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Unpacking the social media phenomenon: towards a research agenda

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In this paper, we highlight some of the challenges and opportunities that social media presents to researchers, and offer relevant theoretical avenues to be explored. To do this, we present a model that unpacks social media by using a honeycomb of seven functional building blocks. We then examine each of the seven building blocks and, through appropriate social and socio-technical theories, raise questions that warrant further in-depth research to advance the conceptualization of social media in public affairs research. Finally, we combine the individual research questions for each building block back into the honeycomb model to illustrate how the theories in combination provide a powerful macro-lens for research on social media dynamics. Copyright © 2012 John Wiley & Sons, Ltd.

Social media continues to have a tremendous impact on how people behave online; how they search, play, converse, form communities, build and maintain relationships; and how they create, tag, modify and share content across any number of sites and devices. In response to the ever-increasing penetration rate of social media services and the fierce competition among new entrants and incumbents, new business models emerge regularly, where firms blend unique technologies and business models to build competitive advantages (Godes et al., 2005; Godes et al., 2009; Gnyawali et al., 2010). For instance, so-called 'freemium models' that offer basic services for free but advanced features at a premium, 'affiliate models' that drive consumers to associate websites and Internetadvertising models are all being replaced by new models that make use of an advanced understanding of monitoring behaviour on social media. For instance, 'personalized retargeting' services follow and bring back consumers who did not complete their purchases on a retailer's site, and 'promoted tweets' allow advertisers to expose regular, personal tweets (i.e. public, text-based posts of up to 140 characters) to a wider yet highly focused audience. At the same time, content-sharing sites, microblogs,

and their specific engagement needs, a honeycomb

framework (Figure 1) was recently presented (Kietzmann et al., 2011). Its usefulness as a lens

for understanding social media through seven

functional building blocks has since been discussed

social networks, wikis and a plethora of other

consumer-oriented services and platforms continue

ments are impacting research, particularly studies

of at the intersection of public affairs and social

media marketing (Terblanche, 2011), online commu-

Of course these interesting social media develop-

widely in scholarly and practitioner-oriented publications. We argue that the same honeycomb model can serve a very important role for developing sound research agenda for social media in public affairs and for identifying and combining appropriate theoretical lenses.

This honeycomb model helps explain the implica-

This honeycomb model helps explain the implications that each block can have for how firms should engage with social media in three important ways.

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nities (Jones *et al.*, 2004; Bateman *et al.*, 2010), government activities (Waters and Williams, 2011), the development of opinion leaders (Crittenden *et al.*, 2011) or individual customer behaviour (Thomas, 2004; Hughner *et al.*, 2007; Leskovec *et al.*, 2007; Büttner and Göritz, 2008; Zhao *et al.*, 2008; Kaplan and Haenlein, 2010; Kilduff and Brass, 2010; Neilson, 2010; Ozanne and Ballantine, 2010). In order to provide a managerial foundation for understanding these new services, consumers

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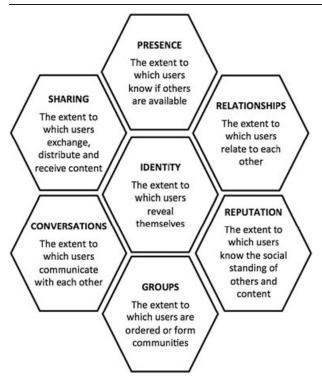


Figure 1 Social media functionality

First, the model describes different specific facets of the social media user experience. Each social media platform, for instance, is driven by primary, secondary and tertiary building blocks, which inform the rationale of important social media design decisions. Second, using the social media honeycomb model as an analytical lens allows managers to conduct a focused a priori study of their firms' specific 'community needs', whose findings can then educate the design or use of an appropriate social media platform. Third, the model can be used on an ongoing basis, as a lens for monitoring how dynamic changes of the community's needs vis-à-vis changes of the social media tools present implications for the firm. The seven building blocks of the model are neither mutually exclusive nor do they all need to be included in a particular social media context (Kietzmann et al., 2011). They are constructs that allow managers and researchers to understand how different social media functionalities can be configured.

UNPACKING THE RESEARCH OPPORTUNITIES OF SOCIAL MEDIA

In this paper, we now re-use the social media honeycomb model and the seven constructs of *identity, presence, relationships, conversations, groups, reputations* and *sharing* to outline how social media presents challenges for researchers and to discuss their usefulness for advancing our understanding of community relations, corporate social responsibility and political strategy and marketing, among others. In fact, each building block of the model presents an important social media phenomenon that can be understood using a number of theories. In this section, we briefly present one theory for every building block to (i) provide an example of an interesting lens for understanding each building block; (ii) help build research agenda for social media; and (iii) illustrate the methodological usefulness of the honeycomb model for building powerful and novel combinations of theoretical approaches for studying social media platforms, consumer engagement, content sharing and community needs.

IDENTITY

This functional block describes the extent to which users choose to reveal their identities in a social media setting, or alternatively, the degree to which sites allow or require identities to be shared. Such identity can be associated not only with elements such as name, age, gender, profession and location but also with more subjective information that reveals users through the conscious or unconscious 'self-disclosure' of personal information (Kaplan and Haenlein, 2010). In this sense, users with their virtual (re)presentations (Schultze and Leahy, 2009) share thoughts, feelings, likes and dislikes in an effort to be understood as the person they desire or believe themselves to be (Donath, 1999; Swann *et al.*, 2000; Ma and Agarwal, 2007).

Beyond pragmatic suggestions of how firms should be aware of the implications of using identity as part of a social media presence, this building block offers a wealth of highly interesting research approaches. Using dramaturgy as an analogy, Goffman's (1959) work is a prime example of how social theory can help understand identity and motivation behind complex human performances, including of course behaviour in online communities (Moisio and Arnould, 2005). Goffman uses a theatre-and-play metaphor to describe how an interaction is a performance by one actor that shapes and is shaped by the actor's environment and target audience. Part of this performance is the identity of an actor as the 'totality of the person's thoughts and feelings in reference to oneself as an object' (Zhao et al., 2008: 1817). The creation of identity then reflects a process in which an individual claims an identity that subsequently needs to be endorsed by others (Zhao et al., 2008).

