CORPORATE USE OF SOCIAL MEDIA: TECHNOLOGY AFFORDANCE AND EXTERNAL STAKEHOLDER RELATIONS

Young Anna Argyris[1] and **Kafui Monu[2]**

[1]*Department of Media and Information, School of Communication Arts and Sciences, Michigan State University, East Lansing, Michigan, USA*
[2]*Computer Information Systems, College of Business Administration, Savannah State University, Savannah, Georgia, USA*

Business organizations are beginning to recognize the substantial potential of social media for enhancing corporate communications with external stakeholders, including investors, customers, and the general public—all of whom can affect firms' financial future. Social media applications reach a wide spectrum of external stakeholders, help them express themselves and connect with one another, and engage them in ongoing conversations with the firm. Despite growing interest in this area, there has been limited research on this important topic. Accordingly, we focus on wikis, social networking sites, micro-blogging sites, and video-sharing sites, among many social media applications, and identify their respective beneficial attributes within the context of external communication. In so doing, we illuminate the prominent technical features of the four social media applications and review the existing literature in order to identify how business organizations take advantage of the unique features to facilitate their communicative activities in practice. We ground our analyses in validated conceptual frameworks in the fields of information systems and communication, such as the notion of technology affordances and Hutton's (1999) framework for public relations. As a result, we suggest the "Eight Affordances" of the four social media applications that help corporate communicators. This study expands the social media and technology affordance literature into the important, yet understudied, external communications field.

Keywords: *social media; technology affordance; external stakeholders; public relations; conceptual framework*

1. INTRODUCTION

Corporate use of social media for external communication—using social media to communicate with external stakeholders such as customers, investors, and the general public (Welch and Jackson 2007)—has grown exponentially in the past few years. External communication professionals are attracted to social media for its capacity to reach a broad audience, generate viral spread of information, and engage audiences (Macnamara 2010).

Address correspondence to Young Anna Argyris, Department of Media and Information, School of Communication Arts and Sciences, Michigan State University, 404 Wilson Road, Suite 403, East Lansing, Michigan 48824-1212, USA. E-mail: yelee@msu.edu

Using social media, corporate communicators hope to fulfill external stakeholders' ever-increasing demands for transparency, particularly in the wake of the loss of public trust incurred by the Enron accounting scandal and the collapse of major financial institutions during the subprime mortgage-induced crisis (Uzunoğlu and Onat 2012).

While social media is now expected to be part of the external corporate communications toolbox, such use of social media remains understudied by academics. This is contrasted starkly by the extensive attention that social media use for internal communication has received (e.g., Zammuto et al. 2007; Wagner and Bolloju 2005; Yates, Wagner, and Majchrzak 2010; Turban, Bolloju, and Liang 2011; Wang and Wei 2011; Treem and Leonardi 2012; Arazy and Gellatly 2012). Furthermore, the extant studies on social media use in external communications center on customer relations. For instance, Majchrzak, Wagner, and Yates (2006) investigated customers' use of wikis to aid in the creation of web content and new products for the firm. Others have examined the use of social networking sites for product endorsement and customer relationship management (Meadows-Klue 2008; Harris and Dennis 2011; Huang et al. 2013; Laroche, Habibi, and Richard 2013; Malhotra, Malhotra, and See 2013). Very little, however, is known about social media use for external audiences other than customers, despite the vital importance of good communication with investors and the general public to firms' financial future (Petersen and Martin 1996; Hutton 1999). As a result, communications specialists "understand they should be doing more with social media but are unsure where to begin" (Schlinke and Crain 2013).

Here, we investigate how firms can use social media to enhance their communication activities vis-à-vis a wide variety of external stakeholders—not only customers, but also investors and the general public. In so doing, we focus on four types of social media tools—wikis, social networking sites, micro-blogging sites, and video-sharing sites—because these are the types most commonly used for external communications according to the survey results administered to 2100 companies by Harvard Business Review Analytics Services in 2013.[1] We reviewed the existing studies to find how corporate communicators use these tools for external communications. Given the rapid growth of corporate use of social media, however, the existing studies may not be entirely up-to-date. To overcome this limitation, we identify prominent features of the four types of social media tools from the seminar literature to explain how these features can potentially enhance external communication activities. By recognizing both the actual use examples and the potential strengths derived from the tools' distinctive features, we are able to identify many possible capacities of the social media tools for external communication activities.

We base our analyses on validated frameworks from the fields of information systems and communications. To conceptualize the unique capacity of social media, we employ the notion of affordance. Affordance has been adopted by many researchers for the purpose of identifying abilities afforded by computerized systems in aiding a user in performing a task within a specific context (Bloomfield, Latham, and Vurdubakis 2010). In addition, to elucidate concrete communication activities facilitated by social media tools, we employ Hutton's (1999) specifications of public communication activities.

As a result of these analyses, we advance eight unique capacities that social media provide for external communication, namely, the "Eight Affordances." The Eight Affordances represent the capacities provided by the social media tools, such as encouraging active participation, providing audience interconnectivity, and fostering ongoing

---

[1] http://www.sas.com/resources/whitepaper/wp_23348.pdf.

engagement with the firm, among others. Many of these affordances are unique to social media inasmuch as presocial media communication tools, including mass media (Hazleton, Harrison-Rexrode, and Kennan 2007), are limited in these areas. Mass media are designed to disseminate and gather information in a monological manner (Kent and Taylor 2002). Therefore, mass media are dissimilar to social media, which foster dialogical communications between firm and audience (Kaplan and Haenlein 2010).

Furthermore, the four social media tools are not equal in terms of the extent to which they provide the Eight Affordances. For instance, social networking sites outperform video-sharing sites in their capacity for user interconnectivity through "friend lists," which allow users to find and contact one another. Therefore, we compare the four tools across the Eight Affordances. This comparison matrix may help practitioners find appropriate social media tools for specific external communication activities.

The remainder of this article consists of four sections. The first of these presents justifications as to why studying social media for external communication merits attention. The second presents the research method, followed by the Eight Affordances that we identify. In the third section, we discuss how one might apply the Eight Affordances for research and practice. In the last section, we summarize this study and propose a roadmap for future.

2. RESEARCH QUESTION AND JUSTIFICATIONS

In this section, we contrast social media vis-à-vis previous media, and external communication vis-à-vis its internal counterpart, to illuminate the idiosyncratic contexts of social media use for external communications. Next, we introduce the concept of affordance and describe how crucial it is to take usage contexts into account when identifying affordances of a computerized system. We claim that, given its idiosyncratic usage contexts, a study on social media affordance in external communication stands on its own right.

2.1. Previous Media Used in External Communications

Prior to the introduction of social media, external communication activities were primarily conducted via mass media tools (Hazleton, Harrison-Rexrode, and Kennan 2007). The role of mass media in this context was to simply broadcast and collect information, as opposed to creating opportunities for two-way conversations between the firm and its audiences (Kent and Taylor 2002).

This monological communication pattern changed with the introduction of Web 2.0, which introduced greater cooperation, flexibility, and data-gathering capabilities than traditional media (O'Reilly 2007). Web 2.0 applications provide users with the tools to shape or add to the service, thereby effectively making them codevelopers. Web 2.0 is more flexible than traditional media because it is "device agnostic"— designed to operate on any computing device (O'Reilly 2007). Last, Web 2.0 applications are better equipped than previous media for the type of data gathering and use needed for delivering personalized services (Kaplan and Haenlein 2010).

Social media is an extension of the Web 2.0 movement (O'Reilly 2007), as shown in its definition: "a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0 and that allow the creation and exchange of user-generated content" (Kaplan and Haenlein 2010). It is focused on user-generated content, works on any device, and gathers data so as to individualize user experience (O'Reilly

2007). As such, interaction via social media is more dialogical than that afforded by traditional media. This means that social media–based external communication differs considerably from previous modalities.

2.2. External Communication vs. Internal Communication

Likewise, external communication diverges markedly from internal communication in terms of purpose and target audience. The purpose of internal communication is to organize work within the firm, thereby adding value to the product and/or service (Cheney and Christensen 2001). Examples of value-added internal communication include informing engineers of customer preferences and sharing documents among project team members for the purpose of seamless information flow. External communication, by contrast, does not necessarily prioritize activities that offer direct and immediate value to the firm. The priority of external communication is to foster good faith and long-term relationships with stakeholders, which may or may not benefit the firm in the near future (Cheney and Christensen 2001). For example, a company that transparently discloses crises to shareholders may see sharp declines in valuation following such disclosures. Nevertheless, those practices can nurture good-faith relationships with the investment community, thereby benefiting a firm in the long run. Cause-related campaigns are another such example. Cause-related campaigns are designed to improve the firm's image by establishing a social presence and gaining social legitimacy in a community but also to fulfill a firm's corporate social responsibility (Shrivastava 1995), such as Unilever's "Sustainability Challenge" campaign in which 12 families across the United Kingdom competed in reducing domestic food bills and daily waste.

Another clear difference is that internal audiences are more clearly defined than external audiences. Internal communication refers to communication within an organization (Treem and Leonardi 2012), while external communication involves a wide range of audiences, including customers, investors, and the general public—basically, anyone outside the firm (Cheney and Christensen 2001). Customers include potential buyers who are not yet patrons (Payne and Frow 2005); and investors entail both current and potential shareholders as well as the investment community as a whole (Kelly, Laskin, and Rosenstein 2010). The general public is an even larger category, which includes government agencies, regulatory bodies, volunteer groups, and nonprofit organizations (Clarkson 1995).

