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What is This?
The “Megapozitiv” Role of Enterprise Social Media in Enabling Cross-Boundary Communication in a Distributed Russian Organization

Jennifer L. Gibbs¹, Julia Eisenberg², Nik Ahmad Rozaidi¹, and Anna Gryaznova³

Abstract
Collaborating across boundaries is important for organizational innovation, but it poses a key challenge for large, distributed organizations. New technologies such as enterprise social media (ESM) are often heralded for their open infrastructure, democratic nature, and ability to break down traditional hierarchies and barriers to communication; thus, such tools may be expected to play a role in facilitating cross-boundary interaction. Usage patterns are likely to be shaped by existing cultural factors within the organizational and national contexts, however. Drawing on a case study of a large Russian telecommunications company, we empirically assess the introduction of an ESM application and the degree to which it promotes cross-boundary communication (across geographical and hierarchical lines), through analysis of server log data and in-depth interviews. Our findings demonstrate that ESM promotes cross-boundary communication, although there are distinct patterns for hierarchical and regional boundaries. Implications for ESM implementation and distributed collaboration are discussed.

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cross-boundary communication, distributed collaboration, enterprise social media, knowledge sharing, Russia

Introduction
Collaborating across boundaries is an important source of organizational innovation; however, it is often a key challenge for large, distributed organizations. New technologies such as enterprise social media (ESM) are often heralded for their open infrastructure, democratic nature, and ability to flatten traditional hierarchies. For instance, a *Harvard Business Review* blog post claimed, “Social networking is also flattening organizations by distributing access to information. Everyone is equal on the social network. No hierarchies need get involved” (George, 2010). Although this claim may be exaggerated, it suggests that social media may play an important role in facilitating cross-boundary interaction across hierarchical and geographical lines in distributed organizations. Prior research has found, however, that social norms and pressures arising from the organizational or cultural context shape technology use in ways that may reinforce or reproduce existing organizational hierarchies (Fulk & Steinfield, 1990) and that technology use is not dependent on inherent properties but is produced and reproduced through ongoing, recurrent practices (Feldman & Orlikowski, 2011). Emerging research suggests that ESM are likely to facilitate distributed collaboration; however, prior research on ESM has not explicitly addressed the extent to which ESM are contributing to cross-boundary communication in distributed organizations.

Drawing on a case study of a large Russian telecommunications company, we empirically assess the introduction of an ESM application and the degree to which it is promoting cross-boundary communication through a mixed-method case analysis of server log data and in-depth interviews. Whereas many Western organizations have shifted away from traditional command-and-control management and formal bureaucracies to flatter, team-based structures and participatory-management models (Nohria & Berkley, 1994), Russian companies often retain hierarchical structures and authoritative management styles involving less voluntary employee participation and knowledge exchange. Creating a climate in which employees have a chance to create and foster network connections may help diminish some of the barriers to knowledge sharing, and ESM provide a technological infrastructure that allows for such increased network connections (Ellison, Gibbs, & Weber, 2015). Given that most research has studied large technology-producing Western corporations such as IBM (DiMicco et al., 2008) and HP (Brzozowski, 2009), little is known about the adoption of ESM for cross-boundary communication in other types of organizations and national contexts, and how it is influenced by existing organizational and cultural norms.

Research suggests that ESM provide affordances that enable organizational members to locate distributed expertise (Brzozowski, 2009), gain access to new people and knowledge (Steinfield, DiMicco, Ellison, & Lampe, 2009), and increase contact
among geographically dispersed employees (DiMicco & Millen, 2007). Leonardi, Huysman, and Steinfield (2013) defined enterprise social media as:

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

As such, ESM provide unique affordances to users that may shape communication patterns in new ways (Treem & Leonardi, 2012). An affordance approach (Gibson, 1979) acknowledges that a given technology may provide different affordances depending on user perceptions and goals due to the “interpretive flexibility” inherent in ICTs (Orlikowski, 1992). As such, new technologies such as ESM must be studied in situ as embedded in particular communicative practices to fully understand their usage patterns.

Drawing on this approach, this study examines the use of an ESM tool in the retail division of a large Russian telecommunications company and its impact on cross-boundary communication.

Cross-Boundary Communication in Distributed Organizations

Communicating and collaborating across boundaries are critical sources of innovation (Tushman, 1977). Trends of globalization, rapid technological change, specialization, and increasing costs of research and development have made it crucial for firms to participate in networks of informal knowledge exchange. Cross and Cummings (2004) demonstrated that boundary spanning is an important source of knowledge transfer that leads to improved performance. In a field study examining knowledge sharing in a telecommunications company, Cummings (2004) highlighted the importance of knowledge sharing among various teams to expose employees to diverse and unique sources of knowledge, leading to more innovation. Cummings (2004) recommended that organizations “look for ways to improve the connectivity among their employees” (p. 363). Despite its importance, however, large corporations are likely to face challenges with internal knowledge sharing (Szulanski, 1996) and in fostering collaboration across organizational boundaries.

Large organizations today are increasingly geographically distributed, making it difficult for employees to collaborate and connect throughout time and space. Although organizations working among multiple locations and communicating “virtually” have been referred to as “boundaryless” (Nohria & Berkley, 1994), communication in large, distributed organizations is in fact often thwarted by geographical and hierarchical boundaries. Working across locations and time zones creates complexities and tensions that must be managed (Gibbs, 2009). Communication patterns are known to be strongly influenced by proximity effects, with collocated workers being much more
likely to communicate and collaborate than those who are physically separated (e.g., Kraut, Fussell, Brennan, & Siegal, 2002; Leenders, van Engelen, & Kratzer, 2003). Geographical dispersion often limits communication and knowledge sharing among distributed workers because it makes it difficult to identify expertise in distant parts of the organization (Leonardi & Treem, 2012) and creates challenges in sharing knowledge that is situated in local contexts and often taken for granted (Cramton, Orvis, & Wilson, 2007; Sole & Edmondson, 2002). Geographically dispersed employees are embedded in diverse contexts and have less shared contextual knowledge and understanding of those at other sites, making it more difficult to interact and coordinate resources (Gibson & Gibbs, 2006). In addition, faultlines are likely to form among different sites or locations, which further limit cross-boundary communication (Cramton & Hinds, 2005; Levina & Vaast, 2008). Finally, remote employees in particular are likely to feel disconnected and marginalized from those in corporate headquarters or other locations due to their physical isolation (Bartel, Wrzesniewski, & Wiesenfeld, 2012). All of these factors are likely to limit the degree of communication across geographical boundaries in distributed firms.

