

Enacting knowledge strategy through social media: Passable trust and the paradox of nonwork interactions

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Research Summary: Despite the recognition that knowledge sharing among employees is necessary to enact knowledge strategy, little is known about how to enable such sharing. Recent research suggests that social media may promote knowledge sharing because they allow social lubrication and the formation of trust. Our longitudinal and comparative analysis of social media usage at two large firms indicates that users who participate in nonwork interactions on social media catalyze a cycle of curiosity and *passable trust* that enables them to connect and share knowledge. Paradoxically, the very nonwork-related content that attracts users to social media and shapes passable trust can become a source of tension, thwarting a firm's ability to encapsulate knowledge in the form of routines and to use it to enact its strategy.

Managerial Summary: Integrating knowledge from across a firm is a critical source of competitive advantage. Firms are increasingly implementing internal social media sites to promote knowledge sharing among their employees. Our analysis indicates that employees' curiosity about nonwork-related and work-related interactions motivate them to use the sites. The integration of non-work and work content allows employees to identify people with valuable knowledge, and gauge the *passable trust* that they need to share knowledge on the sites or offline. Paradoxically, the nonwork-related content that attracts users to the sites can become a source of tension, thwarting the production of knowledge to enact firms' knowledge-based strategies. To foster work-related knowledge sharing, managers should accommodate nonwork-related interactions on social media.

KEY WORDS

Knowledge Sharing, Knowledge-Based View, Social Media, Trust, Strategy-as-Practice

1 | INTRODUCTION

When asked in the early 1990s why Hewlett-Packard invested so many resources trying to implement new technologies to help employees share knowledge more effectively, then CEO Lew Platt famously replied, “If only HP knew what HP knows we would be three times more productive.”

In line with Platt’s exhortation, there is ample evidence indicating that firms may not always know what they know (Argote & Ingram, 2000; Grant & Baden-Fuller, 2004). Strategy scholars would argue that lack of awareness about a firm’s own knowledge affects the firm’s ability to be productive as well as the vital issue of competitive advantage. As Haas and Hansen (2005) suggested, “competitive performance depends not on how much firms know but on how they use what they know.” If firms possess unique and inimitable knowledge, then they will be more likely to enact strategies that enable them to outperform their competitors (Felin & Hesterly, 2007; Grant, 1996; Liebeskind, 1996). Consequently, knowledge sharing among employees is critical to an effective knowledge-based strategy. In fact, Eisenhardt and Santos (2002) argued that effective knowledge sharing within organizations is essential if firms wish to create and execute knowledge-based strategies.

Scholars who study the relationship between knowledge and strategy argue that technology is a primary way by which firms can execute their knowledge-based strategies (e.g., Hansen, Nohria, & Tierney, 1998). Like Hewlett-Packard, many other firms such as McKinsey, Accenture, IBM, Spencer Stuart, and Boeing have adopted technologies in hopes of enabling effective knowledge transfer among employees. However, a rich literature shows that technologies implemented to foster knowledge sharing often fail to result in knowledge integration among employees, and consequently, make it difficult to encapsulate knowledge and spread it across the firm (See Alavi & Leidner, 2001 for review). For example, Haas and Hansen’s (2007) study of technology-mediated knowledge sharing in a management consulting firm showed that electronic databases save employees time on certain tasks, but did not improve employees’ ability to share knowledge in ways that led to knowledge integration across the firm, and consequently, negatively affected the firm’s ability to execute its strategy.

One possible reason that technologies used to facilitate knowledge sharing in organizations fail to produce knowledge integration and subsequent use at the firm level is because knowledge and practice are intimately connected (Brown & Duguid, 2001). Orlitzki (2002, p. 250) observes that knowledge is “enacted—every day and over time—in ‘people’ practices. [This view] leads us to understand knowledge and practice as reciprocally constitutive, so that it does not make sense to talk about either knowledge or practice without the other.” Building on this work, scholars who adopt a Strategy-as-Practice perspective (Golsorkhi, Roeleau, Seidl, & Vaara, 2010; Jarzabkowski & Spee, 2009; Whittington, 1996), argue that knowledge sharing within organizations is a core component of doing strategy (Jarzabkowski, 2004, p. 529). Although sharing about strategy processes is clearly important, sharing about mundane operational tasks is often more important for the enactment of a knowledge strategy (Chia & MacKay, 2007). If a firm bases its competitive strategy on uniquely

held knowledge, employees must be able to share and adopt that knowledge widely, thus enacting the firm's knowledge strategy in their everyday practices (Jarzabkowski & Kaplan, 2015).

Strategy-as-Practice scholars have recognized the potential of social media to connect people within organizations so that they can more effectively share knowledge in practice (Järventie-The-sleff, Moisander, & Villi, 2014; Whittington, 2012). According to Leonardi, Huysman, and Steinfield (2013, p. 2), social media designed specifically for enterprises allow workers to communicate with specific coworkers or broadcast messages to everyone in the organization. Reflecting on these capabilities for connection, Whittington (2014, p. 90) posits that social media may become increasingly important in the practice of strategy making and execution and suggests, "the study of episodes of technology-mediated strategy practices comparatively across time or across organizations—for example...strategy participation through social media—offers exciting opportunities." Yet, despite such optimism, there are reasons to be skeptical that social media are a panacea. For knowledge sharing to be effective, people must have trust (Reagans & McEvily, 2003). It is unclear whether social media could promote the type of trust necessary for knowledge sharing. Studies have documented that technology users often develop swift trust (Jarvenpaa & Leidner, 1999) that allows them to get their work done. But it is unclear whether swift trust can move knowledge on social media. To develop trust sufficient for knowledge sharing, it would seem that employees would need to engage in nonwork-related interactions with each other since informal interactions are crucial for the development of interpersonal trust (McAllister, 1995). Continually engaging in nonwork-related interactions, however, could undermine work performance and thwart knowledge sharing. Recent studies have confirmed that people do spend a great deal of time engaging in nonwork-related conversations on social media. How people move from connecting with each other to building trust, to engaging in knowledge sharing practices remains largely understudied, yet it is key to understanding the role that social media may play in knowledge-based strategy execution. The purpose of this article is to fill this gap.

Through a study of two large organizations, we find that one type of social media—internal social networking sites—enables employees to connect with others who have useful knowledge, and provides the lubrication, through nonwork interactions, to unstick knowledge from different sites of practice, and allows knowledge to become integrated and encapsulated in routines and available as firm-level knowledge. Our findings highlight a paradox: Employees are more likely to share knowledge with one another and integrate that knowledge into firm-level routines if they engage in nonwork-related interactions with colleagues. Social media provide the ability to turn nonwork-related interactions into organizational knowledge sharing. However, the very nonwork-related interactions that lubricate knowledge sharing can stop workers from engaging with social media.

2 | THEORETICAL BACKGROUND

According to the Strategy-as-Practice perspective, strategy is enacted in the practice of people's work. Vaara and Whittington (2012, p. 287) defined *practices* as "accepted ways of doing things, embodied and materially mediated, that are shared among actors and routinized over time." This view treats strategy as continually in the making through practices of planning and execution. If a firm builds its strategy based on the idea that its unique and inimitable knowledge will give it competitive advantage (Eisenhardt et al., 2002; Grant, 1996; Kearns & Sabherwal, 2006, Kogut & Zander, 1996), knowledge sharing among employees—about mundane operational knowledge that is uniquely held by the firm—would be the practice through which such a knowledge-based strategy would be enacted (Jarzabkowski, 2004; Langley, 2010). Therefore, knowledge sharing in practice is

key to both strategy making and strategy execution. From the standpoint of strategy making, as employees share their knowledge with each other in the practice of their work, that knowledge can eventually become routinized and widely shared across the organization. Once it is routinized, it becomes a capability that the firm possesses and can use to its competitive advantage (Nelson & Winter, 1982). From the standpoint of strategy execution, if the firm has certain knowledge capabilities, sustained competitive advantage would require that those employees are continuously sharing their knowledge with other employees so that the firm, as a whole, continues to possess that capability (Grant, 1996; Nonaka & Takeuchi, 1995; Yang & Chen, 2007). In short, the practice of knowledge sharing within a firm's actors is core to a firm's ability to both make and execute strategy (Jarzabkowski, 2004).