2.3. Affordance

Given the idiosyncrasies of social (vs. traditional) media use for external (vs. internal) communication, there is a clear need to study affordances in this context. This is especially true inasmuch as affordances of computerized systems are best understood when usage contexts and users' goals are taken into account (Bloomfield et al. 2010; Markus and Silver 2008). Later in this section, we apply the previously known affordances of social media in internal communication to the contexts of external communication to illuminate why we need a new set of affordances specifically for external communication.

The affordance concept was first proposed by the ecological psychologist Gibson (1979) and then adopted by information systems (IS) researchers with modifications necessary for understanding capacities of computerized systems. IS researchers define technology affordances as the opportunities for action provided to a user by a computerized system under particular circumstances (Markus and Silver 2008; Bloomfield et al. 2010).

Table 1 Applying the previously known affordances to external communication.

Treem and Leonardi (2012) and Faraj et al. (2011)	Definition	Applicable to External Communication?	
		Applicable	Less Applicable
Visibility, persistence, and reviewability	To make users' communicative acts more visible, accessible, and reviewable at any time and place	This affordance helps the firm's content become visible and reviewable to audience	Firms may not want random external stakeholder-generated content visible or reviewable at all times due to the concerns of inaccurate postings and possible spread of unconfirmed rumors
Editability and experimentation	To edit communicative acts and try out novel ideas	This affordance makes external stakeholders to easily express themselves to the firm	Communication specialist must not post any content that is not verified. They are strongly discouraged to experiment with novel ideas. Inaccurate posting from the firm can mislead investors and regulatory bodies.
Association and recombinability	To build connections with other users and other users' content	This affordance connects stakeholders with one another, and also with the firm	Whether the association occurs between the firm and stakeholders or among stakeholders is unclear. In external communication, the two often have distinct outcomes. For instance, the former often results in co-creation of content, while the latter increases customer loyalty.

The concept of affordance is found helpful for examining what social media can do to users. As such, Treem and Leonardi (2012) identified four affordances of social media for internal communication within an organization; Faraj, Jarvenpaa, and Majchrzak (2011) recognized three affordances of technological platforms for internal communication for online communities (Table 1).

Because affordance is an emergent property, which arises amid dynamic interactions between technology and users who have unique goals, usage context must be taken into account (Markus and Silver 2008; Bloomfield et al. 2010). Consider a dashboard feature in a group decision support system, as an example. When the manager of a taskforce is leading a large project, she may use this feature to urge taskforce members to meet timelines for tasks. After the project is completed, the manager may refer to the dashboard to assess each individual's performance. The capabilities afforded by the dashboard to the manager are contingent on his or her specific goals and circumstances. In this sense, Bloomfield and colleagues (2010) stated:

One way of approaching the analysis of affordances is to ask: how, and under what circumstances are particular "affordances" *made* present? How and when are different action possibilities made available—or *un*available—to specific actors in particular settings? (Emphasis in the original text.)

As such, Treem and Leonardi (2012) and Faraj and colleagues' (2011) affordances of social media in internal communication are applicable to the context of external communication only with proper refinement and expansions necessary to reflect the affordances that are made present in external communication. For instance, their persistence, visibility, and reviewability affordance in internal communication means that user-generated content becomes visible and reviewable, and remains persistent at any time and place (Faraj et al. 2011; Treem and Leonardi 2012). In external communication, this affordance becomes available depending on the directionality of communicative acts. Clearly, a firm wants content generated by its communicators to be visible and reviewable by external audiences at any time and place. However, the firm often prevents audience-generated content from becoming visible or reviewable at all times due to concerns over inaccuracy, vandalism, and unconfirmed rumors, all of which can potentially harm the firm's reputation vis-à-vis investors and regulatory bodies. Accordingly, the persistence, visibility, and reviewability affordance is applicable to external communication with an addition of "whose" content becomes persistent. Also, the previously known affordances should be expanded to include social media capacities that become available in the context of external communication. An example of this is the ability to reach wide audiences. This affordance, which for lack of need has not been exploited for internal communication, becomes invaluable in external communication. Table 1 presents how the known affordances are more or less applicable to external communication.

3. IDENTIFICATION OF SOCIAL MEDIA AFFORDANCE IN EXTERNAL COMMUNICATION

Given the unique contexts involved, as mentioned in the previous section, we argue that social media affordances in external communication stand on their own right. In this section, we analyze the specific affordances for external communication. To this end, we first delineate the activities that firms perform for external communication. We adopt Hutton's (1999) public relations activities with additional customer relations activities outlined by Payne and Frow (2005), and investor relations as identified by Kelly and colleagues (2010), given the rapid expansions of relationship-specific activities in recent years. Table 2 presents these communication activities; Figure 1 presents our conceptual model.

3.1. Activities for Public Relations

Hutton (1999) identified six activities necessary for managing communication and relationships with external stakeholders. Hutton argued that public communication consists of three dimensions—interest, image, and initiative. Interest relates to whether the activity is in the interest of the external stakeholders or the firm. Image relates to whether the message is more interested in the perception or the reality of a situation. Initiative relates to whether the message is proactive or reactive. These three dimensions combine to yield six primary activities: persuasion, advocacy, public information, cause-related, image/reputation management, and relationship management.

Table 2 External communication activities.

Activity			Definition
General activity	Persuasion		Changing a particular part of the public's mind about the company and its actions
(Hutton 1999)	Advocacy		A defensive measure by a company to refute a claim that hurts the organization
	Public information		Providing information and education as a service to the general public
	Cause-related		Persuading the public to take up a cause that affects all of society
	Image/reputation management		Creating an impression in the minds of the public that the company wants to project
Relationship management	Public relations (Hutton 1999)		Finding a mutual interest between the company and the public to create "win–win" situations
(Hutton 1999; Payne and Frow 2005; Kelly et al. 2010)	Customer relations (Payne and Frow 2005)	Value-creation process	The activities used by the marketing team to manage the value exchange between the company and the customers
		Multichannel integration	Activities that create a combined and consistent message from the company to its customers among many media channels
		Information management	The collection, analysis, and use of customer data
		Performance assessment	The activities that assess the customer relationship management strategies
	Investor relations (Kelly et al. 2010)	Two-way symmetrical communication	The activities that provide and manage the relationship between management and investors

Persuasion refers to changing public opinion of a company in regards to a specific issue or action. Therefore, it serves the firm's interests rather than those of external stakeholders, is concerned with perception rather than reality, and is reactive rather than proactive because persuasion is intended to rectify the compromised image of a firm.

Advocacy refers to a company's defensive measures in refuting harmful claims. As such, advocacy serves the interest of the firm rather than those of external stakeholders, reflects reality rather than perception, and is reactive rather than proactive.

Public information is defined as providing information as a service to external stakeholders. Public information is neutral in terms of serving the interests of the external stakeholders or firm, and is reactive rather than proactive because the firm provides information when such needs arise (e.g., the launch of a newly developed medication).

Cause-related activities are actions intended to persuade external stakeholders to take up a cause. Such campaigns usually involve marshaling an unorganized public to champion a particular cause that serves the external stakeholders' interests more than those of the firm. Cause-related public relations are concerned slightly more with perception than reality because a common cause might reflect the interests of a specific group but not those
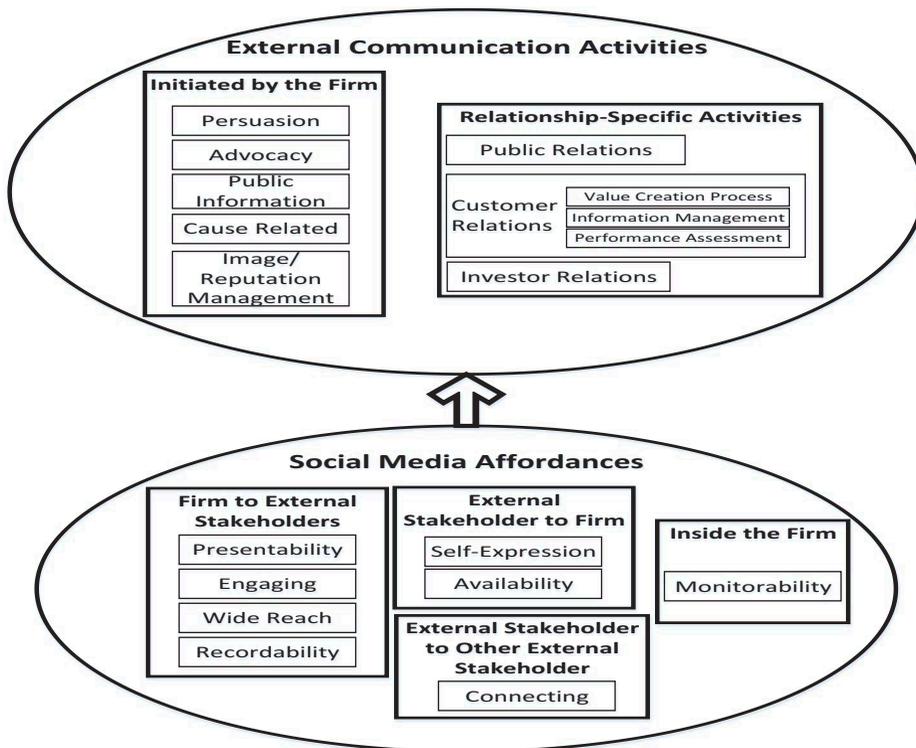
Figure 1 Conceptual framework.

of others. A medieval crusade is an example. A crusade was religiously motivated predominately against one religious group. Therefore, the crusade represents only the interests of that group. Cause-related public relations are more proactive than reactive inasmuch as they are intended to effect a grassroots movement.

