Social Media and Their Affordances for Organizing: A Review and Agenda for Research

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SOCIAL MEDIA AND THEIR AFFORDANCES FOR ORGANIZING:
A REVIEW AND AGENDA FOR RESEARCH

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ABSTRACT

Social media - computer-mediated tools of the web 2.0 generation that make it possible for anyone to create, circulate, share and exchange information in a variety of formats and with multiple communities - have become increasingly widespread in today’s organizations. Social media have started to affect multiple organizational phenomena and processes. This paper pursues three interrelated goals. First, it provides a theoretical framework, based upon the concept of affordances, to theorize the potential implications of social media use for organizing. Second, it reviews existing scholarship on social media and organizing, highlighting social media diffusion, use, and its implications for organizational processes of communication, collaboration, and knowledge sharing. Third, it relies upon the affordance perspective and existing scholarship in order to articulate an agenda for future research on social media and organizing, advocating for a diversification of the phenomena under study and for greater diversity and innovativeness in the methodological approaches devised to investigate these phenomena.
INTRODUCTION

Social media have begun to proliferate across organizations as executives and managers attempt to leverage the power of their companies’ informal information economies. These computer-mediated tools make it possible for anyone to create, circulate, share and exchange information in a variety of formats and with multiple communities. According to Leonardi, Huysman, and Steinfield (2013: 2), enterprise social media 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. The broad family of social media technologies used in organizations today includes social networking sites, blog platforms, micro-blogging tools, wikis, and social tagging tools. Each of these specific social media applications, despite differences in their functionality, evinces the four characteristics outlined above. In contrast to most other technologies used for communication within organizations, social media provide a forum for public communication among employees about user-generated content (DiMicco, Geyer, Millen, Dugan & Brownholtz, 2009; McAfee, 2009). On most social media developed specifically for organizational use, the communications that occur between people in the organization are visible to all of those peoples’ contacts and, often, by everyone in the organization (Leonardi, 2014).

Perhaps because social media provide an unprecedented platform for employee communication and interaction there have been growing considerations of the ways in which social media within the workplace changes organizations and the work of their employees (Colbert, Yee, & George, 2016). In a recent report, researchers from the McKinsey Global
Institute predicted that the use of social media within large companies could contribute as much as $1.3 trillion in annual value to the U.S. economy (Chui et al., 2012). As the authors indicated, a full two-thirds of that potential is likely to come from improving collaboration within the organization. Another large survey executives revealed that most managers consider that social media has and will continue to be strategically important to their organizations (Kiron, Palmer, Phillips, & Kruschwitz, 2012). Such predictions would seem silly were it not for the rapid diffusion and uptake of social media within organizations. A study of organizational technology use by Forrester, with responses from more than 10,000 workers across a variety of industries showed that, in 2012, 25% of employees used their company’s internal social media regularly, and the number of employees using these tools was growing rapidly (Schadeler & Karcher, 2012). Such numbers represent a diffusion of organizational technologies that is unprecedented in scale and speed.

Aside from the fact that a large and increasing number of employees are using social media in the workplace, there are at least four reasons why it seems important for students of organizations to pay attention to these technologies. First, unlike most large-scale communication technologies implemented within organizations (e.g., email, intranets, etc.) social media have, so far, regularly bypassed the organization’s IT department. Regular workplace managers and executives – without a link to IT – are making decisions to implement social media within their divisions, departments, and teams. Most social media are simple web-based applications that are hosted on the cloud make it simple for organizational managers to buy licenses and implement the technologies themselves – no tricky installation and customization is necessary. The result is that the adoption of social media in organizations is often conducted by and affects non-IT managers directly. Second, as Treem and Leonardi (2012) show, unlike most other technologies
used in the workplace, social media became popular outside of organizational use before organizations became interested in them. In other words, people used tools like Facebook and blogs long before organizations became interested in social media and were thus comfortable with them. We know very little about how technologies move from people’s personal lives into organizations, though we know quite a bit about how they diffuse outward from organizations.

Third, the content that is shared on social media tends to be generated by employees. This turn toward user-generated content means that employees are increasingly gaining a voice within their workplaces and have a forum upon which to share their ideas, concerns, and insights about work-related matters. Fourth, the content shared via social media is visible to almost everyone in the organization. Employees and managers are able to broadcast messages across the organization in ways that were often impossible prior to the introduction of social media in the workplace.

Taken together, these four trends – managerial involvement with the technology, wide adoption in personal lives before adoption in organizations, the ascendancy of user-generated content, and the unprecedented visibility of communication and interaction – mark social media use in organizations as one of the most significant changes to organizational life today. Yet organizational scholars have been slow to begin exploring the use of social media in the workplace despite a number of calls exhorting them to do so (see, e.g., Andriole, 2010; Aral, Dellarocas, & Godes, 2013; Grasso & Convertino, 2012; Majchrzak, Faraj, Kane, & Azad, 2013).

We speculate that there are at least two reasons why organizational scholars have not yet fully explored the role of social media in organizations. First, organizational theorists have been slow to study the uses and effects of communication technology in the workplace in general because they often believe that such technologies are ancillary to their topics of interest (as noted in Leonardi and Barley (2010) and Orlikowski and Scott (2008)). Yet as we have suggested, the
pervasiveness of social media in the workplace and the fact that such technologies are often the province of non-IT managers and employees means that they are likely to be increasingly implicated in all kinds of workplace phenomena that are within the areas of interest of organizational scholars. Second, there are few obvious theoretical lenses and frameworks for understanding and conceptualizing the ways that social media become embedded in and affect various organizational processes of broad concern to organizational scholars.

In this article, we attempt to remedy the lack of study of organizational implications of social media use by addressing these two reasons head on. We suggest that a lens on social media use that focuses theoretical attention on the types of organizational activities that these new technologies afford users the ability to do, as well as the types of activities these technologies constrain users from accomplishing, can provide a compelling framework through which to understand the role of social media in organizations. We draw on this affordance perspective to interpret and organize prior research on social media within organizations such that it can help us to address the first concern outlined above: that organizational scholars have not yet paid much attention to social media because they view these new technologies as ancillary to their core phenomena of interest. By highlighting the affordances and constraints provided by social media in the workplace, our review demonstrates that social media are at the center of most action within organizations. Moreover, it also shows that if they are not as of today, they are likely to be in the near future. The use of an affordance lens reveals that broad macro-level organizational concerns such as knowledge sharing and coordination, as well as more micro-level phenomena such as decision-making and temporal orientation, are poised to be shaped by the use of social media at work. Thus, we argue that the use of social media within organizations will undoubtedly affect most individual, group, and organizational level processes that organizational scholars take
as their main topics of inquiry. Consequently, we close by suggesting several ways in which organizational researchers might begin to fruitfully incorporate studies of social media into both the foreground and the background of their focal areas of concern.

**DIFFUSION, USE, AND ORGANIZING PROCESSES: AN AFFORDANCE LENS**

In this section, we review work on social media in organizations conducted by organizational scholars and the much larger corpus of studies conducted by scholars in the fields of Information Science, Management Information Systems, Communication Studies, Human-Computer Interaction, and Computer-Supported Cooperative Work (CSCW). To structure this review, we adopt an affordance lens.

An affordance lens is rooted in the work of ecological psychologist James Gibson (1986) and has formed the foundation for the field of design science (e.g., Norman (1990)). The term “affordance” refers to the potential for action that new technologies provide to users. All technologies are constructed out of material features that have properties that transcend their context of use. Although social constructivist approaches to technology use rightly argue that individuals can exercise their human agency to make choices about how to use the features of new technologies in their work (see for review, Leonardi and Barley (2010)), those features are constructed out of materials that permit certain actions and limit others. When individuals perceive that those features allow them to perform certain actions, the technology can be said to provide an “affordance.” This affordance perspective on technology use, which focuses its gaze on the intersection between people’s goals and a technology’s material features, is a useful perspective for understanding the role of social media used within organizations. It is useful, in one sense, because it provides a way of transcending the two dominant (and antithetical) theoretical positions that organizational scholars have adopted in their study of technology:
technological determinism and social constructivism. We further argue that its utility comes from recognizing that social media are technologies that are constructed out of certain material properties that enable the presentation, storage, and flow of information in ways that are difficult or impossible in other media.

Gibson’s (1986) early formulation of the concept of affordance suggested that people do not interact with an object prior to or without perceiving what the object is good for. As he famously observed, the material properties of an object exist apart from the people who use them, but they are infused with meaning “relative to the posture and behavior of the animal being considered” (pp. 127-128). In other words, objects have materiality, but that materiality affords different possibilities for action based on the contexts in which they are used. Although the materiality of an object is typically common to the various people who encounter it, people’s perceptions and enactment of the affordances of that object are not necessarily common. Rather, affordances are unique to the particular ways in which an actor perceives materiality.

Consequently an affordance lens on technology use holds that affordances are not exclusively properties of people or of objects – they are constituted in the relationships between people and the materiality of the things with which they come in contact. For example, Hutchby (2001) argues that an object’s affordances can change across different contexts even though its materiality does not. Also, as Leonardi (2011) suggests, people may perceive that an object offers no affordances for action, perceiving instead that it constraints their ability to carry out their goals. In short, people have perceptions, objects have materiality, and affordances or constraints are created when people construct perceptions of an object’s materiality. Because affordances are relational such that they exist between people and an object’s materiality, objects can be used in
myriad ways and have multiple effects on the organization of work (Fayard & Weeks, 2007; Zamutto, Griffith, Majchrzak, Dougherty, & Faraj, 2007).

By focusing jointly on objects’ materiality and on people’s perceptions of affordance and constraint, an affordance lens is useful for theory in that it has the potential to help explain why, how, and when new technologies – like social media – become enrolled in and affect organizational action (Faraj & Azad, 2012). For example, when adopting an affordance lens, scholars who study, say, identification in organizations would not ask how social media affect identification practices, but rather how the affordances or constraints offered by social media become intertwined in the production of identification. From the vantage point offered by an affordance lens, technologies like social media are constitutive features of all action that takes place in organizations and of the process of organizing because they offer the possibility of affording certain types of action that would be difficult or impossible to achieve without them and they sometimes constrain other kinds of action that are desirable. Although an affordance lens helps to see that technologies play a central role in organizations, it does not place the technologies in the foreground. Rather, organizational action is primary, and technologies that afford and constrain activities that constitute such action are seen as facilitating conditions.

Using this affordance lens to review and organize research on social media use within organizations reveals that people’s goals and the materiality of these new technologies intersect in three related processes: (1) the diffusion of social media, (2) the use of social media, and (3) the organizing processes occurring around and through social media. The affordance lens enables us to surface issues surrounding social media that mark them as distinct technologies from the many other computerized communication technologies that have been used in organizations for
the past half century, while simultaneously showing how they become constitutive features of organizational action. Figure 1 depicts the organizing structure of our review.

**Diffusion**

A long-standing, important aspect of research on the relationship between technology and organizing concerns the way that new technologies enter organizations and are adopted by employees (Attewell, 1992; Boudreau & Robey, 2005). Here we present relevant scholarship on the diffusion of social media in organizations and distinguish three of its key distinctive aspects: that diffusion has taken place from the outside in of the organization, from the bottom up and from the leisure to the work realms. Each of these modes of entry helps to shape the kinds of affordances that employees develop about how these technologies can be useful for their work. A summary of key studies of social media diffusion across these three modes of entry is presented in Table 1.¹

**From the Outside In.** Previous research on more traditional ITs (e.g. email, ERPs) has examined how they were implemented by and from organizations. By contrast, the growing scholarship on social media in organizations has started to uncover how technologies and their practices moved from the outside in of the organization. Unlike most other technologies used in the workplace, social media became popular outside of organizational use before organizations became interested in them. In other words, people used tools like Facebook and blogs long before organizations became aware of social media and grasped the potential they held (Gonzalez,

¹ In the interest of space, all tables in this manuscript have been condensed. To see the complete version of the tables, including recommended areas for future research, please consult the online appendix.
Llopis, & Gasco, 2015; Sinclaire & Vogus, 2011). This centripetal diffusion of social media in organizations has led to ambivalent affordances for organizations, their employees, and their management, which scholarship has started to investigate.

