

Social Media Marketing Strategy: Theory and Research Propositions

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Despite the growing importance of social media in marketing, theoretical advances in our understanding of how to best deploy this media remains undeveloped. This paper argues that social media strategy should be based on understanding of social network structures and influence. Several research propositions are presented.

INTRODUCTION

Social media is perhaps the fastest growing media in history. The largest social media websites attract over 1 billion visitors monthly. It is estimated that 27% of total U.S. internet time is now spent on social marketing websites. Social media now reach one of every four persons worldwide (eMarketer, 2013). Currently, marketers invest 22% of all marketing communications to digital media and this percentage is expected to grow to 27% by 2017 (Hernandez, 2013; Vranica, 2013). In 2015 advertisers worldwide will spend \$23.68 billion on paid media to reach consumers on social networks. By 2017, social network ad spending will reach \$35.98 billion, representing 16.0% of all digital ad spending globally. In a clear signal of its growing power, Facebook terminated free organic reach of company posts and updates through computer and mobile newsfeeds —companies but must now pay to promote and reach existing and potential customers (Loten, Janofsky & Albergotti, 2014).

Despite the growing importance of social media, little is known regarding the mechanisms through which social media operate. Some researchers have studied the relationship between social media and viral marketing and argue that effective social media exert viral influences (Kaplan & Haenlein, 2011) or represent word-of-mouth online (Kiecker & Cowles, 2002). Other researchers focus on social media metrics and note that social media require alternative measures of the effectiveness of this media (Hoffman & Fodor, 2010). Finally, some scholars have investigated how social media are used in conjunction with traditional media to increase customer equity and marketing effectiveness (Kim & Ko, 2012; Mangold & Faulds, 2009).

The popular literature on social media marketing notes its collaborative nature. This literature also provides classifications of social media according to criteria such as whether the goal is to publish, share, or create a community. According to this research, a key goal of social media is to increase the visibility

of the firm online. To reach this goal, practitioners recommend that the firm dedicate significant time and resources to social media marketing activities in a systematic manner (Barker et al., 2013; Scott, 2009).

Neither the academic nor the popular literature adequately explains the rise of social media. The fact that social media may be viral or collaborative cannot account for market capitalizations of firms in this sector, the hundreds of millions of user registrations, or the dramatic mergers between media giants. Indeed, Yadav and Pavlou (2014) lament that our understanding of the nature of consumer-to-consumer interactions in social media is deficient. This lack of knowledge persists despite the fact that eWom elasticities advertising elasticities exceed by a significant margin (You, Vadakkepatt & Joshi, 2015).

This paper argues that the effects of social media marketing can be understood from the perspective of social network theory. Several research propositions are provided based on this framework.

SOCIAL NETWORK THEORY

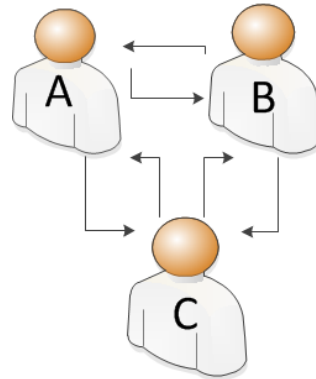
A social network is a specific kind of network where nodes are social entities (Van den Bulte & Wuyts, 2007). Nodes or entities are called *actors*. Actors are linked by social ties or relations. Social ties have a number of properties including directionality, reciprocity, strength, and homophily. Directionality refers to the flow of direction between nodes. For example, a tie may flow from node A to node B. If a tie flows back from B to A, then ties are reciprocal. Tie strength refers to the intensity and tightness of a tie such as the amount of time, intimacy, or valence associated with the tie (e.g. the affective, supportive, or cooperative character of a tie). Ties are homophilic when actors interact with one another on the basis of shared values or interests.

Properties of social networks include transitivity, density, and closure. Networks high in transitivity are those for which ties stress reciprocity. Networks are said to be dense if a high proportion of actual to possible ties exists. Closure means the density among those in a network with whom an actor has a tie. Closure tends to increase with transitivity, which itself tends to be higher for ties with positive valence. If closure among the neighbors of a focal actor is low, then this actor may represent a bridge and span a structural hole or gap in the network. (Van den Bulte & Wuyts, 2007).