Hierarchical structure has long been an entrenched boundary in traditional organizations, particularly large corporations. A comprehensive review of 80 empirical studies finds that as organizational size increases, so do the number of hierarchical levels and challenges with communication and coordination (Kimberly, 1976). The past half century has, however, witnessed increasing workplace trends toward a flattening of hierarchies through networked organizational forms (DeSanctis & Monge, 1999; Nohria & Berkley, 1994) and participatory styles of management and decision making (Miller & Monge, 1986; Stohl & Cheney, 2001). Hinds and Kiesler (2002) defined crossing boundaries as communication across both hierarchical and nonhierarchical levels. They suggested that the nature of work influences communication across boundaries, and that increases in technical work and the move to flatter organizational structures are resulting in more collaborative, nonhierarchical communication.

Electronic communication technologies may be helpful in providing the means to reduce organizational hierarchy (Fulk & DeSanctis, 1995) and may provide the means for organizational members to cross geographical, temporal, cultural, hierarchical, and other boundaries, relaxing constraints of structure and enabling lateral boundary-spanning collaboration (DeSanctis & Monge, 1999). In postbureaucratic organizations and particularly in those operating virtually using electronic communication technology, there has been a change in organizational forms, which have evolved to include structures that replace managerial hierarchies and are more flexible (Fulk & DeSanctis, 1995). Such changes have mainly been documented in Western organizational contexts, however, and may not be universal in other cultural contexts.

**Cultural Influences on Cross-Boundary Communication**

Diversity of thought is particularly important to innovation (Dougherty, 1992) as well as other organizational processes relying on knowledge sharing. Yet, in some cultures, gathering diverse perspectives is more complex than in others. Stemming from the
remains of the Soviet era, Russian culture historically has not fostered employee participation. One of the most dramatic differences between Russian and Western business culture is its large power distance, which has been recorded in a number of cultural studies (Elenkov, 1998; Hofstede & Hofstede, 2005; Naumov & Petrovskaya, 2010). In large power distance countries, managers and employees consider each other fundamentally unequal, and this belief produces stricter hierarchies, centralization of power and decision making, large income inequalities, and top-down paternalistic communication, which may impede creativity, bottom-level initiative, and acceptance of responsibility.

Historically, Russian organizations tend to be quite hierarchical, implying a strong authoritarian and paternalistic leadership. In hierarchical structures, employees expect managers to guide them through important decisions and processes and lack incentives to show self-initiative and creativity. Welsh, Luthans, and Sommers (1993) found that participatory-management techniques not only precluded the expected effect but also had a negative impact on the performance of Russian employees who were used to following the chain of command. After an extensive review of the literature on authority-based leadership styles in Russia, Michailova (2002) concluded that Russian employees were not interested in self-initiative or action, and would treat participative management as either avoidance of responsibility and lack of professionalism, or as an additional burden.

These organizational norms and practices have their roots in specific cultural and historical conditions and may serve to discourage open communication (Michailova, 2002; Puffer & McCarthy, 2011; Shekshnia, 2003). For many Russian employees, openness is regarded as inappropriate and sometimes even dangerous behavior. A distinctive feature of the Russian culture is mistrust, whether of government, institutions, or business, or among managers and employees (Kovaleva, 2007; Kuznetsov & Kuznetsova, 2008). Hostility and mistrust of outsiders and the fact that information is an important resource and a source of power are well encrypted into the Russian mentality, as shown by two sayings: “A chatterbox is a great find for a spy” and “The less you know, the better you sleep.” Many Russian employees perceive openness as inappropriate behavior, and they may be afraid to share information or opinions because of possible misinterpretation or deliberate manipulation by managers or other recipients (Michailova, 2000, 2002). This is likely to hinder communication and knowledge sharing across both hierarchical and geographical boundaries.

At the same time, despite the persistence of such cultural norms and practices, there is ongoing research showing that Russian managerial practices are becoming more open and that managers are becoming more receptive to new ideas and concepts, especially in terms of participative management and employee empowerment (May, Puffer, & McCarthy, 2005). Organizations formed in the post-Soviet era and particularly those highly affected by Western influence (Fey & Shekshnia, 2011) as well as those employing younger generations of employees may differ in their degree of collaborative behavior from more traditional Russian organizations. Supporting numerous earlier research studies that show employees are more motivated and productive when they are informed and have a chance to contribute to organizational success, Shekshnia (2003) documented a decline in hostility to knowledge sharing, especially in small
entrepreneurial companies, while admitting that the trend restores itself with increasing numbers of employees. Fey and Shekshnia (2011) suggested that the modern Russian workforce is looking for meritocracy, transparency, and an opportunity to make a difference, and that introducing and promoting collaborative practices are key challenges for managers in Russia.

Cross-Boundary Communication and Enterprise Social Media

As mentioned above, information and communication technologies (ICTs) have been found to help in overcoming the challenges of communicating across geographical distance (Nardi & Whittaker, 2002; Olson & Olson, 2000). Although a large body of research exists on the role of earlier ICTs such as email, telephone, videoconferencing, and instant messaging in distributed collaboration (e.g., Fulk & Steinfeld, 1990; Hinds & Kiesler, 2002), little is known about the role played by ESM in this process. ESM are being increasingly adopted in large distributed organizations to facilitate collaboration and knowledge sharing across boundaries. There is evidence that ESM provide unique affordances for users (visibility, association, editability, and persistence) that are potentially transformative in enabling new work practices and ways of communicating (Treem & Leonardi, 2012). As Leonardi et al. (2013) wrote, “Because ESM afford the visibility and persistence of communicative actions, they expand the range of people, networks, and texts from whom people can learn across the organization” (p. 3). This expanded pool of learning is likely to occur through increased cross-boundary communication, but prior research on ESM has not explicitly addressed the extent to which ESM are contributing to cross-boundary communication in distributed organizations.

ESM have the potential to transform communication and knowledge sharing across various boundaries in distributed organizations. ESM have been found to enable a different kind of communicability in organizations by changing network structure to increase worker productivity (Wu, 2013). DiMicco et al. (2008) found that ESM enabled employees to reach organizational members who were otherwise inaccessible due to being in different departments, locations, or even hierarchical positions. This in turn enabled some employees to leverage these latent and weak ties (Haythornthwaite, 2005) to strategically promote themselves to upper management as part of a career move, or to use their network connections to gain wider support for their ideas and project proposals. Access to the weak ties fostered by ESM can lead to knowledge sharing due to the greater novelty of information and diversity of perspectives provided by such ties (Granovetter, 1973).

By providing a platform to facilitate connections and interactions among internal resources throughout the organization on both work and nonwork levels, companies may be able to foster an environment in which individuals are engaged with colleagues. Some may be motivated to participate by a desire for socializing with or helping others, and others by the chance to enhance their reputation or expertise (Wasko & Faraj, 2005). In addition, ESM provide greater access to a large audience with a wide range of available expertise, increasing the chances of reaching those with complementary expertise, which is important in enabling effective knowledge sharing.
Scholars have suggested that effective knowledge sharing between parties is dependent on similarities in their capabilities (Sachwald, 1998). Bringing together parties with common capabilities for a more productive exchange may be aided by ESM features, enabling the assignment of relevant topics through tagging and making relevant expertise more visible. The significant overlap in processes related to sharing expertise and forming relationships creates a compelling argument that ESM are tools that may enable cross-boundary communication and knowledge sharing.