For one, some research has focused on how employees have adopted social media in work-related contexts (Behringer & Sassenberg, 2015; Luo, Guo, Zhang, Chen, & Zhang, 2015). In a related vein, social media have afforded employees a “voice” beyond traditional channels of organizational communication. Miles and Mangold (2014) discussed how social media enable employees to deliver messages about the organization within and beyond its boundaries. The potential impact of these messages can vary widely depending upon what employees actually say about the organization. Employees may voice their dissatisfaction and potentially damage the reputation of the company or they may enhance the organization’s public image by presenting an internal perspective on the organization to the general public. Miles and Mangold (2014) concluded that managers could guide employees’ voice and manage the employee-triggered diffusion of social media.

Organizations have thus attempted to rein in or, at least, control, the diffusion of social media (Alberghini, Cricelli, & Grimaldi, 2014). Vaast and Kaganer (2013) examined how organizations perceived the affordances of social media and how they reacted to their employees’ use of social media through policies. A content analysis of organizational policies showed that, through this key means of organizational governance at least, organizations tended to be more concerned with managing risks associated with employee use of social media than with its value-generating potential. It also revealed uneven reactions to the affordances of social media for organization identified by Treem and Leonardi (2012): visibility, persistence, editability, and association (between people and between people and information). Organizations reacted to the
affordances of visibility and persistence much more than to the affordance of editability. Policies also revealed an awareness of a third type of association, between employees and organization, afforded by social media. Vaast and Kaganer (2013) discovered that organizations’ reactions to social media evolved from being solely concerned with risk management to also considering its value-generating potential.

Beyond management’s attempts to control or harness social media, the outside-in diffusion of social media in organizations has had unanticipated consequences for organizations. Unanticipated consequences may come from employees’ diverse perceptions of the affordances of the new technology and from shifting relations between organizations and some of their key external stakeholders.

For one, recent scholarship has provided nuanced insights onto employees’ perceptions of the affordances of social media in the organization (Sinclaire & Vogus, 2011; Tormo-Carbó, Seguí-Mas, & Oltra, 2014). Koch, Leidner, and Gonzalez (2013) in particular relied upon the in-depth, interpretive case study of a global security company’s efforts to implement a social media application as part of a cultural change effort. The study found that conflicts could arise between employees’ workplace values and the values they ascribe to social media. In other words, how employees perceived the affordances social media, shaped by outside use of and talk about social media in the general public, affected whether and how they actually used social media within the organization. In a related manner, Treem, Dailey, Pierce, and Leonardi (2015) investigated how employees of a large financial company reacted to the implementation of an enterprise social networking application. Based upon two rounds of semi-directed interviews with key potential users of the application, they discovered that employees had developed technological frames (i.e. expectations and assumptions regarding what technology should do and how it should be used,
see Orlikowski and Gash (1994)) of social media that differed widely from the technological frames they had developed from earlier, more traditional computer-based applications (e.g. ERP, email). The social media frames were initially shaped by activities outside work settings and influenced employees’ perception of the affordances of the new system. As the system was implemented however, the social media frames changed for some employees. Employees who were heavy users of social media outside of work (and tended to be younger) remained skeptical about the use of the new system for work, but employees who were not heavy users of social media outside of work (and tended to be older) became more enthusiastic about the affordances of social media for work. This study thus reveals potential changes in perceptions and affordances of social media over time, as well as points at a variety of employees’ reactions to the new applications.

Moreover, subtle and far-ranging affordances arising from the outside in diffusion of social media arise from potential shifts in the relationships between organizations and some of their key external stakeholders (Gallaugher & Ransbotham, 2010). In this regard, Orlikowski and Scott (2014) examined in-depth the implications for the hospitality industry of online valuation by consumers. They found that consumers’ near-constant online evaluations afforded reconfigurations of the everyday practices of organizations. Such potential implications extend to other industries. Focusing on the medical sector, for instance, Kallinikos and Tempini (2014) studied how social media afforded the production of medical knowledge by patients rather than medical professionals, hence holding the potential to transform medical research and patient management. Organizations may also rely upon affordances of social media to access others’ resources and ideas. For instance, organizations may try to benefit from social outsiders’ input on them to become more innovative (Kane, Johnson, & Majchrzak, 2014). Some organizations have
in this regard used crowdfunding platforms to get non-experts’ (consumers’) input on future innovations (Bayus, 2013). The actual use and effect of outsiders’ input onto organizations and their innovation capabilities is not straightforward, though. Bayus (2013) found for instance that some consumers were repeat “ideators” whereas others only proposed one idea, but that the repeat ideators whose initial ideas had been implemented by the organization failed to come up with new, different ideas.

*From the bottom up.* Unlike most large-scale communication technologies implemented within organizations (e.g., email, intranets, etc.) social media have, so far, regularly bypassed the organization’s IT department (Groysberg & Slind, 2012; Vaast & Kaganer, 2013). Regular workplace managers and executives – without a link to IT – are making decisions to implement social media within their divisions, departments, and teams (Treem et al., 2015). Most social media are web-based applications hosted on the cloud that make it simple for organizational managers to buy licenses and implement the technologies themselves. No sophisticated installation and customization is necessary. The result is that the adoption of social media in organizations is often conducted by and affects non-IT managers directly (El Ouirdi, El Ouirdi, Segers, & Henderickx, 2015).

Scholarship has investigated this organic diffusion of social media in organizations. Razmerita, Kirchner, and Nabeth (2014), in particular, examined how social media tended to be implemented within organizations by following a bottom-up rather than top-down approach. They however distinguished among different social media applications (e.g. wikis, blogs, social networking applications) in terms of their potentials for individual users and the organization. Their work suggests that, depending on organizations’ and employees’ needs for social media use, management could attempt to steer differently the diffusion of social media. In other words,
there may be different paths, combining bottom-up, middle-ground, and top-down, approaches, to implementing and managing social media in organizations. Examining the context of 30 companies, Guinan, Parise, and Rollag (2014) arrived at similar conclusions as they discovered that organizations may adopt different diffusion strategies that were more or less driven by innovative employees that they called “young experimenters” or by “corporate entrepreneurs” or, even, “enlightened executives.” Their work suggests that the diffusion of social media in organizations may follow different paths and may be influenced by the social context, by employees’ needs and expertise, as well as by particular social media affordances.

In a related manner, Jarrahi and Sawyer (2015) examined the spontaneous use of social media by consultants. Adopting a structuration perspective, they showed how consultants’ practices changed with social media and how social media use was at first disconnected from their organization’s computing environment. The consideration of the “take-up” of social media led these researchers to contend that managers may try and craft an appropriate and creative response to grassroots social media diffusion to shape its affordances for the organization.

Related to this scholarship that has focused on the organic diffusion of social media and on management responses to this diffusion, some research has considered the importance of time in social media diffusion. Luo et al. (2015) for instance focused on what drives employees to continue using social media, and, in particular, internal blogs. They found that the continual use of internal blogs was driven by force of habituation, which was related to the development of network effects, and by management encouragement and incentives. This research illustrates how employee-driven use of social media may be amenable to management input and may generate various affordances for the organization. It specifically underlined the importance of considering the use of social media and its potential organizational effects over time.
Focusing on the case of governmental organizations, Mergel and Bretschneider (2013) took a processual approach to the adoption and use of social media. They contended that the diffusion of social media followed a three-stage process of: initial, local and dispersed, experimentation; growing acknowledgement of the need for organization-level norms and resources, and; development of an organizational model for social media implementation and use in the entire organization. Scholarship on the diffusion of social media in organizations has also started to take in consideration multi-level dynamics and the inherent challenges they place upon traditional technology management. Ford and Mason (2013) discussed the tensions emerging with the use of social media in organizations as involving three levels: the macro- (organizational) level, the meso- (group) level, and the micro- (individual) level. They contended that perceived tensions arise when managers seek to maintain their traditional roles at the macro-level, yet social media affordances enable these roles to be performed at the micro- and meso – levels. Social media affordances also extend beyond traditional organizational boundaries to encompass employees’ communities of practice, hence potentially generating further tensions for management. They therefore proposed that management be more flexible in terms of roles, ownership, control and value associated with social media in organizations.

Søyland and Herstad (2011) also emphasized how bottom-up social media diffusion contrasted with the traditional implementation of corporate IT. Building upon case studies from two organizations, they elaborated upon how emergent social media implementation may happen and called for a more proactive management of the applications. They considered the potential negative impact of excessive fragmentation within and across organizational boundaries and advocated for a model in which diverse, local grassroots initiatives get turned into a standardized innovative platform.
**From leisure to work.** Social media have moved from people’s personal lives into their organizations (Skeels & Grudin, 2009). Employees’ use of social media has originated in non-work related realms. These origins have also shaped employees’ perceptions of affordances and use of social media in the workplace. Internal dynamics of organizations and work practices have thus been affected by this diffusion of social media from the leisure realm to the work realm.

Scholarship has shown how employees’ experience of social media for leisure colors their perception of the affordances of social media in the workplace (Fieseler, Meckel, & Ranzini, 2015; Koch et al., 2013; Treem et al., 2015). It has also revealed that the use of social media for non-work related purposes affects actual work performance. In this regard, building upon a large survey, Leftheriotis and Giannakos (2014) showed that many employees in the insurance industry used social media heavily for both utilitarian and hedonic purposes and that there was an important connection between the use of social media and work performance.

Other studies have tried to characterize further this relationship between playful uses of social media and performance at work. In this vein, Ali-Hassan, Nevo, and Wade (2015) identified a “repertoire of uses” by employees that included social, hedonic, and cognitive uses of social media. They relied upon a large survey of employees of a multinational IT company and found that social and cognitive uses of social media had a positive, but indirect, effect on employees’ routine and innovative job performance. Hedonic uses of social media had a direct negative impact on routine performance but positively affected the development of social ties, leading to a positive effect on innovative performance.

Such intriguing finding is consistent with Huang, Singh, and Ghose’s (2015) study of the creation and consumption behavior of social media content by employees of an organization. They developed a model of employees’ blogging behavior that posited that users faced a trade-off
between blog posting and blog reading and a trade-off between work-related and leisure-related content. They applied this model to a data set including fifteen months of blog posting and reading behavior of employees of a large IT company. They found that employees posted and read a large number of leisure posts and that posting leisure posts created positive spillover effect on the readership of work posts. Their study held interesting implications for management in that restricting leisure blogging in the workplace would lead to decrease the production and circulation of work-related knowledge and would also reduce employee performance. In other words, the affordances of social media for organizations could be negatively affected by efforts to curb leisure-oriented uses of social media at work.

Considering that leisure-related uses of social media may positively affect performance at work, it is unsurprising that organizations have started implementing gamification features for enterprise social media (Dale, 2014; Deterding, Sicart, Nacke, O'Hara, & Dixon, 2011; Kumar, 2013). Thom, Millen, and DiMicco (2012) examined the case of a corporate social networking system (SNS) that initially offered and then eliminated gamification features (a points-based incentive system for users). Removing the incentive schemes reduced the participation and contributions to the SNS. This study hints at the ways in which gamification features, popular in non-work related applications, may also lead encourage work-related uses of social media in organizations.

Use of Social Media

Social media provide a number of material features that are distinct from other communication technologies used in the workplace. Authors such as Treem and Leonardi (2012), Majchrzak et al. (2013), and Vaast and Kaganer (2013) have provided overviews of specific affordances that social media commonly provide for employees in organizations. In what follows,
we take a different approach, reviewing studies to examine how use of social media produce affordances that generate several new phenomena in organizations that have the potential to change the way that people work and how organizations organize: network articulation, social transparency, and user-generated content. Table 2 provides an overview of key studies of social media use.