In an online world, 'it is possible for people to reinvent themselves through the production of new identities' (Zhao *et al.*, 2008: 1818), in other words, through claims that cannot easily be validated online. In the social media context, Goffman's analogy of the theatre allows researchers to focus on (i) the various roles single 'actors' can play and the diversity of identities they adopt on different platforms; and (ii) the choices they make with

respect to 'self-disclosure' (as it relates to real factual information) or 'self presentation' (which can relate to fictitious information).

There is a lack of research that investigates how the same actor manages different identities on different stages online, for instance, by using a handle to protect his or her privacy (e.g. on blogs), 'personal' identity for self-promotion or staying in touch with friends (e.g. on Facebook) or by presenting a 'professional' identity for self-branding (e.g. on LinkedIn). As consumers explore more social media platforms, managing the multitude of different profiles (i.e. partial identities) requires finesse, as sharing a particular identity or sending messages to the wrong audience would lead to what Goffman (1959) calls 'embarrassments'. As more and more consumers of social media engage in constant and conscious role and audience segregation and choose which elements of their person to reveal, which to hide and which to embellish, opportunities are created for using Goffman's work for research that yields answers to questions such as the following:

- There is no single identity for a single social media consumer, as people wear different masks when they claim their identity for each social media platform (Zhao et al., 2008). This results in partial or 'unreal' identities becoming endorsed by others. Beyond single-platform research, how can scholars of social media understand the highly complex phenomenon of identity construction and management across platforms?
- Audience segregation breakdowns occur when different, possibly contradictory, identities of the same person become known across social media platforms. How do these 'embarrassments' unfold, and how do others react to the incongruent information about one of their peers? Do they truly lead to embarrassments, or are they normal occurrences in the social media context? If they are, how will this affect our face-to-face interactions and our design of social media platforms?
- How can researchers study identity, confidentiality and self-disclosure on non-anonymous sites that require a high degree of accuracy and information declaration? How can researchers study identity and self-presentation on anonymous sites that permit a high degree of discretion? How can we separate claims of self-disclosure from selfpresentation? Given the ambiguity and nonaccountability of actors for their identity claims, how do communities endorse (or not) the identities created by others? How can social media system design facilitate this process?

GROUPS

The more 'social' one's network becomes, the bigger the group of consumers, friends, followers and

contacts. Combined with the growth of social media offerings, this leads to a tremendous number of identities online, as people belong to any number of communities. In this sense, new forms of organizing are required, which are likely not subject to the same constraints as traditional social structures (Butler, 2001; Ma and Agarwal, 2007; Schultze and Orlikowski, 2010). Given this increasingly complex social media environment, platforms have started to allow users to organize their contacts into 'groups', which are used for audience segregation and for circumventing 'embarrassment'. This building block represents the extent to which consumers can form and join communities and sub-communities that can be open to anyone, closed (approval required) or secret (invite only); and the degree to which they can control their membership (Tinson and Ensor, 2001; Godes and Mayzlin, 2004) or even group moderate the amount of influence some social media customers or groups exert (Iyengar et al., 2011).

Scholars of social identity argue that behaviour in groups is different than the collective behaviour of individuals. In social identity theory, a key argument is that individuals have a number of identities, ranging from highly individual to highly collective. Tajfel and Turner (1979) posit that it is the social context that shapes whether an individual interacts with others more on an individual interpersonal level or a highly collective intergroup level. One key component of this social context is group distinctiveness or the rationale by which individuals set up or join particular groups and not others. Group members hold their group and their peers in high esteem, often leading to ingroup favouritism, and might feel animosity towards those belonging to other groups.

Applying elements of social identity theory to social media holds a number of promises. For public affairs researchers and social media analysts, group behaviour and the degree to which individuals participate and engage with the group are still difficult to understand (Forman et al., 2008). Through introducing a continuum on which group participation ranges from highly individual to highly collective, social identity theory might help understand the traffic flow and 'stickiness' of different sites. Social identity theory also adds to the understanding of identities by placing them in a wider social context, and introduces ingroup and outgroup behaviour (Tajfel, 1974) as an interesting additional lens for examining the multiplicity of identities and audience segregation. In social media, how an individual chooses which platforms and tools to use and which groups to start or join is often investigated through quantitatively measured network externalities (Butler, 2001). In other words, the value of a social media site increases as the number of its users increases. By investigating how belonging to a social media platform or group within it leads to a particularly positive association, social identity

theory supports cross-group studies of attitudes and behaviour within one group (the ingroup) towards outgroups.

The processes and outcomes of group decision making have been studied for decades (Wheeler and Valacich, 1996). Consumer group research on ethics and environment (Shaw and Clarke, 1999), health (Allsop et al., 2004), fashion (Workman and Kidd, 2000), food consumption (Hughner et al., 2007), among others suggest that such groups are particularly influential through their tremendous communication power. As these often offline groups continue to be transformed into social media communities, an organization's ability to capitalize on their power hinges on its ability to understand how these are formed and maintained. Relevant questions focus on the role of groups and the advantages and dynamics of group creation and membership could include the following:

- What communication shifts occur during the transformation of offline or online consumer groups to social media groups? What is the impact on firms, and what response mechanisms are appropriate?
- Given the complexity of the construct of identity in social media, what attributes do users consider when they decide which groups to join? What are the advantages and disadvantages, from a member perspective, for the participation in open, closed or secret groups?
- How is boundary maintenance managed for social media groups, and by whom? What are the advantages and disadvantages of belonging to an ingroup in social media? (How) can these be managed by existing group support systems?

RELATIONSHIPS

This building block addresses the extent to which users can be related to other users. We define 'relate' as two or more consumers who have some form of relationship that leads them to converse, share objects, meet up or simply just list each other as a friend or fan (Constant *et al.*, 1994; Miranda and Saunders, 2003). Of course, a discussion of identity and groups is directly impacted by the relationships that exist within social media platforms. Especially when individuals have networks that span hundreds or thousands of members (followers, friends, etc.), the sorts of relationships they maintain are important.