Given this context, companies operating in the context of geographical dispersion, a hierarchical structure, and being in a cultural setting such as that in Russia may face unique and significant barriers to communicating across both geographical and hierarchical boundaries. However, given the participatory and open architecture of ESM, which allows for ease of connection and interaction across geographical and status lines, it is possible that adoption of ESM may help break down these barriers and encourage knowledge sharing more widely within the organization. This leads to our first two research questions:

Research question 1 (RQ1): How does the use of ESM influence communication across hierarchical boundaries within a large distributed Russian organization?

Research question 2 (RQ2): How does the use of ESM influence communication across geographical boundaries within a large distributed Russian organization?

Furthermore, we are interested in the nature of communication within the ESM tool. Social media are often distinguished from other communication technologies by their “social” nature. Although some question whether this detracts from workplace productivity (e.g., Skeels & Grudin, 2009) or renders ESM incompatible with workplace norms (Treem, Dailey, & Pierce, 2013), others demonstrate that it has benefits for relationship formation by increasing group cohesion (DiMicco, Geyer, Dugan, Brownholtz, & Millen, 2009), providing social capital and context awareness to help smooth interactions (Ellison et al., 2015), and assisting with impression formation among virtual workers (Cummings, 2013). What remains unclear, however, is the extent to which ESM are used for work versus social purposes and how this evolves over time. Furthermore, given that distributed work may be conducted at any time of day, it is interesting to explore whether ESM use happens primarily during the workday or beyond. Thus, we propose the following:

Research question 3 (RQ3): To what extent are ESM used for work versus nonwork purposes, and how is each type of communication distributed over time?

**Methodology**

**Research Context**

A mixed-method case study was conducted by an international team of researchers from Russia and the United States at a retail subsidiary of a multinational telecommunications company.
company headquartered in Russia. Established in 2009, the subsidiary, whose pseudonym is TeleCom, operated about 4,500 retail outlets in approximately 1,000 cities throughout Russia, selling brand name mobile phones and digital devices as well as the products and services of its parent company, including internet connectivity and financial services. TeleCom employed about 20,000 people in its corporate offices and retail outlets distributed throughout Russia, spanning nine time zones. Many of its employees were retail specialists who were very young, with an average age of 25. Being such a large organization, the company was divided into several departments and had a hierarchical structure. The company’s website suggests that in 2006, the Board of Directors of the parent company restructured its management to strengthen various functions by shifting to a more transparent structure. As part of its change initiative, TeleCom rolled out an ESM tool called TeleCom Life in the fall of 2011. The application was an enterprise social network site (similar to Yammer or Jive) that enabled employees to create online profiles, find and articulate connections with coworkers by following them, and interact with others by exchanging online messages or “liking” posts, among many other features. Our preliminary discussions with management—including the manager of internal communications (who was in charge of ESM implementation) and the founder of the company developing the tool—indicated that ESM were introduced by top management in an attempt to improve internal communication and knowledge sharing within Telecom, as well as to enhance its innovative image.

**Data Collection**

Our study examined the first year of adoption of the ESM tool by retail employees at TeleCom. We used a mixed-method approach to capture actual communication patterns through server log data from the ESM tool while providing deeper insight and understanding of these patterns and employee perceptions of the tool through in-depth interview data from a mix of employee types. Triangulating these approaches gives us a fuller picture of how and why cross-boundary communication was occurring throughout the organization.

**Server Log Data.** We obtained access from the company to analyze the online activities and communication patterns of all users of TeleCom Life. These activities were logged and stored in a file on a central server. We analyzed a subset of the server log data that were provided by TeleCom, which tracked the online activities of about 17,000 employees from August 2011 (when the application was first deployed) until September 2012. For confidentiality reasons, the log file provided was stripped of personally identifiable information and actual message content, although its subject tags, where provided, were available. The file did, however, contain a wealth of descriptive information about users, including their job title, department, and location, as well as usage data of when the users posted messages, made comments, “liked” posts, and “followed” other users. In total, the database contained 156,543 posts, 628,782 comments, 503,180 follower relationships, and 849,126 likes involving 17,192 users in nine Russian regions and in the head office. This comprised about 86% of the organization; adoption was high because it was mandated by management at the end of 2011.
In-Depth Interviews. To supplement the server log analysis and provide better understanding of these data, we conducted a set of in-depth, semistructured interviews with 14 TeleCom employees. We recruited interviewees from different departments, positions, job functions, and regions to capture a variety of perspectives on ESM usage across boundaries. The interviews, which averaged 30 minutes each, were aimed at understanding challenges related to cross-boundary communication and the role of the ESM tool in influencing communication dynamics. The interviews were conducted in person and on-site at TeleCom or by telephone during March and April 2012, about 6 months after the ESM application was implemented, to allow for initial adoption to take place. The interviews were conducted in Russian by a native speaker and were audio recorded. Another native speaker transcribed and translated the Russian transcripts into English verbatim, producing a total of 189 double-spaced pages of transcripts. Table 1 shows the interviewee profiles.

Data Analysis

Server Log Data. To facilitate the researchers’ queries about the data, the log file was converted into a MySQL database, and its textual information was machine translated from Russian into English and verified by a native Russian speaker. The ESM usage log data were examined for evidence of dyadic communication activities to provide us with attribute information about both sides of the dyad that could be used to identify whether cross-boundary communication was occurring. We focused on commenting and liking behavior as measures of communicative activity. Although less interactive than commenting, liking was included because it is regarded as a signal for agreement or “positive association” in social media (Kosinski, Stillwell, & Graepel, 2013). A list of all posts and their associated comments and likes was compiled and merged with attribute information about who made them and when. Self-likes and comments made by the poster (usually as a reply to a comment) were removed because they were not valid dyads. Because our aim was to analyze unique dyads in both commenting and liking, similar pairs of dyads occurring in the same post were removed. The resulting data set of 1,028,306 dyads had 11,565 unique users, who came from nine regions (Central: 10.9%; Chernozem: 1.4%; Far East: 5.0%; Moscow: 9.1%; Northwest: 10.4%; Siberia: 8.7%; South: 10.6%; Ural: 13.8%; and Volga: 17.9%) and the head office (12.2%) among five hierarchical positions (top management: 0.9%; middle management: 17.9%; senior specialists: 11.9%; specialists: 65.7%; and support staff: 3.7%).