**Network Articulation.** An important feature of social media is that users can (and / or sometimes required to) articulate a network of contacts from whom they receive information. Users typically articulate their networks by indicating that other users are “contacts,” “co-workers,” or “friends.” If a user articulates a particular contact, that contact’s name is added to the users’ list of contacts and that person’s communications, comments, and other posts appear on the users newsfeed. Ellison, Steinfield, and Lampe (2011) have suggested that articulating networks is a primary way that users of social media build, enhance, and maintain their social capital. Establishing a “connection” with someone via social media suggests that the user is interested in initiating or reinforcing a social relationship. For a contact to be established on social media, both parties (the source and the target) have to agree to the connection. Thus, in articulating their network on social media, users are testing the robustness of their social network as they see whether targets will accept their request to be connected (Kane, 2015). Such active processing in the decision about whether or not one wants to create or maintain a tie has the potential to strengthen social networks by forcing the target to confirm that he or she does indeed value a relationship enough to signal its presence to the larger user community. Consequently, articulating their networks on social media platforms may help users to reactivate dormant ties (Levin, Walter, & Murnighan, 2011).
Users may also be able to maintain a set of “latent ties” (Ellison et al., 2011) through social media. Latent ties are electronic ties that a user forms with a target, but ties that are not activated. In other words, in articulating his or her network a user requests that a target be labeled as a contact. The target accepts, but the users and the target do not communicate or exchange information. Ellison et al. (2011) argue that there is value in these latent ties because they signal to third-party observers the breadth of someone’s potential network, not just their actual network. Also, because establishing a latent tie has required both parties to agree that they would like a relationship, that work has already been accomplished should either party decide that they need to strengthen the tie with another at a future point, thus reducing the investment needed to coax information from a tie at the moment that information is needed.

In a study of social networking site users at a large telecommunications firm, Leonardi and Meyer (2015) showed that articulated networks could serve as a solid base from which to strengthen ties in times of need. The authors showed that when users determined that they needed complex knowledge from a particular co-worker, but did not have a sufficiently strong tie with which to acquire that knowledge they turned to the social networking site to gain information about the target that would help lubricate social interactions with that person. Because the target was already articulated as a member of the user’s network, the user could watch to see how that target communicated with others on the site and learn important information that would be fodder for communication with that person. The users could then take that information and use it to begin to build a stronger tie. Leonardi and Meyer (2015) found that when users did not ask for knowledge right away, but waited to strengthen their ties with targets, users were far more successful in strengthening ties when they had access to information about that target on a social
networking site than when they did not. The increased tie strength that resulted paved the way for more satisfactory knowledge transfer between the two employees.

Fulk and Yuan (2013) have argued that employees with well articulated networks on social networking media should be able to identify new contacts who have needed knowledge or information. Because users are initiating contact with new employees and are monitoring those contacts, they will learn information about those employees related to their jobs and be able to take advantage of this information at a future date. Majchrzak et al. (2013) termed this joint practice of articulating networks and monitoring content communicated or posted by those network connections as “network-informed associating.” The authors suggest that as users begin to learn more about the contacts they have articulated through their use of social media in the workplace, they will also learn about new contacts to establish by watching those primary contacts engaged in their own network articulation with others and will continue to grown their own networks, thus exposing them to greater knowledge within the organization.

Although network articulation can have positive effects on social capital, research indicates that there are also problems that can arise once a user articulates his or her networks publically. In one of the few studies that explicitly compared employee’s articulated networks on social media to their offline communication networks, Brzozowski (2009) found a very high overlap. In other words, people tended to articulate networks with co-workers with whom they already tended to communicate via other channels. This duplication in networks belies many of the potential advantages of social capital enhancement through network articulation: if users are not taking advantage of the capabilities of social media to expand their networks, it is unlikely that network articulation on social media will do much to change the nature of their relationships for the better (Kane, Alavi, Labianca, & Borgatti, 2014). In a study of Facebook use outside of
organizations, Tong, Van Der Heide, Langwell, and Walther (2008) found a curvilinear relationship between Facebook friends and social attractiveness: those with a moderate number of friends were judged to be the most socially attractive and those with the lowest and highest number of friends were judged to be the least socially attractive. This finding appears to hold similarly in organizational contexts. In a study of SNS use in a large organization, Mark, Guy, Kremer-Davidson, and Jacovi (2014) showed other problems that can arise with the public nature of network articulation. The authors found that users who had articulated the largest networks (i.e., indicated the greatest number of people in the organization as their contacts) were the most likely to receive negative assessments from their coworkers and were the least likely to be confided in and celebrated by their colleagues. The authors speculated the articulating large social networks resulted in perceptions of the user being disingenuous and only interested in showing off, as opposed to being committed to building high-quality work relationships. Thus, network articulation can have both positive and negative effects on one’s ability to build, maintain, and strengthen ties with communication partners within the organization as users must confront the fact that the public nature of their articulated networks can both create information advantages, but also generate negative perceptions.

**Social Transparency.** A key feature of social media that distinguishes them from other technologies used in the workplace is that they allow users to see into the communications and behaviors of co-workers. On most social media sites, the conversations that people have with each other, the documents they post, the comments they make, the content they like, and their articulation of their own social networks are visible for anyone in the organization to see. Consequently, several authors have suggested that the rise of social media use within the workplace coincides with an increase in social transparency.
Social transparency has been defined in a number of ways. Stuart, Dabbish, Kiesler, Kinnaird, and Kang (2012) defined social transparency as “the ability to observe and monitor the interactions of others within and across applications.” They characterized social transparency as a larger concept with several distinct facets, including identity transparency, content transparency, and interaction transparency. Identity transparency refers to one’s ability to learn about another’s identity. Identity transparency is enabled when observers can see a person’s name, virtual identifiers, and profile information including demographic and historical data. They argue that identity transparency helps to hold individuals accountable, create conditions for trustworthiness, and promote liking through perceptions of similarity. They also suggest that enhanced identity transparency within the organization can increase information accuracy by holding people accountable to presenting useful and accurate information but that it can also decrease creativity by increasing conformity. Content transparency is enabled by greater awareness of authorship on documents and is revealed in revision history. The authors argue that content transparency effects activity awareness (what people did at what times) and increases credibility because people know who authored what content. They suggest that content transparency can increase productivity by enabling more micro-level coordination of actions and also increase attentional demand since workers have stronger incentives to observe what others are doing. Finally, interaction transparency is enabled by third party access to people’s communications with each other and the articulation of their social networks. They suggest that interaction transparency will result in increases in herding due to popularity affects and decreases in privacy as asymmetries in identity and interaction transparency increase privacy violations.

Leonardi (2014; 2015) defines social transparency as communication visibility. He suggests that social media make visible to third parties what people communicate about with each
other and with whom people communicate. The findings of a quasi-experimental field study at a large financial services firm showed that communication visibility was enabled by two mechanisms: message transparency and network translucence. Message transparency is defined as one’s ability to see the content of the messages another person exchanges with a communication partner. The findings showed that message transparency was linked to significant increases in people’s ability to accurately identify “who knows what” in the organization. Network translucence is defined as the ability to see network ties among work colleagues. This aspect of visibility is characterized as translucent because although an observer can detect a connection between two work colleagues, he or she is not typically able to figure out why that connection was formed or how strong it is. As Leonardi suggests, “like an obscured glass enables someone to see an object’s shape without discerning what that object is, users of enterprise social networking technologies can see that a person has a tie with someone else, but they most likely cannot know the strength or nature of the tie” (2015: 750). Network translucence is linked to significant increases in people’s ability to accurately identify “who knows whom” in the organization. Through the accuracy in metaknowledge that they engendered, both message transparency and network translucence were shown to increase the firm’s ability to innovate by recombining knowledge across diverse domains of practice and to reduce work duplication by helping people learn what others were doing and appropriating their work products to reduce workload (Leonardi, 2014).

Studies focusing on social transparency (or communication visibility) have shown positive affects on awareness in organizations. Bharati, Zhang, and Chaudhury (2015) showed that social transparency increased users social capital and their cognitive capital directly, but only affected their relational capital (their ability to maintain relationships) indirectly through
increases in social and cognitive capital. Dong and Wu (2015) found that in globally distributed organizations, social transparency eased problems associated with cultural difference and increased mutual understanding across company sites. Other studies (Schreurs & De Laat, 2014; Shami, Muller, Pal, Masli, & Geyer, 2015) have shown that social transparency can increase employee engagement as users learn about the personal and professional contexts of their colleagues and thus have both the impetus to and useful information with which to approach them to develop relationships.

Other studies have demonstrated that social transparency can have negative impacts on organizational activities. Gibbs et al. (2013) demonstrated that as employees in a globally distributed organization became more aware of what their coworkers were doing and with whom they communicated, they realized that other people were watching them in the same way. This realization prompted them to begin to regulate their workplace behaviors, sometimes exaggerating certain aspects of their work and other times concealing aspects of their behavior in hopes of successfully managing impressions of others. Stohl, Stohl, and Leonardi (2016) identified what they termed a “transparency paradox” in organizations whereby the use of social media to make content more visible can actually lead to a decrease in overall organizational transparency. The authors argue that visibility is a product of three mechanisms: information availability (if information is recorded and stored), information approval (if someone allows that available information to be disseminated), and information accessibility (if someone has the technical or cultural resources to decode and access the information). The authors demonstrate that when information is readily available, approved for dissemination, and people have the ability to access it, there often exists so much information that individuals often cannot focus their attention enough to see it. Consequently, the authors argue that increased visibility can lead
to increased opacity, rather than increased transparency as organizations either inadvertently or strategically make more information available to drown out certain pieces of content they would rather others not see.

**User-Generated Content.** Traditional forms of organizational communications have often involved formal channels (e.g. memos, intranet systems). E-mail and instant messaging systems have allowed employees to send content to select few in a more informal manner. Social media in organizations, however, have enabled user-generated content, whereby any employee may contribute and share their own content to all or most in the organization (Kaplan & Haenlein, 2010). This turn toward user-generated content means that employees are increasingly gaining a voice within their workplaces and have a forum upon which to share their ideas, concerns, and insights about work-related matters. The existing evidence also suggests that organizations are able to harness knowledge and information from people (e.g., customers, suppliers, competitors) from outside the organization and incorporate their ideas into organizational activities.

By making employees' interests and expertise more visible to others, and by enabling linkages among like-minded people, social media can foster the creation of communities of practice considered critical to organizational innovation, learning, and knowledge sharing (Aral et al., 2013; Kane et al., 2014b). Profiles, blog entries, comments and other persistent content help distributed but like-minded workers better establish common ground that can be the basis for community formation (Majchrzak et al., 2013). Connections among peers often produce a form of homophily, which has also been associated with stronger network ties among virtual teams and increased bridging and bonding social capital on social media (Yuan & Gay, 2006).

Yet as researchers point out, user-generated content and the establishment of communities on social media can also lead to the creation of an echo chamber where individuals seek out and
talk with people who share their same backgrounds and opinions (Leonardi et al., 2013; Pfeffer, Zorbach, & Carley, 2014). The production of an online echo chamber can potentially lead to lower integration of knowledge across disparate communities (Van Alstyne & Brynjolfsson, 2005). User-generated content could thus paradoxically result in a fragmented set of communities with too few interactions among them. The formation of network ties across groups might be limited due to this subgrouping tendency (Leftheriotis & Giannakos, 2014; Mergel & Bretschneider, 2013). Outcomes such as groupthink, where conflicting perspectives are ignored might become more prevalent. This potential for a reduction in knowledge flows across communities might therefore signal a decline in organizational social capital from social media, an outcome that has been given surprisingly little attention so far.

Although user-generated content is often lauded as a way to move toward flatter organizational hierarchies and more democratic participation among employees, it is not without its problems. As more and more users begin to contribute content on social media, more demands are placed on the attention of observers who are limited in their capacity to process all of this user-generated content. Nowhere is this problem of attention more pronounced than in user-generated content that comes from outside the organization. Many organizations hope to solicit ideas, comments, and information from external parties in the hopes of creating new innovations and becoming more agile. Research indicates that ideas that come to organizations from the outside are often more valued that ideas that come from within (Menon & Pfeffer, 2003) and recent studies have shown that individuals who are further away from the area of knowledge they are evaluating often find more value in the knowledge and think it more novel than when they evaluate knowledge in domains with which they are very familiar (Boudreau, Guinan, Lakhani,
& Riedl, 2016). But how do organizations pay attention to the large quantities of information and knowledge generated by users?

Piezunka & Dahlander (2015) argued that distant search (search outside of the organization) allows organizations to tap into knowledge that may not reside within their organizational boundaries. But when faced with large quantities of user-generated content, organizations will face increasing demands on their attention and will narrow their attention to deal with processing limitations. Their study of more than 100,000 crowdsourced suggestions evaluated by more than 900 organizations showed that despite preferences for user-generated content, organizations paid less attention to information whose content was distant from the organization’s expertise, the people who contributed the content did not share similar demographics with organizational employees and the way that knowledge was presented differed from organization norms. The more user-generated content available, the narrower the organizations’ focus of attention was. In a simulation study, Iyer and Katona (2015) found that as the quantity of user-generated content on social media increases, competition between senders’ for receivers’ attention becomes more intense, resulting in senders competing with greater equilibrium messaging effort. This in turn leads to lower equilibrium payoffs and the entry of fewer senders. Overall, attempts to harness user-generated content resulted in more, rather than less, participation inequality.