Image/reputation management is the process of cultivating a positive impression of the company in external stakeholders' minds. It serves the firm's interest more than those of external stakeholders, is concerned with perception rather than reality, and proactively manages the firm's image ahead of any potential damage.

Finally, relationship management finds mutual interests between the company and the external stakeholders to create "win-win" situations. Relationship management benefits the firm, as it seeks to make the firm appear to operate in a responsible manner that conforms to the external stakeholders' interests. Therefore, it serves the firm's interest ahead of those of external stakeholders, but only slightly. Relationship management focuses on reality rather than perception and is proactive rather than reactive, as the firm is seeking cooperation and co-existence with stakeholders.

3.2. Relationship-Specific Activities

Hutton mentions public relations as only a relationship-specific activity. However, we have added activities conducted for customer and investor relationship management,

which have grown rapidly since Hutton introduced his framework in 1999 (Payne and Frow 2005; Kelly et al. 2010). Customer relationship management is comprised of four processes (Payne and Frow 2005). The first is the value creation process, which comprises the activities used by the marketing team to find the value of customers to the company and to determine how to manage the value exchange between the company and the customers. The second is the multichannel integration process, which encompasses activities that create a combined and consistent message from the company to its customers across various media. The third is the information management process, which includes the collection, analysis, and use of customer data. And the fourth is the performance assessment process, namely the activities that identify whether the customer relationship management strategies are actually working.

Investor relations involve two-way symmetrical communication in which the investor relations professional provides and manages messages to the investor as well as to management (Kelly et al. 2010). In other words, investor relations professionals become mediators between investors and management so that the two parties enhance mutual understanding and negotiate conflicts (Kelly et al. 2010). As such, the purpose of investor relations is to change the attitudes and behaviors of management as much as it is to change the attitudes and behavior of the investor community (Kelly et al. 2010).

3.3. Method for Identifying Social Media Affordances

To identify the affordances of the four social media tools for external communication, we performed a two-phased analysis. In the first phase, we conducted a comprehensive literature review to identify cases in which firms utilized the four social media tools for external communications. We used multidatabase search engines, such as ABI/INFORM, Academic Source Premier, Business Source Complete, and ACM Digital Library, with keywords that represent the four social media tools, as defined by Kaplan and Haenlein (2010). Specifically, we used "social media," "social networking sites," "user-generated content," "video-sharing sites," "micro-blogging," and "content collaboration sites" as keywords. In addition, we used the names of representative platforms from each category, such as "wikis," "YouTube," "Twitter," "Facebook," and so on. Last, we used keywords reflecting external communication such as "customers," "investors," "external stakeholders," "public relations," "customer relations," and "investor relations."

Once we gathered all of the cases, we categorized each one by analyzing how social media helped the firms fulfill the purposes and goals of specific external communication activities. The process can be best explained by the following example. Fournier and Avery (2011) refer to P&G's Old Spice campaign called "The man your man could smell like," wherein Old Spice was depicted as a superior man's body wash because it makes an ordinary man smell like a desirable man. To facilitate this campaign, P&G encouraged customers to upload their homemade videos on this theme, from which P&G adopted ideas for the next commercial. In this case, YouTube helped P&G convince customers of the advertising theme—that Old Spice is a superior man's body wash—by enticing customers to replicate the advertising theme. Thus, we categorize this case under Hutton's activity of "Persuasion." Once categorization of all the cases like this is complete, we looked into each case again, and then analyzed how the social media tool in question facilitated the corresponding activity. In this case, YouTube facilitates the persuasion activity by engaging customers in the campaign through production of their own videos. We, therefore, categorized this ability as the "engagement" and "self-expression" affordance. One case may be

categorized under more than one activity; more than one affordance may be derived from one case.

In the subsequent phase, we derived additional affordances from the primary features of the four tools. We added this phase because deriving affordances solely from existing cases has limitations, especially in a study of social media in external communication. Many new ways of using social media have emerged in recent years, and the current literature may have not yet caught up with them. Especially when considering a significant lapse of time between the first submission and the final publication of an article in any academic journal, some important affordances may yet to have appeared in the existing studies. To overcome this limitation, we analyzed features of the four social media tools and deduced likely affordances. In so doing, we focused on features of the four social media tools previously identified as "backbone" features. Specifically, we relied on Chawner and Lewis (2006), Gonzalez-Reinhart (2005), Wagner (2004), and Simha and Kishore (2009) for wikis; on Ellison and Boyd (2013) and Hampton et al. (2012) for social networking sites; on Honeycutt and Herring (2009) for micro-blogging sites; and on Duffy (2008) for video-sharing sites. Listing all existing features of the four tools is not feasible or necessary because many tools are being constantly adapted and upgraded as the technology advances. However, certain basic features remain consistent. For instance, a list of connected people, or "friends' list," is the backbone of social networking sites, but a game application is not (Ellison and Boyd 2013). Table 3 presents the list of backbone features and the sources.

3.4. The Eight Affordances

The eight affordances we identify are presentability, monitorability, reach, self-expression, engagement, connectivity, recordability, and availability as shown in Table 4. The Eight Affordances are not necessarily mutually exclusive; yet each affordance refers to a capability of social media that cannot be explained comprehensively by another affordance.

Now, we describe each of the eight affordances. For each affordance, we offer a definition and then explain how firms have used it. Next, we derive potential uses from

Table 3 Prominent features of the four social media tools.

Social Media Tools	Features	Sources
Wikis	Editable forum, search, multimedia support, web content management system, information structuring (hierarchy), and tagging	(Chawner and Lewis 2006; Gonzalez-Reinhart 2005; Wagner 2004; Simha and Kishore 2009)
Social networking sites	Profile, newsfeed, feedback, friend list, personal message, group, and subscription/hide	(Ellison and Boyd 2013; Hampton et al. 2012)
Micro-blogging sites	Short message (tweet), metadata tag (hashtag), short-message sharing (retweet), follower list (contact list), and reply	(Honeycutt and Herring 2009)
Video-sharing sites	Video content, related video, comment, viewer counter, and ratings	(Duffy 2008)

Table 4 Eight affordances of social media use for external communication.

Affordance	Directions of the Communication	Definition	External Communication Activities Supported by the Affordance
Presentability	Firm to external stakeholders	The ability to create and craft the firm's image desirable for the firm's particular purposes and strategic directions	Persuasion, advocacy, cause-related, and image/reputation management
Self-expression	External stakeholders to the firm	The ability to encourage the expression of external stakeholders' thoughts, ideas, and opinions due to the technically nondemanding nature of social media	Advocacy, value-creation process, and two-way symmetrical communication
Monitorability	Inside the firm	The ease of observing audiences' reactions to firms' communicative acts	• Information management, performance assessment, and two-way symmetrical communication • Indirect support: persuasion, advocacy, cause-related, image/reputation management, and public relations management
Reach	Firm to external stakeholders	The ability to address a wide range of individuals and organizations due to the broad spread of social media use	• Public information, cause-related, two-way symmetrical communication • Indirect support: persuasion, advocacy, image/reputation management, public relations, and value-creation process
Engagement	Firm to external stakeholders	The ability to keep the external stakeholders engaged in interactions with the firm	• Image/reputation management, public relations management, value-creation process, and two-way symmetrical communication • Indirect support: multichannel integration, persuasion, advocacy, and cause-related
Connectivity	External stakeholders to other external stakeholders	The ability to get external stakeholders to share content with other stakeholders	Persuasion, advocacy, cause-related, image/reputation management, value-creation, and two-way symmetrical communication
Recordability	Firm to external stakeholders	The ability to collect, store, and document conversations with external stakeholders	Public information, multichannel integration, information management, and two-way symmetrical communication
Availability	External stakeholders to the firm	The ability to access any content posted on the sites at any time and place	Public information and multichannel integration

existing features, which have not necessarily appeared in the literature to date. Last, we explain the particular external communication activities facilitated by the affordance in question. The complete list of examples and sources is presented in the Appendix.

3.4.1. Presentability. Social media enables firms to craft and present the firm's images in a desirable way. Using social networking sites, video-sharing sites, and micro-blogging sites, corporate communicators present carefully crafted images. For example, firms create and post multimedia content promoting brand images on video-sharing sites (Fournier and Avery 2011). Firms also utilize connections among users, such as friends' lists on social networking sites or followers on micro-blogging sites, and spread positive images virally along users' connections, as people tend to trust their acquaintances' endorsements of the firm more than direct messages from the firm (Chatterjee 2011).

Using the presentability affordance, firms can manage images/reputation, persuade stakeholders better by delivering positive images, mobilize advocates, and provide traction for cause-related campaigns by leveraging viral spread of information through user networks.

3.4.2. Self-expression. Because of their technically nondemanding, interactive, and liberating nature, social media afford external stakeholders the opportunity to share their thoughts, ideas, and opinions (Wagner 2004). External stakeholders can easily read and write content on social media with minimal training (Wagner 2004; Paroutis and Saleh 2009). This technical simplicity disinhibits users from withholding their ideas and thoughts (Huang and Güney 2012). Wikis therefore have been used successfully to solicit external stakeholder innovation as well as concerns/complaints (Decker et al. 2007; Simha and Kishore 2009; Standing and Kiniti 2011). In addition, we contend that self-expression in social networking sites is supported by personal web forums (such as Facebook timelines) where users can post personal messages; on micro-blogging sites with the "reply" feature; and on video-sharing sites with the "comment" feature.

Using this affordance, external stakeholders act as influencers (i.e., advocates) on others (Berkman 2013), participate in value-creation processes by providing input for new product development (Wagner and Majchrzak 2006), and, on occasion, direct their questions to management in a two-way symmetrical fashion.