Because knowledge is enacted in practice, problems with knowledge sharing arise when employees attempt to move knowledge across distinct sites of practice (Barley, Leonardi, & Bailey, 2012; Nicolini, Mengis, & Swan, 2012). The critical problem with knowledge sharing from a practice perspective is that sources and targets tend to have distinct practices. If a source attempts to share that knowledge with a target who conducts different practices, that target can lack the contextual understanding to interpret and decode the knowledge because his or her practice is different (Brown & Duguid, 2001). For people to create a shared space of practice, they need (a) to know who among their coworkers has needed knowledge, and (b) to learn enough about that person to be able to build common ground and shared context that will allow for the movement of knowledge. However, a major hurdle for firms is that people do not know what their coworkers know or how to create shared context with them (Szulanski, 2002). Use of social media within firms is one possible way to overcome this problem because they have the potential to promote *social lubrication*, defined as "conversational material about the knowledge source and the knowledge itself" (Leonardi & Meyer, 2015, p. 11).

According to Leonardi et al. (2015), social media can serve as a lubricant that connects employees in two ways. First, social media allow people who do not know each other to easily view each other's communications and other online activities. Users can see conversational threads indicating communication exchanges that their work colleagues have had with each other. Users can also see what documents and conversations their work colleagues have posted or tagged. These types of vicarious learning about other people's communications allows users of social media to learn by watching (Leonardi, 2014). Brown and Duguid (2000, p. 136) characterized such vicarious learning derived from practice as "stolen knowledge." As they argued, being immersed in practice and watching others engage in practice helps observers to understand the nuances of work and the contours of knowledge. Observation of others in practice, as well as the ability to see how other people respond to one's own practices, create the conditions for joint practice (Brown & Duguid, 2001; Wenger, 2000).

Second, social media provide fodder for conversation that allows people to more easily initiate and maintain their interactions with each other. Interactions that occur on social media persist over time in discussion threads and forums that individuals can return to at any point (Ellison, Gibbs, & Weber, 2015). This persistence is an important feature for fostering connections among people because the production and the sharing of knowledge are not discrete events. Social media provide users the ability to edit, post, review, and even engage additional actors in a discussion. These practices rely on a system that is not bound in time and can record interactions among people indefinitely in a way that contributes to the practice of knowledge sharing (Treem & Leonardi, 2012). Presaging the advent of social media, Erickson and Kellogg (2000) noted, "Persistence opens the door to a variety of new uses and practices: persistent conversations may be searched, browsed, replayed, annotated, visualized, restructured, and recontextualized, with what are likely to be

profound impacts on personal, social, and institutional practices.” Thus, persistence, which is enabled by social media, may make room for individuals to connect people who develop relationships and share knowledge with each other.

As Leonard et al. (2015) argued, knowledge sharing in organizations is typically characterized by high degrees of uncertainty about who the target is and how to approach him or her, but information gleaned from visible and persistent information on social media can decrease such uncertainty, thus lubricating the connection between source and target. Decreases in uncertainty are highly correlated with increases in trust. Jarvenpaa et al. (1999, p. 812) suggested that in contexts where employees do not know each other and communicate primarily through mediated channels, they will often build trust not through emotional closeness, but by gathering information about each other to disconfirm any negative perceptions. This view coincides with Lewis and Weigert’s (1985) observation that a key precondition for establishing trust is one’s ability to gather information that disconfirms fears that a person is not trustworthy.

We know from studies of social lubrication that individuals glean information about others from content that they read on social media that allows them to engage in the uncertainty reduction necessary to develop trust (Denyer, Parry, & Flowers, 2011; Leonardi et al. 2015). Researchers have also argued that by developing preliminary trust, employees can establish connections with one another that can facilitate knowledge sharing over time (Ellison et al., 2015). But while these studies have suggested that social media can provide the social lubrication necessary to facilitate knowledge sharing, they do not show, empirically, what type of content motivates employees to want to learn more about their colleagues in order to reduce uncertainty and develop trust. Nor do we understand what role that content can play in sustaining knowledge sharing within organizations over time.

There are, in fact, several reasons to believe that social lubrication accomplished via use of social media may not lead to effective knowledge sharing among employees or integration and encapsulation of that knowledge at the firm level. One reason to suspect problems with social lubrication is that studies of social media outside of organizations have shown that the kind of content that users observe and draw on to initiate conversations with others tends to be very personal in nature (Ellison, Steinfield, & Lampe, 2011; Hampton, Goulet, Rainie, & Purcell, 2011). Employees might not engage in nonwork-related communication when they know management is watching, out of fear of being censured or not taken seriously in their role (Bernstein, 2012). Denyer et al. (2011) showed that the type and volume of employee communication on social media varies greatly depending on who employees think is watching them. One reason to suspect problems is that the very features that make content visible on social media (e.g., public messages, discussion threads, etc.) can provide so much data that important information is obscured. For example, Majchrzak, Wagner, and Yates (2013) suggested that it is so easy to post content on social media, that employees will often post content to new conversational threads or discussion forums without checking to see if others have discussed the topic elsewhere. Consequently, it may be difficult for employees to integrate other people’s knowledge into their own work practices if employees themselves do not directly interact with content that others have created or posted, building on it cumulatively (Haefliger, Monteiro, Foray, & von Krogh, 2011; Majchrzak, Faraj, Kane, & Azad, 2013).

Taken together, theory on social media use for knowledge sharing and integration within organizations suggests that employees who are able to vicariously learn about others by watching and communicating with them can use the information they glean from such interactions to know they can trust them and connect with them. Once they establish these connections, employees can learn what those employees know and they will know how to approach them in ways that increases their likelihood of receiving knowledge from them. But while existing theory suggests that all of these positive benefits can occur, the empirical research reviewed above suggests a number of findings

that complicate this ideal picture. Thus, how employees move from connecting with each other to actually engaging in knowledge sharing practices is unclear, yet this is key to understanding the role that social media may play in strategy execution. Given the lack of our knowledge in this area, we ask the following research questions:

RQ 1: What are the mechanisms that enable social media users to develop the trust necessary to connect with each other such that they can share knowledge?

RQ 2: What are the conditions under which knowledge that is received from connections made and maintained on social media can be integrated and used by the firm to continually enact its knowledge strategy?

3 | METHODS

3.1 | Research settings

Given the scarcity of theory and evidence on how employees engage in knowledge sharing practices on social media, we use an inductive, comparative, and longitudinal study design (Christensen & Carlile, 2009; Eisenhardt, 1989; Eisenhardt & Graebner, 2007; Yin, 2014). We drew from data collected in two organizations that implemented social media sites to help achieve their knowledge-based strategies: American Financial and GlobalMoves (*pseudonyms*). American Financial was a large multibillion-dollar financial services firm that offered direct banking and payment services for consumers and corporate clients. American Financial had over 15,000 employees across eight locations. In late 2010, executives at the company launched the social media site, called "Jive" (made by a company called Jive), which looked nearly identical to publically available sites such as MySpace and Facebook. According to a senior vice president, the implementation of Jive was directly tied to the company's knowledge-based strategy: "We built our strategy on our distinct competencies. To make it work, we have to get knowledge from all different parts of our company and bring it together. That's hard to do. We decided to adopt Jive to try to help us share knowledge and help us execute our strategy."

