimistic (Fisher's exact test, $p < .001$). To examine whether frames of ESM were related to perceptions of specific social media tools, and not social media generally, we also coded for instances when workers mentioned existing platforms when discussing expectations for the hypothetical workplace social media. Several workers mentioned Facebook and LinkedIn (Google+ and Twitter were each mentioned once), but individuals invoking these technologies did not significantly differ in the frames expressed for ESM. Figure 1 displays the differences in frames expressed by individuals based on age and level of personal social media usage. In the following sections, we discuss these attributes and their relationships to frames of ESM.

Age. Older American Financial employees tended to be more optimistic about the usefulness of ESM. Responses indicated that for older workers, optimism was linked to the expectation that social media could aid with tasks, while younger employees associated social media with personal use. Laura, 24, reflected on this difference and noted, "I would say that young generations probably would use it for chatting, but
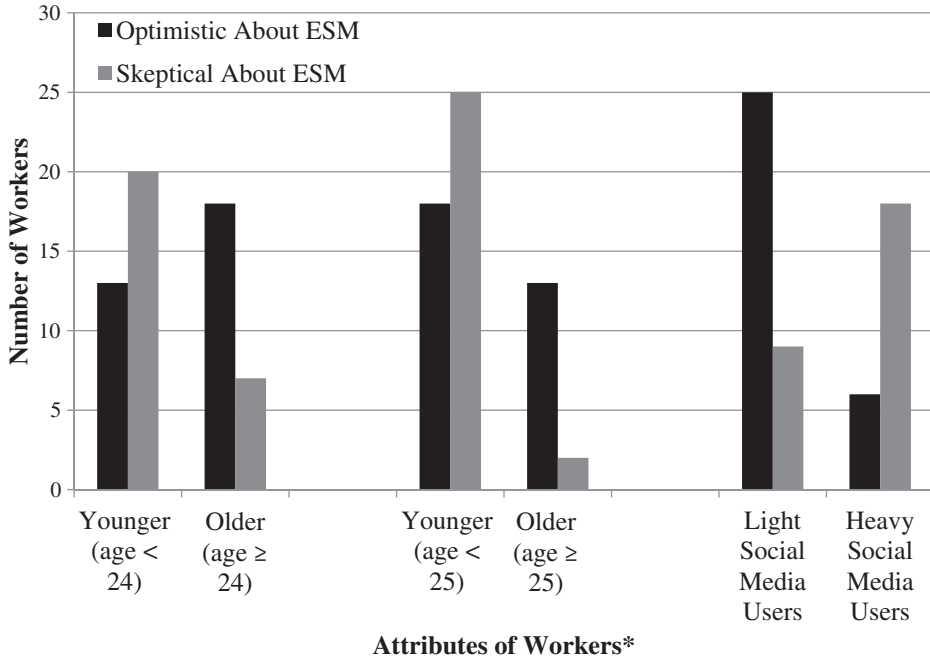
Figure 1 Comparison of employees' technological frames of social media in the workplace based on attributes. *Differences in frames of ESM for each set of attributes are statistically significant at the $p < .05$ level based on Fisher's exact test.

people like my managers would just use it for business and for checking information." By contrast, Joseph, 22, felt social media would hurt productivity: "It is in great danger of beginning to border on frivolity if you start having … here is a picture of me at the Grand Canyon." Whereas Laura's comment indicates an ability to view social media as useful beyond socializing, Joseph's concern suggests that he is applying an existing frame of social media developed outside of work. Guowei, 26, noted he "did not see any difference with other communication inside the company," whereas Abby, a younger worker, commented, "It's the business adopting cool things and making it uncool. That's my 23-year-old mentality about it." Older employees exhibited a greater ability to adapt their frames of social media to a work context, but younger employees had more difficulty shifting their established frames.

Older employees were more optimistic about ESM because they believed social media might help them gain valuable exposure, network with colleagues, and have ideas recognized. For example, Harry, 28, had used a social media platform within his previous organization and remembered, "You get exposure, so it can be really good." Although older employees viewed this visibility as a potential opportunity, younger employees were resistant to increased attention. Sam, 23, shared why many younger employees were reluctant to participate in workplace social media: "A lot of people are worried about how they look and their work appearance." Nearly all of

the employees we interviewed were newcomers to American Financial, but younger workers expressed greater concern about their professional reputation than older employees, and older individuals were more concerned with being recognized than younger individuals.