Social network theory has been operationalized to understand relationships in detail in various contexts, and Kilduff and Brass (2010) highlight topics including leadership (Pastor *et al.*, 2002), teams (Reagans *et al.*, 2004), social influence (Sparrowe and Liden, 2005; Aral, 2010), trust (Ferrin *et al.*, 2006), power (Brass, 1984), attitude similarity (Rice and Aydin, 1991) and diversity (Ibarra, 1992),

among others. Structure and flow (Granovetter, 1973; Borgatti and Foster, 2003), two particular properties from social network theory, help examine, for instance, social media behaviour through the importance of different relationship traits (Neilson, 2010). The structural property of relationships refers to users' social graphs, how many connections they have and where they are positioned within their network of relationships. Research shows that users are more likely to be an influential member (also known as 'influencers') in their network the denser and larger their portfolio of relationships is, and the more central their position in the network. The flow property of user relationships refers to the types of resources involved in individual relationships and how these resources are used, exchanged or transformed. It describes tie strength (Granovetter, 1973), in other words, the strength of a relationship where strong tie relationships are 'long-lasting and affect-laden' (Krackhardt, 1992: 218) and weak ones are 'infrequent and distant' (Hansen, 1999: 84). Granovetter's work proposes that strong ties within close intimate social circles are ineffective compared with weak ties (i.e. acquaintances) for connecting social networks.

Social network theory's structural and flow properties were developed long before the emergence of the Internet, let alone the popularity of social media. However, the theoretical propositions are highly relevant for social media firms seeking to define an appropriate interaction environment for their users, including such design elements as privacy controls, message routing, friend introductions and information prioritization (Gilbert and Karahalios, 2009). On some social media sites, tie strength matters little, and users can interact in a fairly informally and without structure (e.g. on blogs). In other cases, how individual users associate hardly matters at all (e.g. Twitter and YouTube). Of course, many sites that rely on highly formal, regulated and structured connections, such as LinkedIn, are often built around the notion of tie strength and connect users with their intimate friends, with 'influencers' and with weak ties that will become important peripheral network members.

Research projects that shed light on the nature of relationships, the network position of individuals and the impact of tie strength for their overall connectivity would be useful for answering such questions as:

- What are the unintended consequences and the negative results of tie strength? For instance, how does false information or 'embarrassment' affect relationships within and across social media networks? How can social media designs circumvent this?
- What relationship contradictions emerge in 'multiplex' relationships; that is, when users are connected by more than one type of relationship

- (e.g. they are work colleagues and friends)? How are these managed by social media consumers?
- Are ties in social media the same as ties in the 'traditional' online and offline worlds? Given the diversity of identities, can there be a duality of strong and weak ties, where one is both an intimate friend and an acquaintance?

REPUTATION

Reputation is 'a tool to predict behaviour based on past actions and characteristics' (Dingledine et al., 2003: 1). Because individuals cannot draw from enough personal historical data for such predictions, the reputation of other individuals, of a firm or of a product is a socially shaped opinion based on aggregate experiences, shared through word of mouth, coverage in the popular press and so on (Dellarocas, 2003; Godes and Mayzlin, 2009). In essence, reputation is about how trust between parties is developed, assessed and maintained (Pavlou and Gefen, 2004; Dellarocas, 2005). Relationship management, for firms often pursued through branding, becomes a conscious act of linking positive real or perceived perceptions, images and experiences to a firm or a product. A good reputation then affects future actions favourably, perhaps through brand recognition during a purchasing decision. However, this linkage is also dangerous in the sense that negative associations affect a reputation adversely.

This construct of reputation and trust (Putnam, 1995; Bourdieu, 2007) has been placed in the context of online behaviour studies (Büttner and Göritz, 2008; Brunk, 2010). A body of literature discusses elements that constitute reputation across three dimensions (Habermas and McCarthy, 1985), on the basis of Plato's worlds of the Good, the True, and the Beautiful, where

the enduring respect of the ancient community would only be accorded those citizens who served the world of truth in their activities, showed themselves to be virtuous citizens in the world of good and also demonstrated the requisite inner and outward grace in the world of the beautiful (Eisenegger, 2009, p. 12).

In Habermas' (1985) theory of communicative action, these are reflected in propositional truth, normative rightness and subjective truthfulness. Eisenegger (2009) relates them to separate reputation dimensions on the basis of an individual's or firm's continuous demonstration of competence (functional reputation), on whether individuals or firms act responsibly as good social citizens in accordance to social norms (social reputation) and is distinctive enough, with an attractive, even fascinating, profile capable to inspire others (expressive reputation).

The Internet has added several new dimensions to this age-old concept (Dellarocas, 2005). In a social

media setting, reputation plays a tremendous role, particularly on platforms where trust is important (S. C. Rice, 2011) and 'trusting beliefs' need to be formed quickly (McKnight et al., 2002). However, because information technologies are not (yet) very good at determining such highly qualitative criteria, social media sites rely on 'mechanical Turks' to accumulate word of mouth, that is, tools that automatically aggregate information originally provided by users to determine trustworthiness and reputation (Godes and Mayzlin, 2004). In many cases, although users might seek trust-building information around functional, social and expressive reputations, this is often only hidden in data presented quantitatively, through the sheer numbers of followers for people, view counts for videos, likes for contents on Facebook, through ratios and averages of peer ratings, thumbs up versus thumbs down or through cumbersome archives of qualitative feedback via endorsements.

Reputation is a complex phenomenon, and social media often collapses its three dimensions into simplistic metrics. The development of more appropriate reputation tools and effective institution-based trust mechanisms (Pavlou and Gefen, 2004) would certainly have an important impact for platforms built around reputation and trust between buyers and sellers, involving employers and employees and among private community members. Social media service sites are starting to improve their ability to analyse user-generated contents from across social media platforms; nonetheless, their effectiveness as 'tool[s] to predict behaviour based on past actions and characteristics' (Dingledine et al., 2003: 1) is limited by the inability of users to share their experiences appropriately. 'To build a good reputation system, we must find ways to use these data without naively believing in their quality' (Dingledine et al., 2003: 3), and questions that investigate how the engagement needs of a community may inform the improvement of reputation management systems could include the following:

- How does the multiplicity of reputations (similar to identities) take shape in a social media setting, and how do individuals manage them? How could new information systems support the management of this multiplicity?
- How are reputations of virtual entities connected to real beings? Is there a need for this connectivity in social media?
- Do the three dimensions of functional, social and expressive reputations translate into the social media context? Do their levels of importance change?