GlobalMoves, also a multibillion-dollar enterprise, operated a technology platform to facilitate an Internet marketplace similar to Amazon and eBay, where retailers, product manufacturers, and other service providers built online storefronts on the company's Website. With over 10,000 employees, across 15 countries, GlobalMoves generated revenues from such retailers through fixed monthly fees, sales of advertising, consulting services, and a percentage of gross merchandise sales from its online shopping channel. In early 2011, GlobalMoves launched its own social media site called Yammer (made by Microsoft) to also promote knowledge sharing across their geographically dispersed organization. According to the CEO, a knowledge-based strategy was pivotal for his company that competed in a fast moving e-commerce services business. The CEO credited the early growth of his domestic operations to knowledge sharing among functional groups and expected Yammer to extend the trend across globally distributed employees: "The reason our company grew so fast in the early years is because of the massive amount of expertise sharing across the organization. We always want to encourage the flow of internal information and communication so that everyone can learn from one another. Now we need for this to continue across our organization worldwide." The CEO established an internal social media committee to promote Yammer as a workplace version of Facebook.

American Financial and GlobalMoves were ideal settings to gather data on whether and how social media sites at both organizations evolved through employees' enactment of the knowledge sharing practices (Details on the commonalities and differences between the two settings can be found in Appendix S1). In both settings, we began data collection just before the sites were implemented and followed their use over time. In fact, American Financial and GlobalMoves implemented their respective social media sites within three months of each other. This parity in implementation was important for our study because attitudes about and uses of this emerging social media platform within organizations have been evolving rapidly and both organizations began their journeys using these tools at roughly the same time. Consequently, we were able to account for the wider societal views about social media use at the time of adoption (Treem, Dailey, Pierce, & Leonardi, 2015).

3.2 | Data collection

Following the lead of scholars who have conducted comparative studies of organizational practice across settings (Barley, 1996; Bechky & Okhuysen, 2011), we combine semi-structured interview data drawn from longitudinal qualitative studies collected in the two organizations. We also used information from intranets, organizational artifacts, informant-provided material (e.g., screen shots of on-going conversation on the sites and policy documentation), and informal observations to triangulate and to gain insights about the respective contexts and knowledge sharing practices that we examined. Data triangulation afforded us a rich corroborating strategy to fully capture the richness and complexities of our field studies (Patton, 2002). In addition to the archival data that spanned 38 months, we drew from a total of 166 semi-structured interviews (Kvale, 1996) for this study to learn about how employees used social media to share knowledge. At American Financial, our data were drawn from 68 in-depth semi-structured interviews with 34 employees. Each employee was interviewed twice over an 18-month period. At GlobalMoves, data came from 98 in-depth semi-structured interviews with executives and employees—20 of whom were interviewed twice over a period of 24 months.

3.3 | Data analysis

To begin analyzing our data, we followed Strauss and Corbin's (1998) recommendation to categorize data, in an iterative fashion, into codes that captured our main topic of interest. Using this open coding procedure with the software program NVivo, we analyzed our interview transcripts with an eye toward identifying codes that described how the implementation of social media shaped knowledge sharing within the company. In the second phase—axial coding—we grouped codes created during the open coding phase into categories of like properties and dimensions. The iteration among data, categories, and concepts concluded when we reached theoretical saturation, that is, when no new categories or concepts emerged in our theoretical development process. This process was applied to each set of interviews collected at both companies.

Next, we compared the results of our coding across the two settings (Eisenhardt, 1989; Yin, 2014) by scrutinizing the practices that people engaged in when they first began using their respective social media sites just after they were implemented. For instance, we noted consistent patterns of curiosity that influenced employees' recurrent visits to the sites in both cases. Informants at American Financial explained the reason for logging into Jive was to learn what they described as "what's going on." Informants at GlobalMoves also used the exact portrayal of wanting to see

“what’s going on” as the reason for their interest in the activities on Yammer that led them to log in.

During this stage, we cycled between the data and the literature to help make sense of emerging concepts. Returning to the example of identifying curiosity to illustrate the latter, we turned to the nascent literature on organizational curiosity (Harrison, 2011) to make sense of the curiosity that was prevalent in both settings and discovered distinctions between explanations involving organizational curiosity in the literature and the recurrent curiosity that noted in our data. We labeled the recurrent curiosity that the sites elicited “generalized curiosity” because, in both cases, employees did not have a target for their curiosity, hence our characterization of their behavior as generalized. We then verified that the generalized curiosity in both settings was linked to knowledge sharing.

We then turned back to the data to uncover the practices that people employed to move from curiosity to knowledge sharing. To do so, we flagged every instance in which informants mentioned identifying the presence of knowledge that could contribute to their work. Scrutinizing the practices and processes underlying the discovery and eventual sharing of knowledge generated the social lubrication category to capture the surfacing patterns on how members developed interpersonal trust or the extent to which people were confident in the words, actions, and decisions of others (McAllister, 1995, p. 25) through observation and familiarity as the precursor to knowledge sharing (Leonardi et al., 2015). The type of trust that emerged was distinct from that covered in the literature, leading us to create a new category we labeled *passable trust* to capture the satisfactory threshold of trust or the extent to which observing focal actors were sufficiently confident in the words, actions and decisions of others that they discerned through observation prior to making contact with knowledge holders.

Remarkably, our comparative approach revealed similar patterns centered on tensions that arose between the social and work (e.g., knowledge sharing) practices across the two companies over time. The longitudinal nature of our design was particularly important to unearth those effects (Burgelman, 2011). The nonwork-related versus work-related tensions had similar effects of diminished knowledge sharing in both settings based on distinct manifestations across the two sites. Employees at American Financial and management at GlobalMoves originated the tension that destabilized the utility of the sites. We revisited our data to look for the time period where these changes took place to uncover the phases that shaped these outcomes. As a final step of our analytical approach, we cross-checked our model with several members at American Financial and GlobalMoves to validate and sharpen our conceptualizations and attendant claims as well as to deepen our understanding of our phased results in the context of both organizations (Miles & Huberman, 1994).

4 | SOCIAL MEDIA USE AND KNOWLEDGE IN PRACTICE

Both American Financial and GlobalMoves launched their sites—Jive and Yammer, respectively—by sending automated emails from the launch teams inviting employees to register and join the sites. In both cases, the sign-up process was easy, requiring only a company email address to log in. The brief introductory message from the launch team characterized the social media site as a Facebook-like system. The vast majority of informants, who were accustomed to using Facebook outside of the workplace, felt Jive and Yammer were familiar and signed up with few reservations. Thereafter, they received a brief welcome email with simple instructions for: (a) following people who were of interest, (b) starting or participating in a conversation, and (c) completing a profile “so that people know who you are.” The ease of using the sites drew employees further in.

At the time of launch, the director of corporate communication at American Financial emailed the entire organization and conducted several town hall meetings to explain that the purpose of Jive was to help employees exchange knowledge and information more easily in order to increase efficiency and productivity. He told employees that company executives believed that to be competitive, American Financial needed to develop new products and acquire new customers faster than the competition and that the company's ability to do so depended on leveraging the knowledge of its employees. Yammer's purpose was similar, and within three weeks of its rollout, the launch team at GlobalMoves, led by an executive, started a campaign to convey that message. Employees at GlobalMoves were encouraged to share knowledge with one another across national borders and functions, with emphasis on tacit knowledge exchanges following Nonaka et al.'s (1995) knowledge creation model. During the rollout of Yammer, company officials indicated that doing so would accelerate people's ability to leverage the knowledge that had been accrued worldwide in order to outperform competitors. Despite these grand statements by management linking social media use and knowledge sharing to strategy at both companies, employees at American Financial and Global-Moves initially had more interest in learning about other people on the sites than in sharing knowledge.

We identified three theoretically and empirically distinct phases of employees' use of the social media sites. In the first phase, participants had generalized curiosity that repeatedly drew them to the sites after launch. The second phase entailed an unanticipated synergistic period when the posting of both nonwork-related and work-related content on the sites helped employees discover what knowledge people held. In this phase, if users of the sites felt a level of trust, which we call "passable trust," they were willing to seek and share knowledge (Illustration of engagement, curiosity and lubrication practices for knowledge sharing through social media in both settings can be found in the Appendix S2). The third and final phase saw tension arise between users' nonwork-related and work-related activities on the sites, which ultimately derailed the knowledge-sharing practices and the firm-level knowledge that had taken hold. Table 1 provides a timeline of activities and their corresponding phases. Table 2 provides the summary of results with percentages of informants who reported the behaviors described below.