3.4.3. Monitorability. Monitorability is the capacity to easily observe audiences' reactions to a firm's communicative acts by way of a particular social media platform. Using social media, firms collect and aggregate user responses efficiently so that the firm gains a deeper understanding of external stakeholders (Evans, Twomey, and Talan 2011; Coyle, Smith, and Platt 2012).

Using the monitorability affordance, firms can enhance their information management processes. The collected information turns into a valuable resource for performance assessment, as the firm can quickly detect problems from the stakeholders' reactions. Similarly, by attentively listening to investors' voices, firms can learn about market sentiment and deliver this information to management, thereby addressing rumors before negative sentiment affects valuations of the firm's securities (Gilbert and Karahalios 2010). We contend that this affordance indirectly supports other activities, such as persuasion, advocacy, cause-related public relations, image/reputation management, and public relations management, because communication professionals can better persuade stakeholders, advocate the firm, marshal cause-related campaigns, and manage the firm's image based on a knowledge of audience sentiment.

3.4.4. Reach. Reach refers to the ability of social media to reach a wide range of individuals and organizations due to its broad adoption by the general public. As of March 2013, Facebook had more than one billion users[2]; Wikipedia had 25 million articles and 100,000 active contributors[3]; YouTube had one billion unique monthly viewers[4]; and Twitter had 200 million active users.[5] This astonishing user base means that external stakeholders can hardly afford to fail to embrace new social media services as they emerge. By leveraging this broad user familiarity, business organizations can reach external stakeholders whom they previously could not reach.

The reach affordance is essential for providing information to the general public and for gaining support for a cause-related campaign (Burton and Soboleva 2011). Specifically, communications professionals can send financial performance data to attract a large number of potential investors to the firm (Q4-Web-Systems 2012a). Moreover, we contend that reach forms a necessary precondition for many activities because firms must be able to reach an audience first for persuasion, advocacy, and image/reputation management. Likewise, firms must reach the public and customers in order to manage relationships and to engage them in value-creation processes to co-create products and web content (Wagner and Majchrzak 2006).

3.4.5. Engagement. Social media affords a business organization the ability to engage external stakeholders in continuous conversations with the firm. Firms can easily update content on social media and send periodic reminders to external stakeholders to maintain stakeholders' active involvement, even when no immediate action is required of the stakeholders (Laroche et al. 2013). By keeping them engaged, the firm can maintain relationships with them and increase loyalty among external stakeholders (Bressler and Grantham 2000).

This affordance helps firms manage their image/reputation by keeping stakeholders informed of socially desirable activities of the firm, and strengthening relationships with the stakeholders. In addition, communication professionals can effectively maintain two-way symmetrical communication between the firm's management and investors by engaging them in continuous conversations; they can also encourage customers to provide valuable input for any value-creation process. Additionally, because of the engagement affordance, several firms are now using some social media tools as an integrated communication channel (Evans et al. 2011). Because constant exposure to an object increases the chance of a change in attitude toward said object (Petty and Cacioppo 1986), this affordance also indirectly assists with persuasion, advocacy, and cause-related campaigns.

3.4.6. Connectivity. Social media has the capacity to encourage external stakeholders to connect with other stakeholders. The connectivity affordance contrasts with the engagement affordance in the sense that the latter refers to communication between the firm and its stakeholders whereas the connectivity affordance refers to enabling communication among stakeholders. Connecting external stakeholders is useful because firms can disseminate information with greater effectiveness as the information spreads virally (Wang and Wei 2011).

---

[2]http://news.cnet.com/8301-1023_3-57566550-93/facebook-by-the-numbers-1.06-billion-monthly-active-users/.
[3]http://en.wikipedia.org/wiki/Wikipedia.
[4]http://www.youtube.com/yt/press/statistics.html.
[5]http://marketingland.com/twitter-flutters-past-the-200-million-active-user-mark-29001.

The connectivity affordance encourages external stakeholders to exchange information about the firm with one another. As shown in the success of Wikipedia, user connections provide traction to the growth of voluntary contributions. Also, investors may share their inquiries among themselves, which can be directed to management, thereby spurring two-way communications between investors and management. The connectivity affordance also enables communication professionals to assess values of individual stakeholders participating in value-creation processes. Those who are better connected are called "influencers," and firms strive to identify these individuals (Chatterjee 2011) because word-of-mouth is the most effective means of persuasion (Sweeney, Soutar, and Mazzarol 2008; Berkman 2013). Due to the effectiveness of word-of-mouth communication, the connectivity affordance helps firms persuade stakeholders, advocate on behalf of the firm, marshal cause-related campaigns, and manage the firm's image.

3.4.7. Recordability. Recordability is the ability to collect, store, and document communication with external stakeholders (Caple and Bogle 2013). By enticing stakeholders to communicate with the firm via social media, firms can easily save conversations with their stakeholders (Caple and Bogle 2013). For instance, firms use wikis as a central repository to manage documents with many external parties (Decker et al. 2007; Garcia-Perez and Ayres 2010; Standing and Kiniti 2011). In addition, we suggest that this affordance is supported in social networking sites by profiles, messaging, and feedback features, which a firm can use to collect users' comments; in micro-blogging sites by the list of short messages; and in video-sharing sites by the viewer counter and comment features.

By taking advantage of this recordability, firms can archive information they have shared with stakeholders. Likewise, in investor relations, we contend that the ability to record financial conversations is useful for preserving conversations between management and investors. This record can later prove to legislators that the management has done due diligence by disclosing financial performance to investors in compliance with existing regulations.

3.4.8. Availability. Availability refers to the ability of social media to grant users access to content at any time and place (Wagner and Bolloju 2005). Whereas recordability refers to the firm's ability to record its communications with stakeholders, availability refers to external stakeholders' ability to review these communications (Wagner and Bolloju 2005). We assert that this affordance is supported by the search feature on wikis' editable forum. Also, the micro-blogging sites have the metadata tags (e.g., hashtags) that allow users to find recent content using keywords.

Availability increases the transparency of a firm's communicative processes with its external stakeholders. As a result, the availability affordance allows external stakeholders to review public information and learn about the firm. Due to these benefits, some firms use micro-blogging sites to inform their audiences of the information that they shared elsewhere (Q4-Web-Systems 2012a). For instance, a firm tweets, "The first quarter performance is just announced. Please visit our webpage at. . . ." This way, availability can aid integrated corporate communication.

3.4.9. Comparison matrix. The Eight Affordances are unique properties of the four social media tools in the sense that presocial media tools are not equivalent to the social media tools in terms of the Eight Affordances. To illustrate this point, we analyze the eight affordances of mass media in this section (Table 5). Table 5 presents the comparison matrix.

Table 5 Comparison matrix.

	Social Media				Traditional Media			
	Wikis	Social Networking Sites	Micro-blogging Sites	Video-sharing Sites	TV	Radio	Print Media	Outdoor Media
Presentability	Low	High	High	High	High	High	High	High
Monitorability	Med	High	High	High	Low	Low	Low	Low
Reach	Low	High	High	High	High	High	Med	Low
Self-expression	Med	High	High	Med	Low	Low	Low	Low
Engagement	High	High	High	High	Low	Low	Low	Low
Connectivity	High	High	High	Low	Low	Low	Low	Low
Recordability	High	High	High	High	Low	Low	Low	Low
Availability	High	Low	Low	High	Low	Low	Low	Low

3.4.10. Mass media. Mass media employ media technologies that are intended to reach a wide audience by mass communication tools, such as television and film, radio, and print media (e.g., newspaper, magazine), as well as outdoor media such as billboards (Lule 2012). Television, film, and radio all have high levels of presentability and reach, given that content can be tailored to the needs and wants of advertisers and program sponsors. However, television and radio provide few opportunities to viewers to actively participate in communicative acts (Heeter 2000). They occasionally offer chances to participate but to a very limited number of people, and the chances to actually get connected to them are very slim (Heeter 2000). Therefore, self-expression, engagement, and connectivity affordances are low. The lack of viewer participation results in low levels of monitorability and recordability because there are few viewer responses for firms to monitor. Last, TV and radio content are hard to store unless viewers/listeners have dedicated devices for this purpose, such as video recorders or digital television recorders (low availability).

Print media also have high presentability because editors can write content as they wish. However, print media has low interactivity with readers as compared with online media, because readers are less likely to submit contents to print publications than on online media sites (Benson et al. 2012). Print media, therefore, scores low on self-expression, engagement, connectivity, monitorability, and recordability. Print content is also more cumbersome to store than digital information (low availability). Outdoor media, such as billboards, can effectively disseminate carefully crafted images by advertisers (high presentability), but can reach only those people nearby (low reach), are highly one-directional (low self-expression, engagement, connectivity, monitorability, and recordability) and hard to store (low availability).

3.4.11. Comparisons across the four social media applications. Although social media provide the Eight Affordances to greater degrees than presocial media, not all of the four social media provide the Eight Affordances equally, as they have distinct features that support particular goals of users. Along this line, we compare the four social media tools in terms of the degree to which each tool provides each of the Eight Affordances. In so doing, we mark the four social media tools with three decreasing levels of affordance—high, medium, and low—based on the two parameters: (i) the existence of usage examples in the literature and (ii) the existence of features that could lead to the affordance. Specifically, a high level of affordance means that we find both strong evidences

from the literature and clear features supporting the affordance. A medium level indicates either, (a) we find both examples and features, but the examples are arbitrary, or (b) we do not find an example, yet there are features from which the affordance could emerge. A low level means we find neither evidence nor any supporting features.