To show the extent to which cross-boundary communication was occurring on the ESM tool, the dyad data set was repurposed for intergroup analysis. Specifically, the individuals on each side of the dyads were reorganized into their respective hierarchical positions and regional groups. The number of dyadic relationships between and within each group was counted and placed in two square matrices—one for hierarchical position, and the other for regional groups. To reduce the influence of large group sizes, dyadic counts were averaged by their respective target group size. This shows how many dyadic relationships each group was involved with among groups and can be used to assess the extent of cross-boundary communication. To further aid understanding of intergroup communication, the matrices are visualized in connected graphs.
To show how cross-boundary communication changed throughout time on the ESM tool, the hierarchical positions of each dyad in the data set were first compared and coded (0 if the same; 1 if different). This comparative coding was repeated for regional locations. The two comparative measures were then tabulated by month from August 2011, when the system was first rolled out, to August 2012. The proportion of different hierarchical positions and different region dyads to the total number of dyads was calculated and then plotted throughout time to examine its trend. A Mann–Kendall test was performed to determine whether the trend was significant.

Content Analysis of Tags. To address RQ3, we conducted a content analysis of subject tags assigned to posts in ESM to identify the kinds of topics being discussed. Although message content was removed by TeleCom for purposes of confidentiality, the tags were quite helpful in revealing the topics discussed and specific contexts that were driving communication within the ESM tool. Of the 156,543 posts in the data set, 57.2% had subject keywords, or tags, that helped describe the posts. The tagged posts were first sorted alphabetically so that similarly worded tags would appear together. Several categories of tags emerged that were then discussed by the research team, who collectively agreed to consolidate and exclusively code them into a total of 12 categories. For instance, customer complaint, customer service quality, and customer service training were all coded as customer service. To test for interrater reliability, the code frame—comprising the top 500 tags representing 33% of the tagged posts—was provided to two of the authors to independently code based on the 12 emergent categories. The resulting Cohen’s kappa was 0.872, indicating an 87.2% level of agreement. This is particularly high given the large number of categories among which coders needed to distinguish.

<table>
<thead>
<tr>
<th>Participant ID</th>
<th>Gender</th>
<th>Department</th>
<th>Job title</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>M</td>
<td>General purchases</td>
<td>Manager</td>
</tr>
<tr>
<td>2</td>
<td>M</td>
<td>Orders and stocks supplies</td>
<td>Senior specialist</td>
</tr>
<tr>
<td>3</td>
<td>F</td>
<td>Quality control</td>
<td>Specialist</td>
</tr>
<tr>
<td>4</td>
<td>F</td>
<td>External visual advertisement</td>
<td>Designer</td>
</tr>
<tr>
<td>5</td>
<td>F</td>
<td>Inventory and accounting</td>
<td>Inventory manager</td>
</tr>
<tr>
<td>6</td>
<td>M</td>
<td>Graphic design and marketing</td>
<td>Specialist</td>
</tr>
<tr>
<td>7</td>
<td>F</td>
<td>Advertisement development</td>
<td>Designer</td>
</tr>
<tr>
<td>8</td>
<td>F</td>
<td>Training</td>
<td>Training specialist</td>
</tr>
<tr>
<td>9</td>
<td>M</td>
<td>Quality control</td>
<td>Quality control manager</td>
</tr>
<tr>
<td>10</td>
<td>M</td>
<td>Retail customer service</td>
<td>Specialist</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>Internal communications</td>
<td>Manager</td>
</tr>
<tr>
<td>12</td>
<td>F</td>
<td>Site development</td>
<td>Specialist</td>
</tr>
<tr>
<td>13</td>
<td>M</td>
<td>Goal development</td>
<td>Office manager</td>
</tr>
<tr>
<td>14</td>
<td>M</td>
<td>Inventory control</td>
<td>Specialist</td>
</tr>
</tbody>
</table>

Table 1. Profile of Interview Participants.
To examine the timing of each of the 12 communication topics, the tagged posts were aggregated by the hour of their posting. Post times were adjusted to reflect the local time when they were posted. Plotting these data throughout a 24-hour period allowed us to examine when various topics were most and least actively discussed. We were particularly interested in when work versus nonwork posts were made, and how this evolved over time.

**Interview Data.** Prior to analyzing the interview data, the English transcripts were coded by two authors in Atlas.ti using line-by-line coding. We used a selective coding procedure (Strauss & Corbin, 1998) to flag instances of communication across hierarchical and geographical boundaries and examine those excerpts in greater depth. Any evidence of cross-boundary communication was extracted to support the findings from the server log analysis. Given the small number of interviews, we used this analysis primarily to supplement the quantitative analyses by providing deeper explanation of the patterns observed.

**Findings**

**Communication Across Hierarchical Boundaries**

Our examination of the server logs informed us how different hierarchical groups were communicating with each other in ESM and how they changed throughout time. Table 2 shows the matrix of the mean communication dyads between and within hierarchical groups, and Figure 1 shows the visualization of the matrix. The intergroup analysis revealed that among the five hierarchical groups, the top-management group had the highest mean number of interactions with other groups despite its relatively small size. Top managers replied to or liked a mean of 98.3 posts or replies by middle managers, 47.8 by senior specialists, 83.1 by specialists, and 2.2 by support group employees. This suggests not only active participation of top managers in the ESM but also active cross-boundary interaction among top management and lower level groups. This is further reflected in the mean number of communicative dyads for middle managers and senior specialists with specialists, which was 47.7 and 56.6 responses, respectively. Another notable observation is that within-group communication was also active, with top managers responding to a mean of 53.6 posts or replies by fellow top managers, specialists replying to or liking 46.5 posts or replies by their peers, and middle managers responding to 32.1 posts or replies by other middle managers. Overall, communicative interaction on ESM occurred more prevalently across than within hierarchical boundaries (with 571,869 cross-hierarchy dyads and 456,437 same-hierarchy dyads).

Tracking communication dyad formation over time, however, revealed a negative trend in the proportion of cross-hierarchy dyads to total monthly dyads (Mann–Kendall tau: $-0.87; p < .001$). The percentage began at 68.6% in August 2011, peaked at 72.0% a month later, but gradually fell to 49.7% by August 2012. This suggests that users increasingly communicated more within than across hierarchical groups. This is likely explained by the tremendous increase in specialist users. Indeed, the proportion of
specialists to total users rose from 38% to 67% by August 2012, and the number of within-group dyads among specialists also increased as ESM became more popular among lower level employees. The chart showing the trend throughout time is presented in Figure 2, with numerical data contained in Table 3.

Our interview analysis supports the above findings and suggests that the introduction of ESM had an important influence on communication dynamics at TeleCom, especially regarding bridging differences across hierarchical boundaries. ESM were perceived to “unite [employees]” (respondent #5), provide the means “for employees to communicate directly with top management” (#3), and demonstrate that “the company is really open, ready for dialogue” (#9). Prior to the introduction of TeleCom

Table 2. Mean Communication Dyads Within and Between Hierarchical Groups.