4.1 | Phase one: inspiring curiosity

Early postings on the sites piqued people's curiosity and sparked a broad desire to know about other employees' nonwork-related and work-related activities as well as company-wide affairs. In fact, Jive and Yammer inspired ongoing generalized curiosity that influenced people to use the system recurrently. At American Financial, most employees logged in to Jive in the morning when turning on their computers and kept it open throughout the day. As one employee noted, "I get on Jive every morning. I open it right when I open my email and leave it on all day. You just want to get all the communication flowing first thing." In addition to email and Jive, employees at American Financial also frequently used instant messaging to communicate with coworkers. But unlike email and instant messaging, which carried predictable kinds of information (e.g., follow-up response), Jive was much more surprising for users. In addition to receiving messages meant specifically for them, employees were also able to observe conversations occurring among other people in the organization. As a marketing specialist commented:

My email and IM are boring. But Jive is kind of exciting because you get to see what other people are saying to each other. It's like being able to eavesdrop on your coworkers. But it's not shady or anything. You just get really curious about what other

TABLE 1 Timeline of key events at both settings

	Phases	Key dates	Events
American Financial	Phase I	December 2011	Decision to launch Jive to enact knowledge strategy
		January 2012	Jive launched with invitations to activate account sent to multiple major divisions
		February 2012	Guide to technical usage of Jive posted by corporate communications
		April 2012	Usage increases with more than 50,000 posts by employees
	Phase II	May 2012	Jive rolled out to all divisions and company subsidiaries
		June 2012	First assessment of Jive shows employees improving ability to find knowledge
		July 2012	Executives encouraged to increase participation on Jive instead of on intranet
		October 2012	Usage increases to 150,000 posts
	Phase III	December 2012	Employees increasingly worried about management observing their work
		February 2013	Dramatic slow-down in posts and in new account formation
		May 2013	Precipitous decline in usage across entire company
GlobalMoves	Phase I	February 2011	Decision to launch Yammer to enact knowledge strategy
		March 2011	Yammer launched with invitations to activate account sent to all employees
		April 2011	Executive committee formed
		May 2011	Manuals for beginners with emphasis on effective Yammer for knowledge sharing
		December 2011	100,000 posts reached and announced at company-wide meeting
	Phase II	January 2012	Executives from foreign subsidiaries join executive committee to increase global base
		February 2012	Tracking of types of posts commences
		March 2012	Objective for 2012 set for 25% growth globally established
		April 2012	Executives encouraged to increase their own participation on Yammer
	Phase III	May 2012	Usage policy deployed emphasizing Yammer as a way to meet work goals
		June 2012	Guidelines enforcing the goal of work posts sent to all employees via PowerPoint
		August 2012	“1 post/day, <i>like</i> or leave a comment” campaign launched to grow user base
		March 2013	Monitoring to verify business use established (e.g., departmental use)
		June 2013	Controversial incident ensues; management warned against personal attacks online
		June 2013	Company executives cease to use Yammer
		July 2013	Presentation delivered and posted to encouraging only business-related posts
		August 2013	Usage begins to decline
		December 2013	Precipitous decline in usage across entire company

TABLE 2 Summary of percentages of informants who reported behaviors on Jive and Yammer

Mechanisms	Jive	Yammer
1. Generalized curiosity	77%	83%
2. Passable trust	42%	37%
3. Nonwork content leading knowledge sharing	64%	53%
4. Firm-wide knowledge encapsulation	27%	19%
5. Anxiety about nonwork interactions	8% Management 73% Employees	100% Management 6% Employees

people are doing and what kinds of things other people are working on and watching them talk with other people on Jive or watching them post about what they're working on. So you get to scratch that itch.

A marketing manager at American Financial felt the same tug. Despite having generally negative perceptions of social media, she said she continually returned to Jive to satisfy her curiosity about what was happening at the company:

I don't really like Facebook and I didn't like the idea of Jive because it seemed like a waste of time. Like, keep your personal life at home; this is work. But I find myself going back on because I'm just interested to see what's going on with other people and across the company more generally. You just can't do that any other way.

At GlobalMoves, people's use of Yammer ranged from once a week to multiple times daily. For some employees, signing into Yammer was also part of their morning routine to glean new information that might have surfaced overnight. As one accountant noted: "The second I get here, I fire up my computer, I open up email, I open up a resource I use for tracking press, and then I open up Yammer. And it sits open all day." Similarly, an operations manager liked to log into Yammer at the start of her day to acquire what she described as "a daily digest" of what people were chatting about. At times, she explained, the digest included a subject that piqued her interest, prompting her to stay tuned to the evolving online discourse. An executive assistant found Yammer interesting when the number of people posting varied content rose. She eventually created an affinity group representing her cultural heritage, and was soon joined by a group of people at multiple subsidiaries who shared similar interests. A senior country manager who adopted Yammer immediately said he valued the far-reaching exposure the site uncovered for him: "You get to know what's being cooked in France, U.S., Japan." For others, like a 28-year-old software developer who never posted but logged in weekly, Yammer offered a window to passively learn "what's going on" and absorb trends. Workers at both companies exhibited generalized, self-reproducing curiosity, which led them to enter their respective sites repeatedly. This steady participation propelled employees into a new phase of site use.

4.2 | Phase two: lubricating social interaction for knowledge sharing and encapsulation

Through regular visits to the sites, users eventually discovered helpful knowledge (e.g., contacts and information) relevant to their work. Although nonwork-related interactions are what typically sparked employees' curiosity and boosted traffic to the sites, the resulting flow of messages set the stage for future knowledge sharing. Jive and Yammer grew to be spaces where employees engaged in both nonwork-related and work-related interactions. Two factors were central to this phase:

(a) the integration of nonwork-related and work-related interactions, which helped employees discover people with valuable knowledge, and (b) the development of a degree of trust (“passable trust”) that employees needed before they were willing to tap others for knowledge sharing.

4.2.1 | Synergistic nonwork-related and work-related interactions

In the weeks and months following the launches, employees at both firms used their new sites to interact with coworkers, to join functional or interest groups, and to post work-related content, such as informative articles and reactions to developments both inside and outside the company. In addition, people regularly interacted around nonwork-related events. They posted about their personal lives, reporting what they did during the weekend, sharing personal pictures, and sent invitations to private parties. People wrote about their political views or visits to vineyards that triggered an exchange with like-minded colleagues.

Neither American Financial nor GlobalMoves prohibited such nonwork posts. Some employees were torn about what kind of content to contribute. As one junior employee at American Financial noted:

At first I didn’t really want to post anything personal on Jive. If I want to connect to people about personal stuff I can just friend them on Facebook. But other people do it and, you know, it is really interesting to see what they’re doing, and it makes you feel kind of like you know them better. So I started doing it too, and it’s amazing the number of people who I don’t know who comment on personal things. And it kind of helps me feel closer to the people at work.

A growing appreciation of nonwork-related content in the workplace was also prevalent at GlobalMoves. For example, Yammer became a place to share nonwork experiences such as one user who posted “a photo op in our Halloween costumes and our Halloween party” or another who learned about his counterpart’s favorite sports team. Another user discussed how he learned about his shared love of swimming or mountain climbing with others on Yammer. These exchanges became a foundation for connections that could potentially be fostered. The following quote from a quality assurance associate typifies how sharing nonwork-related content in addition to work-related content became not only common but desirable as Yammer gained acceptance:

[People] will show office party pictures or clubs that they’re part of. And then we just check off, “Oh, I like this.”... I’m aware of some of the things happening in different branches of the company, which is very interesting because I could see a lot of details. You can easily find pictures. People talk about their anniversaries, their problems at work, technologies.