3.4.12. Wikis. Wikis provide high levels of self-expression, engagement, connectivity, recordability, and availability. A large number of previous studies show that wikis' collaborative editing forum garners voluntary contributions by allowing users to circumvent the task of learning complex software programs (Wagner and Majchrzak 2006). These voluntary contributions gain traction as contributors interact with others by editing, building, and tagging others' content (Chawner and Lewis 2006; Gonzalez-Reinhart 2005; Wagner 2004; Simha and Kishore 2009). In addition, wikis are web document management systems with advanced search features and multimedia support (Wagner 2004; Gonzalez-Reinhart 2005; Chawner and Lewis 2006; Simha and Kishore 2009), thereby providing recordability and availability affordances.

However, many corporate users refrain from posting messages on wikis due to concerns regarding information sensitivity and the potential repercussions of sharing inaccurate and incomplete information (Arazy and Gellatly 2012). Hence, it is unclear whether wikis' self-expression affordance has been fully realized in the context of investor relations, wherein inaccurate information could lead to severe financial losses. Collaborative editing is also potentially counterproductive to company message crafting, as anyone with editing privileges can edit and add content in a potentially harmful manner. The difficulty of controlling wiki content is well known, as such content grows in an organic manner (Gonzalez-Reinhart 2005). Conversely, however, limiting editing privileges in order to control quality comes at a cost in terms of reach affordance, as voluntary contribution is a wiki's driving force (Simha and Kishore 2009). Wikis also do not have immediate feedback options such as a "like" button, and while firms can check the number of pages contributed voluntarily by users, thereby revealing levels of external stakeholder interests in specific topics, this is a time-consuming process (Decker et al. 2007). Therefore, wikis provide medium-level monitorability.

3.4.13. Social networking sites. Social networking sites provide high-level affordances in all dimensions, except for availability. A company can display a well-crafted image through its company page. Communication specialists use social networking sites to monitor customers' reactions to new product offerings (Casteleyn, Mottart, and Rutten 2009) and investor sentiment (Gilbert and Karahalios 2010). In addition, firms use social networking sites to reach a wide variety of stakeholders and continuously engage them with brands (Harris and Dennis 2011). External stakeholders exploit the self-expression affordability on social networking sites to voice their opinions, which makes it possible to turn these users' voices into word-of-mouth communication to promote the firm's offerings. Many researchers have explored diverse ways to turn Facebook users into product endorsers (Gil-Or 2010; Chatterjee 2011; Harris and Dennis 2011; Berkman 2013; Huang et al. 2013; Malhotra et al. 2013).

However, we argue that social networking sites have low availability because, albeit possible, it is very cumbersome for average users to sort through a large number of posts on a company profile, particularly when it comes to older content.

3.4.14. Micro-blogging sites. Like social networking sites, micro-blogging sites support all affordances except for availability. Firms use micro-blogging sites to manage

their reputation (Evans et al. 2011) and build images of caring companies (Hawn 2009; Schultz, Martin and Lauren 2012). Also, firms monitor their stakeholders' short messages (e.g., tweets) carefully, reach diverse audiences, and engage in a dialogue with their stakeholders (Rybalko and Seltzer 2010). For instance, Twitter is useful for monitoring real-time reactions to news events and for providing a more authentic and personal communication experience for users (Evans et al. 2011). Firms make public announcements about their firms via Twitter (Kaplan and Haenlein 2010; Burton and Soboleva 2011). External stakeholders also can easily express their opinions using short messages and replies, and connect with others using their contact lists.

Many firms archive their external stakeholders' short messages so as to better understand their needs and concerns (Evans et al. 2011). Twitter, for instance, shares its application programing interface (API) so that firms can retrieve customers' tweets. In contrast, individual stakeholders, unless they have sufficient programming experience to use the Twitter API, are limited to metadata tags (e.g., hashtags in Twitter) to retrieve short messages, which only provide small sets of recent messages. Hence, we assert that micro-blogging sites provide low availability.

3.4.15. Video-sharing sites. Video-sharing sites score highly in terms of presentability, monitorability, reach, engagement, recordability, and availability, but medium in self-expression and low in connectivity affordances. Large firms create and disseminate promotional videos, which are very engaging and ready to be viewed by a large audience (Q4-Web-Systems 2012b). For instance, a firm used online video to solicit ideas for products or promotional campaigns from the public (Kaplan and Haenlein 2010). Also, firms can easily monitor what viewers think about the video content shared on the sites. The multimedia content shared on video-sharing sites is available at any time to anyone who wishes to watch them (high availability); firms can archive all of the videos and store viewers' comments (high recordability).

However, users can only provide comments on the video content posted on the sites, unless the firm gives options for them to post their own videos. Even in the case where users are allowed to post videos, they are rarely allowed to initiate conversations. Hence, video-sharing sites provide a mid-level of self-expression.

4. DISCUSSION

The analysis of the affordances demonstrates that social media provide unique capacities to aid external communication in comparison to the traditional media, and that these affordances expand the previously known affordances for internal communication. These contributions do not, however, exempt this study from limitations. This section describes contributions and limitations of this study, followed by our suggestions on potential avenues for future research and practical guidelines as to the use and disuse of social media for external communication.

4.1. Contributions and Limitations

This study advances theory in three ways. First, we demonstrate that social media have distinctive properties that set them apart from the presocial media. Mass media score highly in terms of presentability and reach, but do not match social media's capacity for monitoring audience responses, eliciting feedback, encouraging continuous engagement,

fostering interconnectivity, or making content available and recordable. These unique properties have been made available primarily by the dialogical conversations nurtured on social media.

Second, this study shows that social media affordances for external communication have both commonalities and divergences from those in internal communication. The affordances proposed by Treem and Leonardi (2012) and Faraj and colleagues (2011) need to be revised and expanded to truly reflect the idiosyncratic contexts of social media use for external communication. This finding has theoretical support from previous researchers of affordance who underscore the importance of incorporating usage contexts (Bloomfield et al. 2010).

Here we have added directionality of communication in the definition of affordances, given potential accountability, security, and legal issues that are likely to arise in the context of external communication. External communication often involves parties with conflicting interests, dissimilar internal communication, and whose participants share common goals (Cheney and Christensen 2001). For instance, potential investors may want the firm's stock prices to decrease so that they can obtain them at a lower price, while the management wants fair valuation of their stocks. These and other potentially conflicting interests make it important to check "who" is posting content.

In addition, we demonstrate that affordances that are latent in internal communication become prominent in external communication, such as presentability and reach. In external communication, communication specialists are more motivated to portray the firm's images positively to a wide range of audiences, including those who are not well aware of the firm. In internal communication, this is a less important issue. Indeed, Treem and Leonardi (2012) and Faraj and colleagues (2011) have not included such affordances. Consequently, this study also expands the literature on social media affordance into the important, yet less known, area of external communication.

Third, this study introduces the Eight Affordances and shows that four social media applications are not equal in terms of providing them. The four applications are equipped with distinct backbone features—such as a freely editable wiki forum and friend lists on social networking sites—serving distinct purposes, functions, and goals, thereby resulting in different levels of affordances. Recognizing the idiosyncratic capacities of individual social media applications deepens our understanding of the corporate use of social media for external communication.

Despite its substantial contributions, this study has several limitations, particularly with regard to the methodology employed. We inductively coded the cases we found through a comprehensive literature review. Although we strived to code the cases systematically by referring to the existing frameworks, such as Hutton's and the concept of affordance, because of the nature of inductive coding, the analyses are not entirely free from the researchers' subjective judgments. However, inductive coding or any forms of open-coding necessitates researchers' subjective judgment calls (Glaser and Strauss 1967; Corbin and Strauss 1990). Also, matching a feature to a communication activity could be done more systematically, including an analysis of what a feature can do, what subfeatures are nestled in a feature, and so forth. We believe this analysis itself can constitute a paper that stands on its own right and, hence, we needed to draw a fine line to make sure that we do not include more than we can cogently embrace in one paper.

Another limitation is the lack of existing research on this topic, which hindered us from extracting affordances from existing cases. Although we conducted two-phased analyses to overcome this limitation, we do not deny that our analysis could have been richer and

more complete had we had an extensive pool of existing research on the topic. However, this lack of previous research also allows us to identify promising fields of future research.

4.2. Potential Venues for Future Research

As shown in the four tables included in the Appendix, there are many areas of social media affordances where we could not find existing studies. We suggest that some of these gaps can translate into opportunities for future research. In this section, we point out these areas along with potential research questions for future research.

No research has discussed the use of wikis for persuasion, advocacy, cause-related, image/reputation management, or two-way symmetrical communication. Future researchers may want to investigate why firms are not using wikis for these purposes.

Many studies have been conducted on the use of social networking sites for external communications. Two topics, however, have not yet been discussed—the use of social networking sites for multichannel integration and two-way communication for investor relations. Because social networking sites deliver content in a wide variety of formats, firms could use social networking sites as an integrated communication channel. However, because of their low score in terms of the availability affordance, the use of social networking sites as an integrated communication channel, while technically feasible, might not be well received by audiences. It is hard for an average user to navigate his or her way through long message threads on social networking sites. Instead, we argue that the lack of research on the use of social networking sites for investor relations presents an opportunity for future research. We believe social networking sites can facilitate two-way communication between investors and management because the sites afford users the ability to express their voices and connect with other investors. More specifically, firms can utilize the "group" feature of social networking sites to maintain an exclusive community with select investors, including individuals and institutional investors. Investors may post their inquiries, share concerns, and then direct them to the management, who can respond to investor inquiries directly or through the firm's investor relations team. The impact of this shareholder group and the group's word-of-mouth communication on firms' stock prices would be promising topics.