<table>
<thead>
<tr>
<th>Source group</th>
<th>Group size</th>
<th>Top management</th>
<th>Middle management</th>
<th>Senior specialists</th>
<th>Specialists</th>
<th>Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top management</td>
<td>102</td>
<td>53.6</td>
<td>9.7</td>
<td>8.8</td>
<td>2.6</td>
<td>0.9</td>
</tr>
<tr>
<td>Middle management</td>
<td>2,068</td>
<td>98.3</td>
<td>32.1</td>
<td>32.8</td>
<td>17.8</td>
<td>5.4</td>
</tr>
<tr>
<td>Senior specialists</td>
<td>1,373</td>
<td>47.8</td>
<td>15.9</td>
<td>22.3</td>
<td>10.7</td>
<td>2.7</td>
</tr>
<tr>
<td>Specialists</td>
<td>7,599</td>
<td>83.1</td>
<td>47.7</td>
<td>56.6</td>
<td>46.5</td>
<td>18.4</td>
</tr>
<tr>
<td>Support</td>
<td>423</td>
<td>2.2</td>
<td>1.5</td>
<td>1.3</td>
<td>1.2</td>
<td>1.2</td>
</tr>
</tbody>
</table>

Figure 1. Mean communication dyads within and between hierarchical groups.
Figure 2. Monthly cross-hierarchy and cross-regional communication dyads.

Table 3. Monthly Communication Dyads by Hierarchical Position and Region.

<table>
<thead>
<tr>
<th>Month</th>
<th>Total monthly dyads</th>
<th>Cross-hierarchy dyads</th>
<th>Cross-region dyads</th>
<th>Cross-hierarchy dyads (%)</th>
<th>Cross-region dyads (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 2011</td>
<td>1,218</td>
<td>836</td>
<td>590</td>
<td>68.6</td>
<td>48.4</td>
</tr>
<tr>
<td>September 2011</td>
<td>794</td>
<td>572</td>
<td>370</td>
<td>72.0</td>
<td>46.6</td>
</tr>
<tr>
<td>October 2011</td>
<td>2,166</td>
<td>1,479</td>
<td>1,195</td>
<td>68.3</td>
<td>55.2</td>
</tr>
<tr>
<td>November 2011</td>
<td>7,101</td>
<td>5,039</td>
<td>3,271</td>
<td>71.0</td>
<td>46.1</td>
</tr>
<tr>
<td>December 2011</td>
<td>26,293</td>
<td>16,947</td>
<td>17,132</td>
<td>64.5</td>
<td>65.2</td>
</tr>
<tr>
<td>January 2012</td>
<td>66,121</td>
<td>41,230</td>
<td>49,593</td>
<td>62.4</td>
<td>75.0</td>
</tr>
<tr>
<td>February 2012</td>
<td>77,915</td>
<td>48,152</td>
<td>57,067</td>
<td>61.8</td>
<td>73.2</td>
</tr>
<tr>
<td>March 2012</td>
<td>76,560</td>
<td>46,800</td>
<td>52,008</td>
<td>61.1</td>
<td>67.9</td>
</tr>
<tr>
<td>April 2012</td>
<td>100,817</td>
<td>57,636</td>
<td>70,207</td>
<td>57.2</td>
<td>69.6</td>
</tr>
<tr>
<td>May 2012</td>
<td>140,358</td>
<td>74,641</td>
<td>100,023</td>
<td>53.2</td>
<td>71.3</td>
</tr>
<tr>
<td>June 2012</td>
<td>156,125</td>
<td>85,507</td>
<td>106,147</td>
<td>54.8</td>
<td>68.0</td>
</tr>
<tr>
<td>July 2012</td>
<td>177,911</td>
<td>96,204</td>
<td>122,081</td>
<td>54.1</td>
<td>68.6</td>
</tr>
<tr>
<td>August 2012</td>
<td>194,927</td>
<td>96,826</td>
<td>135,288</td>
<td>49.7</td>
<td>69.4</td>
</tr>
<tr>
<td>Total</td>
<td>1,028,306</td>
<td>571,869</td>
<td>714,972</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Life, communicating and seeking or sharing knowledge outside of one’s immediate group of collaborators or across hierarchical boundaries were time-consuming and complex tasks. Employees particularly appreciated having the opportunity to interact
with top management—who were inaccessible to most employees before ESM—by posting questions and getting direct responses. As one expressed, “You get the feeling that you can talk with top management as equals and express your opinion” (#2). This perception of reduced hierarchy in ESM was echoed by others as well:

It is important for employees to know that they have top management support and that they will receive a response to any question. You can ask the CEO any question…. Top management consists of real people. They are not gods. They answer questions and can help in some way or another. (#3)

In particular, a number of participants suggested that the Forum of Innovators, a designated tab for the exchange of innovative ideas within the ESM tool that was regularly reviewed by top management, had been a great motivator in idea generation, discussion, and even implementation, changing the way they collaborated. For employees in remote locations looking to advance their career, ESM provided the means to connect with and get exposure to senior management, thus further enhancing communication across hierarchical boundaries. Employees were encouraged to submit ideas and request feedback from colleagues throughout the organization. Those whose ideas were selected received rewards, recognition, and a chance for career advancement. A training department specialist (#8) suggested that the Forum of Innovators motivated participation by employees throughout the organization regardless of their hierarchical position to suggest, discuss, and receive feedback on ideas:

We recently held an innovation forum in Moscow. We had 120 employees come to this event, but none of them were selected based on their title or tenure with the company, but rather by the number of ideas they brought forward, number of innovations. They were rewarded with a trip to Moscow, where they could turn their ideas into projects.

Our interview findings thus suggested that ESM use was breaking down hierarchical boundaries by increasing direct interaction between top management and lower level employees, as well as by increasing employee participation through contributions of ideas in the Forum of Innovators.

**Communication Across Geographical Boundaries**

Our examination of the server logs also informed us how different regional groups were communicating with each other on the ESM tool and how they changed throughout time. Table 4 shows the matrix of the mean communication dyads between and within regional groups, and Figure 3 shows the matrix visualization. At first glance, the largest individual mean communication dyads were within the same region, suggesting a proximity effect. For example, employees in the head office (HQ) responded to a mean of 66.9 posts by fellow HQ employees, compared to 13.2 posts from Central region employees or 12.9 posts from Volga region employees. When the means for all cross-region dyads were aggregated, however, the total was more than double the
amount of same-region dyads. For example, Central region employees responded to a mean of 71.9 posts and replies from non-Central regions, compared to 36.6 from fellow Central employees. Moreover, there were 714,972 cross-region dyads and 313,334 same-region dyads in total, indicating that communication activity on the ESM tool was indeed occurring more among regions than within the same region.