The messages about both nonwork-related and work-related content on the respective sites in the two companies had an unanticipated synergistic effect: It helped employees discover what knowledge people held. Typically, employees were initially drawn to personal and other nonwork-related content. But when paying attention to someone’s nonwork-related content, employees came across material that intrigued them professionally. As an executive at American Financial observed, this type of learning was surprising and robust:

I’ll admit I’m drawn to Jive because it’s fun. You learn things about your work colleagues’ style and personal lives. Like this one time, I was following this guy in the e-commerce division who posted about soccer statistics. I thought it was cool and

interesting because it was a hobby of mine too. So I went to his page to see if he'd written anything about the Euro Cup, and I saw him and another guy in marketing talking about a promotion they were working on. I was like, "Whoa, this promotion is a great idea." So I called him up and introduced myself and told him I kind of stalked him because of his soccer posts, and we both laughed. And then I said, "Hey, I saw about this promotion you're doing. Can you tell me about it so we maybe could do something like this in my division?"

At GlobalMoves, a member of the U.S. subsidiary, who had little prior exposure to his foreign colleagues, explained that Yammer helped him feel more connected, in his words "[I] get a feel for what everyone's doing over there and what sort of projects and how they're doing. So I definitely feel more connected to [them]." A data analyst who relied on Yammer to expand her perspectives about company-wide activities indicated that her sense of connection and common ground stemmed from the meshing of nonwork-related and work-related postings:

It's interesting seeing everything on Yammer, because it's more of a place for social interactions. Social meets work. Social meets the professional venue.... Looking at the feed, people are sharing professional things, but they're also sharing more personal things. It's interesting to see that integration and to get to know people....

At both firms, the nonwork-related content was a gateway to discovering useful work-related content. As a mid-level marketing manager at American Financial commented,

I don't really go on Jive to find knowledge. I don't use any of our knowledge management technologies for that either. It's too abstract and hard. Sometimes I find knowledge I need when I'm following someone because of their personal life. I guess that's just lucky, though, right?

Although informants thought that the synergies between nonwork-related and work-related content were lucky, our analyses of the uses of Jive and Yammer revealed a much more regular pattern. The data show that users *often* stumbled on knowledge for which they were not originally searching. Table 3 provides examples, from both firms, of work-related information that employees discovered when they were drawn into people's nonwork-related content.

4.2.2 | Visibility and the development of passable trust

When employees identified someone with knowledge who could advance their work, their response depended on their history with the person. If they already had a relationship, they reached out immediately. For example, a manager who was prolific on Yammer had contact with many users because most employees frequented the on-boarding program he designed and delivered. One day, after he posted an article, nine people replied quickly to react or pose detailed questions. All nine were people he knew.

In contrast, users seldom reached out immediately to knowledge holders they did not know. Instead, they shifted from the *generalized* curiosity that had first drawn them to the sites to *targeted* curiosity—a desire to learn specific information—about particular individuals. Their aim was to discern two conditions. First they wanted to assess the approachability of the knowledge holders—their willingness to share their expertise. Second, users wanted to gauge the knowledge holders' trustworthiness. Specifically, they sought *passable trust*—confidence that someone is sufficiently reliable. In contrast to trust (Meyerson, Weick, & Kramer, 1996), faith that is quickly placed on in-group

TABLE 3 Examples of how knowledge was identified and accessed via social media sites in both settings

Jive	Yammer
a. Observed messages mentioning the name of an expert in search engine optimization (SEO), which employee then sought out to ask questions about the task	i. Saw and joined site's Legal forum to exchange ideas with international colleagues, posting and receiving feedback on legal regulations and standards relevant to his or her work question, and determined the contact responsible for social media
b. Saw document title in coworker's message, indicating it contained a forecast report. Employee asked poster for a lesson on conducting a forecast for a new market segment	j. Reviewed the site's employee profiles to find appropriate contacts by name and title, in order to build relationships by reaching out, exchanging experiences and asking questions on marketing topics
c. Read a message from a colleague seeking help, leading the employee to ask the recipient about how to make spending projections for customer acquisitions	k. Posted question to determine how to view the customer's journey in order to learn where to attract his attention and which advertising media to use
d. Reviewed a message between two employees containing a project tracking template, which allowed the employee to ask the poster for a lesson on project management	l. Reviewed technical forums online to ask and receive feedback on the IT platform the employee was tasked with working on, which became especially useful when working against tight deadlines
e. Observed a coworker's comment about an upcoming meeting, enabling the employee to ask for an introduction to someone at the Datacenter who could help extract promotional histories	m. Posted questions related to technical problems the employee was facing in order to receive valuable feedback from headquarters on their experience. Similarly, the employee also shared information on his experience on the project
f. Saw a message sent by a coworker about a focus group related to social media. Employee then asked for the name of the focus group leader for info on how to run a social media contest	n. Scanned site for updates on current technical projects underway and new product features that will be released to share with clients, as someone with a nontechnical focus
g. Saw a conversation between a close coworker and someone in legal, which allowed the employee to ask for the appropriate legal contact through his or her friend. Employee sought to learn the best language to use in a complaint with NAD rulings	o. Reviewed and posted marketing-related articles and reports to both gain and provide information with colleagues internationally
h. Observed a colleague asking someone in the Finance department a question. Employee then asked the same Finance contact how to expedite a query related to a new promotional program	p. Skimmed daily email summary of activity on the site, which led employee to read colleagues' discussions on how to resolve an issue on the servers

members of a temporary team who engaged in group tasks that are often tied to a common functional role (e.g., cockpit crew), but that may be eroded by new evidence, passable trust did not rely on group membership or known common tasks associated with the group's function. Rather, individuals were satisfied that a target could be sufficiently counted on by concluding that there was enough observed evidence of likely trustworthiness.

Consider the work-related information presented in Table 3 (example a.). Clarissa, a marketing specialist, explains how her nonwork-related interaction with a coworker on Jive led her to discover the existence of an employee at the company who could help her solve a work-related problem:

I was talking with Joe about a [TV] show. I posted a message on his wall and then just scrolled down to see what was there. He had sent a message to someone...asking about search engine optimization.... I asked him who the guy was and he told be he was an expert at it [search engine optimization].

Transparency facilitated passable trust for Clarissa who felt comfortable asking the search engine optimization expert, Ian, for the knowledge she needed. When Clarissa identified that Ian had knowledge about improving search engine optimization, she turned to Jive to make a determination about whether or not to ask him for that knowledge. Clarissa spent time examining the interactions

that Ian had with other American Financial employees on Jive. Because the site recorded these interactions and kept them in threaded sequences, Clarissa was able to see into his conversations with others. After browsing on his wall, Clarissa decided to approach him because she trusted that his response to her would not be uncommon: “So there was a lot of trail on his page of people asking him questions and him giving polite responses.” Clarissa sent Ian a message on Jive asking if he could give her some tips on search engine optimization. Ian asked for her phone number and offered to call her later that day. When Ian did call her, he explained that an important element of effective search engine optimization is making sure that text is not littered with too many keywords, or else search engines treat this as gaming the system and do not give it a favorable rating. He said that, over time, he and others had ascertained that the best percentage of keywords to text was somewhere between 1 and 3%. After Clarissa learned about optimal keyword density from Ian, she integrated that knowledge into her own practice by changing how she wrote text. Clarissa submitted a draft of her text to her manager and as they were discussing it, she revealed how she learned about keyword density from Ian. The manager wanted to quickly ensure that all other personnel in the division could benefit from this insight. The manager asked another employee to incorporate this knowledge in a document that compiled various pieces of knowledge that had been acquired by employees in marketing. The document titled, “SEO How to Guide,” was published on American Financials’ intranet that was accessible to every employee. Over time, writing texts with keyword density below 5% became routine in the marketing department and employees rarely looked at the “SEO How to Guide.”