Users seem to recognize the importance of attracting attention for the content that they generate. Marlow and Dabbish’s (2014) study of an online commerce site for graphic designers found that in order for the content they produced to be seen and attended to by organizations interested in their services, they had to spend significant amounts of time cultivating their social networks on the social media site. This cultivation resulted in more users of the site commenting
and voting on their ideas. This increased commenting and voting, in turn, attracted the attention of the organization because it moved the salience of the users’ content higher in the sites rank order algorithm. Orlikowski and Scott (2014) found similar practices and effects in their study of user-generated content on a public travel social media site. The more ratings and comments that hotels received on the site, the more likely they were to capture the attention of travelers. Yet, also, the more a user’s content received attention from other users on the site, the more likely the organizations were to pay attention to it and to think about incorporating those suggestions into important changes in organizational structuring and service.

Miller and Tucker (2013) discovered that user-generated content grew externally from customers and other clients and that user-generated content from among organizational employees grew as well. Specifically, they noticed that more generic posts by management encouraged more user-generated content among employees who contributed ideas for new products and services and who became more engaged with the organization. Razmerita et al. (2014) focused on the types of technologies best suited for spurring user-generated content on social media. Their findings showed that tools that allowed employees and external constituents more control over their posts and the boundaries of their communities lead to higher levels of interaction and a diversity of knowledge. Thus if one major goal of user-generated content is to encourage users to combine what they know into new idea, providing features that facilitate communities to assert control over their boundaries is essential (Kane et al., 2014b).

**Organizing Processes Occurring Around and Through Social Media**

We highlight three key organizing processes that existing research has shown to be affected by the use of social media in organizations: communication, collaboration, and knowledge sharing. Here, we highlight how the use of social media affords important changes in
the enactment of these three organizing processes. For each of these processes, we discuss how existing research has examined the antecedents of these processes, the processes themselves, and their potential implications for organizations. Table 3 summarizes key studies showing how social media provide affordances that are used to enact communication, collaboration, and knowledge sharing as they structure the organizing process.

**Communication.** Social media use affects and is affected by shifts in social networks within organizations (Kane et al., 2014a; Wu, 2013). The use of social media may be associated with new communication patterns within organizations (Berger, Klier, Klier, & Probst, 2014; Carpenter, Li, & Jiang, 2012; El Ouirdi et al., 2015). As noted earlier in the section on social media use, social media afford visibility in communications (Leonardi, 2014). They offer various features that make it possible to know who uses them and who is related to whom. Moreover, potentially anyone in the organization may use them to communicate. This contrasts with older computer-mediated communication means, which either were not designed for one-to-many or many-to-many communications (e.g. email, see Orlikowski and Yates (1994), Sarbaugh-Thompson and Feldman (1998)) and / or privileged management communication over employees’ (e.g. intranets, see Ryan (1996), Vaast and Levina (2006)).

Scholarship has thus started to examine new communication patterns in organizations with the use of social media. It has noted that the affordances of social media for open and distributed communications make it possible for all in the organization to communicate among one another (Barker, 2008; DiMicco, Geyer, Millen, Dugan, & Brownholtz, 2009). Management and employees’ communications can expand, and their respective roles may be transformed, or even switched. As an illustration, Huang, Baptista, and Galliers (2013) examined the use of social
media as rhetorical tools in three organizations. They found that social media enabled the shaping of new organizational rhetorical practices from multiple sources ("rhetors") in the organization as well as the simultaneous consumption and co-production of content.

Taking in consideration the multiple flows and directions of communications, and drawing upon the case study of a multinational telecommunications company that was implementing social media globally, Huang, Baptista, and Newell (2015) further theorized upon what the affordance of “communicational ambidexterity” defined as “the capability to simultaneously address different and often conflicting communication needs that exist in an organization’s internal communication” (p. 50). Communicational ambidexterity refers to how organizations may be able to manage two distinct yet connected types of internal communication: organization-(or management) produced content, and user- (or employee-) content. They considered that social media can assist the development of top-down and grassroots communications, which can possibly generate new capabilities but also tensions in the organization. Communicational ambidexterity may help navigate these tensions and bring about these capabilities. Huang et al. (2015a) contended further than communicational ambidexterity should be considered as an ongoing process, rather than as a goal that may be fulfilled once and for all. To accompany this process, managers should exert stewardship rather than direct control, and appeal to employees’ individual sense of responsibility.

Scholarship has also started to examine how the use of social media may affect intra-organizational communication across geographical distance. Findings from this seminal scholarship reveals that the use of social media does not abolish geographical distance (i.e. that geographically distant members of the organization will not automatically start communicating with the implementation of social media), but also that the use of social media affords the
emergence of new, intriguing patterns of communications within the organization. For instance, Recker and Lekse (Forthcoming) investigated how geographically dispersed managers communicated with a new enterprise social networking application. Based upon 15 months of usage data from an enterprise social network of a large retail corporation, they found that, overall managers privileged local communications over geographically distant ones. At the same time, communication patterns were very distinct for two user communities. One such user community, which they labeled the “locals,” communicated mostly with geographically adjacent managers. The other user community, the “globals,” used the enterprise social network to communicate with geographically distant peers.

Gibbs, Eisenberg, Rozaidi, and Gryaznova (2014) examined the use of social media for communications in a geographically distributed organization. They also took in consideration how the use of social media affected communication across hierarchical levels. They investigated, through log data and semi-directed interviews, the particular case of a large, Russian retail corporation and its employees’ use of social media. They found that the use of social media for local communications was more prevalent than for distant communications. At the same time, they also observed that the use of social media enabled an uptake in communications that spanned geographical distance, which allowed remote employees to feel less isolated within the organization. They also found that the use of social media enabled communications that crossed hierarchical boundaries. Yet, they noticed that this effect did not seem to last over time and that these vertical communications were mostly unidirectional (i.e. managers communicated with subordinates, but the reverse did not happen as much).

These findings nuance our understanding of the affordances of social media for communication processes in organizations. They also highlight the need for a better
understanding of the potential impacts of social media afforded communications. There has so far been little research on this issue. Early findings from Denyer, Parry, and Flowers (2011), based upon the case study of a large multinational telecommunications company, showed that, despite (or, perhaps, in part due to) management push toward the use of social media by employees, communications with social media were not more “open,” “social,” or “participative” than with more traditional modes of communications. Schmidt, Lelchook, and Martin (2016), on the other hand, examined the effects of social media-based communications for organizing. Specifically, they surveyed union retail employees to examine how their relative co-worker social media-based connections affected how they perceived the organization. They found that employees who had relatively more co-worker connections perceived the organization as more supportive and its members as more willing to assist each other spontaneously.

Scholarship on social media use and communication in organizations has provided interesting insights. We note however that much research has tended to be static rather than dynamic. The potential of social media for changes over time in communication processes has thus yet to be fully understood. Moreover, further research would be useful to investigate more systematically the potential impacts of social media-based communications for organizations. There is still much to know regarding, for instance, how social media-afforded communication patterns may affect actual work, employee satisfaction, or organizational performance.

**Collaboration.** The open and social defining characteristics of social media applications also have the potential to transform how people work together as well as the collaboration patterns within organizations (Razmerita et al., 2014). Scholarship on social media use and collaboration within organizations has examined what enables or not social media-based collaboration as well as what actual collaboration processes with social media use involve.
Budding research has also started to investigate some of the possible impacts of these collaborative processes for organizing.

With regard to what enables or not collaboration with social media use, Parchoma (2014) questioned the very affordances of social media for collaborative learning and team-based innovations. She highlighted the ontological debates associated with the concept of affordances, and linked these debates to the openness of social media applications within organizations. Pirkkalainen and Pawlowski (2014) examined the barriers that global knowledge workers faced with social media. They distinguished barriers of different types, including organizational, social, cultural, and technical. They considered that these barriers were intertwined. They concluded that, therefore, these barriers should be examined not only separately but also jointly to help global knowledge workers use social media to collaborate effectively. Vuori and Okkonen (2012) focused on what enabled collaboration with social media use. Based upon a survey distributed in two companies, they found that employees’ desire to help the organization reach its goals and colleagues accomplish their work was more related to collaboration with social media than financial rewards and the desire to advance one’s career.

Other scholarship has dealt with the actual use of social media applications for collaboration, such as cooperation through contributions to a wiki system (Paul, Cook, & Burtner, 2014), or the use of social media-based resources for enterprise communities of different types and sizes (Muller et al., 2012). In this regard, Matthews, Whittaker, Badenes and Smith (2014) emphasized the importance of considering the use of multiple social media applications together when examining collaboration in communities. Wikis, social bookmarks, social file repositories and task management tools, among other such tools, are not used in isolation but, rather, in conjunction with each other. Collaboration patterns are thus shaped by the combined
use of these social media applications, and generate complex information spaces. Subramaniam, Nandhakumar, and Baptista (2013) examined in-depth the case of social media use for collaborative purposes in the context of a large telecommunications company. They developed the concept of “virtual co-presence,” an extension in the digital environment of Goffman’s (1959) co-presence encounters. They found that the affordances of social media for virtual co-presence affected workers’ interactions and collaboration processes.

As for communication, scholarship on the actual impacts of the use of social media for collaboration still remains scant. Seminal evidence is provided in Holtzblatt, Drury, Weiss, Damianos, and Cuomo (2012) and in Dong, Ehrlich, Macy, and Muller (2016). Holtzblatt et al. (2012) evaluated the effects of an enterprise social networking platform in a large, distributed non-for-profit organization. Drawing from in-depth interviews with users of the system, log data and an online survey, they found that the platform did not improve collaboration patterns for the whole organization, but that the most active users benefited from it. In other words, users who used the system the most frequently and contributed the most to it were more likely to perceive the system as supporting collaboration, strengthening their social connections within the organization, and fostering an awareness of others’ activities.

Dong et al. (2016) examined how collaboration was affected by the use of an internal social networking system in a global sales corporation. More specifically, they questioned if the use of the system affected relationships among culturally dissimilar employees. Like Holtzblatt et al., (2012), they found no overall effect of the new system. The enterprise networking system did not reduce the effect of homophily throughout the organization. However, when they considered distributed workgroups that used the system heavily, the effect of cultural differences reversed. There was greater cultural diversity in these online ties than in the overall company. These
authors speculated that social media afforded people who work together to form ties with each other not simply in spite of cultural differences, but because of them.

Overall, research on social media use and collaboration processes has been useful to highlight how social media use enables shifts in the ways in which people collaborate in organizations. We note, however, that most scholarship so far has focused on the fairly specific contexts of large, multinational corporations, more often than not from the telecommunications industry. More research would be needed to know more about social media-afforded collaboration in a wide variety of organizational contexts. Moreover, most existing scholarship so far has presented early snapshots rather than longitudinal investigations of the implementation, uses, and consequences of social media for collaboration. As social media applications mature and become even more prevalent in organizations, such longitudinal examinations would be especially welcome.

**Knowledge Sharing.** As noted earlier, the availability of social media affords the production of user-generated content that has triggered unprecedented opportunities but also demands placed upon the attentional ability of individual employees, communities, and organizations. These opportunities and demands are intricately related to changes in knowledge flows and in the ways in which knowledge is shared and used, in organizations (Beck, Pahlke, & Seebach, 2014; Bharati et al., 2015). Knowledge sharing, or the process of capturing, distributing, and using, knowledge (Davenport & Prusak, 1998), may thus be affected by the growing prevalence of social media use in organizations (Leonardi, 2014; Thomas & Akdere, 2013; Von Krogh, 2012). As for the processes of communication and collaboration, we highlight key insights from existing research on the antecedents, actual process, and potential implications of the use of social media for knowledge sharing.
With regard to the antecedents of social media-afforded knowledge sharing, much of the
existing research to date has focused on the intentions, attitudes, and roles of employees toward
social media and knowledge sharing (Kwahk & Park, 2016). For instance, examining the intra-
organizational use of blogs for knowledge sharing, Papadopoulos, Stamati, and Nopparuch
(2013) developed a survey that questioned respondents, employees of Thai corporations, about
their self-efficacy, enjoyment, expectations and attitude toward knowledge sharing. They found
that positive attitudes towards knowledge sharing and self-efficacy were strongly associated with
intentions to share knowledge with blogs. Yan, Davison, and Mo (2013) also examined
individual intentions to share knowledge in organizations. They in particular distinguished
between knowledge seeking and knowledge contributing behaviors. Their survey of employees
from ten Chinese organizations highlighted the importance of employees’ self-perception on
knowledge seeking and knowledge contributing with social media. Their results indicated that
knowledge sharing with social media could facilitate knowledge creation and that “flow,” i.e.
employees’ immersion in their tasks and activities at work, supported employee creativity and
inventiveness. In addition to considering the individual characteristics of knowledge seekers and
contributors, Beck et al. (2014) also identified the characteristics of the relationships between
them as an important factor in knowledge exchange with enterprise social media. They examined
15,505 enterprise microblogging messages from a large multinational service firm and found that
the quality of the knowledge exchange was more closely associated with the relationship between
knowledge seekers and contributors than with individual characteristics of both parties.