Like social networking sites, micro-blogging sites have attracted much attention from academia. As such, most of their usages have been discussed, except for their value-creation processes. Micro-blogging sites, such as Twitter, have supporting features such as short messages (tweets), short-message sharing (retweets), metadata tags (hashtags), and contacts (followers), which can enhance value-creation processes. For instance, many firms conduct polls to solicit names for a new product. Future researchers could investigate how these value-creation processes increase external stakeholders' engagement with, and loyalty to, the firm.

Very little research has been conducted on video-sharing sites. As shown in the Appendix, we have been unable to find research on use of video-sharing sites for public information, public relations management, multi-channel integration, information management, or investor relations. It is surprising to see little attention given to these areas, because firms have been using video-sharing sites extensively for these very purposes. For instance, British Petroleum conducted a massive campaign on YouTube aimed at remedying its damaged corporate image after the Deepwater Horizon oil spill in 2010 (Q4-Web-Systems 2012b). Because video content is entertaining, engaging, and easily understood by anyone, regardless of age, gender, and education level (Q4-Web-Systems 2012b), video-sharing

sites can be effective for managing public relations. To this end, future researchers may consider how multimedia content changes the public's perceptions of a firm.

4.3. Practical Implications

The Eight Affordances generate several practical implications. First, the framework provides tools to evaluate the usefulness of social media for external communication activities. Specifically, the affordances can be categorized as firm to stakeholder, stakeholder to firm, within the firm, and among stakeholders (Figure 1). Each of the social media affordances has a specific function in each category that is related to practitioner goals, such as sending messages to stakeholders, receiving messages from stakeholders, using external communication information within the firm, and using stakeholders as influencers (Cheney and Christensen 2001). When practitioners want to send messages to stakeholders, the quality of the message is aided by the presentability affordance, the reach of the message is aided by the reach affordance, the effectiveness of the message is aided by the engagement affordance, and the long-term value of the message is aided by the recordability affordance. When practitioners want to receive messages from stakeholders, the effectiveness of their efforts is aided by the self-expression affordance, and the reach of their efforts is aided by the availability affordance. When practitioners may want the firm to learn more about their external communication activities, this is aided by the monitorability affordance. And last, when practitioners want stakeholders to discuss messages among themselves, this is aided by the connectivity affordance.

Second, with this framework practitioners can now evaluate current and future social media applications based on how they wish to use the application. For instance, using video-sharing sites for public information would be appropriate, because the content is easily available for the public to search. However, it may be detrimental to use social networking sites or micro-blogging sites, because their content cannot be easily searched.

Third, the framework informs practitioners about disuse of social media applications based on their affordances. For instance, it may not be appropriate for a campaign aimed at influencing public opinion on a controversial topic to receive responses from stakeholders whose interests may run contrary to those of the campaign. Therefore, the practitioner may want to shy away from social media applications that afford high levels of self-expression, such as micro-blogging sites, and instead consider using a video-sharing site with its mid-level self-expression affordance.

5. CONCLUSION

This article investigates the use of social media for external communications by firms. Research has been conducted on the use of social media within a firm, but little IS research has investigated the use of social media for communicating outside of the firm. For a systematic view of how social media can aid external communications, we introduce the Eight Affordances that social media provides to its corporate users. By understanding how social media has been used in particular cases, we find that social media has helped firms perform communicative acts, monitor the effectiveness of campaigns, create relational ties, and store information. More specifically, we find that social media's affordances for external communication are presentability, monitorability, reach, self-expression, engagement, connectivity, recordability, and availability. The analysis of communication activities for customers, investors, and the general public shows that each social media affordance is

useful for some external communication activities. For instance, the wide-reach affordance is important for persuading the general public, but not as important for gathering information about customers. By understanding how social media aids specific activities, we are able to suggest how to use current and existing social media applications.

This study furnishes roadmaps for both practitioners and researchers who are interested in social media, but are not sure of "how-to" due to rapid technical developments and changes in the business environment. Specifically, practitioners can use the Eight Affordances advanced in this article to evaluate any future social media tool for its applicability to external communication. By considering the Eight Affordances of new social media, practitioners are better equipped to evaluate the helpfulness of new social media applications as they are launched. For instance, young people are eschewing Facebook in favor of services like Reddit and Instagram, which provide greater anonymity and interactivity.[6] How can companies adapt to this change? An analysis of Reddit and Instagram, in relation to the Eight Affordances, would guide practitioners on how to use the sites for external communication.

In addition, by identifying the affordances for social media in external communications, we produce a better understanding of the phenomenon that might serve as a foundation for future studies in this area. For instance, researchers could test whether these affordances are antecedents to social media adoption. The affordances themselves can be a rich area of research. For instance, currently we assume that the affordances do not influence each other, but more research is needed to determine whether these affordances interact with each other and how their interaction affects the uses of the applications.

ORCID

Young Anna Argyris ⓘ http://orcid.org/0000-0003-2415-3223
Kafui Monu ⓘ http://orcid.org/0000-0003-1533-1622

REFERENCES

Arazy, O., and I. R. Gellatly. 2012. "Corporate wikis: The effects of owners' motivation and behavior on group members' engagement." *Journal of Management Information Systems* 29(3):87–116.

Baute, N. 2010, July 17. "How the Old Spice campaign changed social media". Retrieved from http://www.thestar.com/entertainment/2010/07/17/how_old_spice_campaign_changed_social_media.html.

Benson, R., M. Blach-Ørsten, M. Powers, I. Willig, and S. V. Zambrano. 2012. "Media systems online and off: Comparing the form of news in the United States, Denmark, and France." *Journal of Communication* 62(1):21–38.

Berkman, R. 2013. "Turning Facebook fans into product endorsers." *MIT Sloan Management Review* 54(2):1–4.

Bloomfield, B. P., Y. Latham, and T. Vurdubakis. 2010. "Bodies, technologies and action possibilities: When is an affordance?" *Sociology* 44(3):415–433.

Bressler, S. E., and C. Grantham. 2000. *Communities of Commerce: Building Internet Business Communities to Accelerate Growth, Minimize Risk, and Increase Customer Loyalty*. New York: McGraw-Hill Professional.

[6]"Yes, you've chased your kids off Facebook—here's where they went." http://www.nbcnews.com/technology/yes-youve-chased-your-kids-facebook-heres-where-they-went-1C9840070.

Brown, V. R., and E. D. Vaughn. 2011. "The writing on the (Facebook) wall: The use of social networking sites in hiring decisions." *Journal of Business and Psychology* 26(2):219–225.

Burton, S., and A. Soboleva. 2011. "Interactive or reactive? Marketing with Twitter." *Journal of Consumer Marketing* 28(7):491–499.

Byron, E. 2010. "Diaper gripes grow louder for P&G: Company staunchly defends new Pampers as allegations of rashes, leaks find traction on the Web." *The Wall Street Journal*, B1.

Caple, H., and M. Bogle. 2013. "Making group assessment transparent: What wikis can contribute to collaborative projects." *Assessment & Evaluation in Higher Education* 38(2):198–210.

Casteleyn, J., A, Mottart, and K. Rutten. 2009. "How to use data from Facebook in your market research." *International Journal of Market Research* 51(4):439–447.

Chatterjee, P. 2011. "Drivers of new product recommending and referral behaviour on social network sites." *International Journal of Advertising* 30(1):77–101.

Chawner, B., and P. H. Lewis. 2013. "WikiWikiWebs: New ways to communicate in a web environment." *Information Technology and Libraries* 25(1):33–43.

Cheney, G., and L. T. Christensen. 2001. "Organizational identity: Linkages between internal and external communication." In *New Handbook of Organisational Communication*. New York: Sage Publications.

Chu, S. C., and Y. Kim. (2011). "Determinants of consumer engagement in electronic word-of-mouth (eWOM) in social networking sites." *International Journal of Advertising* 30(1):47–75.

Clarkson, M. E. 1995. "A stakeholder framework for analyzing and evaluating corporate social performance." *Academy of Management Review* 20(1):92–117.

Constantinides, E., and S. J. Fountain. 2008. "Web 2.0: Conceptual foundations and marketing issues." *Journal of Direct, Data and Digital Marketing Practice* 9(3):231–244.

Corbin, J. M., and A. Strauss. 1990. "Grounded theory research: Procedures, canons, and evaluative criteria." *Qualitative Sociology* 13(1):3–21.

Coyle, J. R., T. Smith, and G. Platt. 2012. "'I'm here to help': How companies' microblog responses to consumer problems influence brand perceptions." *Journal of Research in Interactive Marketing* 6(1):27–41.

Davison, H. K., C. Maraist, and M. N. Bing. 2011. "Friend or foe? The promise and pitfalls of using social networking sites for HR decisions." *Journal of Business and Psychology* 26(2):153–159.

Decker, B., E. Ras, J. Rech, P. Jaubert, and M. Rieth. 2007. "Wiki-based stakeholder participation in requirements engineering." *Software, IEEE* 24(2):28–35.

Duffy, P. 2008. "Engaging the YouTube Google-eyed generation: Strategies for using Web 2.0 in teaching and learning." *The Electronic Journal of e-Learning* 6(2):119–130.

Ellison, N. B., and D. Boyd. 2013. "Sociality through Social Network sites." In *The Oxford Handbook of Internet Studies*, edited by W. H. Dutton (pp. 151–172). Oxford: Oxford University Press.

Evans, A., J. Twomey, and S. Talan. 2011. "Twitter as a public relations tool." *Public Relations Journal* 5(1):1–20.