Level of personal social media use. Our analysis also identified one's level of use of existing social media outside of work as a potential influence on workers' frames of ESM. Specifically, individuals who used social media more heavily outside of work were more skeptical about ESM than light social media users. Workers' comments indicated that heavy social media users used the technology extensively for entertainment purposes and as a distraction. This experience led to the perspective that ESM would not be productive. Callie (heavy user) noted, "I use social media to get updates from my friends and maybe I post a photo or an 'I'm alive type of thing.' But it is not … serious at all." She expressed difficulty viewing social media as a "serious" and useful form of workplace communication. Alternatively, Michael (light user) had few qualms about using ESM, because he saw it as "just another way to communicate with employees. I mean it definitely would be professional. … We have IM, we have e-mail, we have phones and there have not been any drawbacks with any of that. … I think it will be very useful." Individuals like Michael, who reported using personal social media less frequently, held more optimistic frames about social media as a useful technology at work.

Persistence of frames in practice at American Financial

Through data collected during our first round of interviews, we found that employees held different technological frames for ESM and anticipated they would use a hypothetical ESM differently based on these varied expectations and assumptions. The second round of interviews with 22 employees allowed us to evaluate whether these technological frames persisted after workers had the opportunity to use a social media platform, A-Life, within American Financial. The interviews revealed that the frames participants had previously formed about workplace social media shaped not only how they thought about the utility (or lack thereof) of A-Life, but also how they actually used the technology within American Financial. Specifically, younger heavy social media users consistently reported that they shied away from using A-Life despite managements' insistence that they do so, while older lighter users became active users of A-Life. In other words, individuals' early experiences with the technology were largely consistent with the frames they expressed prior to the ESM's implementation.

For example, before A-Life was implemented, a younger employee named Tim reported that he never logged off of his Facebook page and posted to it multiple times a day. After A-Life's implementation, Tim commented that he intentionally avoided using the ESM at work: "Some people try to get me to use it. I know my boss wants me to use it. But I haven't done anything on it really other than create a profile. I don't post on it, and I don't really ever log in. I don't want to. There are lots of other avenues to socialize with people without having everyone watch you." Tim's quote demonstrates the expectation that A-Life would, and should, be used for socializing and he did

not find this useful in the context of work. Fearing that their private life and their work life would become conflated, or that they would be caught saying inappropriate things or appearing to spend too much time on A-Life and not doing their "real work," all 12 younger heavy users of social media interviewed indicated that they did not regularly use A-Life. As Abby, another younger heavy user of social media outside the workplace commented, "Even after people telling us we should use it for like a whole year now, I still don't. I just don't think that its good for anyone to say things at work that they would say on Facebook." Employees who associated social media with socializing or entertainment had difficulty envisioning what alternative task-related goals they might accomplish by using social media at work.

By contrast, older employees who were light users of social media before A-Life was implemented became regular users of the new tool. Of the 10 older, light social media users we interviewed, participants indicated that they spent, on average, 50 minutes a day posting messages or documents, commenting on others' posts, or reading posts and comments made by others on A-Life. As Jessica commented:

> I didn't ever use social media a lot before we got A-Life. I had a Facebook page and LinkedIn profile but rarely used them. I'm on A-Life a lot now. I didn't know if it would be useful last time we talked, but I figured I'd give it a shot since it's another tool for communicating with your coworkers. It's turned out to be very useful to sort of get a pulse on what's happening at American Financial. I read about what kinds of projects people are working on and I can use it to learn things for my own projects or ask for help from the crowd. It's been a good tool for learning and connecting with people that helps me to get my own projects done better. I really like it.

Because Jessica did not have a lot of experience with existing social media outside of work, it was easier for her to approach A-Life as an organizational communication platform and not be clouded by how social media is primarily used outside of work. Her initial experiences confirmed that A-Life could operate as a tool for organizational learning.

Jim, another older employee who was a light user of social media before the A-Life implementation, concurred with Jessica's point that A-Life was useful for work related tasks. He commented that he likely would not have used A-Life if he had spent more time on existing social media outside the workplace:

> After I graduated from college—a few years—I got a Facebook account like all my friends were doing. I never used it much because I never found it all that interesting. … So when A-Life came I was like, "Maybe I can just try it out and see." It's been really great because I learn so much about what other projects are happening by reading what people post and that makes me do better on my own projects. So, I'm glad I gave it a try. If I had been all gung-ho about Facebook, though, I might not have tried it because I probably would have been burnt out by social media like a lot of my friends who were on there all the time.

This quote again demonstrates how assumptions or the lack thereof about social media influenced workers' choices to use A-Life. Jim's response also indicates one way that age may have influenced technological frames. Because Jim was older he did not use Facebook in college to socialize with friends, and therefore did not carry the expectation that an ESM technology would be used in a similar way. Our data

indicated that age and level of experience with social media outside of work shaped both what kinds of frames about social media that employees brought into the workplace and, as we have shown, the usage patterns that followed after implementation.