As for the process of knowledge sharing itself, scholarship has started investigating new
types of behaviors made possible by the affordances of social media for knowledge creation,
transformation, and circulation (Majchrzak et al., 2013; Wagner, Vollmar, & Wagner, 2014;
Zhang et al., 2015). For instance Oostervink, Agterberg, and Huysman (2016) investigated the use of social media for organizational knowledge sharing. Their qualitative case study of an enterprise social media application in a large IT consultancy company revealed that employees faced ambiguities as their knowledge sharing behavior was shaped by two distinct logics: that of the profession, and that of the corporation. Consultants coped with these ambiguities by developing practices of connection management, reputation management, and information management. Their work illustrates how the use of social media may both enable and discourage knowledge sharing.

The affordances and potential implications of social media use for knowledge sharing are thus still to be fully understood. Von Krogh (2012) noted how the rise of social media in organizations coincided with drastic changes in knowledge sharing from relying upon centrally managed and proprietary knowledge repositories to using social software using open standards. Von Krogh (2012) hypothesized that this transition offered the promise of more open and collaborative knowledge sharing but also that it could raise questions regarding the nature of firm knowledge, its protection, and the sources of competitive advantage.

Bharati et al. (2015) tackled the question of the impact of social media use onto the quality of organizational knowledge. Building upon concepts of relational, structural, and cognitive capital, they hypothesized how social media use would affect knowledge quality. They tested their hypotheses with panel data collected through a Web-based survey answered by IT professionals and managers from multiple U.S. organizations. They found that social media was associated with higher organizational quality, but that the effect was highly dependent upon organization’s commitment to knowledge sharing. In other words, social media provided potentially effective affordances for knowledge sharing, but knowledge quality could only be
positively impacted in the presence of organizational concerted efforts toward knowledge sharing.

Hwang, Singh, and Argote (2015) discovered diverse consequences of the use of social media on knowledge sharing. Focusing on the impacts of the use of social media for knowledge sharing in the organization, they theorized that employees would prefer to share knowledge with others of similar attributes. They examined empirically a social media based knowledge exchange community used in a Fortune 500 consulting company. The community had been implemented to promote knowledge sharing beyond geographical and social boundaries within the organization. Findings revealed that users of the knowledge exchange community chose similar peers to share knowledge, because similarity increased attraction and common ground and limited some of the risks and challenges of knowledge sharing. They also found that over time, employees learned about others’ expertise by observing their knowledge-sharing behaviors and ended up favoring those who were similar in expertise over those who were similar in categorical attributes (e.g. organizational position).

Gibbs, Rozaidi, and Eisenberg (2013) further examined the potentially unintended consequences of social media use for knowledge sharing. They relied upon the case study of the engineering division of a distributed high tech start-up whose employees were tech-savvy. They found that many employees initially resisted the use of social media for knowledge sharing. They realized that this resistance originated from the affordances of social media that enabled both open knowledge sharing and covert behavior. Employees thus experienced tensions in their use of social media between visibility and invisibility, engagement and disengagement, as well as sharing and control.
Understanding how social media may afford changes in knowledge sharing for organizations has thus been a topic of great interest to many researchers. This scholarship has yielded interesting and often counter-intuitive findings that shed new light onto the complexity of the relationship between social media use and knowledge sharing. Existing research on this issue, however, as for research on social media use and communication and collaboration, has suffered from a lack of longitudinal research. We also note that, save exceptions (e.g. Beck et al. (2014)), most research has either favored the individual or the organizational levels of analysis, but has not much examined multi-level processes. Finally, most of this research has also tended to consider social media fairly broadly. It has yet to delve precisely upon how patterns of feature use may be associated with actualized affordances of social media for knowledge sharing.

**NEW INSIGHTS ON SOCIAL MEDIA AFFORDANCES FOR ORGANIZING**

The review presented in the previous section highlights a number of activities, practices and phenomena that are made manifest in the introduction of social media to the workplace. In this section, we suggest four important implications for organizational studies latent in these findings. In other words, although the authors of the studies reviewed above do not typically call out these implications, the affordance lens used to review the literature and organize the findings reveals that the types of affordances social media are bringing to organizations may shape four phenomena in important ways: (1) the nature of work, (2) understandings of time, (3) the enactment of boundaries, and, (4) surveillance and control. Key studies illustrating these implications are summarized in Table 4. We discuss these implications in this section and explain their importance for our understanding of social media use in organizations. Next we build from these findings to map out an agenda for future research on social media use and their affordances for organizing.
Implications for Important Organizational Phenomena

Nature of Work. There has been evidence of occupations being created from the use of social media applications (e.g. Vaast, Davidson, & Mattson (2013)) and others being drastically affected by it (e.g. Orlikowski & Scott (2014); Wright & Hinson (2008)), but, as acknowledged in Ali-Hassan et al. (2015), there has yet to be a systematic conceptualization of how social media use relates to actual changes in the work accomplished in organizations.

Scholarship has examined the relationships between employees’ attitudes toward their work and organizations and toward social media. For instance, Charoensukmongkol (2014) found that employees’ perceptions of coworker support, supervisor support, and job-related demands impacted their perception of social media use at work. Beyond such examinations of perceptions, however, what affordances for work social media bring to organizations, and how these affordances may be associated with transformations in the ways work is done in organizations deserves to be more fully understood. Early insights from Skeels and Grudin (2009) noted how difficult it was to know how much social media applications were actually used for work as opposed to for other purposes (e.g., for socialization or recreation), and, particularly, to measure productivity impacts of social media in organizations. Other scholars have also touched upon the relationships between uses of social media for work and changes in business processes (Aral et al., 2013), as well as firm effectiveness and equity value (Dong & Wu, 2015; Luo, Zhang, & Duan, 2013). Wu (2013) found for instance that social media use was associated with changes in employees’ network positions and with organizations’ network structure. She considered that the organization’s effectiveness, measured in terms of output per working time, was positively correlated with information security and social communication. Mostly missing however so far is
a consideration of how social media use may afford changes in productivity both at the
organizational and individual levels. Shami, Nichols, and Chen (2014) for instance examined the
connections between social media use and performance ratings for employees of a large global
company during a three-year period. Their main finding was that social media use does not
impede job performance. However they also noted that the relationship between social media use
at work and employee performance was not straightforward. In other words, there is still much to
do to unpack the affordances of social media for work in organizations.

An affordance perspective also alerts researchers to the need to take in consideration the
consequences of the use of social media, be they intended or unintended as well as positive or
negative for the organization. In this regard, there is still much to investigate to grasp fully the
implications of the work-related uses of social media. Seminal insights already hint at ambivalent
consequences. Bucher, Fieseler, and Suphan (2013) for instance focused on social media use for
communication professionals. They noted that the new features offered by social media have
provided unprecedented opportunities for communication professionals (e.g. engaging in real-
time conversations with readers), but also unanticipated challenges. These challenges arise from
the need to cope with a constant deluge of information that has generated changes in the content
and structure of work as well as technology-related stress for these professionals.

**Time.** Social media communications tend persist over time (Treem & Leonardi, 2012), but,
at the same time, they are also fairly evanescent (Vaast & Kaganer, 2013). The potentially
contradictory factors and outcomes of social media use for time in organizations need to be
understood better. There is much to be known regarding, for instance, how the rhythms of work
may be affected by the use of social media or how the rise in quasi-instantaneous and persistent
communication patterns shapes relationships within organizations (Majchrzak et al., 2013).
At the notable exception of Shami et al.’s (2014) investigation of social media use and employee perceptions over a three year period, much existing research has either been cross-sectional (see, e.g., Dong & Wu (2015); Saldanha & Krishnan (2012)), or has focused on short-term periods (see, e.g., Bayus (2013); Huang et al. (2015a)). Obviously, part of this situation comes from the recent character of social media that have come to the fore with the development of the “web 2.0” generation of technologies (Kaplan & Haenlein, 2010; O'Reilly, 2007). This relatively recent character of the implementation and use of social media in organizations, combined with the slow pace required for quality longitudinal research to be completed (Langley, 1999; Van de Ven & Huber, 1990), helps explain the relative dearth of long-term examinations of the use of social media in organizations so far.

Yet, the potential effects associated with the use of social media in organizations (e.g. network articulation, social transparency, and user-generated content) have an important implicit time dimension (Fulk & Yuan, 2013). Over time, users may create, post, and circulate more content in ways that may amplify the affordances of social media within organizations. How this may happen and how to investigate and conceptualize the potential shifts in affordances of social media over time would be fascinating topics for future research.

Another important facet related to time and social media in organizations that could be illuminated with an affordance perspective has to do with the constant availability of social media in organizations. This constant availability has been related to the “ambient awareness” that social media afford (Kaplan & Haenlein, 2011; Leonardi, 2015). It may have changing effects for employees according to their tenure in the organization. Social media use may affect the socialization process of newcomers (Ali-Hassan et al., 2015), how they become integrated in the organization (Marlow & Dabbish, 2014), and whether and how they develop sense of belonging
to and identification with the organization (Fieseler et al., 2015).

**Boundaries.** As this review has shown, social media in organizations have diffused largely from employees’ private life to their workplace (Koch et al., 2013; Sinclaire & Vogus, 2011). It is thus understandable that the use of social media has been associated with new dynamics of boundary work between the professional and the personal (Leftheriotis & Giannakos, 2014). Ollier-Malaterre, Rothbard, and Berg (2013) in particular theorized the new situations of boundary management and identification that employees face as their professional and personal networks increasingly become interconnected online. Using social media, employees therefore manage the boundaries between their professional and personal selves and this negotiation can shape and reshape over time their relationships at work and beyond. In a related manner, van Zoonen, Verhoeven, and Vliegenthart (2016) empirically showed how employees used the microblogging application Twitter in a way that enhanced the integration of their personal and professional life domains.

However, the boundaries between the personal and the professional may not be the only ones that undergo shifting and renegotiating as employees increasingly adopt social media. Von Krogh (2012) noted for instance how the use of social media for knowledge sharing purposes, with its promise of open access to and circulation of information, forces companies to rethink the meaning of their boundaries and the protection of their knowledge. An affordance perspective is particularly well suited to make sense of how employees may use social media in ways that take advantage of the increase of available information while also being constrained by changes in competitive dynamics and by potential threats to competitive advantage.

There are thus likely shifts in multiple boundaries at play with the use of social media in organizations. Some of these shifts could include the boundaries among jobs and occupations
(Hwang et al., 2015) or the geographical and organizational distance within project team members (Gibbs et al., 2014; Recker & Lekse, Forthcoming). By being non-deterministic while taking in consideration the technical and social context of social media in the organization, an affordance perspective is particularly useful to make sense of the ways in which social media use may be associated with multiple, overlapping, consistent or possibly contradictory, shifts in boundaries.

**Surveillance and control.** The very same characteristics of social media that ensure the open circulation and generation of information in organizations can also have far-reaching, and unprecedented, potential implications for surveillance and control in organizations that can affect employees as well as management (Zhang, De Choudhury, & Grudin, 2014).

Employees may experience a tension between openness of communication and covert behavior (Gibbs et al., 2013). They may also fall prey to new forms of workplace bullying (Hall & Lewis, 2014), navigate changing rules of appropriate behavior at work (Mainiero & Jones, 2013), and grasp new questions related to ethics and privacy in the organization (Sánchez Abril, Levin, & Del Riego, 2012).