Examining the number of communication dyads formed throughout time revealed an interesting pattern. The proportion of cross-regional communication dyads that started at 48.4% in August 2011 fell to a low of 46.1% in November before jumping to a peak of 75.0% just 2 months later, stabilizing at around 69% around the end of the study period (Mann–Kendall tau: 0.41; $p = .058$). The chart showing the trend throughout time is presented in Figure 2. Although of borderline significance, this suggests that cross-region communication activity occurred at a faster pace than same-region

<table>
<thead>
<tr>
<th>Source region</th>
<th>Group size</th>
<th>Head office</th>
<th>Central</th>
<th>Chernozem</th>
<th>Far East</th>
<th>Moscow</th>
<th>Northwest</th>
<th>Siberia</th>
<th>South</th>
<th>Ural</th>
<th>Volga</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head office</td>
<td>1,414</td>
<td>66.9</td>
<td>20.4</td>
<td>10.6</td>
<td>12.2</td>
<td>18.0</td>
<td>13.2</td>
<td>15.0</td>
<td>14.0</td>
<td>11.9</td>
<td>14.0</td>
</tr>
<tr>
<td>Central</td>
<td>1,261</td>
<td>13.2</td>
<td>36.6</td>
<td>16.3</td>
<td>6.8</td>
<td>9.2</td>
<td>8.2</td>
<td>8.5</td>
<td>8.9</td>
<td>9.0</td>
<td>7.1</td>
</tr>
<tr>
<td>Chernozem</td>
<td>160</td>
<td>0.6</td>
<td>1.6</td>
<td>3.9</td>
<td>0.6</td>
<td>0.7</td>
<td>0.7</td>
<td>0.8</td>
<td>0.7</td>
<td>0.9</td>
<td>0.4</td>
</tr>
<tr>
<td>Far East</td>
<td>578</td>
<td>4.0</td>
<td>32.2</td>
<td>3.2</td>
<td>13.6</td>
<td>3.0</td>
<td>2.7</td>
<td>5.0</td>
<td>3.4</td>
<td>4.0</td>
<td>2.6</td>
</tr>
<tr>
<td>Moscow</td>
<td>1,056</td>
<td>8.4</td>
<td>7.4</td>
<td>5.3</td>
<td>4.5</td>
<td>16.4</td>
<td>6.3</td>
<td>6.7</td>
<td>5.9</td>
<td>6.0</td>
<td>4.3</td>
</tr>
<tr>
<td>Northwest</td>
<td>1,206</td>
<td>9.6</td>
<td>8.1</td>
<td>6.4</td>
<td>5.2</td>
<td>8.2</td>
<td>21.0</td>
<td>7.1</td>
<td>6.8</td>
<td>7.3</td>
<td>6.5</td>
</tr>
<tr>
<td>Siberia</td>
<td>1,004</td>
<td>6.0</td>
<td>5.4</td>
<td>4.4</td>
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<td>5.0</td>
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<td>17.5</td>
<td>5.2</td>
<td>5.6</td>
<td>3.5</td>
</tr>
<tr>
<td>South</td>
<td>1,228</td>
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<td>8.1</td>
<td>7.6</td>
<td>6.4</td>
<td>7.8</td>
<td>6.9</td>
<td>7.6</td>
<td>7.5</td>
<td>7.1</td>
<td>5.8</td>
</tr>
<tr>
<td>Ural</td>
<td>1,592</td>
<td>7.8</td>
<td>8.0</td>
<td>7.7</td>
<td>6.3</td>
<td>7.6</td>
<td>6.6</td>
<td>8.2</td>
<td>7.5</td>
<td>18.5</td>
<td>6.0</td>
</tr>
<tr>
<td>Volga</td>
<td>2,066</td>
<td>12.9</td>
<td>9.7</td>
<td>6.1</td>
<td>6.4</td>
<td>8.0</td>
<td>7.7</td>
<td>7.6</td>
<td>7.9</td>
<td>8.7</td>
<td>20.0</td>
</tr>
</tbody>
</table>

Table 4. Mean Communication Dyads Within and Between Regional Groups.

Figure 3. Mean communication dyads within and between regional groups.
communication activity, with a notable spike at the end of 2011 that was attributable to ESM use being mandated by management around this time. Overall, this analysis shows that geographical boundaries strongly shape communication relationships, as evidenced by the high degree of within-region communication. ESM seems to play a role in overcoming these barriers, however, based on the increase in cross-regional communication throughout time.

Our interviews supported the finding that ESM were able to bridge distances among employees, especially in a highly geographically dispersed organization such as TeleCom. As a female supervisor of internal communications (#11) mentioned,

> We didn’t have a platform where people could exchange knowledge before [ESM]. [Knowledge sharing] was not stimulated in any way. It is easier to talk to another person via social media … many people choose social networks over telephone or email.

Another interviewee (#14) suggested that the ESM tool was a “very powerful tool to bring people together.” Furthermore, he brought up problems related to communication issues with colleagues in other regions and stated that with the availability of TeleCom Life, “my ability to communicate is not limited by office space—now I can communicate with guys with whom I don’t [have a chance to] talk at work, or whom I never see at work from Kazan, Tyumen.”

Employees in small retail outlets in remote regions, who had fewer opportunities to interact with their colleagues, found the ESM tool particularly important in increasing their sense of belonging to TeleCom. As one employee put it, “Although it is mostly offline, I would call it live communication…. I use [ESM] because I don’t have an opportunity to meet people in person…. [ESM] brings people together” (#13). Based on the interviews, this was particularly important for the customer-facing retail employees, many of whom worked in remote locations and reported feeling isolated from the rest of the company. ESM enabled TeleCom employees to connect to colleagues from other offices, facilitating multidirectional knowledge sharing as well as fostering a sense of identification and community.

Our findings suggest that ESM enabled many distributed employees to form connections they would not have formed otherwise, and that the asynchronous nature of ESM communication helped to bridge the company’s nine time zones. A designer from the outdoor advertising department (#4) summarized sentiments shared by others as well:

> I get a chance to make friends and communicate with people from the regions via social media whom I would not have had an opportunity to meet and talk with before. [Geographical] boundaries are becoming erased. It is great to get to know new people with whom you talk not only about work, but about other things as well. It’s great!

Overall, the data provided evidence for increasing cross-boundary communication among geographical regions over time as ESM became diffused among specialists and they began interacting more among locations.
In coding the tags and collapsing them into major categories, as described above, two broader categories of work and nonwork communication emerged. Work posts comprised 61.5% of the total, whereas nonwork posts made up the other 38.5%. Figure 4 shows the frequency of each of the 12 categories. Interestingly, the most frequent tag category was a nonwork one: Posts that were humorous and fun, and perhaps unique, were tagged with *megapozitiv* (“мегапозитив”), which is a slang word akin to having a super-positive feeling or being “super-cool” (21.7%). The next most common tags were one welcoming new users to the system (16.6%) and one related to work in general (14.6%), which consisted of posts about the various functional areas in the organization, such as finance, recruitment, legal, and IT, but excluding sales, quality, and customer service (5.2%); these latter three were coded separately, given that the research site was the retail arm of a telecommunications company. The remaining work-related categories were question-and-answer (Q&A) and frequently asked questions (FAQ) posts (7.8%); mobile technologies and devices (5.2%); company news (5.1%); posts specific to groups, departments, and regions (3.8%); ideas, including those generated in the Forum of Innovators (2.4%); and polls and surveys (0.8%). Other nonwork posts included shares that were useful or