PRESENCE

Presence is the extent to which consumers know if other consumers are accessible at a specific time.

It may include knowing where others are (in the virtual or real world); and for instance, whether they are available, busy or taking a break. In the virtual world, this happens through status choices such as 'available', 'hidden' or 'idle'. The managerial implication of presence is that firms should evaluate the relative importance of consumer availability and location for their businesses. Virtual presence is directly associated with a desire to communicate synchronously, engage with others in real time and have more influential interactions (Elaluf-Calderwood *et al.*, 2005).

This building block presents interesting challenges for research. Research on interactivity (Rafaeli, 1988; Newhagen and Rafaeli, 1996; McMillan and Hwang, 2002; Sundar et al., 2003; Fortin and Dholakia, 2005) offers interesting insights for presence within social media contexts. Here, interactivity is defined in terms of the immediacy of the responsiveness and the degree to which the communication resembles human discourse (H. Li et al., 2002). According to Li et al. (2002), the concept of interactivity has been investigated within areas such as computer-mediated communications, Internet and virtual reality, Internet marketing and advertising, among others. Consistent with previous literature (e.g. Liu and Shrum, 2002; McMillan and Hwang, 2002), Sundar et al. (2003) also highlight the importance of interactivity and argue that a high interactivity environment gives consumers considerably more control and choice, provide a richer sense of feedback and two-way communication and imbue a greater feeling of responsiveness and flow.

Despite the fact that presence and interactivity are intrinsically related, the definition of presence is controversial and varies within the literature (see, e.g. Steuer, 1992). Lombard and Snyder-Duch (2001) argue that presence in the virtual world is closely related to perception. We draw on Lombard and Ditton's (1997) work that states that the various presence definitions share the central idea of the 'perceptual illusion of nonmediation'. For the authors, the term 'perceptual' implies that it is associated with continuous feedback 'from the human sensory, cognitive, and affective processing systems' (Lombard and Ditton, 1997: 10). An 'illusion of nonmediation' occurs when a person fails to recognize the presence of a medium in his or her communication environment (Lombard and Ditton, 1997). According to the authors, a medium that becomes invisible (producing the perceptual illusion of nonmediation) is analogous to an 'open window' and can allow a richer social interaction, producing a sense that there is no border between the 'two sides' of the medium.

Within social media contexts, the perception of presence can vary depending on the platform used. For instance, social media platforms such as Foursquare, MSN, Skype and Trapster allow users to share their status updates and check-ins. These

platforms enable different levels of presence perception. On the other hand, within social media platforms such as LinkedIn, Facebook and YouTube, presence is an element that matters less. On the basis of these considerations, we call for further exploration of some intriguing research avenues as follows:

- What is the importance of physical or virtual availability and location for firms within and across different social media platforms and industry settings?
- What is the interplay between consumer presence and interactivity within different social media platforms?
- What is the implication of interactivity and 'perceptual illusion of nonmediation' for a positive consumer attitude towards a particular technology, company or offering?

CONVERSATIONS

This block of the honeycomb model is defined as the extent to which consumers communicate with each other in social media settings. Many social media environments are designed to enhance conversations, where consumers come to meet others, find a job or discover true love or stay abreast of trending topics and new ideas. Although a social media space where people communicate is of course very interesting to firms (Constant et al., 1994; Parent et al., 2011), understanding voluntary knowledge contribution between strangers interacting through technology-mediated communication (Ma and Agarwal, 2007) is very difficult. Trying to make sense of the sheer volume of data that comes out of the 'social media firehose', and knowing when to participate as a firm, is almost impossible without appropriate analytical tools and capabilities.

The discourse on environmental velocity within organizational literature is very promising for understanding consumer conversations on social media. Drawing upon research on industrial dynamics (McCarthy et al., 2010), we argue that differences in the frequency and direction of a conversation can have major implications for how firms monitor and make sense of the 'conversation velocity'. The frequency is the number of conversations over a specified period, and the direction concerns the mood, tone or inclination of the conversation towards a brand or an issue. If conversations are implemented in a high-velocity fashion, it means that there is a great amount of new information readily available each time (frequency) about a large variety of topics and opinions (direction). The velocity of conversation is an indicator that can be used to determine the extent to which a consumer conversation might go 'viral' (Leskovec et al., 2007; Bampo et al., 2008; Aral and Walker, 2011).

There is ample theoretical support for the idea that word of mouth, or 'word-of-mouse', impacts social media consumers' actions (Reingen et al., 1984; Banerjee, 1992, 1993; Bikhchandani et al., 1992; Foster and Rosenzweig, 1995; Godes and Mayzlin, 2004). Thomas Jr. argues that the growing importance of online environments and social media allowed the emergence of buzz marketing-'the amplification of initial marketing efforts by third parties through their passive or active influence' (2004: 64). This may exacerbate 'herding', a phenomenon in which individuals make the same choices influenced by the opinion of others (Van den Bulte and Lilien, 2001; Mayzlin, 2006; Li and Hitt, 2008). Van den Bulte and Lilien (2001) find strong evidence of social contagion and decompose the adoption process of certain trend into two different phases: an 'awareness phase'—in which social media consumers make sense of the topic and an 'evaluation and adoption phase'—in which they make their decision and adopt (or not) the new product, service or technology.

Thus, conversation velocity within social media settings influences collective intelligence, which is defined as groups of individuals 'doing' things collectively that seem intelligent (O'Reilly, 2007; Malone et al., 2010). On social media platforms such as Facebook and Twitter, members establish relationships and conversations that may be embedded in trust, similar tastes and viewpoints, and other types of affinity. In a high conversation velocity environment, consumers evaluate numerous individual inputs (high frequency) on the basis of a diverse range of topics (discontinuous direction) to make their individual choices. On the basis of the aforementioned discussion, the following questions would help educate the conceptualization of consumer conversations on social media.