An actor's importance in the overall network is measured by centrality. Degree centrality is the number of ties an actor has. This can be measured as out-degree versus in-degree. Closeness centrality is how close an actor is to each of the other actors in the entire network such as the "degrees of separation". Eigenvalue centrality measures the extent to which an actor with high prestige is connected to others with high prestige. Finally, centralization reflects the importance or prominence of the actors in the network. A centralized structure means that the network is organized around focal actors (Van den Bulte & Wuyts, 2007).

Figure 1 shows an example of a simple social network of three actors. Ties are reciprocal. Actors are of equal importance as each actor shares the same number of in-degree and out-degree links. The network is dense and closed. If the actors connect with one another on the basis of shared interests or mutually held beliefs, the network is homophilic.

FIGURE 1
A CLOSED RECIPROCAL SOCIAL NETWORK

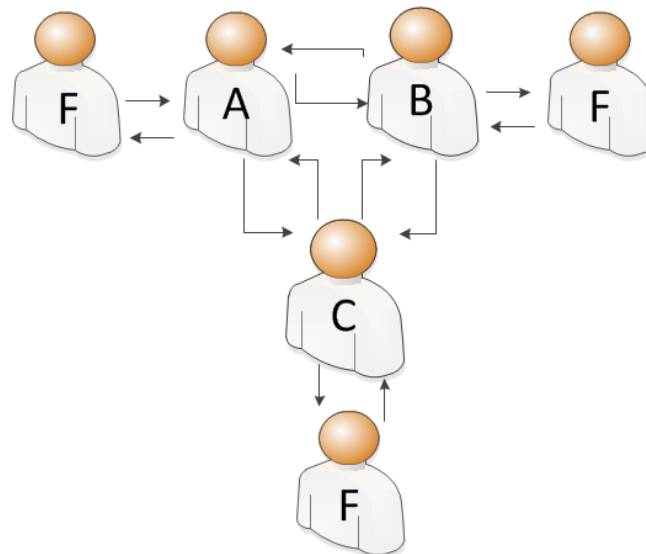


SOCIAL NETWORK ANALYSIS AND SOCIAL MEDIA

The social network literature provides a useful framework to better understand social media. Actors consume social media through virtual nodes online. Social ties are created through links, sharing, or memberships. These ties may be strong or weak, open or closed, directional or reciprocal. Some actors may enjoy centrality through a large number of in-degree links whereas others may not. The network may be dense or distributed through a few focal actors.

Figure 2 shows an example of an ideal online social network sponsored by the firm. In this case, the firm forms a strong, bidirectional tie with each actor. This network is ideal because it simultaneously combines the many-to-many web communications model proposed by Hoffman and Novak (1996) with the one-to-one web communications model advocated by Peppers and Rogers (1995). Hence, the firm has the opportunity to engage in value creation and co-production marketing opportunities efficiently and effectively and foster brand communities (Anderson, 2005).

FIGURE 2
A MANY-TO-MANY, ONE-TO-ONE SOCIAL NETWORK



Social media differ in their ability to facilitate the creation of this ideal many-to-many, one-to-one social network online, which we will call the *MMOO* network. Table 1 classifies social media according to tie strength, network properties, and the communication model. The analysis shows that social media that stress *social networks* are best suited for the formation of MMOO networks. Hence, we propose that social media marketing efforts should start by adopting and implementing those social media that facilitate the creation of a MMOO network platform and integrate these marketing efforts with corporate network structures. Therefore, the following proposition is made:

P1: The foundation of successful social media marketing is the creation of MMOO social networks by leveraging social media that can create strong, bidirectional ties and relationships and integrating the social media platform with corporate networks.

**TABLE 1
KEY PROPERTIES OF SOCIAL MEDIA**

Social Media Type	Tie Strength	Network Properties	Actor Importance	Communication Model
Information Blog	Weak	Focal structure	Dominant actor in-degree links	One-to-many
Discussion, Q&A Boards	Weak	Focal structure	Dominant actor in-degree links	One-to-many
Articles/E-Books	Weak	Focal structure	Dominant actor in-degree links	One-to-many
Webinars, Podcasts	Weak	Focal structure	Dominant actor in-degree links	One-to-many
Microblogs	Moderate	Weak balance and closure	Dominant actor in-degree and out-degree links	One-to-many, few-to-few, one-to-one
File Sharing	Moderate	Weak balance and closure	Dominant actor in-degree and out-degree links	One-to-many
Apps, Location Services	Strong	Strong balance and closure	Many actors with in-degree and out-degree links	Many-to-many, one-to-one
Social Networks	Strong	Strong balance and closure	Many actors with in-degree and out-degree links	Many-to-many, one-to-one