**Figure 4.** Distribution of posts by subject tags.

**Content Analysis of Tags**

In coding the tags and collapsing them into major categories, as described above, two broader categories of work and nonwork communication emerged. Work posts comprised 61.5% of the total, whereas nonwork posts made up the other 38.5%. Figure 4 shows the frequency of each of the 12 categories. Interestingly, the most frequent tag category was a nonwork one: Posts that were humorous and fun, and perhaps unique, were tagged with *megapozitiv* (“мегапозитив”), which is a slang word akin to having a super-positive feeling or being “super-cool” (21.7%). The next most common tags were one welcoming new users to the system (16.6%) and one related to work in general (14.6%), which consisted of posts about the various functional areas in the organization, such as finance, recruitment, legal, and IT, but excluding sales, quality, and customer service (5.2%); these latter three were coded separately, given that the research site was the retail arm of a telecommunications company. The remaining work-related categories were question-and-answer (Q&A) and frequently asked questions (FAQ) posts (7.8%); mobile technologies and devices (5.2%); company news (5.1%); posts specific to groups, departments, and regions (3.8%); ideas, including those generated in the Forum of Innovators (2.4%); and polls and surveys (0.8%). Other nonwork posts included shares that were useful or
“interesting” (9.4%) and posts concerning “social interest” topics, such as music, food, soccer, cars, travel, fashion, photography, and the like (7.4%). It is interesting to note the large mix of different types of work and nonwork communication that was prevalent on TeleCom Life. Some tags, such as girls, relationships/sex, and Jewish jokes, would be considered inappropriate in the U.S. workplace but seemed to have no stigma at TeleCom.

As part of the communication trend analysis, we examined the timing of work versus nonwork posts in terms of (a) development over time in months, and (b) the time of day when posts were created. Our findings reveal that whereas work posts fluctuated, with new-user welcome posts peaking in January 2012 (shortly after the system was mandated by management) and then dropping off, even though other work and Q&A posts steadily increased—the number of nonwork posts sharply increased, such that by the end of our study period, there were more nonwork than work posts, as illustrated in Figure 5. Further inspection of the data demonstrated that the megapositiv humor posts were responsible for most of this growth, and that although lower level employees generated the majority of them, middle managers contributed as well (see Figure 6).

In charting the time of day when posts were created, we found that whereas the bulk of activity—for both work and nonwork posts—occurred during the standard workday, a substantial proportion of posts was created outside these hours (with 3:00–6:00 a.m. being the only hours with little ESM activity). Thus, ESM communication (both work and social) appeared to extend far beyond the normal workday (see Figure 7).
Figure 6. Monthly distribution of *megapozitiv* (humor) posts by position.

Figure 7. Timing of work and nonwork posts.
The interview findings confirm that the ESM tool was used heavily for both work and nonwork communication. Although this seemed largely acceptable in the organizational culture, some perceived nonwork posts as spam and disruptive to their work. As one interviewee (#6) noted, “[Spam] is another minus … there is so much noise.” The same employee, however, also felt as follows:

Social networks in big companies with many employees can’t do harm. Some people may not like it, but the majority does communicate via social media. I often notice that people talk on non-work topics in the network because they like it. People join groups. It’s live communication.

**Discussion**

We examined the adoption of ESM in a large Russian distributed organization through a mixed-methods case study and found that it did indeed contribute to cross-boundary communication across geographical and hierarchical boundaries, albeit in different ways. Overall, our interviewees felt that the introduction of ESM had a profound influence in increasing knowledge sharing and communication across hierarchical and geographical boundaries. This was verified but also tempered by actual communication patterns in the ESM tool that showed evidence of increasing cross-boundary communication among regions, but decreasing cross-hierarchical communication as usage became more diffused among lower level specialists (although management participation remained strong). Our findings suggest that top managers were active in driving the ESM adoption process as part of a larger change initiative designed to flatten TeleCom’s structure and move to a more participatory management style. As such, a high level of cross-hierarchical communication was evident in the early months, but the proportion of cross-hierarchical commenting and liking behavior significantly decreased throughout time as ESM became relatively more diffused among lower level retail specialists (the largest group of employees), resulting in increased interaction among specialists. Whereas cross-hierarchical communication declined, however, communication across geographical boundaries increased. This suggests that ESM helped overcome regional boundaries, because retail specialists among regions began interacting more through commenting and liking behavior throughout time.

Although we do not have a quantitative baseline of the amount of cross-boundary communication prior to the introduction of ESM, our interviewees felt ESM allowed them direct access to higher level management and employees in other locations, who had previously been inaccessible (or less accessible) to them. They also appreciated the Forum of Innovators feature, which allowed lower level employees in remote retail outlets to contribute ideas (which were considered based on merit, not the status of the contributor) and be more visible to management. ESM were considered particularly effective in helping retail employees in remote locations feel more connected and build a sense of community within the company as a whole. Our study has important implications for ESM use in distributed organizations, which we discuss below.
Theoretical Implications

Our findings extend previous research in multiple ways. First, we demonstrate that ESM do facilitate cross-boundary communication across both hierarchical and geographical boundaries through analysis of large-scale dyadic communication patterns throughout time. This is a tempered story, however: In some ways, hierarchy was breaking down (e.g., ESM allowed for direct Q&A and other interaction among managers and lower level employees, and the Forum of Innovators encouraged the submission of ideas that were evaluated on their own merits without consideration of status), but in other ways communication followed traditional hierarchical lines. For instance, the top managers were early adopters of the ESM tool and initially drove the process through one-way, asymmetrical communication, because they were doing most of the commenting and liking of lower level employees’ posts rather than vice versa. In this way, managers were still positioned as experts and perpetuating downward rather than upward communication (although interviewees felt that simply having direct contact with top management in ESM positioned them more as equals). This changed throughout time as ESM became more diffused among lower level specialists, although management participation remained strong. In terms of geographical boundaries, there was initially much within-region communication activity, but there were modest increases in cross-regional communication throughout time as retail specialists began interacting with specialists in other locations. These findings demonstrate that both hierarchical and geographical boundaries were transformed through ESM use, but they did not disappear or weaken significantly. Given the importance of cross-boundary communication for organizational innovation (Tushman, 1977), this implies that ESM may help distributed organizations overcome innovation challenges.