Management is also affected by the affordances of social media that enable new, and often expanded, forms of surveillance and control. Social media can be and are often used to collect and harvest huge amount of employee behavioral data. For instance, during the selection process, hiring managers increasingly use social media in the vetting of applicants (Berkelaar, 2014). This increasing use of social media transforms the implicit expectations of both management and potential employees for personnel selection and employment relationships. Similarly, Alberghini et al. (2014) developed knowledge performance indicators to monitor employees’ engagement with social media. Some companies have even started to scrutinize their employees’ use of social
media in order understand their emotions at work. De Choudhury and Counts (2013) analyzed the affective expressions of employees at a large Fortune 500 software corporation via an internal microblogging tool. These authors considered that their method could help employees and managers access their emotions, relate their emotional patterns to moments of high and low productivity, and promote positive attitudes at work. At the same time, the systematization of the monitoring of employees through social media may lead to fears and resentment of surveillance. Such surveillance does not necessarily come exclusively from management; employees can also make use of the transparency and openness of social media to seek through others’ behavior.

Mitrou, Kandias, Stavrou, and Gritzalis (2014) talked about how social media may afford “participatory panopticism” by which the many can watch the many and reconstruct information out of seemingly anonymous content. They noted that employees may suffer from prejudice and discrimination in their workplace as a result. On the other hand, Wilner, Christopoulos, and Alves (2016) noted that social media could change how organizations exert control over employees but also that employees could resist this control. They considered that the use of social media in companies intensify three ambiguities that employees and management have to deal with: the ambiguity between the private and public spheres, the ambiguity between spontaneous and performed manifestations, and the ambiguity between the distribution and control of power.

The interconnections among social media, surveillance and control represent ripe areas for future research. It would be particularly interesting to examine how social media use may be associated with different affordances for various stakeholders in the organization, how these stakeholders may actualize these different affordances and to what effects for organizational dynamics of surveillance and control.

**An Agenda for Future Research on Social Media Affordances and Organizing**
Our review and organization of the existing studies on social media use within organizations has demonstrated that the affordances of social media have implications for how these new technologies are diffusing throughout organizations, how they are used, and the various organizing processes into which they are enfolded. Also, by examining themes that were latent in existing studies of social media use in organizations, we demonstrated that social media have the potential to bring about dramatic changes to the nature of work, time, boundaries, and practices of surveillance and control. In this section, we build from these insights to delineate an agenda for future research on social media affordances and organizing.

We divide this agenda into two parts. The first part is conceptual. The review presented above has shown that the actual number of organizational phenomena to which researchers of social media have heretofore paid attention is actually quite small. We argue for a diversification of organizational phenomena under study. Second, we note that most studies of social media use conducted within organizations have relied on a narrow set of methodologies. We argue that building robust theory about social media and their affordances for organizing will require an expansion of methodological tools. We articulate these two aspects of the agenda below.

**Diversify The Phenomena of Inquiry.** As our review makes clear, studies of social media use in organizations have, so far, focused predominantly on these technologies’ implications for knowledge sharing in organizations. An early focus on knowledge sharing makes sense. Social media make information about people’s work and their behavior visible for others in the organization to see. To the extent that knowledge is born out of the information that people produce and use in practice, any technology that provides a window into other people’s practice is likely to have implications for the movement of knowledge within the organization.

Yet, even if knowledge is the focus of scholarly inquiry, most studies of social media’s role
in organizational knowledge-related processes have been quite limited. For example, one might suspect that due to the threaded nature of discussions on social tools and the fact that individuals can see into others’ practices, social media might afford the potential for new knowledge creation. Individuals who interact through or because of social media might have the potential to co-create knowledge in ways that have been difficult to achieve before. Further, because traces of knowledge abound in people’s communications, social media might also serve as vessels that contain great deals of organizational knowledge. In other words, social media technologies may help to encapsulate knowledge in networks that can be accessed by employees at later points in time. Both of these areas, knowledge co-creation and knowledge encapsulation, need much more study in addition to more traditional studies of knowledge sharing across boundaries.

Of course, there are many other important phenomena that are implicated by social media in addition to knowledge sharing. Our review highlighted several that have been discussed in some detail, but below we ask several questions to stimulate research on social media and their affordances for organizing.

**What is an organization?** In the era of social media, it may make sense to reexamine the ways in which we conceptualize organizations. Through tools like SNS, blogs, micro-blogs and wikis, people can organize across boundaries and time in space like never before. Much of this organization is emergent, in the fashion of self-organizing systems. People select into communities and create and defend the boundaries of those communities through communication. They share original content and repurpose other people’s content regularly. Conversations happen in both real-time and over extended time horizons. And, perhaps most interestingly, algorithms make recommendations and selections for whom people should pay attention to or link to as they work. Thus, organizing that occurs through social media is
inherently sociomaterial in nature. Yet as these examples highlight, much of the organizing that occurs through social media defies our typical understanding of it as a process of human intention and goal-directed action. For example, organization theorists typically assume that people purposefully join organizations. Even scholars of social movements argue that individuals are typically goal-directed when they join others who they recognize are part of a movement that has been organized or is in the process of organizing. But users on social media often join conversations or contribute content without understanding that they are part of any specific community. Moreover, their content can be easily appropriated and shared by others without their knowledge, making them unwitting actors in organizing processes that they do not understand or of which they are not aware. Also, algorithmic agency links people with others, or links people with content, in ways that can produce organizing structures in which people are involved but of which they are unaware. Finally, with use of social media, people’s social networks are often difficult to define. Studies reviewed above showed that people often have many social connections on social media tools that they do not “count” as connections when asked with whom they communicate regularly or from whom they seek advice. These latent connections provide a form of social capital that can be accessed, but exists virtually. It is becoming increasingly unclear where one’s social networks begin and end and to what extent connections formed and maintained on social media add to, substitute for, replace, or exist apart from the connections they form and maintain through other media. Consequently, understanding what organizations are when they are simultaneously transient and enduring, simultaneously virtual and material, and simultaneously hierarchical and distributed poses challenges to our existing theories of organizing.

**How do communities intersect with organizations?** Formal organizations that adopt
social media and diffuse it internally often do so to build communities among employees, or to bring communities that exist outside of the organization in. As we have shown, the emergent and user-generated nature of these communities often blurs the boundaries between where the organization ends and the community begins. That users in these communities can form relationships and produce their own informal organization that might be different than the formal organization of work raises questions about how organizations and the communities that grow within them via the use of social media might co-exist. Of course, employees have long engaged in informal communications and identified with occupational communities or created communities of practice without the use of social media. However, as our review shows, social media afford the creation of community on a broad scale since employees can reach an unprecedentedly large organizational audience through the use of these new tools. Also, the communications and interactions that take place through social media have a permanence that means that the community has a memory and a home. Understanding how communities co-exist or compete with each other within the organization, or with the organization seems an important area of research in the era of social media.

What happens when employee behavior becomes visible? One of the key aspects of social media revealed in this review is that these new technologies make employee behavior visible to a wide audience within the organization. They also make it easy for employees to see what their colleagues are doing on a regular basis, what they are saying to each other, and with whom they are saying and doing those things. This visibility of action, communication, and relationship is new for most employees. When using social media, employees are no longer anonymous or hidden within the organization; their behaviors are open for all to see. How might this visibility affect traditional organizing processes? The existing research has so far examined
how social media use may affect knowledge sharing and collaboration within organizations. But visibility (of oneself and others) is likely to have much broader effects on phenomena of interest to those who study organizational behavior. For example, questions arise about how decisions are made when information about people’s preferences and actions is visible for all to see. How does conflict arise or resolve when people’s behaviors are visible to others? How might people negotiate for salary or job changes when others know about their preferences and actions because they have seen them played out on social media? What are the pressures on self-presentation when employees know that everyone can see what they are doing and with whom they are communicating? At a more macro organization theory level questions arise, for example, about the nature of power: how can dependencies be leveraged when social media provides an accurate map of who depends upon whom in the organization? Visibility on social media raises other questions for organization theory too. Do certain behaviors become externalized more quickly such that they take on qualities of institutions when those behaviors can be widely seen and rapidly mirrored across social media platforms? How does the structure of social networks change when employees no longer have to build a mental map of what the organization’s network looks like, but can instead see it articulated on social media? And, how might social movements within organizations grow and change formal organizational structures and procedures when those movements are begun and grow with the assistance of social media? Such questions arise precisely because social media help to make employee behavior visible in ways that it has not been visible before. This is clearly an important area for organizational research.

**Expand The Methodological Repertoire.** Our review of existing studies of social media use in organizations revealed a striking homogeneity in research approaches adopted to study the role that these new technologies play in the organizing process. The vast majority of published
studies employed interview methodologies and claimed to build grounded theory. The use of such an inductive approach is understandable and certainly warranted given the novelty of the phenomenon under study. As a research community, we do not know much about the way that social media are incorporated into organizational action. Consequently, it makes sense to engage in inductive research to uncover the affordances and constraints that these new technologies are having within organizations. However, relying heavily on interview research and the construction of case studies limits the types of activities we can study within organizations and it restricts what we can know about the role that social media plays in the process of organizing. We argue that to build theory about social media in organizations will require that students of organizations and technology use expand their repertoire of methods. We suggest three methodological directions below that are likely to help expand our knowledge about social media use in organizations.

**Harnessing server-side data.** The most obvious way to expand studies of social media within organizations is to collect and analyze server-side data. Data extracted from the servers that host social media platforms within organizations are unprecedentedly rich in that they provide not only evidence of the structure of interactions amongst employees, but also the content of their interactions. In other words, researchers have access to recorded traces of behavior and discourse. In many studies of organizations, the analyst attempts to construct a profile of a person’s network of contacts and probe them about the topics they discuss with their communication partners. Data collected via surveys are subject to distortion in recall and can sometimes be affected by a desirability bias on the part of the survey taker. Server-side data collected about behavior on social media chronicles actual actions, interactions, and communications. Yet despite the richness and usefulness of such data, there have been very few studies that have collected and analyzed it so far. Collecting data of this type could reveal not
only broader patterns of social behavior, but would also allow organizational researchers to model contagion effects, the emergence of new norms, and the reconstitution of informal structures. Because such data are also time stamped, researchers could begin to study development and change in a more systematic way than has been possible in the past. Collecting server-side data would also allow researchers to make comparisons between what employees actually do on social media and what they say they do when discussing their behavior in interviews or reporting it on survey instruments. Triangulating similarities and differences in responses between behavior and reports of behavior would provide very interesting insights into the nature of motivation and identify performance within organizations, as well as reveal norms and taken-for-granted assumptions that exist within the organization.

**Incorporating observations of social media use.** Observation of social media use is also a powerful methodological resource that has been scantily used by researchers of social media in organizations up to this point. Observation of work conducted in practice would be helpful for understanding why social media afford and constrain behavior within organizations in the ways they do. While interviews can provide information about actions and justifications of those actions and server-side-data can reveal actual patterns of communication and behavior over time, observational data can help explain the conditions under which people rely on social media to accomplish their tasks, why they do so, and when they do not. Social media are but one set of technologies that people in organizations are using to accomplish their work. How social media are used interdependently with technologies such as email, databases, simulation tools, and artificial intelligence is yet unknown. Understanding such interdependence among technologies is important because the technical infrastructure of organizations is increasingly key to how work gets done. Further, if one adopts the perspective that all action within organizations is
sociomaterial in nature (Orlikowski & Scott, 2008), then understanding how social media are incorporated into people’s practice would help to explain how the very actions that constitute the organizing process are produced and perpetuated. Observation of use is crucial to begin explaining how the affordances and constraints provided by social media are constructed and how those affordances and constraints shape the practice of organizing.