Faraj, S., S. L. Jarvenpaa, and A. Majchrzak. 2011. "Knowledge collaboration in online communities." *Organization Science* 22(5):1224–1239.

Fournier, S., and J. Avery. 2011. The uninvited brand. *Business Horizons* 54(3):193–207.

Furlow, N. E. 2011. "Find us on Facebook: How cause marketing has embraced social media." *Journal of Marketing Development and Competitiveness* 5(6):61–64.

Garcia-Perez, A., and R. Ayres. 2010. "Wikifailure: The limitations of technology for knowledge sharing." *Electronic Journal of Knowledge Management* 8(1):43–52.

Gibson, J. J. 1979. *The Ecological Approach to Visual Perception*. Hillsdale, NJ: Lawrence Erlbaum.

Gil-Or, O. 2010. "Building consumer demand by using viral marketing tactics within an online social network." *Advances in Management* 3(7):7–14.

Gilbert, E., and K. Karahalios. 2010. "Widespread worry and the stock market. In *Proceedings of the Fourth International AAAI Conference on Weblogs and Social Media*. Menlo Park, CA: AAAI Press.

Glaser, B. G., and A. L. Strauss. 1967. *The Discovery of Grounded Theory: Strategies for Qualitative Research*. Piscataway, NJ: AldineTransaction.

Gonzalez-Reinhart, J. 2005. "Wiki and the wiki way: Beyond a knowledge management solution." *Information Systems Research Center* 2007:1–22.

Greenberg, P. 2010. "The impact of CRM 2.0 on customer insight." *Journal of Business & Industrial Marketing* 25(6):410–419.

Halpern, D., and J. Gibbs. 2013. "Social media as a catalyst for online deliberation? Exploring the affordances of Facebook and YouTube for political expression." *Computers in Human Behavior* 29(3):1159–1168.

Hampton, K. N., L. S. Goulet, C. Marlow, and L. Rainie. 2012. "Why most Facebook users get more than they give." *Pew Internet & American Life Project*, 3.

Harris, L., and C. Dennis. 2011. "Engaging customers on Facebook: Challenges for e-retailers." *Journal of Consumer Behaviour* 10(6):338–346.

Hawn, C. 2009. "Take two aspirin and tweet me in the morning: How Twitter, Facebook, and other social media are reshaping health care." *Health Affairs* 28(2):361–368.

Hazleton, V, J. Harrison-Rexrode, and W. Kennan. 2007. "New technologies in the formation of personal and public relations." In *New Media and Public Relations*, edited by Sandra Duhe (pp. 91–105). New York: Peter Lang.

Heeter, C. 2000. "Interactivity in the context of designed experiences." *Journal of Interactive Advertising* 1(1):3–14.

Hennig-Thurau, T., E. C. Malthouse, C, Friege, S. Gensler, L. Lobschat, A. Rangaswamy, and B. Skiera. 2010. "The impact of new media on customer relationships." *Journal of Service Research* 13(3):311–330.

Honeycutt C., and S. C. Herring. 2009. "Beyond microblogging: Conversation and collaboration via Twitter." In *Proceedings of the Forty-second Hawaii International Conference on System Sciences (HICSS-42)*. Los Alamitos, CA: IEEE Press.

Huang, J., S. Su, L. Zhou, and X. Liu. 2013. "Attitude toward the viral ad: Expanding traditional advertising models to interactive advertising." *Journal of Interactive Marketing* 27(1):36–46.

Huang, K. Y., and S. Güney. 2012. "Toward a framework of Web 2.0-driven organizational learning." *Communications of the Association for Information Systems* 31(1):6.

Hutton, J. G. 1999. "The definition, dimensions, and domain of public relations." *Public Relations Review* 25(2):199–214.

Kaplan, A. M., and M. Haenlein. 2010. "Users of the world, unite! The challenges and opportunities of social media." *Business Horizons* 53(1):59–68.

Kelly, K. S., A. V. Laskin, and G. A. Rosenstein. 2010. "Investor relations: Two-way symmetrical practice." *Journal of Public Relations Research* 22(2):182–208.

Kent, M. L., and M. Taylor. 2002. "Toward a dialogic theory of public relations." *Public Relations Review* 28(1):21–37.

Kim, S., and H. Park. 2013. "Effects of various characteristics of social commerce (s-commerce) on consumers' trust and trust performance." *International Journal of Information Management* 33(2):318–332.

Krabina, B. 2010. "A semantic wiki on cooperation in public administration in Europe." *Journal of Systemics, Cybernetics and Informatics* 8:42–45.

Laroche, M., M. R. Habibi, and M. O. Richard. 2013. "To be or not to be in social media: How brand loyalty is affected by social media?" *International Journal of Information Management* 33(1):76–82.

Lule, J. 2012. *Understanding Media and Culture: An Introduction to Mass Communication*. Washington, DC: Flatworld Knowledge.

Macnamara, J. 2010. "Public relations and the social: How practitioners are using, or abusing, social media." *Asia Pacific Public Relations Journal* 11(1):21–39.

Majchrzak, A., C. Wagner, and N. Yates. 2006. "Corporate wiki users: Results of a survey." Paper presented at the *Second International Symposium on Wikis*, Copenhagen.

Malhotra, A., C. K. Malhotra, and A. See. 2013. "How to create brand engagement on Facebook." *MIT Sloan Management Review* 54(2):18–20.

Markus, M. L., and M. S. Silver. 2008. "A foundation for the study of IT effects: A new look at DeSanctis and Poole's concepts of structural features and spirit." *Journal of the Association for Information Systems* 9(3/4):609–632.

Meadows-Klue, D. 2008. "Opinion piece: Falling in Love 2.0: Relationship marketing for the Facebook generation." *Journal of Direct, Data and Digital Marketing Practice* 9(3):245–250.

O'reilly, T. 2007. "What is Web 2.0: Design patterns and business models for the next generation of software." *Communications and Strategies* 65(1):17–37.

Obal, M., G. Burtch, and W. Kunz. 2011. "How can social networking sites help us?" *International Journal of Integrated Marketing Communications* 3(2):33–47.

Paroutis, S., and A. Al Saleh. 2009. "Determinants of knowledge sharing using Web 2.0 technologies." *Journal of Knowledge Management* 13(4):52–63.

Payne, A., and P. Frow. 2005. "A strategic framework for customer relationship management." *Journal of Marketing* 69(4):167–176.

Petersen, B. K., and H. J. Martin. 1996. "CEO perceptions of investor relations as a public relations function: An exploratory study." *Journal of Public Relations Research* 8(3):173–209.

Petty, R. E., and J. T. Cacioppo. 1986. *Communication and Persuasion: Central and Peripheral Routes to Attitude Change*. New York: Springer.

Poynter, R. 2008. "Facebook: The future of networking with customers." *International Journal of Market Research* 50(1):11–12.

Q4-Web-Systems. 2012a. "Part 1. Twitter and Stocktwits." *Public Company Use of Social Media for Investor Relations 2012*. Retrieved from http://www.q4blog.com/category/whitepapers/.

Q4-Web-Systems. 2012b. "Part 3. YouTube and Slideshare." *Public Company Use of Social Media for Investor Relations 2012*. Retrieved from http://www.q4blog.com/category/whitepapers/.

Rybalko, S., and T. Seltzer. 2010. "Dialogic communication in 140 characters or less: How Fortune 500 companies engage stakeholders using Twitter." *Public Relations Review* 36(4):336–341.

Schlinke, J., and S. Crain. 2013. "Social media from an integrated marketing and compliance perspective." *Journal of Financial Service Professionals* 67(2):85–92.

Schultz, D. E., R. B. Martin, and I. L. Lauren. 2012. "Consumer retailer preference and Facebook: Friends or foes?" *International Journal of Integrated Marketing Communications* 4(1):7–18.

Shrivastava, P. 1995. "The role of corporations in achieving ecological sustainability." *Academy of Management Review* 20(4):936–960.

Simha, A., and R. Kishore. 2009. "Enhancing e-Collaboration effectiveness through the use of Wikis: A theoretical examination in the context of requirements elicitation." *International Journal of E-Collaboration* 5(3):58–78.

Standing, C., and S. Kiniti. 2011. "How can organizations use wikis for innovation?" *Technovation* 31(7):287–295.

Sweeney, J. C., G. N. Soutar, and T. Mazzarol. 2008. "Factors influencing word of mouth effectiveness: Receiver perspectives." *European Journal of Marketing* 42(3/4):344–364.

Treem, J. W., and M. L. Paul. 2012. "Social media use in organizations: Exploring the affordances of visibility, editability, persistence, and association." *Communication Yearbook* 36:143–189.

Turban, E., N. Bolloju, and T. P. Liang. 2011. "Enterprise social networking: Opportunities, adoption, and risk mitigation." *Journal of Organizational Computing and Electronic Commerce* 21(3):202–220.

Uzunoğlu, E., and F. Onat. 2012. "Public relations in a time of turbulence: A study on Turkish PR firms." *International Journal of Human Sciences* 9(1):769–792.

Vinke, S. N. A. 2011. "Green tweets: Communicating corporate responsibility through social media." Master Thesis, Tilburg University, The Netherlands.

Wagner, C. 2004. "Wiki: A technology for conversational knowledge management and group collaboration." *The Communications of the Association for Information Systems* 13(1):265–289.

Wagner, C., and N. Bolloju. 2004. "Supporting knowledge management in organizations with conversational technologies: Discussion forums, weblogs, and wikis." *Journal of Database Management* 16(2):I–VIII.