Other social media cannot easily replicate the ideal MMOO network. For example, Figure 3 represents the social network structure of file sharing or a simple blog. Ties among actors are weak. The network is unbalanced, open, and has little density. The firm is the dominant actor as indicated by the most in-degree and out-degree links. The goal of this simple network is to encourage the consumption and distribution of content. It is therefore similar to a one-to-many broadcast model but with viral characteristics. Hence, the following proposition is made:

P2: File sharing media should be selected consistent with integrated marketing communication goals for one-to-many broadcast media.

The premise of proposition 2 is that because file sharing media operate according to the broadcast model notwithstanding viral characteristics, content should be prepared and distributed according to the same criteria as offline media. Petty and Caccioppo (1986) note that media possess central and peripheral cues according to involvement and that advertisements should incorporate both of these elements. Ratchford and Vaughn (1989) report that advertising strategies differ according to whether a product generates “think” or “feel” buying motives. This and related research provides detailed recommendations concerning advertising execution strategy. Therefore, file sharing social media for videos, images, articles, and e-books should likewise be used according to these strategies.

FIGURE 3
FILE SHARING NETWORK STRUCTURE

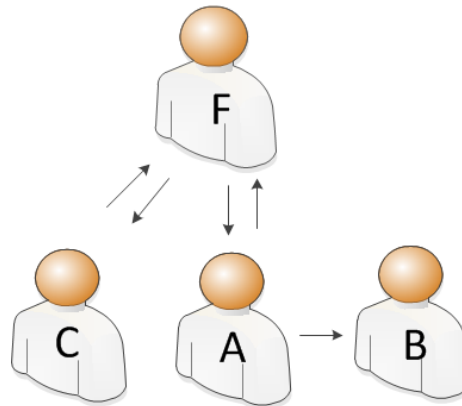


Figure 4 shows the network structure of a microblog such as Twitter. Ties among the actors are weak. Actor importance is measure by in-degree links (“Follower”) and by out-degree links (“Following”) but prestige is associated with having a greater number of in-degree than out-degree links. Actors may attempt to increase their own eigenvalue centrality or prestige by following the blogs of others to encourage a bidirectional link. The nature of this network depends upon its growth. A highly popular celebrity blog will mimic the one-to-many model. Marketers may exploit this by implementing “celebrity blogs” for product sponsorship or endorsement. A more specialized blog based on a subject or product may be targeted to fewer key customers and be characterized by a one-to-few model. Finally, personalized blogs based on individual needs may mimic the one-to-one model. Therefore, the following proposition is made:

P3: Firms should create multiple blogs and other forms of outbound communications to satisfy one-to-many, one-to-few, and one-to-one marketing requirements according to relevant product or market segments, attitudes, interests, or opinions.

FIGURE 4
NETWORK STRUCTURE OF A MICROBLOG

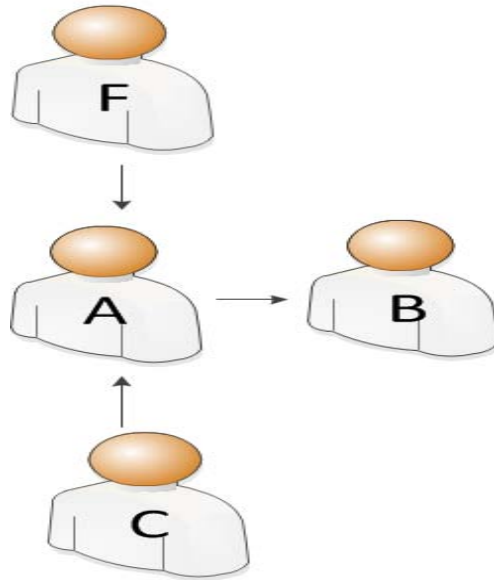


Figure 5 represents the network structure of a discussion board or Q&A forum. This network consists of two separate sub-networks which are bridged by focal actors. The network comprised of focal actors is balanced, dense, and closed. These individuals have high eigenvalue centrality and this is often denoted with badges and honorific certifications to demonstrate their role as moderators. These focal actors coordinate service, communications, and requests from consumers of content who form a weak network of ties. Although visitors may sometimes interact with other visitors, the moderators can terminate interactions, delete, or modify content, close threads, or eliminate registrations.