- What are the implications of conversation velocity (low versus high) to consumer adoption of new trends, products/services or technologies?
- How should firms entrain their social media activities to follow and respond to conversations with different velocities?
- What is the interplay between conversation velocity and the 'herding' phenomenon? How can information systems design evaluate the information quality and system quality (McKinney and Yoon, 2002) on social media?

SHARING

This building block is associated with the extent to which consumers exchange, distribute and receive contents (Ozanne and Ballantine, 2010). The term social often involves exchange of contents and information between people. In many cases, however, the act of sharing is associated with particular

linkages between people (Engeström, 2001), for example, favourite movies, similar cars, travels to the same country and common employers (Berthon et al., 2008). There are at least three fundamental managerial implications that the sharing block offers to firms whose ambition is to engage in social media: first, there is a need to identify these linkages or to select new objects that could mediate their shared interests (e.g. photos for Flickr and videos for YouTube consumers); second is related to the degree to which these objects can or should be shared (e.g. copyright concerns, legality, offensive or improper contents); and third, what motivates consumers to share these objects of sociality.

One important theoretical lens to enhance our understanding of the sharing block of the honeycomb focuses on either intrinsic or extrinsic motivation of the users to share contents (Amabile, 1997; Ryan and Deci, 2000; Lakhani and Wolf, 2005). Intrinsic motivation is driven by an intense interest and involvement in the activity itself, curiosity, enjoyment, peer recognition, a personal sense of challenge, accomplishment or belonging, whereas extrinsic motivation is driven by the desire to achieve some external reward that is apart from the activity itself such as money, deadlines, directives, threats, competition pressure, expected evaluation, surveillance or job promotion (Amabile, 1997; Ryan and Deci, 2000).

Research on motivation is very rich and has been used in a number of areas such as education (Pintrich and Schunk, 2002), work behaviour (Gagné and Deci, 2005), learning (Cordova and Lepper, 1996) and performance (Elliott and Dweck, 1988). According to Amabile (1997: 44), 'although combinations of intrinsic and extrinsic motivations are common, one is likely to be primary for a given person doing a given task' and as extrinsic motivation increases for a particular activity, intrinsic motivation must decrease. Deci et al. (1999) corroborate with this idea, arguing that there is a negative impact of extrinsic rewards on intrinsic motivations, which may also have an important implication within social media contexts. In fact, on the basis of the user-generated content phenomenon, Nov (2007) argues that to understand what inspires these social media consumer contributions, it is necessary to investigate what motivates them to share contents.

Within social media contexts, motivation may present a key element to be understood by firms willing to engage with consumers. The sharing approach each consumer uses may vary in frequency, or the number of times a consumer shares contents over a certain period, and intensity, which is associated with the quality of the contribution in terms of the time and effort spent (e.g. answering a simple question at wiki.answers.com would be different than producing an elaborated video for YouTube). On the basis of these arguments, sharing

within social media contexts may present several opportunities for further research. Some of the questions associated with these areas are as follows:

 How and why different motivations (intrinsic or extrinsic) impel consumers to share objects within different social media platforms?

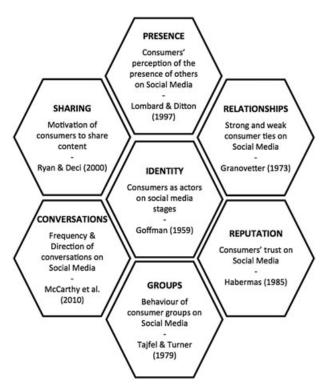


Figure 2 Social media lenses

- What is the interplay between intrinsic and extrinsic motivations when consumers share contents on a particular social media platform?
- What kind of motivation is associated with different levels of frequency (low versus high) and quality (low versus high) of how social media consumer share content?

DISCUSSION

The evolution of Web 2.0 has shifted the power online, from the static corporate content of the past to dynamic interaction driven by the active participation of consumers. In a social media setting, this has lead to human conversations across a landscape of publishing sites (blogs, wikis), social networks (Facebook, LinkedIn), mircoblogs (e.g. Twitter), lifestreams (e.g. FriendFeed), livecasts (e.g. Justin.tv), social games (e.g. FarmVille) and content-sharing sites (e.g. YouTube), among others. With Facebook now being the 'Number 1' most visited website (Leitch, 2011), the popularity of social media is hard to ignore.

This paper suggests that researchers focus on the fundamental building blocks of social media to understand how consumer behaviour is changing. With this goal, the honeycomb model suggests identity, presence, relationships, conversations, groups, reputations and sharing as key constructs for understanding social media and community engagement needs. In the research context presented here, this honeycomb model offers four contributions to social media research and theory:

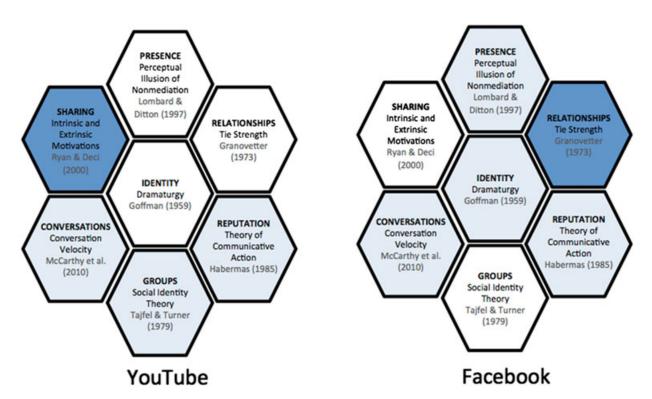


Figure 3 Research agenda for YouTube and Facebook

- Public affairs researchers can use the honeycomb construct and the seven building blocks as a starting basis for understanding social media and are encouraged to expand the model to fit social media consumer engagement needs, technological change or their particular research interests. In this regard, it is not our contention that the seven building blocks we discuss here are the only ones, but we recognize them as highly important ones across a range of social media services and platforms. For example, for increased granularity, 'trust' and 'image' could become building blocks in addition to 'reputation' for a researcher who look specifically at the intersection of public affairs and marketing on social media.
- By providing one example of an appropriate theory for each building block (Figure 2), we provided an example of an interesting lens for understanding *engagement needs* and how these might be changing over time. By adding three representative research questions for each building block, we ambition to help build research agenda for social media. In the spirit of the topic, it is our hope that this will lead to a public conversation among researchers about themes and appropriate theories for social media and public affairs research.
- Social media and public affairs researchers studying specific *social media phenomena* might find the honeycomb model useful for connecting different research angles, theories and questions related to their focus. For instance, those concentrating on changing identities might want to ascertain and add their own theories and questions for reputation, groups and relationships.
- For social media and public affairs researchers studying behaviour on individual social media platforms, the honeycomb model is particularly useful because most sites have struck a careful balance among the different building blocks (Kietzmann et al., 2011). Collecting theories for each block and then reintegrating them into the honeycomb can help build powerful and novel combinations of theoretical lenses for studying social media platforms, user engagement, content sharing, community needs and so on. For example, a study of a social network site (e.g. Facebook) could be conducted using a theoretical combination of how consumers act differently on different stages (using Goffman's dramaturgy), and how their position on their social graph (using Granovetter's tie strength debate) is affected by, and affects, the way they communicate (using velocity arguments of McCarthy et al.), and how consumers perceive the presence of others and develop trust to each other. For content-sharing sites (e.g. YouTube) that are much less about identity, presence and relationship, the theory combination could include lenses

from sharing, conversations, groups and reputation (Figure 3).

As social media activity will continue to soar, firms and researchers will increasingly face the challenges of understanding emerging features and their implications for individuals, communities, firms and social media platform designers. In this context, we hope that our paper will generate greater progress in understanding the symbiotic relationship between social media consumers and different social media functionalities. We also hope that this paper stimulates a discussion of the usefulness of the social media honeycomb model, the building blocks we decided to emphasize and the theories we chose as examples. We would like to see more work on improving the honeycomb model, identifying where appropriate other functional building blocks and developing new theoretical lenses for each block to help energize and direct the much needed agenda for public affairs research on social media.

REFERENCES

- Allsop J, Jones K, Baggott R. 2004. Health consumer groups in the UK: a new social movement? *Sociology of Health & Illness* **26**(6): 737–756.
- Amabile TM. 1997. Motivating creativity in organizations: on doing what you love and loving what you do. *California Management Review* **40**(1): 39–58.
- Aral Ś. 2010. Identifying social influence: a comment on opinion leadership and social contagion in new product diffusion.
- Aral S, Walker D. 2011. Creating social contagion through viral product design: a randomized trial of peer influence in networks. *Management Science* **57**(9): 1623–1639.
- Bampo M, Ewing MT, Mather DR, Stewart D, Wallace, M. 2008. The effects of the social structure of digital networks on viral marketing performance. *Information Systems Research* **19**(3): 273–290.
- Banerjee AV. 1992. A simple model of herd behavior. *Quarterly Journal of Economics* **107**(3): 797.
- Banerjee AV. 1993. The economics of rumours. *The Review of Economic Studies* **60**(2): 309.
- Bateman PJ, Gray PH, Butler BS. 2010. Research note—the impact of community. Commitment on participation in online communities. *Information Systems Research* 1–16.
- Berthon P, Pitt L, Campbell, C. 2008. Ad lib: when customers create the ad. *California Management Review* **50**(4): 6–30.
- Bikhchandani S, Hirshleifer D, Welch I. 1992. A theory of fads, fashion, custom, and cultural change as informational cascades. *Journal of Political Economy* **100**(5): 992–1026.
- Borgatti SP, Foster PC. 2003. The network paradigm in organizational research: a review and typology. *Journal of Management* **29**(6): 991.
- Bourdieu P. 2007. *Outline of a Theory of Practice*. Cambridge University Press: Cambridge.
- Brass DJ. 1984. Being in the right place: a structural analysis of individual influence in an organization. *Administrative Science Quarterly* **29**(4): 518–539.
- Brunk KH. 2010. Reputation building: beyond our control? Inferences in consumers' ethical perception formation. *Journal of Consumer Behaviour* **9**(4): 275–292.

- Butler BS. 2001. Membership size, communication activity, and sustainability: a resource-based model of online social structures. *Information Systems Research* **12**(4): 346–362.
- Büttner OB, Göritz AS. 2008. Perceived trustworthiness of online shops. *Journal of Consumer Behaviour* 7(1): 35–50.
- Constant D, Kiesler S, Sproull L. 1994. What's mine is ours, or is it? A study of attitudes about information sharing. *Information Systems Research* 5(4): 400–421.
- Cordova DI, Lepper MR. 1996. Intrinsic motivation and the process of learning: beneficial effects of contextualization, personalization, and choice. *Journal of Educational Psychology* 88(4): 715–730.
- Crittenden VL, Hopkins LM, Simmons J. 2011. Satirists as opinion leaders: is social media redefining roles? *Journal of Public Affairs* **11**(3): 174–180.
- Deci EL, Koestner R, Ryan RM. 1999. A meta-analytic review of experiments examining the effects of extrinsic rewards on intrinsic motivation. *Psychological Bulletin* **125**(6): 627.
- Dellarocas C. 2003. The digitization of word of mouth: promise and challenges of online feedback mechanisms. *Management Science* 1407–1424.
- Dellarocas C. 2005. Reputation mechanism design in online trading environments with pure moral hazard. *Information Systems Research* **16**(2): 209.
- Dingledine R, Freedman MJ, Molnar D, Parkes D, Syverson P. 2003. Reputation. Paper presented at the Digital Government Civic Scenario Workshop, Cambridge, MA, USA.
- Donath JS. 1999. Identity and deception in the virtual community. *Communities in Cyberspace* 29–59.
- Eisenegger M. 2009. Trust and reputation in the age of globalisation. *Reputation Capital* 11–22.
- Elaluf-Calderwood S, Kietzmann J, Saccol AZ. 2005. Methodological Approach for Mobile Studies: Empirical Research Considerations, 4th European Conference on Research Methodology for Business and Management Studies. Academic Conferences Limited: Paris; 133–140.
- Elliott ES, Dweck CS. 1988. Goals: an approach to motivation and achievement. *Journal of Personality and Social Psychology* **54**(1): 5.
- Engeström Y. 2001. Expansive learning at work: toward an activity-theoretical reconceptualization. *Journal of Education and Work* 14(1): 133–156.
- Ferrin DL, Dirks KT, Shah PP. 2006. Direct and indirect effects of third-party relationships on interpersonal trust. *Journal of Applied Psychology* **91**(4): 870.
- Forman C, Ghose A, Wiesenfeld B. 2008. Examining the relationship between reviews and sales: the role of reviewer identity disclosure in electronic markets. *Information Systems Research* **19**(3): 291–313.
- Fortin DR, Dholakia RR. 2005. Interactivity and vividness effects on social presence and involvement with a web-based advertisement. *Journal of Business Research* 58(3): 387–396.
- Foster AD, Rosenzweig MR. 1995. Learning by doing and learning from others: human capital and technical change in agriculture. *Journal of Political Economy* **103**(6): 1176–1209.
- Gagné M, Deci EL. 2005. Self determination theory and work motivation. *Journal of Organizational Behavior* **26**(4): 331–362.
- Gilbert E, Karahalios K. 2009. Predicting tie strength with social media. Paper presented at the 27th international conference on Human factors in computing systems.
- Gnyawali DR, Fan W, Penner J. 2010. Competitive actions and dynamics in the digital age: an empirical investigation of social networking firms. *Information Systems Research* **21**(3): 594–613.