Discussion

This study revealed meaningful differences in how employees at American Financial viewed the anticipated and subsequent implementation of an ESM platform. Younger individuals and those who had used social media heavily outside of work were largely skeptical about the potential usefulness of the technology within work, and were unwilling to engage with the technology when it was implemented. Older workers and those who did not have significant experience with social media outside of work were largely optimistic about the potential usefulness of ESM, and perceived benefits from use of A-Life. The comments by respondents indicated some of the reasons why these differences in technological frames emerged and why they may have been associated with age and social media experience. Strikingly, all employees seemed to initially frame their understanding of publicly available social media in a similar way — they viewed the different platforms as useful to communicate with or keep track of friends, family members, and acquaintances. The differences in technological frames (optimism and skepticism) emerged only when the context of social media use shifted. Although both groups mentioned how social media could provide more open communication, greater sharing, and increased connections, skeptical employees saw this as a potential distraction or threat in organizations, and optimistic employees viewed this as an opportunity or asset for improving work. The comments of the respective groups indicated that the skepticism of younger workers and those using social media heavily was related to them viewing all social media as personal and expressive, and, consequently, inappropriate for task-orientated behaviors. In contrast, older employees and those who used social media lightly were able to view ESM as different than public social media and perceived the technology as potentially useful for organizational activities.

Like any study, there are a number of limitations that should be considered when interpreting the meaning and generalizability of these findings. First and foremost, the sample of respondents lacks variability on a number of dimensions. Workers came from a single organization, and employees in other organizational contexts may have different perceptions of technologies or be influenced by unique elements of organizational culture. Additionally, although we found differences in frames based on age, the workers spanned an age range of only 13 years. We attempted to provide a conservative analysis of the data available, but the findings related to age may differ in a more diverse sample and additional variables could also influence frames. For example, all of the workers we examined joined the organization during a similar time period, so we were not able to explore the potential influence of tenure on frames of ESM. Finally, it is possible that the findings are isolated to this particular time in which social media adoption is just beginning to transition to workplace contexts.

Our intent is not to argue that age and level of personal social media use are the only variables that influence technological frames of ESM, only that frames related to this class of technologies are likely to vary based on the experiences of individuals outside of work and the extent to which workers are expected to carry over or shift frames to a new context. The goal of this study was not to provide a definitive account of expectations and opinions of ESM. Future work is needed to continue investigating the development of frames workers have related to both ESM and other new communication technologies entering the workplace, how organizations might shape or influence these frames, and how these frames influence technology use.

Despite the present limitations, this study can contribute to our understanding of ESM and organizational communication in two ways. First, this work calls into question whether the term ESM currently characterizes a stable form of technology, or that workers possess a shared view of the usefulness of ESM. Much of the current interest around ESM is related to ways the features of these new technologies can organize knowledge, connect individuals, and facilitate communication (e.g., Fulk & Yuan, 2013; Treem & Leonardi, 2012). This study shows that although features of social media do not change substantially as the technology moves from public use to ESM, the utility of these features can shift across contexts. Whereas scholars often focus on what social media can *do* in organizations, this work demonstrates the importance of asking what social media *means* to respective users.

When individuals confront communication technologies like social media at work, they do not discard their previous experiences with those technologies developed in their personal lives. Rather, those experiences may have an anchoring effect that limits perceptions about how and under what circumstances a communication technology can be used (Gal & Berente, 2008). Studies have predominantly focused on the role of messages from managers or organizational leadership in shaping frames or users' early experiences with *new* technologies (e.g. Leonardi, 2009), but little work has explored how organizational communication might play a role in getting workers to shift frames regarding a technology with which they may already be familiar. At American Financial, A-Life was implemented with little communication or guidance about how the technology should be used. For those skeptical of ESM, significant exposure to social media outside of work (younger workers and heavy social media users) may have provided salient and well-formed frames about the technology that were difficult to alter. Alternatively, for those optimistic for ESM, the organizational context of technology use may have contributed more to the development of technological frames than expectations based on limited use of the features of social media outside of work. These findings demonstrate the need for theories of ICT use to factor in both the features and the contexts in which technology and individuals are embedded (Fulk & Gould, 2009).