When focal actors play a responsible role, discussion forums can provide high quality information and resolution to community problems and issues. It is therefore critical that moderators are perceived to be credible experts to effect informational social influence. If the role of focal actors is weak, such media will degenerate and offer little value to visitors. This may also adversely impact the reputation of the firm. Therefore, the following proposition is made:

P4: Firms that adopt discussion boards or fora should implement a focal structure of advocates.

FIGURE 5
NETWORK STRUCTURE OF A DISCUSSION BOARD

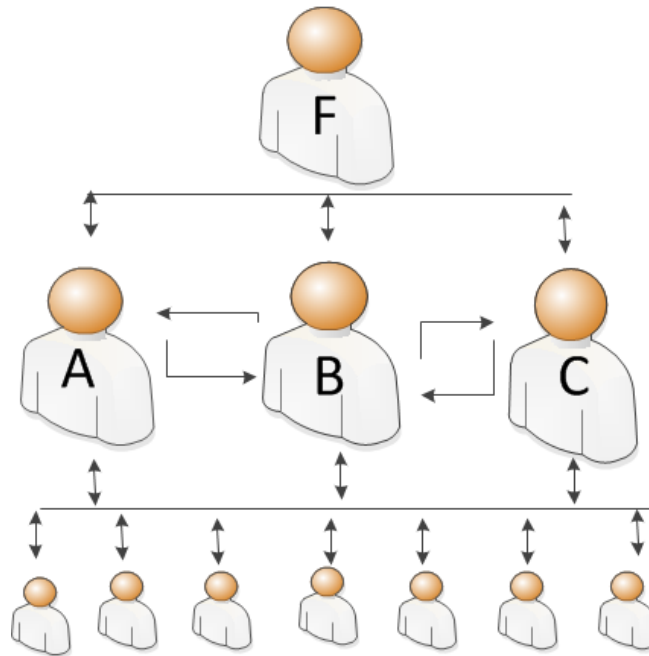


Figure 6 augments the MMOO network to include social media vehicles to provide a more detailed overview of social media marketing. The foundation of the MMOO social media network is provided by the social network solutions platform provider (e.g. Facebook) in concert with the corporate network. The relationship between the two entities may be so close that the corporate network accepts the user registration data of the social network platform provider as valid credentials to access corporate assets.

Social media vehicles including those that empower publishing (such as blogs, webinars, podcasts, articles, and e-books), file sharing (such as videos, photos, and websites), applications (such as online and mobile programs to connect with the firm), and geographic location services (such as maps or other location sensitive programs or services) are then deployed by the firm (Barker et al., 2013). These social media vehicles are strategically selected to maximize the value of the online social network. The strategic selection of social media vehicles can be called the *social media mix*. As is the case with the promotion mix, the social media mix is selected according to communication objectives and results are likewise measured according to forecasts and expectations.

Hence, it is postulated that:

P5: There exists an optimal social media mix which integrates investments across social media vehicles and corporate networks to maximize impact and amplification.

The equity derived from the MMOO network can be called *social equity* in contrast to *customer equity*. Customer equity is a measure of direct financial outcomes that result from first-time, repeat, and add-on sales from the firm (Blattberg, Getz & Thomas, 2001). Social equity is derived from social capital or the resources embedded within the network of relationships possessed by a person or social unit (Gonzalez, Claro & Palmatier, 2014). Social equity consists of both direct and indirect components calculated separately. Direct components of social equity accrue *independent* of network ties and influence. Indirect components of social equity accrue *through* network ties and influence.