Second, our findings shed light on knowledge sharing in the context of a Russian multinational corporation by helping to fill gaps in the literature identified in earlier studies, given the underrepresentation of Russia in current literature (Holden & Vaiman, 2013). Our study makes an important contribution by adding to our collective understanding of this important emerging economy and the dynamics affecting knowledge-sharing-related organizational processes. Although much of the literature on Russian organizations has emphasized cultural attitudes such as a high power distance and lack of openness (Kovaleva, 2007; Michailova, 2000, 2002), our findings suggest that despite these limitations of national culture, organizational culture may play a greater role in the eventual success of ESM. Even though ESM cannot be said to have changed the culture, its usage was in line with broader change initiatives underway to bring about more participatory management at TeleCom (which, as a newer and younger company, may not have been representative of traditional Russian firms to begin with). This cautions us against regarding national culture as absolute and highlights the roles of other dimensions, such as organizational culture. Our findings also support the affordance and practice views, which acknowledge that technologies are shaped by and must be understood within the ongoing organizational and cultural practices that shape them (Feldman & Orlikowski, 2011; Orlikowski, 1992).
Third, our content analysis of tags demonstrates that both work and nonwork interaction play prominent roles in ESM communication. Although some may regard social media as distracting or unproductive (Skeels & Grudin, 2009) due to the stigma associated with other popular sites such as Facebook (Cummings, 2013), nonwork communication through (in this case) sharing megapozitiv stories, jokes, or funny videos to promote humor and a positive attitude is likely to play an important role in building relationships and fostering collaboration and overall participation both within and across organizational boundaries. This type of communication may also help break down boundaries among employees because all are equally qualified to share humorous posts; this was evident because both managers and employees contributed to such posts. Furthermore, our findings illustrate the blurring of work and nonwork communication in ESM, because plenty of nonwork communication occurred during working hours, and work communication took place outside the traditional working hours of 8:00 a.m. to 5:00 p.m. as well. This blurring as well as the benefits of social communication in ESM have been emphasized by other research arguing that ESM support socializing and interpersonal interaction that may encourage knowledge sharing (Ellison et al., 2015). Research on IBM’s Beehive (now Social Blue) found that it facilitated interpersonal interactions and group cohesion among employees (DiMicco et al., 2009) and led to increased social capital, in terms of stronger ties, willingness to contribute content, and access to new people and expertise (Steinfield et al., 2009). Although certain topics (e.g., megapozitiv topics, and topics that may be considered racist or sexist and thus inappropriate in the United States) may differ in the Russian workplace, the prevalence of both work and nonwork interaction in this widely used tool suggests that its success may hinge on its wide range of uses, including for social purposes.

Practical Implications

This study also has practical implications for the implementation of ESM in organizations more broadly. Although other emerging research on ESM has found resistance to their use (e.g., Gibbs, Rozaidi, & Eisenberg, 2013; Treem et al., 2013), our case study can be seen as (at least an initial) success story of ESM adoption in a large, distributed corporation. Although future research should tease out specific factors contributing to this success more systematically, we see several reasons for the initial adoption and diffusion of ESM at TeleCom. First, top management was actively involved in the use of the tool and drove communication activity by commenting on and liking posts of lower level employees. Employees appreciated having direct access to upper management, and this motivated them to contribute to the tool. Second, this technological innovation was part of a broader cultural change initiative by TeleCom’s leadership (Schein, 2004). Third, ESM appeared to fulfill a specific purpose by enabling remote and physically isolated employees (who were distributed throughout nine time zones in many small retail outlets across Russia) to interact with management and employees in other locations much more easily, enhancing their visibility to management and their sense of connectedness to the organization as a whole. Finally, the age and
cultural background of employees may have made them more receptive to ESM use in the workplace. The majority of TeleCom employees were quite young (in their 20s), and they were perhaps more familiar with and receptive to social media technologies. Other research on young employees at a financial company found that despite their age, employees had developed technological frames or expectations for social media use developed in nonwork contexts that emphasized personal expression and disclosure and were thus incompatible with workplace norms (Treem et al., 2013). Although workplace norms in Russia may be different from those in the United States, our findings provide a counterpoint that suggests that personal and social expression may indeed become more normalized and acceptable throughout time as ESM use evolves in an organization. Practitioners can look to these results for guidance on ESM adoption in other organizations.

Limitations and Future Directions

Our findings have several limitations that should be acknowledged. First, they may be conditioned by our context and not fully generalizable to other cultures and organizations. The young age and other characteristics of TeleCom employees may have led to increased enthusiasm for ESM that would not be shared by other groups. In addition, the company’s broader change initiatives may make it a unique case among Russian firms. More research is needed to establish whether this study’s findings would hold up in other Russian as well as non-Russian firms. Furthermore, because ESM were introduced in the Russian organization in our study fewer than two years prior, its long-term effects and the sustainability of the broader cultural change remain to be seen. Also, we do not know whether the shift in the relative prevalence of nonwork versus work communication was limited to the last month of our data or a longer term trend, although the data suggest a continuing upswing in nonwork communication. Our findings are also constrained by the lack of post content that could give us better insight into the messages posted, although the tags proved helpful in categorizing content. We further lack a baseline measurement for cross-boundary communication prior to the introduction of ESM at TeleCom, although we tried to overcome this by gathering employee interview accounts of perceived communication changes resulting from the introduction of ESM. Finally, our interview data may be limited by the small number and duration of interviews, and the lack of inclusion of top management’s perspectives.

Future research should examine actual message content to assess the effects of particular types of messages and the extent to which knowledge sharing and other activities occurred. It should also probe deeper to examine how nonwork communication (which accounted for a substantial amount of posts) contributes to work-related collaboration and knowledge sharing. In addition to collaborating across geographical and hierarchical boundaries, interviewees also brought up the opportunity to bridge functional and departmental boundaries within the ESM; future research should explore cross-functional communication as well. Finally, future research should explore the relationship between culture and technology in greater depth, particularly how technological affordances may vary among cultural contexts.
Conclusion

This study expands our knowledge of the extent to which ESM foster cross-boundary communication in distributed organizations. Hierarchical and geographical boundaries that may have previously inhibited internal organizational communication were at least partially overcome by the use of ESM, as evidenced by its active use to connect managers and employees, as well as employees in various geographical regions. The findings highlight the importance of fostering interaction across various boundaries, especially in organizations that have traditionally been characterized by formal hierarchy and lack of open communication and knowledge sharing. In addition, our study questions the ubiquity of cultural barriers to knowledge sharing, engagement, and participatory management, which have been repeatedly established by earlier studies, illustrating as well the importance of organizational culture initiatives that foster both work and nonwork communication in ESM. Understanding how ESM adoption is shaped by particular organizational and cultural practices is important as we continue to theorize the role of ESM in distributed organizations.

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References


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Julia Eisenberg (PhD, Rutgers University) is an Assistant Professor at Pace University. Her research focuses on the influence of geographical and social distance on collaborative processes related to innovative team performance and the controversial influence of leadership styles. She is also currently working on a project to study the role of social media in connecting individuals across hierarchical and geographical boundaries.

Nik Ahmad Rozaidi (MS, University of Michigan; MS, Universiti Teknologi MARA; BS, University of Bristol) is Bank Negara Malaysia scholar and a PhD candidate at Rutgers University’s School of Communication and Information. His current research concerns the collaborative use of enterprise social media for organizational innovation and knowledge sharing.

Anna Gryaznova (PhD, Moscow State University) is an associate professor at Moscow State University Business School. Her research focuses on psychological contracts, leadership in various cultural environments, use of social media in the organizational context, and performance lessons from the arts. The results of her research have been published in Russia and abroad.