Second, the findings of this work directly dispute the claim that younger employees or those comfortable with publicly available social media platforms will want to use similar technologies for internal communication and knowledge sharing in organizations (Cummings, 2013; Leidner et al., 2010; Rai, 2012). More broadly, the reasons for

differences in frames of ESM indicate that many individuals desire separation between task and social appropriations of technologies, and that the form of a communication technology can serve as a symbolic divide between work and nonwork activities. At American Financial, the most salient concern for those skeptical of social media at work was that it was not "professional" and participation could signal undesirable behaviors to colleagues. The findings also question the assumption that younger users, many of whom are familiar with these technologies, want to use them within work contexts. Instead, individuals who used social media heavily outside of work were the most adamant that social media would be a distraction and were skeptical of the technology's usefulness. Paradoxically, people with the least direct experience with social media may be more open to using ESM.

This study also points to practical ways that organizations can use and benefit from ESM. Organizations may want to use caution when comparing existing social media technologies and ESM. When organizations view ESM as sharing features of Facebook (DiMicco et al., 2008) or as a "corporate Twitter-clone" (Zhang, Qu, Cody, & Wu, 2010), they may inadvertently invite the application of frames from nonorganizational ICTs. Organizations may feel that employees' experience with social media in their nonwork lives might ease obstacles associated with operational skill. People's familiarity with technology, however, may solidify technological frames formed outside the workplace, making it difficult for workers to shift frames to an organizational context. Instead of explicitly using the label "social media," organizations should consider discussing desired behaviors related to technology use (e.g., knowledge sharing and expertise exchange), and avoid likening the tools to social media already in use outside the workplace.

Acknowledgments

References

Cheney, G., & Ashcraft, K. L. (2007). Considering "The Professional" in communication studies: Implications for theory and research within and beyond the boundaries of organizational communication. *Communication Theory*, **17**, 146–175. doi:10.1111/j.1468-2885.2007.00290.x.

Chui, M., Manika, J., Bughin, J., Dobbs, R., Roxburgh, C., Sarrazin, H., ... Westergren, M. (2012). *The social economy: Unlocking value and productivity through social technologies*. New York: McKinsey Global Institute.

Culnan, M. J., & Markus, M. L. (1987). Information technologies. In F. M. Jablin, L. L. Putnam, K. H. Roberts, & L. W. Porter (Eds.), *Handbook of organizational communication: An interdisciplinary perspective* (pp. 420–443). Newbury Park, CA: Sage.

Cummings, J. (2013). The impact of intra-organizational social networking sites on impression formation. *Journal of Information Systems Applied Research*, **6**, 40–50.

Davidson, E. (2002). Technology frames and framing: A socio-cognitive investigation of requirements determination. *MIS Quarterly*, **26**, 329–358. doi:10.2307/4132312.

Davidson, E. (2006). A technological frames perspective on information technology and organizational change. *The Journal of Applied Behavioral Science*, **42**, 23–39. doi:10.1177/0021886305285126.

DiMicco, J., Millen, D. R., Geyer, W., Dugan, C., Brownholtz, B., & Muller, M. (2008, November 8–12). Motivations for social networking at work. In *Proceedings of the 2008 Conference on Computer Supported Cooperative Work*, San Diego, CA, pp. 711–720. doi:10.1145/1460563.1460674.

Ellison, N. B., & boyd, D. (2013). Sociality through social network sites. In W. H. Dutton (Ed.), *The Oxford handbook of Internet studies* (pp. 151–172). Oxford, UK: Oxford University Press.

Fulk, J. (1993). Social construction of communication technology. *The Academy of Management Journal*, **36**, 921–950. doi:10.2307/256641.

Fulk, J., & Gould, J. J. (2009). Features and contexts in technology research: A modest proposal for research and reporting. *Journal of Computer-Mediated Communication*, **14**, 764–770. doi:10.1111/j.1083-6101.2009.01469.x.

Fulk, J., Steinfield, C. W., Schmitz, J., & Power, J. G. (1987). A social information processing model of media use in organizations. *Communication Research*, **14**, 529–552. doi:10.1177/009365087014005005.

Fulk, J., & Yuan, Y. C. (2013). Location, motivation, and social capitalization via enterprise social networking. *Journal of Computer-Mediated Communication*, **19**, 20–37. doi:10.1111/jcc4.12033.

Gal, U., & Berente, N. (2008). A social representations perspective on information systems implementation: Rethinking the concept of "frames". *Information Technology & People*, **21**, 133–154. doi:10.1108/09593840810881051.

Gibbs, J. L., Rozaidi, N. A., & Eisenberg, J. (2013). Overcoming the "ideology of openness": Probing the affordances of social media for organizational knowledge sharing. *Journal of Computer-Mediated Communication*, **19**, 102–120. doi:10.1111/jcc4.12034.

Glaser, B., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Chicago, IL: Aldine.