FIGURE 6
THE MMOO ONLINE SOCIAL NETWORK

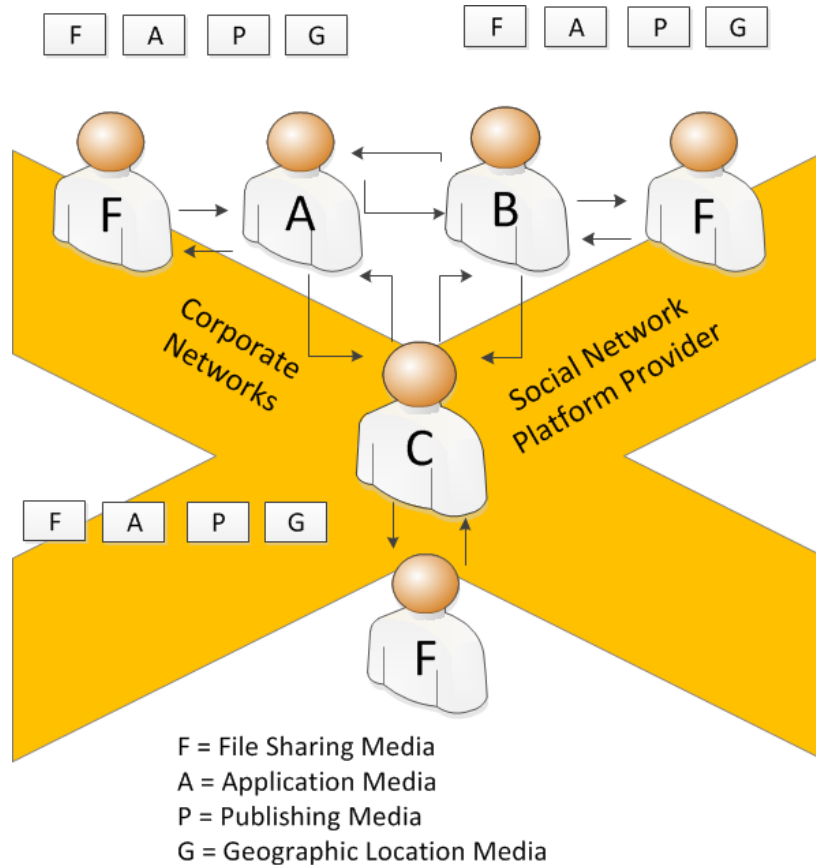
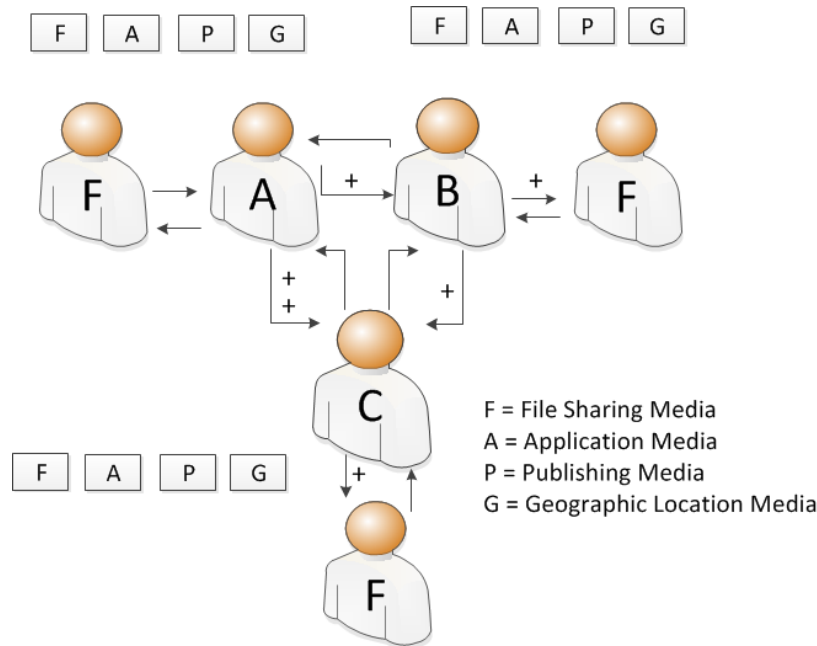


Figure 7 shows a hypothetical example of direct and indirect social equity effects. These are also summarized in Table 2. Direct links to the firm (“F”) indicate direct components of social equity value. The valence of links among actors indicates indirect components of social equity value. In this example, actor A has the greatest social equity value to the firm (3) because of strong indirect effects through other actors despite no direct social equity value. Half of actor B’s social equity (2) derives from indirect effects. All of actor C’s social equity value (1) derives from direct social equity effects.

A firm that is unaware of social equity effects may miscalculate the true value of its customers. For example, from a customer equity perspective, actor A has a value of zero because of no direct contact. However, from a social equity perspective, actor A is the most valuable customer.