One of the key features of both Jive and Yammer was that they provided visibility into coworkers’ actions. Our analyses demonstrated that after employees identified people who had knowledge they wished to acquire, they felt vulnerable because they did not want to request information for fear of publically broadcasting their ignorance in certain areas. As consequence, they avoided *broadcasted help-seeding*—a wide solicitation for assistance cast to a wide audience—in favor of *targeted help-seeking*: The search for assistance from specific individuals for whom the person searching for assistance has deemed worthy of passable trust. As a new employee at American Financial noted, “I don’t like to ask people to teach me or give me anything because it shows them that I don’t know something and then I look incompetent (*broadcasted help-seeding*). I like to vet someone to try to learn if they’re cool, or if they will form a bad impression of me before I ask” (*targeted help seeking enabled via passable trust*). An engineer at GlobalMoves echoed the same insecurity about posting questions: “It’s scary that everybody’s going to see what I posted.” He added that his greatest worry was being regarded as incapable by seasoned engineers. Therefore, he tried to do due diligence before revealing any gaps in his knowledge; he “lurked” on Yammer while sizing up individuals as “safe” to approach or not. He researched people’s backgrounds and sought to understand them first:

You can see [rank] on an org chart...and learn who is the engineer that works on this piece and once you get some context...you kind of gravitate towards that conversation.... Then I’ll read through what other engineers are...saying in that thread...but I don’t talk a lot. I’m more of a lurker until I have familiarity with the people in the group.

He went on to explain that he would post his question only if he perceived that doing so would not affect his reputation. He might also solicit help via email once he targeted a particular individual from the online conversations whom he passably trusted for a subsequent one-on-one interaction.

For employees at GlobalMoves, witnessing the Yammer activity of coworkers located in other countries was particularly important for developing passable trust, because it was their only means of gathering visible and persistent data about foreign colleagues. A self-proclaimed Yammer “addict” who toggled between his work and the site all day long recounted how he forged a

TABLE 4 Examples of knowledge shared between individuals, integrated into existing knowledge base, and encapsulated as firm-level knowledge

Knowledge shared	Knowledge integrated	Firm-level knowledge
Jive		
a. ^a An important function of SEO is low keyword density. A reliable density percentage is between 1 and 3%	Revised SEO parameters on the project to incorporate knowledge about keyword density. Required a change in the way that text was written to reduce number of keywords included in description	Marketing department created new guideline indicating that all copies should be inspected for keyword density. Guideline recommended keyword density no greater than 5%. Guideline was published in “SEO How-To Guide” on intranet site
Yammer		
i. Drew from marketing idea from the United States to develop similar piece that was customized for the Japanese market	Combined this knowledge of databases with understanding of minimum market size needed to make new market an attractive prospect for entry	Database subscription manager created report with links to databases with summaries of market characteristics and tables indicating which databases were likely useful for which markets. Report was sent to all marketing managers and updated monthly. When database subscription manager left company report update was listed as a job requirement for new hire
j. Japanese employee explained how to use tool that tracks customer behavior in order to align advertising that customer would be interested in	Created a new project budget document that included investment and expense categories for customer acquisitions— expense category was divided into several sub-categories: materials, travel expense, contracts	After several months of reviewing budgets, a new routine emerged in which managers would request investment and expense columns in budget plans. After a few months of these requests, the budgeting routine was revised to incorporate these new categories on submission of budgets for management approval
k. Learned about how to approach privacy issues that arose on e-commerce site that was open to the public	Employee revised and created new marketing plan that incorporated marketing concept and plans to customize aesthetics to conform to Japanese market	As part of a regularly scheduled worldwide marketing meeting, the new marketing concept was disseminated to marketing specialists worldwide for use across all markets with tips on the components that should be customized to fit market differences
	Employee adopted customer tracking system and was able to align advertising choices through embedded algorithm in the system for all of his customers	The customer tracking tool was implemented and used as a metric to measure success and to benchmark with other country sites in the organization
	Incorporated the findings in local legal documentation	Global legal group formed as community of practice on Yammer with the cross-pollination of ideas and ensuring that legal decisions are made in the context of the global organization versus local contexts

^a Letters correspond to examples in Table 3.

relationship with a colleague from another country because of his bold behaviors on the site: "I thought he was very open and blunt about his opinions. I liked that. One day, he even openly criticized management for everyone to see." Such presence gave the first employee the basis for passable trust, which helped the two men form an ongoing peer mentoring relationship offline. Table 4 expands on three examples (which were introduced in Table 3) of how knowledge was identified and accessed on the sites from both American Financial and GlobalMoves. The first column in Table 4 indicates what knowledge was shared following nonwork-related interactions that exposed employees to work-related content.

4.2.3 | From the individual to the firm: integration and encapsulation of knowledge

In this section, we elaborate on how the knowledge some individuals gained through social media was integrated into their own practices and then encapsulated within the organizations. In this regard, the knowledge becomes accessible to employees across the firm. In short, the knowledge shared in the sites was transformed into firm-level knowledge, typically in the forms of routines. For example, a Japanese marketing manager at GlobalMoves noticed the artwork for a marketing concept that his counterpart from the United States posted on Yammer one morning (Example i, Table 4). He contacted the U.S. marketing specialist to learn how the concept was developed and what the plans were to disseminate it in the U.S. market. During his conversation, he confirmed his belief that this would work in the Japanese market with some tweaks to better fit the aesthetics of the region. He incorporated this new knowledge into his existing marketing plan along with the customization work that he anticipated would be necessary to better serve his market. At the next worldwide marketing meeting where specialists from every country gathered routinely to discuss current plans and share specific ideas that could benefit the broader organization, the Japanese and U.S. marketing specialists presented the marketing concept with tips on the components that should be customized to accommodate market differences. Many of the marketing personnel on that call incorporated the concept into their own marketing plans.

In a similar fashion, engineers struck up a relationship through a group that formed on Yammer. One of the engineers from the German office learned about a web analytic tool that the more advanced Tokyo office had implemented locally. Before long, he contacted the fellow engineer in the Tokyo office from his Yammer group to get detailed information about the tool itself as well as the network environment that would be required to support it. In turn, the German engineer adopted the tool and posted his satisfaction with how it worked to the group on Yammer. American and French engineers expressed interest in the tool for their respective local markets. Observing the gap and the success of the tool in both Tokyo and Germany, the manager of the group required that the tool be adopted across all markets. He explained:

We are trying to make everything consistent, i.e., to ensure that the right tools are integrated. This [web analytic tool] now is desired to perform measurements on a global dashboard in order to make it consistent.

In this example, knowledge about the web analytic tool, which became a topic of conversation because one engineer in one market sought it on Yammer, triggered interest in many parts of the organization and was eventually adopted company-wide.

The encapsulation of shared knowledge in firm-level routines also occurred at American Financial. For instance, several employees in the marketing department struck up a friendship on Jive because of their mutual interest in baseball launched a post about which databases were best for determining the Total Available Market (TAM) and Serviceable Available Market (SAM) for new

products (Example b, Table 4). Another employee in the marketing department who had begun to follow them because of his interest in baseball realized that TAM and SAM be combined with the results of a project he had just competed on what the minimum market size necessary to be an attractive market for potential entry for American Financial. Over time, the head of the group agreed to have the pieces of knowledge combined into a database that would become the go-to-guide for all employees looking at new market entry.

Encapsulation of knowledge at the firm level had several benefits for American Financial and GlobalMoves. At American Financial, Jive promised to contribute to the company's competitive advantage by fostering new connections across various divisions of employees that could help develop new products rapidly. Those promises were realized for two key product offerings—cash-back bonus plans and new rate plans for loans—that were borne out of relationships that originated on Jive. Executives felt that Jive was effective in bringing people together to innovate on products from knowledge accrued by its employees.

Similarly, Yammer helped meet important knowledge sharing and productivity priorities for GlobalMoves. It created a global online community with employees from the CEO to the newest employee actively posting messages on the system. Leaders praised the emergence of common interest subgroups (e.g., functional groups) in which people exchanged knowledge, received help with local problems, and accomplished work tasks more quickly because people had access to fast applicable information. Taken together, senior leaders believed that Yammer contributed to making their globally dispersed workforce more productive. For leaders themselves, an important gain was their ability to post messages (one-to-many) that instantly reached thousands of employees who interacted on the site routinely.