**Leveraging natural experiments.** Although the use of social media within organizations is swiftly spreading, these new technologies are not yet ubiquitous. Within organizations this often means that certain groups, departments, or divisions use social media while others do not. Such incomplete diffusion means that researchers have the opportunity to isolate the uses and outcomes of social media as they pertain to organizational phenomena of interest by comparing groups that are using social media to those that are not. To be able to leverage such natural experiments will require organizational researchers to first build theory about how the phenomena in which they are interested (e.g., power, decision-making, identification, justice, negotiation) might be affected by the affordances and constraints offered by social media. Researchers will then need to devise instruments that can test differences in application or enactment of those phenomena. Then, researchers must choose whether they would like to hold the context constant such that they can compare the effects of social media use on the phenomena of interest, or whether they would like to vary the context to thereby explore the effects of a particular variable on the way that social media affordances are enacted and affect the phenomena under study. In a few years, the diffusion of social media might be so broad to as resemble the current state of e-mail within organizations and conditions that favor natural experiments may be less likely to occur. Thus, the time seems right for students of organizations to leverage these natural conditions to begin isolating the effects of social media on phenomena
that are important to organization research.

CONCLUSION

Overall, management scholars have begun to recognize the growing significance of social media use for organizing. Our goal here was to provide students of organizations with a theoretical lens, based upon the concept of affordance, to review and build upon existing scholarship on the diffusion, use, and implications of social media for organizational processes. An affordance perspective provides a conceptual apparatus that allows researchers to continue investigating social media use in and among organizations, and to question new and changing phenomena associated with it. The agenda for future research we outlined articulated how social media enable management scholars to expand their inquiries (e.g. on knowledge co-creation), to question taken for granted ideas about firms, their boundaries and their connections with communities, and, to expand their methodological repertoire to make the most of the new treasure trove of data that social media can provide. We hope and believe that this review and agenda for research can inspire further inquiries and expand the collective knowledge on social media and organizing. More generally, given the fast rate of innovation and change among social media applications and digital technologies, we also hope that this review can be of use for researchers to continue theorizing, making sense of, and empirically examining new technologies in the workplace.
REFERENCES


Author Note

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Figure 1: Organization of Review
<table>
<thead>
<tr>
<th>Reference</th>
<th>Method</th>
<th>Technology</th>
<th>Sample</th>
<th>Key Findings</th>
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</thead>
<tbody>
<tr>
<td>Sinclaire, J. K., and</td>
<td>Exploratory study using web site</td>
<td>Social networking sites (SNS) used by the</td>
<td>8 managers employed by large global companies</td>
<td>Managers use SNS because their stakeholders use them. They use SNS to observe and connect with users, especially younger ones. These users have gained power over product and service offerings. The company may change to fit consumers’ social media use. Companies make changes to their organizational structure to take advantage of new information and to protect themselves against loss of power.</td>
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<tr>
<td>Vogus, C. E. (2011)</td>
<td>content analysis, survey and</td>
<td>companies (Facebook, MySpace, Twitter, LinkedIn,</td>
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<td></td>
<td>follow-up interviews</td>
<td>YouTube)</td>
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<tr>
<td>Koch, H., Leidner, D. E.,</td>
<td>In-depth, interpretive case</td>
<td>Wikis, blogs and SNS</td>
<td>22 interviews a large global security company (10 users of social media, 12 non-users)</td>
<td>Employees perceive the organization’s internal social media technologies similarly to the ones they use in their personal lives. This causes them to miss out on the other features of internal social media, and may lead to a misalignment between the values they ascribe to their personal social media and the values they ascribe to their workplace.</td>
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<tr>
<td>and Gonzalez, E. S. (2013)</td>
<td>study using fieldwork,</td>
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<tr>
<td></td>
<td>document analysis, and interviews</td>
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<tr>
<td>Miles, S. J., and</td>
<td>Conceptual study</td>
<td>Facebook, Twitter, LinkedIn, blogs and instant</td>
<td></td>
<td>Employee voice broadcasted via social media can have devastating effects on a company’s reputation. However, when the power of the employee voice is well understood by the managers, companies can guide it for improving their public image.</td>
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<td>Mangold, W. G. (2014)</td>
<td></td>
<td>messaging</td>
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<tr>
<td>Guinan, P. J., Parise, S.,</td>
<td>Interviews</td>
<td>Social platforms (Jive, Facebook, Twitter) and</td>
<td>Over 70 managers across 30 companies (in various stages of social</td>
<td>Companies adopting social media technology with a bottom up approach focus on organizational newcomers, especially recent college graduates, the “young experimenters.” This is especially useful for newer, fast-growing organizations. Results are successful if managers frame the benefit in terms of personal effectiveness, give them time to experiment and integrate it in their work routines, and show them their efforts are valued by senior management.</td>
</tr>
<tr>
<td>and Rollag, K. (2014)</td>
<td></td>
<td>social tools (such as blogs, wikis, or tagging</td>
<td>technology use, from early experimentation to active deployment)</td>
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<td></td>
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<td>systems)</td>
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<tr>
<td>Jarrahi, M. H., and Sawyer, S. (2015)</td>
<td>Field-based study using interviews, micro-studies of practice, documents, and system level data</td>
<td>Enterprise social networking technologies: new and traditional ones</td>
<td>58 consultants from multiple management consulting firms</td>
<td>The corporate and the organizational approach to social technology remain defensive, not strategic. Consultants are comfortable contributing to online forums when sharing and contributing knowledge is seen as a fulfilling practice and rewarded in performance reviews.</td>
</tr>
<tr>
<td>Ford, D. P., and Mason, R. M. (2013)</td>
<td>Literature review</td>
<td>Social media platforms (Facebook and Twitter)</td>
<td>Literatures of knowledge management and social media</td>
<td>Perceived tensions arise when managers seek to maintain their traditional roles at the organizational level, even if social media allows them to do it at group or individual level. Organizations may look to the group level as the most effective locus for clarifying roles and relieving perceived tensions.</td>
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<td>Leisure to work</td>
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Employees’ frames regarding social media are established through activities outside work and influence their views about the ESM. Because employees perceived social media as a platform for social, rather than task-oriented communication, they believed workplace social media would impede productivity. Paradoxically, employees with the least direct experience with social media may be more open to using ESM.

Two rounds of interviews: 1. Before the implementation: 58 employees from the leadership development program 2. One year after the implementation: 22 of the initial 58 employees

Enterprise social media technology (ESM) (American Financial managers explicitly labeled A-Life as an “online platform” and did not refer to it as a social networking site)

Utilitarian and hedonic values influence employees’ use of social media at work. There is no decline by age. Higher use of social media for work is related to better work performance. More productive employees make larger use of social media in their work. Employees’ motivations for using social media are primarily to watch the market and secondarily to keep contact with customers.

Employees who have gained higher levels of knowledge from their blogging activities tend to perform better in the organization. Prohibiting leisure-related posting would be counterproductive for organizations because it also leads to a reduction in work-related posting and reading.

Social media may have a negative effect for routine tasks, and a positive effect for more creative and innovative tasks. Hedonic use of social media, while having a direct negative impact on routine performance was shown to positively contribute to the development of social ties, leading to a positive influence on innovative performance.

Table 2: Use of Social Media

<table>
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<tbody>
<tr>
<td>Treem, J. W., Dailey, S. L., Pierce, C. S., and Leonardi, P. M. (2015)</td>
<td>Interviews</td>
<td>Enterprise social media technology (ESM) (American Financial managers explicitly labeled A-Life as an “online platform” and did not refer to it as a social networking site)</td>
<td>Two rounds of interviews: 1. Before the implementation: 58 employees from the leadership development program 2. One year after the implementation: 22 of the initial 58 employees</td>
<td>Employees’ frames regarding social media are established through activities outside work and influence their views about the ESM. Because employees perceived social media as a platform for social, rather than task-oriented communication, they believed workplace social media would impede productivity. Paradoxically, employees with the least direct experience with social media may be more open to using ESM.</td>
</tr>
<tr>
<td>Leftheriotis, I., and Giannakos, M. N. (2014)</td>
<td>Survey</td>
<td>Enterprise social media</td>
<td>1,799 employees of the insurance sector in Greece</td>
<td>Utilitarian and hedonic values influence employees’ use of social media at work. There is no decline by age. Higher use of social media for work is related to better work performance. More productive employees make larger use of social media in their work. Employees’ motivations for using social media are primarily to watch the market and secondarily to keep contact with customers.</td>
</tr>
<tr>
<td>Huang, Y., Singh, P. V., and Ghose, A. (2015)</td>
<td>Structural-modeling approach, blog postings content analysis</td>
<td>Enterprise social media (blog)</td>
<td>Blog reading and writing activities of 2,396 employees over a 64-week period (2 types of blog posts: work- and leisure-related)</td>
<td>Work-related blogging allows employees to express their expertise, and once they are identified as “experts,” this reputational gain can lead to economic benefits. Leisure readership can indicate how popular employees are among their professional peers. Employees who have gained higher levels of knowledge from their blogging activities tend to perform better in the organization. Prohibiting leisure-related posting would be counterproductive for organizations because it also leads to a reduction in work-related posting and reading.</td>
</tr>
<tr>
<td>Ali-Hassan, H., Nevo, D., and Wade, M. (2015)</td>
<td>Large-scale cross-sectional survey</td>
<td>Multiple social media applications</td>
<td>307 employees of a multinational IT company</td>
<td>Social media may have a negative effect for routine tasks, and a positive effect for more creative and innovative tasks. Hedonic use of social media, while having a direct negative impact on routine performance was shown to positively contribute to the development of social ties, leading to a positive influence on innovative performance.</td>
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Network articulation

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<th>Sample</th>
<th>Key Findings</th>
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<tbody>
<tr>
<td>Majchrzak, A., Faraj, S., Kane, G. C., and Azad, B. (2013)</td>
<td>Conceptual paper</td>
<td>Social media in the workplace</td>
<td>Social media literature</td>
<td>Network-informed associating is the social media affordance of engaging in online knowledge conversations. It can foster productive knowledge conversations in the workplace as employees try to expand their social and intellectual capital. It can also inhibit the productivity of these knowledge conversations if preferential attachment is activated.</td>
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<tr>
<td>Mark, G., Guy, I., Kremer-Davidson, S., and Jacovi, M. (2014)</td>
<td>Large scale data mining and a survey</td>
<td>Enterprise social media (blog, forum, SSN, wiki)</td>
<td>20,772 active users of the enterprise social media tools; 554 survey responders</td>
<td>The smaller one’s online social network size in the organization, the more highly assessed they were by colleagues. Activities in the informal organization can enhance the effectiveness of the formal organization. There is a negative relation of network size on colleagues’ positive assessment. Friending is not a trait associated with the most highly assessed colleagues.</td>
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<tr>
<td>Leonardi, P. M., and Meyer, S. R. (2015)</td>
<td>Online survey</td>
<td>Enterprise social networking tool (Chatter - Salesforce)</td>
<td>81 employees from a mobile communications business unit in a large telecom company in Peru.</td>
<td>SNS may help people become better aware of the activities of those in their network. When an employee needs complex knowledge from a colleague they do not have strong enough ties with, they may delay asking for it until they build a stronger tie with the colleague. To gain awareness about their colleague’s activities and communications, and the knowledge itself, the employee then uses the SNS. The information gathered is useful in lubricating their interaction and building a stronger tie with the colleague.</td>
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Social transparency