Goffman, E. (1974). *Frame analysis: An essay on the organization of experience*. New York, NY: Harper Colophon.

Jackson, A., Yates, J., & Orlikowski, W. (2007, January 3–6). Corporate blogging: Building community through persistent digital talk. In *Proceedings of the 40th Annual Hawaii International Conference on System Sciences*, Waikoloa, HI. doi:10.1109/HICSS.2007.155.

Jian, G. (2007). "Omega is a four-letter word": Toward a tension-centered model of resistance to information and communication technologies. *Communication Monographs*, **74**, 517–540. doi:10.1080/03637750701716602.

Kane, G. C., Alavi, M., Labianca, G., & Borgatti, S. P. (2014). What's different about social media networks? A framework and research agenda. *MIS Quarterly*, **38**, 275–304.

Kvale, S. (1996). *InterViews: An introduction to qualitative research interviewing*. Thousand Oaks, CA: Sage.

Leidner, D. E., Kock, H., & Gonzalez, E. (2010). Assimilating Generation Y IT new hires into USAA's workforce: The role of an Enterprise 2.0 system. *MIS Quarterly Executive*, **8**, 163–176.

Leonardi, P. M. (2009). Why do people reject new technologies and stymie organizational changes of which they are in favor? Exploring misalignments between social interactions and materiality. *Human Communication Research*, **37**, 407–441. doi:10.1111/j.1468-2958.2009.01357.x.

Leonardi, P. M., & Barley, S. R. (2008). Materiality and change: Challenges to building better theory about technology and organizing. *Information and Organization*, **18**, 159–176. doi:10.1016/j.infoandorg.2008.03.001.

Leonardi, P. M., Huysman, M., & Steinfield, C. (2013). Enterprise social media: Definition, history, and prospects for the study of social technologies in organizations. *Journal of Computer-Mediated Communication*, **19**, 1–19. doi:10.1111/jcc4.12029.

Lin, A., & Silva, L. (2005). The social and political construction of technological frames. *European Journal of Information Systems*, **14**, 49–59. doi:10.1057/palgrave.ejis.3000521.

McAfee, A. (2009). *Enterprise 2.0: New collaborative tools for your organization's toughest challenges*. Cambridge, MA: Harvard Business School Press.

Miller, K. I., Considine, J., & Garner, J. (2007). "Let me tell you about my job": Exploring the terrain of emotion in the workplace. *Management Communication Quarterly*, **20**, 231–260. doi:10.1177/0893318906293589.

Orlikowski, W. J. (1992, November 1–4). Learning from notes: Organizational issues in groupware implementation. In *Proceedings of the 1992 Conference on Computer Supported Cooperative Work*, Toronto, Canada, pp. 362–369. doi:10.1145/143457.143549.

Orlikowski, W. J., & Gash, D. C. (1994). Technological frames: Making sense of information technology in organizations. *ACM Transactions on Information Systems*, **12**(2), 174–207.

Pinch, T. J., & Bijker, W. E. (1984). The social construction of facts and artifacts—or how the sociology of science and the sociology of technology might benefit each other. *Social Studies of Science*, **14**, 399–441. doi:10.1177/030631284014003004.

Rai, S. (2012). Engaging young employees (Gen Y) in a social media dominated world: Review and retrospection. *Procedia – Social and Behavioral Sciences*, **37**, 257–266.

Siles, I. (2011). From online filter to web format: Articulating materiality and meaning in the early history of blogs. *Social Studies of Science*, **41**, 737–758. doi:10.1177/0306312711420190.

Strauss, A., & Corbin, J. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (2nd ed.). Thousand Oaks, CA: Sage.

Treem, J. W., & Leonardi, P. M. (2012). Social media use in organizations: Exploring the affordances of visibility, editability, persistence, and association. *Communication Yearbook*, **36**, 143–189.

Yuan, Y. C., Fulk, J., Shumate, M., Monge, P. R., Bryant, J. A., & Matsaganis, M. (2005). Individual participation in organizational information commons: The impact of team level social influence and technology-specific competence. *Human Communication Research*, **31**, 212–240. doi:10.1111/j.1468-2958.2005.tb00870.x.

Zhang, J., Qu, Y., Cody, J., & Wu, Y. (2010, April 10–15). A case study of micro-blogging in the enterprise: Use, value, and related issues. In *Proceedings of the 28th International Conference on Human Factors in Computing Systems* (pp. 123–132). New York, NY: ACM. doi:10.1145/1753326.1753346.

Zickuhr, K. (2010). *Generations 2010*. Retrieved from: http://pewinternet.org/Reports/2010/Generations-2010.aspx.