Social advertising is a communications tactic designed to exploit social influence in social networks. Social advertising uses information about consumers’ peers, including peer affiliations with a brand, product, or organization to target ads and contextualize their display (Bakshy et al, 2014; Tucker, 2012a; 2012b). For example, Facebook allows advertisers to communicate based on social connections of existing fans, and show ads that expressly indicate the name and likeness of targeted friends who like the advertised object. Similarly, Google allows advertising to include social extensions in their advertisements. Hence, the ad represents an implied endorsement. Research indicates that social advertising can result in significantly greater engagement (Bakshy et al, 2014; Tucker, 2012a; 2012b).

**FIGURE 7
THE MMOO SOCIAL EQUITY NETWORK**



**TABLE 2
SOCIAL AND CUSTOMER EQUITY OF ACTORS**

	Indirect Social Equity	Direct Social Equity	Total Social Equity	Customer Equity
Actor A	3	0	3	0
Actor B	1	1	2	2
Actor C	0	1	1	4
Total			6	6

A substantial literature on dimensions and determinants of interpersonal influence has been developed by marketing scholars (Bearden & Etzel, 1982; Grimm, Agrawal & Richardson, 1999; Park & Lessig, 1977). Research suggests that whereas informational social influence is greater for cognitively motivated purchases, normative social influence is greater for affectively motivated purchases especially for conspicuous products (Grimm, Agrawal & Richardson, 1999). Therefore, it is proposed that:

P5. Firms should utilize normative social advertising appeals for conspicuous products that elicit affective buying motives, and informational social advertising appeals for products that elicit cognitive buying motives.

This proposition presumes that the social network structure is homophilic with strong mutual ties so that social connections can be exploited. If the social network is characterized by a weak structure, then social advertising will not be effective. Instead, the firm should focus on promoting boundary spanning activities to increase network strength and homophily.

P6. Firms should utilize electronic word-of-mouth and referral programs rather than social advertising when faced with a weak network structure.

CONCLUSION

This paper argues that social media marketing is more than the use of online collaborative media to create viral marketing or word-of-mouth effects. Social media marketing means strategically leveraging an optimal social media mix to satisfy communications objectives in support of the creation of a MMOO network to maximize social equity. The foundation of this MMOO network rests on social media platform solutions like Facebook that are carefully integrated with corporate networks. Shared login credentials and social plugins are tools that can be used to foster this integration.

A social network analysis of social media vehicles shows that most media termed *social media* may be better called *viral broadcast media* because they do not have inherently strong social effects. For example, videos, photos, articles, e-books, and blogs may be easily shared but the distribution model remains that of the one-to-many broadcast model from a social network perspective. The main actor is the publisher whose goal is to increase the importance or visibility of the firm by generating in-degree links. Principles of broadcast media apply to creation and dissemination of this content. Well-understood and well-tested theories related to advertising content and execution still apply. Therefore, it is not surprising that a popular use of YouTube is simply to post commercials distributed in regular broadcast channels.

Analysis of some social media, however, shows important differences that require special attention. Social network analysis of microblogs such as Twitter indicates that a special form of centrality, namely eigenvalue centrality can be at work. Prestige or expertise is associated with the number of “followers” or in-degree links relative to “following” or out-degree links. Marketers may exploit this by implementing “celebrity blogs” for product sponsorship or endorsement.

Discussion boards and fora are often cited as examples of new collaborative social media. However, without careful design, such vehicles can degenerate into weak pools of communication because of the free rider problem (Sohn, 2008). Therefore, strong focal actors are needed to monitor and discipline the network structure to ensure success.

For the firm to successfully create and sustain a MMOO network, direct and indirect contributions of actors need to be measured and rewarded to maximize social equity. Social advertising may be well suited as a communication tactic if homophily and multiple ties exist. However, the effectiveness of social advertising likely depends upon a variety of factors including buying motives, consumer involvement, product conspicuousness, and the availability of supporting expert or celebrity endorsements in the advertising copy. If a social network suffers from low homophily and ties, social advertising will not work. Instead, the marketer should emphasize referral and word-of-mouth programs.

Social media marketing strategy will likely assume even greater importance given the rise of mobile platforms and applications. Not only are mobile applications by social media giants like Facebook the most popular in terms of downloads (e.g. Facebook Mobile App, Facebook Messenger, WhatsApp, Pinterest, etc.), Facebook no longer provides free organic reach through newsfeeds. Instead, companies but must pay to promote and reach existing and potential customers (Loten, Janofsky & Albergotti, 2015). Therefore, marketers must stress even greater accountability in their social media marketing.

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