<table>
<thead>
<tr>
<th>Reference</th>
<th>Method</th>
<th>Technology</th>
<th>Sample</th>
<th>Key Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leonardi, P.M.</td>
<td>Quasi-natural field</td>
<td>Enterprise social</td>
<td>2 matched sample groups at a large financial</td>
<td>Enterprise social networking technologies can increase people’s metaknowledge, i.e.,</td>
</tr>
<tr>
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<td>Sample</td>
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<tr>
<td>Dong, J. Q., and Wu, W. (2015)</td>
<td>Event study methodology (quasi-experiment, longitudinal data)</td>
<td>Social media technologies (online user innovation communities – OUICs)</td>
<td>1676 firm-day observations from Dell and Starbucks</td>
<td>Online user innovation communities enable idea generation and diffusion, which ultimately leads to new products and services for companies. Yet simply collecting a large number of ideas only generates the potential for success. How firms deal with the ideas is what truly matters for value creation. Thus, a mechanism to effectively select and implement collected ideas is the key.</td>
</tr>
<tr>
<td>Stohl, C., Stohl, M., and Leonardi, P. M. (2016)</td>
<td>Conceptual paper</td>
<td>Information and communication technologies (ICTs)</td>
<td>Disparate studies on visibility</td>
<td>Social media use can generate a new phenomenon in organizations, the “transparency paradox.” High levels of visibility (e.g. publishing of content through social media) can actually decrease transparency and produce opacity. Visibility combines three attributes: information availability, information approval for dissemination, and information accessibility to others. When all these attributes are on high levels, actors have difficulties finding the useful information.</td>
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<tr>
<td>Piezunka, H., and Dahlander, L., (2015)</td>
<td>Network and text analysis methods, on a longitudinal data set</td>
<td>Technology that captures the crowdsourced suggestions from external contributor</td>
<td>922 organizations 105,127 externally crowdsourced suggestions</td>
<td>Crowding leads organizations to narrow their attention, in a way that knowledge that is distant in terms of content and structure (from outside) is less likely to be accepted. Thus, organizations collecting too much information increase their chances of missing out on suggestions that are new and valuable, most likely because of improper filtering mechanisms. Their narrow focus on familiar knowledge negatively affects its ability to innovate.</td>
</tr>
<tr>
<td>Iyer, G., and Katona, Z. (2015)</td>
<td>An analytical model of a social network of agents + a real-life social network analysis</td>
<td>Social networking platform</td>
<td>A group of students from the data collected by Stehlé et al. (2011); a network with 242 nodes and 81316 undirected links</td>
<td>As the span of communication increases, competition between senders for receiver attention intensifies, making it easier for senders to reach more receivers. However, fewer senders enter the competition, and the ones who do enter have higher levels of messaging effort. Thus, an increase in the cost of sending the message commits senders to soften the competition for attention, while at the same time makes the receivers better off.</td>
</tr>
<tr>
<td>Miller, A. R., and Tucker, C. (2013)</td>
<td>Individual case studies</td>
<td>Facebook</td>
<td>5,035 hospitals (out of the 5,759 hospitals listed in the American Hospital Association in the US)</td>
<td>Active involvement of managers in social media drives more user-generated content from employees, especially when done with generic, non-client targeted postings. Thus, when an organization actively manages its social media presence, it predominantly succeeds in increasing user-generated content from employees rather than from outside users. Yet when an organization devotes its postings toward client-specific communications, then active social media management can still lead to incremental user-generated content from clients.</td>
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Table 3: Organizing Processes Associated With Social Media

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<thead>
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<tbody>
<tr>
<td><strong>Communication</strong></td>
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<tr>
<td>Huang, J., Baptista, J., and Newell, S. (2015)</td>
<td>Exploratory, in-depth, interpretive, longitudinal case study, using semi-structured interviews</td>
<td>Organization published Content channels, and user-generated content services</td>
<td>65 employees at a multinational company (10-12 interviews per year between 2006-2011)</td>
<td>The concept of communicational ambidexterity is introduced. The concept refers to an organization’s capability to efficiently manage and achieve complementarity between two distinct types of internal communication flows and directions, like for example in the case of organization-generated content and user-generated content. Social media can be used successfully used so that it reconciles the two distinct modes of internal communication.</td>
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<tr>
<td>Denyer, D., Parry, E., and Flowers, P. (2011)</td>
<td>Case study with semi-structured interviews, documentation, and participant observation</td>
<td>Enterprise2.0</td>
<td>33 employees at a large multinational telecommunications company</td>
<td>Communications via the social media were not as social, open, or participative as previously expected, in spite of managerial push for use. Due to the monitoring and moderation of discussion, as well as due to its use for political propaganda by leaders, the social media was demeaned not any more open, social, or participative than traditional media.</td>
</tr>
<tr>
<td>Gibbs, J. L., Eisenberg, J., Rozaidi, N. A., and Gryaznova, A. (2014)</td>
<td>A mixed-method case study study using analysis of server log data and in-depth interviews</td>
<td>Enterprise social media (ESM)</td>
<td>14 employees at a large Russian telecommunications company; online activities of 17,000 employees from August 2011 until September 2012.</td>
<td>ESM promotes cross-boundary communication across geographical and hierarchical borders. There was more ESM use for local than for distant communications, but remote employees felt more connected to their colleagues. Managers used the ESM mostly as a one-way communication medium. Managers and subordinates used ESM to discuss work and non-work issues. Non-work discussion occurred within the traditional working hours and work communications took place outside traditional working hours, which indicated the blurring of work and non-work communication boundaries on ESM.</td>
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<td><strong>Collaboration</strong></td>
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<tr>
<td>Pirkkalainen, H., and Pawlowski, J. M. (2014)</td>
<td>Systematic literature review</td>
<td>Social software (search terms: social media, web 2.0, collaboration tools)</td>
<td>N/A</td>
<td>There are four major types of barriers that global knowledge workers face when collaborating via social media: organizational (e.g. geographical distance, organizational hierarchies), social (e.g. lack of trust), technical (concerns about security) and cultural (e.g. not knowing what is accepted to be said and what not).</td>
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<tr>
<td>Vuori, V., and Okkonen, J. (2012)</td>
<td>Case study research using a web questionnaire</td>
<td>Intra-organizational social media</td>
<td>148 employees from two companies in the early stages of adopting social media for internal knowledge sharing.</td>
<td>The motivation to share knowledge via the internal social media platform came mainly from the desire to help colleagues, as well as the organization. Advancing one’s career and financial rewards were perceived as the least motivating.</td>
</tr>
<tr>
<td>Matthews, T., Whittaker, S., Badenes, H., and Smith, B. (2014)</td>
<td>Interviews with community leaders and quantitative analysis.</td>
<td>Social software tools</td>
<td>8 leaders, observations of 67 community spaces, and a quantitative analysis of 128 community spaces.</td>
<td>The different social software tools should be combined when using for maximizing collaboration in organizations. The combination is likely to be different from community to community, as their collaboration needs are also distinct.</td>
</tr>
<tr>
<td>Subramaniam, N., Nandakumar, J., and Baptista, J. (2013)</td>
<td>Field study using interviews, field notes, and documents</td>
<td>Enterprise systems</td>
<td>32 semi-structured interviews, with users in three countries.</td>
<td>The concept of “virtual co-presence” is introduced to refer to Goffman (1959)’s co-presence encounters in the digital medium. Virtually co-present employees developed relationship ties when the employees focused on the interaction.</td>
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<td><strong>Knowledge sharing</strong></td>
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<tr>
<td>Von Krogh, G. (2012)</td>
<td>Conceptual paper</td>
<td>Social software</td>
<td>Literature on social software implementations and their impact on knowledge management</td>
<td>An agenda for future research identifying six major issues is laid out. Among others, organizations are encouraged to think through the implications of adopting social</td>
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### Reference Method Technology Sample Key Findings

<table>
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<tbody>
<tr>
<td>Bharati, P., Zhang, W., and Chaudhury, A. (2015)</td>
<td>Quantitative study using panel data collected through a web-based survey</td>
<td>Various social media applications</td>
<td>238 IS professionals and managers from multiple US institutions</td>
<td>Social media in combination with an increased social capital help promote organizational efforts in knowledge management, which is likely to lead to a higher level of organizational knowledge quality.</td>
</tr>
<tr>
<td>Beck, R., Pahiko, I., and Seebach, C. (2014)</td>
<td>Single case study</td>
<td>Enterprise social media, enterprise microblogging</td>
<td>15,505 enterprise microblogging messages postings by 1,921 different users during a 6-month period at a leading financial services provider</td>
<td>Knowledge exchange is driven by the characteristics of the knowledge seekers and the relational factors between the knowledge seekers and the contributors. The more a knowledge seeker engages in interactions to establish their social presence, the more trust and the less uncertainty there is for the knowledge contributor. Also, reputation is an important asset that a network member can leverage to achieve social status. As knowledge contributors strive to improve their social status, they dedicate more effort to sharing knowledge with high-status others, leading to higher-quality knowledge being exchanged.</td>
</tr>
<tr>
<td>Gibbs, J. L., Rozaidi, N. A., and Eisenberg, J. (2013)</td>
<td>Case study using in-depth interviews</td>
<td>Various social media applications</td>
<td>12 engineers from a division of a distributed high tech start-up</td>
<td>Many of the employees resisted using social media tools initially. They were resistant because social media led them to experience conflicting tensions rooted in social media affordances. Several tensions were uncovered: visibility-invisibility, engagement-disengagement, and sharing-control.</td>
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### Table 4: Implications of Social Media for Organizational Phenomena

<table>
<thead>
<tr>
<th>Nature of work</th>
<th>Method</th>
<th>Technology</th>
<th>Sample</th>
<th>Key Findings</th>
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<tbody>
<tr>
<td>Wu, L. (2013)</td>
<td>Social network analysis</td>
<td>Social media</td>
<td>Electronic communications of 8,037 consultants over two years</td>
<td>Social media can transform the network positions of employees over time, likely bringing them economic benefits. Information-rich networks (low in cohesion and rich in structural holes) can drive work performance and job security. Yet, there is a trade-off between engaging in social communication and gathering diverse information. Productivity is positively correlated with information security and social communication.</td>
</tr>
<tr>
<td>Charoensukmongkol, P. (2014)</td>
<td>Questionnaire</td>
<td>Social media</td>
<td>170 employees from two industries, across various organizations in Thailand</td>
<td>Coworker support, supervisor support, and job demands influence the perception of employees toward social media at work. Employees using access social media tend to have less work-related stress, and work more effectively.</td>
</tr>
<tr>
<td>Bucher, E., Fieseler, C., and Suphan, A. (2013)</td>
<td>Survey</td>
<td>Social media (Facebook, Twitter, Blogs and the like)</td>
<td>2,579 marketing and communication professionals</td>
<td>One of the main challenges of using social media at work is being able to mentally cope with information overload, invasion and uncertainty.</td>
</tr>
<tr>
<td>Shami, N. S., Nichols, J., and Chen, J. (2014)</td>
<td>Longitudinal case study</td>
<td>Social media</td>
<td>75,747 employees of a large global company</td>
<td>Using social media in the workplace does not impede performance. Being active on social media at work (number of forum posts, forum post length, and status update length) is positively associated with performance ratings, however the relationship is not straightforward.</td>
</tr>
<tr>
<td>Fulk, J., and Yuan, Y. C. (2013)</td>
<td>Conceptual paper</td>
<td>Enterprise social networking systems</td>
<td>Concepts from three extant theories</td>
<td>Enterprise social networking systems provide an opportunity for employees to manage their existing network, while at the same time scouting for new contacts to expand their...</td>
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network, likely also benefiting the knowledge sharing at organizational level.

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<tr>
<th>Boundaries</th>
<th>Methodology</th>
<th>Analysis</th>
<th>Findings</th>
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<tbody>
<tr>
<td>Ollier-Malaterre, A., Rothbard, N., and Berg, J. (2013)</td>
<td>Conceptual paper</td>
<td>Social media</td>
<td>Literature on boundary management and identification</td>
</tr>
<tr>
<td>van Zoonen, W., Verhoeven, J. W., and Vliegenthart, R. (2016)</td>
<td>Web based survey, content analysis of the tweets</td>
<td>Twitter</td>
<td>38,124 of tweets sent by 433 employees across different organizations</td>
</tr>
<tr>
<td>Hwang, E. H., Singh, P. V., and Argote, L. (2015)</td>
<td>Data mining</td>
<td>Internal online knowledge community</td>
<td>Two sets of data: public user profile information and knowledge-sharing data</td>
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<thead>
<tr>
<th>Surveillance and control</th>
<th>Methodology</th>
<th>Analysis</th>
<th>Findings</th>
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</thead>
<tbody>
<tr>
<td>Zhang, H., De Choudhury, M., and Grudin, J. (2014)</td>
<td>Cross-sectional trend study using semi-structured interviews</td>
<td>Enterprise social networking</td>
<td>46 employees from Microsoft</td>
</tr>
<tr>
<td>Hall, R., and Lewis, S. (2014)</td>
<td>Conceptual paper</td>
<td>Social media, emails, instant messaging</td>
<td>Literature on workplace bullying and social media policy</td>
</tr>
<tr>
<td>Mitrou, L., Kandias, M., Stavrou, V., and Gritzalis, D. (2014)</td>
<td>Data mining, machine learning</td>
<td>Social media (YouTube, Twitter)</td>
<td>12, 964 fully crawled users the Greek community of Twitter; 207,377 videos, and 2,043,362 comments</td>
</tr>
<tr>
<td>Wilner, A., Christopoulos, T. P., and Alves, M. A. (2016)</td>
<td>Qualitative research</td>
<td>Blogs and social media</td>
<td>50 cases involving the publication of images and texts by employees acting outside organizational control.</td>
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</table>