4.3 | Phase three: paradox of nonwork interactions and the decline of knowledge sharing

Ironically, the nonwork content of Jive and Yammer—the very factor that drew users to the sites during phase one and that fostered passable trust and knowledge sharing which eventuated into firm-level knowledge during phase two—became a subsequent source of anxiety. Within six months at American Financial and 11 months at GlobalMoves, conflict surfaced between the nonwork-related and work-related content displayed on the sites.

At American Financial, employees became uncomfortable with the nonwork-related content on Jive because they feared being perceived as socializing excessively. As a junior associate in card member services commented, “I just get nervous that there is so much personal stuff on Jive. I’ve really stopped using it after really posting a lot, because I’ve been getting worried that my boss might not think I’m spending enough time doing serious work.” At GlobalMoves, management became uncomfortable with the personal interactions on Yammer, fearing that the site’s intended purpose was being dwarfed. While GlobalMoves’ leaders actively dissuaded nonwork-related participation on Yammer, employees at American Financial dramatically curbed their own activities on Jive. The result was the same at both companies: The frequency of use of the sites declined, and in turn, knowledge sharing and the concomitant production of firm-level knowledge diminished significantly.

A little over a year after the launch of Jive at American Financial, informants indicated that they were using the site less frequently for one of two interrelated reasons: They feared that contributing to a platform dominated by nonwork-related content could tarnish their reputation, or there were fewer and fewer regular Jive participants to learn about or follow. A senior account services’ manager commented on the first issue, “I just don’t use Jive that much because it’s gotten so much like Facebook. If you’re on there all the time, people might be wondering if you are even doing your work. I know I wonder that about people sometimes.” Another senior manager from the e-marketing division

commented on the second problem, “I used to like to see what people were up to. But now fewer and fewer people are on Jive, so it’s just not as worth it for me to go on and browse around. There’s just not that much interesting content.” These two quotes illuminate why the use of Jive dropped off at American Financial. Employees were drawn to the site because of people’s nonwork-related postings, not their work-related postings. As people decided to contribute less personal content, the critical mass that once attracted and sustained many participants waned. Consequently, fewer employees spent time on Jive, resulting in a vicious cycle. Executives at American Financial were sensitive to this problem and its consequences for knowledge sharing at the company. As one executive observed:

I know people are not on there as much because there is this stigma that it’s too “social.” But that’s all coming from the employees. No one here in American Financial’s leadership ever said Jive couldn’t or shouldn’t be used for social communication.... That’s bad news for our knowledge strategy, because without employees sharing knowledge freely across the company, we can’t execute our strategy.

With nearly a third of the workforce actively using Yammer, GlobalMoves’ management worried about the patterns of use that combined nonwork-related and work-related chatter. In addition, within 15 months of the site’s launch, a conflict among a group of employees unfolded online, further fueling management’s anxiety. A disagreement about the virtues of a company event between two people ballooned into a heated debate with over 100 posts by 14 participants in a 72-hr time frame. Eventually, the exchanges devolved into personal attacks, at which point, a member of the Yammer executive committee intervened. The incident revealed the potential risks of social media for the management. Control and monitoring of Yammer intensified thereafter.

The management at GlobalMoves, like that at American Financial, had never articulated any protocols regarding nonwork-related content on the site. The behaviors that occurred emerged organically. GlobalMoves’ original aim was to increase the number of users who could connect and share knowledge on the site. However, in reaction to the surge of nonwork-related content and the controversial incident, company-wide communications with elaborate, and at times, contradictory guidelines were dispatched. On one hand, people were encouraged to be open, to have fun, and to post at least once per day, with the expressed aim of promoting knowledge sharing that would accelerate efficiency and growth for the company. On the other hand, participants were discouraged from engaging in personal interactions, with exhortations to post only content that would add value to others and to GlobalMoves at large. Participants were also reminded of the serious and professional purpose of the site. The guidelines pointed employees to other social media spaces like Twitter and Facebook for interactions unrelated to work.

The new guidelines diminished the discovery and eventual knowledge sharing that people had grown accustomed to doing on Yammer. In fact, users became acutely aware that management was monitoring activities on the site. Many informants reported that they discontinued their use of Yammer because they believed it was no longer functioning as an open forum with spontaneous discussions and easy networking across the organization—the attributes that had attracted them in the first place. The leaders of the organization who were occasionally visible on Yammer were the first to disappear from the site. The resulting company-wide loss of knowledge sharing was almost immediate. In addition, once Yammer lost its user base, leaders’ capacity to enact their strategic messaging was lost. As one reflected, “I am quite tired of having to explain our strategy over, and over again. I don’t have any space online to explain things to people. So, now, I have to address people’s concerns one at a time.” The leader went on to explain that other platforms like the company’s intranet was inadequate for the actual interactions that he could have with workers worldwide.

For the vast majority of users at American Financial and GlobalMoves, constraining guidelines and fears of damaging their credibility spurred withdrawal from the sites. Nonwork-related and work-related interactions diminished simultaneously, resulting in the loss of knowledge sharing in both organizations. With the loss of this knowledge sharing, both firms had difficulty continuing to produce the firm-level knowledge necessary to enact their respective strategies.

5 | DISCUSSION

In order to promote knowledge sharing among employees, many firms have made investments in technologies that promise to encapsulate knowledge in ways that enable them to enact their knowledge strategies. Our analysis and findings at two large organizations suggest a theoretical framework of how social media use contributes to a knowledge strategy implementation over time that we trace in Figure 1. We posit that social media will enable the enactment of such a knowledge strategy through a sequence of three phases constituting employee connection and engagement. In phase one, generalized curiosity about nonwork-related postings draw employees to the site recurrently. The next link depicts the second phase in the process where we propose three mechanisms that characterize the sequence of behaviors that ensue once employees begin to use the social media sites: Social lubrication, knowledge sharing, and the encapsulation of knowledge at the firm level. The first mechanism—social lubrication—begins with employees engaging with nonwork-related content produced by their colleagues that exposes them to work-related content that either contains knowledge or evinces areas in which their colleagues were knowledgeable. This type of social lubrication in which people learn about coworkers, along with being able to observe coworkers' interactions