- Godes D, Mayzlin D. 2004. Using online conversations to study word-of-mouth communication. *Marketing Science* **23**(4): 545–560.
- Godes D, Mayzlin D. 2009. Firm-created word-of-mouth communication: evidence from a field test. *Marketing Science* **28**(4): 721–739.
- Godes D, Mayzlin D, Chen Y, Das S, Dellarocas C, Pfeiffer B, *et al.* 2005. The firm's management of social interactions. *Marketing Letters* **16**(3): 415–428.
- Godes D, Ofek E, Sarvary M. 2009. Content vs. advertising: the impact of competition on media firm strategy. *Marketing Science* **28**(1): 20–35.
- Goffman E. 1959. The presentation of self in everyday life. Doubleday: Garden City.
- Granovetter MS. 1973. The strength of weak ties. *The American Journal of Sociology* **78**(6): 1360–1380. Habermas J. 1985. *The Theory of Communicative Action:*
- Reason and the Rationalization of Society. Beacon Press: Boston, MA.
- Hansen M. 1999. The search-transfer problem: the role of weak ties in sharing knowledge across organization subunits. *Administrative Science Quarterly* **44**(1): 82–85.
- Hughner RS, McDonagh P, Prothero A, Shultz I, Clifford J, Stanton J. 2007. Who are organic food consumers? A compilation and review of why people purchase organic food. *Journal of Consumer Behaviour* 6(2 3): 94–110.
- Ibarra H. 1992. Homophily and differential returns: sex differences in network structure and access in an advertising firm. *Administrative Science Quarterly* 37(3): 422–447.
- Iyengar R, Van den Bulte C, Valente TW. 2011. Further reflections on studying social influence in new product diffusion. *Marketing Science* **30**(2): 230–232.
- Jones Q, Ravid G, Rafaeli S. 2004. Information overload and the message dynamics of online interaction spaces: a theoretical model and empirical exploration. *Information Systems Research* 15(2): 194–210.
- Kaplan AM, Haenlein M. 2010. Users of the world, unite! The challenges and opportunities of social media. *Business Horizons* **53**(1): 59–68.
- Kietzmann JH, Hermkens K, McCarthy IP, Silvestre BS. 2011. Social media? Get serious! Understanding the functional building blocks of social media. *Business Horizons* 54(3): 241–251.
- Kilduff M, Brass DJ. 2010. Organizational social network research: core ideas and key debates. *The Academy of Management Annals* 4(1): 317–357.
- Krackhardt D. 1992. The strength of strong ties: the importance of philos in organizations. *Networks and Organizations: Structure, Form, and Action* **216**: 239.
- Lakhani KR, Wolf RG. 2005. Why hackers do what they do: understanding motivation and effort in free/open source software projects. *Perspectives on Free and Open Source Software* 3–22.
- Leitch D. 2011. The Most Visited Website of 2010. Available at http://socialmediatoday.com/index.php? q=dleitchmorevisibilitycom/258917/most-visited-website-2010 [accessed on 05 Jan 2012].
- Leskovec J, Adamic LA, Huberman BA. 2007. The dynamics of viral marketing. *ACM Transactions on the Web (TWEB)* 1(1): 5.
- Li H, Daugherty T, Biocca F. 2002. Impact of 3-D advertising on product knowledge, brand attitude, and purchase intention: the mediating role of presence. *Journal of Advertising* **31**(3): 43–57.
- Li X, Hitt L. 2008. Self selection and information role of online product reviews. *Information Systems Research* **19**(4): 456–474.
- Liu Y, Shrum L. 2002. What is interactivity and is it always such a good thing? Implications of definition, person, and situation for the influence of interactivity