Wagner, C., and A. Majchrzak. 2007. "Enabling customer-centricity using wikis and the wiki way." *Journal of Management Information Systems* 23(3):17–43.

Wang, W. T., and Z. H. Wei. 2011. "Knowledge sharing in wiki communities: An empirical study." *Online Information Review* 35(5):799–820.

Waters, R. D., and J. Y. Jamal. 2011. Tweet, tweet, tweet: A content analysis of nonprofit organizations' Twitter updates. *Public Relations Review* 37(3):321–324.

Welch, M., and P. R. Jackson. 2007. "Rethinking internal communication: A stakeholder approach." *Corporate Communications: An International Journal* 12(2):177–198.

Yates, D., C. Wagner, and A. Majchrzak. 2010. "Factors affecting shapers of organizational wikis." *Journal of the American Society for Information Science and Technology* 61(3):543–554.

Zammuto, R. F., T. L. Griffith, A. Majchrzak, D. J. Dougherty, and S. Faraj. 2007. "Information technology and the changing fabric of organization." *Organization Science* 18(5):749–762.

BIOGRAPHIES

Young "Anna" Argyris is an assistant professor in the Department of Media and Information, College of Communication Arts and Sciences at Michigan State University. She earned a PhD from the University of British Columbia under the supervision of Dr. Izak Benbasat. Beginning from her master's thesis, Professor Argyris has published in such premier journals as *MIS Quarterly, Information Systems Research, Communications of the ACM*, and *ACM Transactions on Computer-Human Interaction*, which have been cited over 500 times. Her research centers on corporate use of social media, virtual organizations, computer-mediated communication, and online learning.

Dr. Kafui Monu is an assistant professor of computer information systems at Savannah State University. He holds a doctoral degree from the University of British Columbia. Professor Monu's main area of research is system analysis and design, with special interest in helping developers meet user expectations through conceptual modeling. His work includes representing users' decision-making processes to system designers. Dr. Kofu's earlier work focused on disaster management and consumer marketing, and he is currently working in the area of social media, with additional interest in gamification. He is current President of AIS SIGGAME, an information systems research group focused on games, game-like applications, and game design. His recent work on game design theory has been mentioned in *Gamasutra* and *Critical Distance*.

APPENDIX

Table A Wiki for external communication.

External Communication Activity	Uses Found in Previous Studies	Sources	Extracted Affordance	Features that Support the Affordances
Persuasion	None	N/A	N/A	None
Advocacy	None	N/A	N/A	None
Public information	To post updates on product releases	(Standing and Kiniti 2011)	Recordability and availability	Editable forum and multimedia support
Cause-related	None	N/A	N/A	None
Image/reputation management	None	N/A	N/A	None
Public relations management	To use wiki as a repository of documents	(Krabina 2010)	Recordability and availability	Editable forum, search features, Web content management system, and information structuring
Customer relations management i. Value-creation process	• To communicate and collaborate with business partners • To elicit clients' requirements for software development • To co-create editorials with customers • To increase communication between disparate parties and to solicit innovative ideas	(Simha and Kishore 2009; Decker et al. 2007; Standing and Kiniti 2011)	Self-expression, engaging, and connecting	Editable forum and tagging
Customer relations management ii. Multichannel integration	• To manage documents necessary for software development projects involving many external parties • As a central repository of shared information with customers	(Decker et al. 2007; Garcia-Perez and Ayres 2010; Standing and Kiniti 2011)	Recordability and availability	Editable forum, multimedia support, search features, Web content management system, and information structuring
Customer relations management iii. Information management	• To enable clients to indicate conflicts and parts they cannot understand • To answer users' questions about technical difficulties	(Decker et al. 2007; Wagner and Majchrzak 2006)	Self-expression and engaging	Editable forum and tagging
Customer relations management iv. Performance assessment	To analyze whether the discussion on wiki is focused	(Decker et al. 2007)	Monitorability	None
Investor relations management i. Two-way symmetrical communication	None	N/A	N/A	None

Table B Social networking sites for external communication.

External Communication Activity	Uses Found in Previous Studies	Sources	Affordances	Features that Support the Affordances
Persuasion	To transform Facebook users into product endorsers	(Berkman 2013; Poynter 2008)	Engaging, connecting, and presentability	Profile, newsfeed, feedback features, friends' list
Advocacy	To cause word of mouth using "influencers"	(Chatterjee 2011; Gil-Or 2010; Harris and Dennis 2011; Obal, Burtch, and Kunz 2011; Schultz, Block, and Labrecque 2012; Chu and Kim 2011)	Engaging and presentability	Profile, newsfeed, feedback features, messages, and groups
Public information	To distribute their advertisement messages	(Gil-Or 2010)	Wide reach	Profile, newsfeed
Cause-related	To launch and perform cause-related campaigns	(Furlow 2011)	Engaging	Profile, newsfeed, feedback features, and group
Image/Reputation management	To earn consumers' trust by utilizing groups as advocates	(Kim and Park 2013; Laroche, Habibi, and Richard 2013)	Presentability	Profile, newsfeed, subscription/hide feature, friend's list, group
Public relations management	White House uses social networking sites to foster political discussion among citizens	(Halpern and Gibbs 2013)	Engaging, connecting	Friends' list, profile, newsfeed, subscription/hide feature
Customer relations management i. Value-creation process	• To provide cost-effective concierge services to patients • To build ongoing relationships with customers	(Hawn 2009; Schultz, Block, and Labrecque 2012)	Engaging and wide-reach	Profile, newsfeed, subscription/hide features, friends' list, feedback features, and group
Customer relations management ii. Multichannel integration	None	N/A	N/A	Profile
Customer relations management iii. Information management	To collect consumer data from social networking sites groups for market research	(Brown and Vaughn 2011; Casteleyn, Mottart, and Rutten 2009; Davison, Maraist, and Bing 2011; Poynter 2008)	Recordability	Profile, newsfeed, and friends' list
Customer relations management iv. Performance assessment	To earn more "likes" as an indicator for consumer engagement	(Malhotra, Malhotra, and See 2013)	Monitorability	Feedback features, profile, and newsfeed
Investor relations management i. Two-way symmetrical communication	None	N/A	Self-expression	Feedback features, feedback, and messages

Table C Micro-blogging sites for external communication.

External Communication Activity	Uses Found in Previous Studies	Sources	Affordances	Features that Support the Affordances
Persuasion	To tweet promotional material and encourage others to share it	(Coyle, Smith, and Platt 2012)	Engaging and connecting	Short message, metadata tag, short-message sharing
Advocacy	To respond to customer issues, hoping that the customers retweet good responses	(Coyle, Smith, and Platt 2012; Evans, Twomey, and Talan 2011)	Wide reach and connecting	Short-message sharing, short-message, metadata tag
Public information	To make announcements	(Waters and Jamal 2011)	Wide reach	Short message
Cause-related	To discuss corporate responsibility with the public	(Vinke 2011)	Engaging and presentability	Short message
Image/reputation management	• To manage their reputation • To carve firm's images desirably	(Evans, Twomey, and Talan 2011) (Hawn 2009; Schultz, Block, and Labrecque 2012; Greenberg 2010)	Presentability	Short message, metadata tag, and contact list
Public relations management	To create personal relationships with specific parts of the public	(Evans, Twomey, and Talan 2011)	Engaging	Short message, metadata tag, and contact list
Customer relations management i. Value-creation process	None	N/A	Engaging, connecting	Short message, short-message sharing, metadata tag, and contact list
Customer relations management ii. Multichannel integration	For an informal yet integrated communication campaign	(Evans, Twomey, and Talan 2011)	Engaging	Short message
Customer relations management iii. Information management	To collect customer responses	(Evans, Twomey, and Talan 2011)	Monitorability	Reply, short message, short-message sharing, and metadata tag
Customer relations management iv. Performance assessment	To determine how people care about the brand	(Coyle, Smith, and Platt 2012)	Monitorability	Reply, short message, short-message sharing, and metadata tag
Investor relations management i. Two-way symmetrical communication	• To target investors by providing annual reports • To monitor investors' sentiments and respond to their concerns	(Rybalko and Seltzer 2010) (Gilbert and Karahalios 2010)	Wide reach and monitorability	Short message and contact list

Table D Video-sharing sites for external communication.

External Communication Activity	Uses Found in Previous Studies	Sources	Affordances	Features that Support the Affordances
Persuasion	To persuade the public that they were a good company	(Fournier and Avery 2011)	Wide reach and presentability	Video content
Advocacy	To fight back against negative allegations and sentiment among the public	(Byron 2010)	Wide reach	Video content
Public information	None	N/A	Wide reach and engaging	Subscription
Cause-related	To post a series of videos to build an image of a friendly company	(Fournier and Avery 2011; Hennig-Thurau et al. 2010)	Engaging and presentability	Video content
Image/reputation management	To monitor viewers' comments and then to create a next video based upon the comments	(Baute 2010)	Engaging, monitorability, and presentability	Video content, related videos, and comments
Public relation management	None	N/A	Wide reach and engaging	Video content
Customer relations management i. Value-creation process	To get customers to create marketing materials for the firm's website	(Fournier and Avery 2011)	Monitorability, engaging, self-expression	Video content and comments
Customer relations management ii. Multichannel integration	None	N/A	NA	N/A
Customer relations management iii. Information management	None	N/A	NA	N/A
Customer relations management iv. Performance assessment	To measure success of a campaign	(Fournier and Avery 2011; Constantinides and Fountain 2008)	Monitorability	Comments, views, and ratings
Investor relations management i. Two-way symmetrical communication	None	N/A	NA	None (Comments are not useful for two-way conversations)