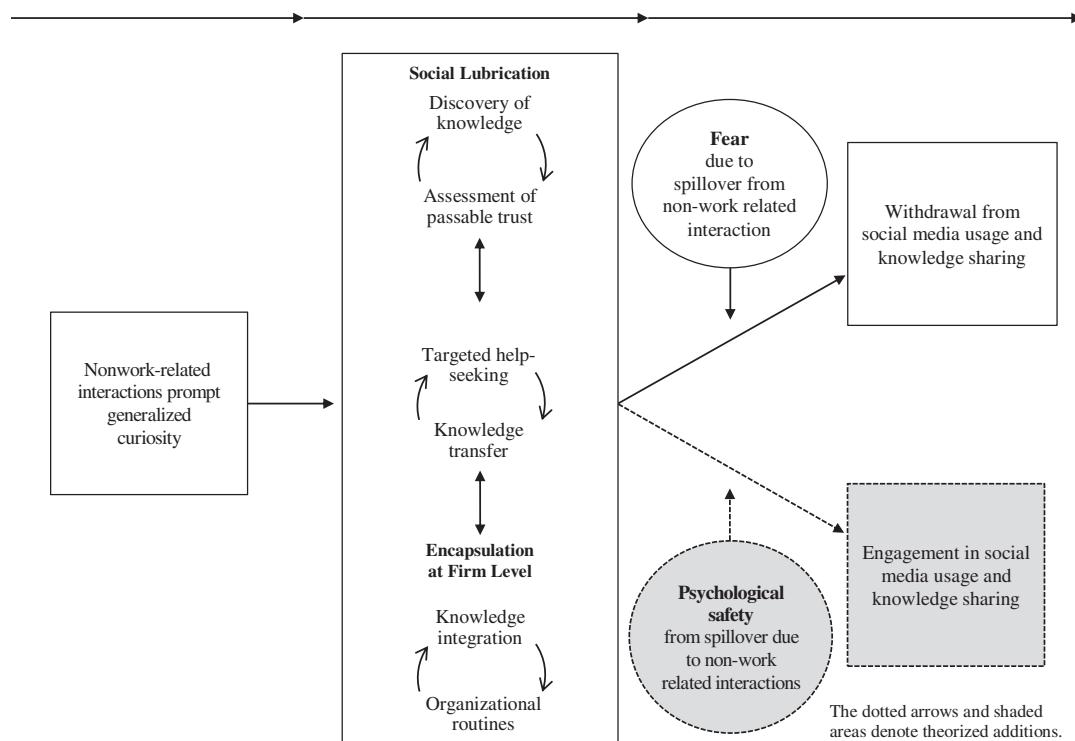


FIGURE 1 Process of knowledge intergation via social media use

with other colleagues, enables the development of passable trust and makes them easier to approach to ask for knowledge. The second mechanism—knowledge sharing—occurs once employees engage in targeted help-seeking and seek assistance from specific individuals who they believe earned passable trust. Knowledge sharing occurs thereafter, which captures the occasion when coworkers transfer knowledge to recipients they deemed trustworthy on the social media site or offline. The next mechanism in the process—the encapsulation at the firm level—involves organization-wide knowledge integration that occurs when those who receive relevant knowledge integrate that knowledge into their own work practices and becomes accessible to others when leaders promote its use widely and encapsulate it in the form of organizational routines.

In the third and final phase, we propose two potential outcomes. The first potential outcome, based on our findings, is employees withdrawing from social media usage and the subsequent knowledge sharing practices based on the fear of spillover from nonwork-related interactions from either employees themselves or leaders in the organization. We theorize an alternative outcome, based on the literature, traced in dotted arrows and shaded areas. We posit that engagement in social media usage would persist if leaders conveyed that employees were safe from professional risk (what Edmondson [1999] calls psychological safety) if they participated in nonwork interactions. This alternative path relies on organizations recognizing that nonwork interactions catalyze the recurrent use of the social media sites, thus prompting generalized curiosity. Our framework makes several contributions to our understanding of knowledge strategy implementation as well as the related literatures on Strategy-as-Practice.

We extend research on the knowledge strategy and management literature in two ways. First, we identify the pre-cursor that helps people connect with each other in ways that exposes nonwork-related and work-related fodder that eventually produces productive knowledge sharing. Although research has documented barriers to knowledge sharing in organizations such as problems associated with search (Katila & Chen, 2008), inappropriate network structure (Reagans et al., 2003) lack of common ground (Carlile, 2002), and insufficient tie strength for type of knowledge sought (Hansen, 1999), little work has articulated the drivers that promote the connections and subsequent relationship development necessary for people to share their knowledge with each other effectively (Hansen, 2009). Second, we trace the manner in which knowledge gleaned in a localized (individuals) context was encapsulated at the level of the firm. In particular, we found that once those who accessed useful knowledge integrated it into their own practice, a second step involved a manager or those with access to a wider audience routinizing that knowledge for a broad audience. Thus, as individual members of the organization developed knowledge and shared it with one another, the organization externalizes that knowledge and harnessed it in enduring routines.

In addition, the emergent concept of *passable trust* from our study serves as a new threshold for understanding the level of interpersonal trust that might represent a sufficient level of confidence for people to share knowledge effectively in organizations, thereby contributing to firm-level knowledge-based strategies. Passable trust speaks to an incomplete or imperfect degree of trust that is still satisfactory within a domain. The primary emphasis on trust and its consequences has been on people feeling confident that others will be reliable and dependable in a global sense (Kramer, 2010; McAllister, 1995). This study also provides an explanation of how passable trust could develop. In contrast to swift trust that posits a temporary system of trust of in-group members who have a priori trusting context based on functional ties (Meyerson et al., 1996), passable trust can be a permanent state such that those who are recipients of passable trust have sufficiently exposed themselves through social and work information disclosures. In the case of our study, individuals developed passable trust by observing people's public behaviors, and therefore, their transparency provides the impetus for others to grant them passable trust for the purpose of knowledge sharing.

In addition to uncovering passable trust as a new interpersonal threshold, we also illustrate a paradoxical outcome in our study: The very nonwork interactions that helped employees to identify knowledgeable others and approach them for needed knowledge eventually came to reduce work-related knowledge sharing. In the case of American Financial, employees became concerned about the impression that they made when they were spending time engaged in nonwork activities, thereby reducing their use of the site. Our longitudinal approach revealed a pattern of oscillation between integration and segmentation of nonwork-related matters and work-related content. Ironically, the integration of nonwork-related and work-related content was seen as an interference with work rather than as a facilitator of knowledge sharing. For example, at GlobalMoves, the organization moved from allowing people to organically connect and share knowledge with each other on the site, to actively dissuading people from integrating nonwork-related matters with the business of the firm. Our finding extends existing theory on the tensions that arise between work and nonwork-related content in the workplace (Dumas & Sanchez-Burks, 2015; Ramarajan & Reid, 2013). In contrast to Ramarajan and Reid's (2013) argument that organizational policies and practices shape employees' nonwork lives, our data illustrate how blurring the boundaries between employees' work and nonwork lives can also influence work practices.

Our study also makes contributions to the emerging Strategy-as-Practice literature, in which a firm's strategy and its knowledge are linked through practice. As Jarzabkowski (2004, p. 529) observed, "just as the literatures on knowing in practice suggest that knowledge is not something that a firm *has* but knowing in action, something that a firm and its actors *do* (Cook & Brown, 1999), so we should examine strategy not as something a firm has but something a firm does." From this perspective, a firm does its knowledge-based strategy through knowledge sharing and integration among employees in the course of their regular work. To produce firm-level knowledge that is unique and inimitable enough on which to base strategy, or to enable employees to use unique and inimitable knowledge that exists within the firm, requires knowledge that employees gain and share when engaged in joint practice. Our study makes two contributions to this line of inquiry.

First, our findings have demonstrated that social media sites are spaces of practice within the organization. Unlike other technologies used for communication, the threaded nature of discussions, the visibility into what other people talk about and the persistence of content over time enables communication that is recursive and adaptive, two characteristics of practice that are key to strategizing (Jarzabkowski, 2004; Vaara et al., 2012). Our findings have demonstrated that at both firms, employees who used the social media shared practice with their coworkers in various ways. By being able to read a chain of messages occurring between coworkers, following documents, and monitoring responses and reactions to the content produced by others, employees in both firms were able to develop contextual understanding about how the knowledge that was produced was linked to activities or initiatives in the firm. This type of contextualization is a key way in which knowing happens in practice.

Second, when Strategy-as-Practice scholars talk about the use of technology in strategizing, they focus on tools that are used in strategy making (Jarzabkowski & Kaplan, 2015; Kaplan, 2011). But as strategy researchers have argued, strategy making and strategy implementation are not necessarily distinct processes (Burgelman, 2002). If a firm cannot implement a strategy, the strategy cannot exist; thus, strategy making and implementation are both constitutive features of strategizing. Consequently, technologies used to implement and enact strategy are core to strategizing in practice. Our findings show this point clearly. Both firms adopted their social media sites to help enact their knowledge strategies. Leadership in both firms understood that if they could not facilitate knowledge sharing among employees they would be unable to make use of those unique knowledge assets that formed their competitive advantage and their strategy would be moot. Through the phases of

curiosity, social lubrication, and trust, the sites allowed both organizations to enact their knowledge strategies. Future work that focuses on the role of technologies in the practice of strategizing needs to consider the important role that technologies play in enabling or constraining the enactment of strategy over time. For without the ability to enact it, the strategy is undermined.

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