J. Public Affairs (2012) DOI: 10.1002/pa.

- on advertising effectiveness. *Journal of Advertising* **31**(4): 53–64.
- Lombard M, Ditton T. 1997. At the heart of it all: the concept of presence. *Journal of Computer-Mediated Communication* **3**(2): 0.
- Lombard M, Snyder-Duch J. 2001. Interactive advertising and presence: a framework. *Journal of Interactive Advertising* **1**(2): 1–15.
- Ma M, Agarwal R. 2007. Through a glass darkly: information technology design, identity verification, and knowledge contribution in online communities. *Information Systems Research* **18**(1): 42.
- Malone TW, Laubacher R, Dellarocas C. 2010. The collective intelligence genome. *MIT Management Review*. Spring **51**(3): 20–31.
- Mayzlin D. 2006. Promotional chat on the Internet. *Marketing Science* **25**(2): 155–163.
- McCarthy IP, Lawrence TB, Wixted B, Gordon BR. 2010. A multidimensional conceptualization of environmental velocity. *The Academy of Management Review (AMR)* **35**(4): 604–626.
- McKinney V, Yoon K. 2002. The measurement of webcustomer satisfaction: an expectation and disconfirmation approach. *Information Systems Research* **13**(3): 296–315.
- McKnight DH, Choudhury V, Kacmar C. 2002. Developing and validating trust measures for e-commerce: an integrative typology. *Information Systems Research* 13(3): 334–359.
- McMillan SJ, Hwang JS. 2002. Measures of perceived interactivity: an exploration of the role of direction of communication, user control, and time in shaping perceptions of interactivity. *Journal of Advertising* 31(3): 29–42.
- Miranda SM, Saunders CS. 2003. The social construction of meaning: an alternative perspective on information sharing. *Information Systems Research* **14**(1): 87–106.
- Moisio R, Arnould EJ. 2005. Extending the dramaturgical framework in marketing: drama structure, drama interaction and drama content in shopping experiences. *Journal of Consumer Behaviour* **4**(4): 246–256.
- Neilson LA. 2010. Boycott or buycott? Understanding political consumerism. *Journal of Consumer Behaviour* 9(3): 214–227.
- Newhagen JE, Rafaeli S. 1996. Why communication researchers should study the Internet: a dialogue. *Journal of Computer-Mediated Communication* 1(4).
- Nov O. 2007. What motivates wikipedians? *Communications of the ACM* **50**(11): 60–64.
- O'Reilly T. 2007. What is Web 2.0: design patterns and business models for the next generation of software. *Communications and Strategies* **65**: 17.
- Ozanne LK, Ballantine PW. 2010. Sharing as a form of anti consumption? An examination of toy library users. *Journal of Consumer Behaviour* **9**(6): 485–498.
- Parent M, Plangger K, Bal A. 2011. The new WTP: willingness to participate. *Business Horizons* 54(3): 219–229.
- Pastor JC, Meindl JR, Mayo MC. 2002. A network effects model of charisma attributions. The Academy of Management Journal 45(2): 410–420.
- Pavlou PA, Gefen D. 2004. Building effective online marketplaces with institution-based trust. *Information Systems Research* 15(1): 37–59.
- Pintrich PR, Schunk DH. 2002. *Motivation in Education: Theory, Research, and Applications* (2nd ed.). Merrill: Englewood Cliffs, NJ.
- Putnam RD. 1995. Bowling alone: America's declining social capital. *Journal of Democracy* **6**(1): 65–78.
- Rafaeli S. 1988. Interactivity: from new media to communication. Sage Annual Review of Communication Research: Advancing Communication Science 16: 110–134.

- Reagans R, Zuckerman E, McEvily B. 2004. How to make the team: social networks vs. demography as criteria for designing effective teams. *Administrative Science Quarterly* **49**(1): 101–133.
- Reingen PH, Foster BL, Brown JJ, Seidman SB. 1984. Brand congruence in interpersonal relations: a social network analysis. *The Journal of Consumer Research* 11(3): 771–783.
- Rice RE, Aydin C. 1991. Attitudes toward new organizational technology: network proximity as a mechanism for social information processing. *Administrative Science Quarterly* **36**(2): 219–244.
- Rice SC. 2011. Reputation and uncertainty in online markets: an experimental study. *Information Systems Research* **15**(1): 1–17.
- Ryan RM, Deci EL. 2000. Intrinsic and extrinsic motivations: classic definitions and new directions* 1. *Contemporary Educational Psychology* **25**(1): 54–67.
- Schultze U, Leahy MM. 2009. The avatar-self relationship: enacting presence in second life. *Paper Presented at the ICIS* 2009. Phoenix: Arizona.
- Schultze, U, Orlikowski, WJ 2010. Virtual worlds: a performative perspective on globally distributed, immersive work. *Information Systems Research*, **21** (4): 810–821.
- Shaw D, Clarke I. 1999. Belief formation in ethical consumer groups: an exploratory study. *Marketing Intelligence & Planning* 17(2): 109–120.
- Sparrowe RT, Liden RC. 2005. Two routes to influence: integrating leader-member exchange and social network perspectives. *Administrative Science Quarterly* **50**(4): 505–535.
- Steuer J. 1992. Defining virtual reality: dimensions determining telepresence. *Journal of Communication* **42**(4): 73–93.
- Sundar SS, Kalyanaraman S, Brown J. 2003. Explicating web site interactivity. *Communication Research* **30**(1): 30.
- Swann, Jr WB, Milton LP, Polzer JT. 2000. Should we create a niche or fall in line? Identity negotiation and small group effectiveness. *Journal of Personality and Social Psychology* **79**(2): 238.
- Tajfel H. 1974. Social identity and intergroup behaviour. *Social Science Information* 65–93.
- Tajfel H, Turner JC. 1979. An integrative theory of intergroup conflict. The Social Psychology of Intergroup Relations 33: 47.
- Terblanche NS. 2011. You cannot run or hide from social media, ask a politician. *Journal of Public Affairs* 11(3): 156–167.
- Thomas, Jr GM. 2004. Building the buzz in the hive mind. *Journal of Consumer Behaviour* **4**(1): 64–72.
- Tinson J, Ensor, J 2001. Formal and informal referent groups: an exploration of novices and experts in maternity services. *Journal of Consumer Behaviour* 1(2): 174–183.
- Van den Bulte C, Lilien GL. 2001. Two-stage partial observability models of innovation adoption (Working paper: University of Pennsylvania). *The Wharton School*.
- Waters RD, Williams JM. 2011. Squawking, tweeting, cooing, and hooting: analyzing the communication patterns of government agencies on Twitter. *Journal of Public Affairs* 11(4): 353–363.
- Wheeler BC, Valacich JS. 1996. Facilitation, GSS, and training as sources of process restrictiveness and guidance for structured group decision making: an empirical assessment. *Information Systems Research* 7(4): 429–450.
- Workman JE, Kidd LK. 2000. Use of the need for uniqueness scale to characterize fashion consumer groups. *Clothing and Textiles Research Journal* **18**(4): 227.
- Zhao S, Grasmuck S, Martin J. 2008. Identity construction on Facebook: digital empowerment in anchored relationships. *Computers in Human Behavior* **24**(5): 1816–1836.