The Role of Marketer- and User-generated Content in Sustaining the Growth of a Social Media Brand Community

Abstract

While recent research has increasingly indicated social media brand communities can bring about desired benefits for firms, the trade press has cautioned the unsustainable growth issue of such communities. Given that the realization of their benefits is contingent on sustained growth, this study investigates the role of two types of content central to sustaining these communities i.e., marketer-generated content (MGC) and user-generated content (UGC). Furthermore, we delineate between content of product-related (for product promotion) and social-related (for relationship building) nature. Our findings show that both social- and product-related UGC can promote growth over time; but only social-related MGC is effective in this regard. However, MGC regardless of their nature may stimulate UGC. Overall our findings suggest that sustaining the growth of a brand community requires a symphony of both marketer effort and consumer response, thus providing a more comprehensive and balanced view of their role.

1. Introduction

Firms are turning to social media to promote their products and to engage their customers. Of such effort, brand communities represent a prominent form of firms’ use of social media [1,2]. According to a report by Website-Monitoring, more than 1.5 million businesses have set up brand communities on Facebook for marketing purposes [3].

A brand community is a specialized community “whose primary base of identification is a brand or brand consumption activity” [4]. By setting up a brand community, a firm can publish information that aims at driving product sales as with traditional marketing strategy. Not only this, via the brand community the firm can interact with its customers and allow its customers to interact among themselves, which may help cultivate a sense of connection to the brand [4].

Whether and how social media brand communities can generate benefits for firms investing in them have intrigued both researchers and practitioners. Recently research has established that they are indeed beneficial to firms e.g., in promoting repeat purchase behavior [1], and in enhancing customer-firm relationship and profitability [2]. Industrial reports support the favorable commercial impact of social media communities e.g., in terms of enhancing consumers’ brand perceptions [5,6].

However, at the same time the trade press has highlighted the problem faced by many brand communities in attracting members and sustaining their growth. For instance, a report from Sysomos1 shows that over a third of all brand communities on Facebook (35%) had only fewer than 100 fans, and over three-quarters (77%) had fewer than 1,000 fans. This is echoed by a study by Deloitte2, which indicates that attracting community members is a major obstacle to creating successful communities, and 35% of the corporates surveyed have less than 100 fans and are struggling to survive. Failing to survive, the purported benefits of these communities to firms would be out of reach.

The question is, then, “to ensure they can reap the benefits of investing in a social media brand community, what can a firm do to promote and sustain the growth of the community?” For this Facebook (http://www.facebook.com/business/engage) advocates firms to try to attract fans by creating content of promotional (e.g., company news and product updates) and social (e.g., greeting and chatting) nature on the community page. Also it is recommended to engage the users to generate content in the forms of responses, feedbacks, and conversations among themselves, which may make the community more vibrant and attractive to others. In line with this, Goh et al. underscore the importance to consider both marketer-generated content (MGC) and user-generated content (UGC) in the context of social media brand communities [1]. Their pioneering research suggests that UGC is more efficacious than MGC in promoting consumer purchase behavior [1]. However, the effect of the two content types on growth (i.e., increase in the

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number of fans in these communities) has not been tested in this context.

Therefore, this research sets out to investigate the role of MGC and UGC in sustaining the growth of social media brand communities over time. To gain a deeper understanding of their role, we differentiate between content related to product promotion and relationship building, in line with the two fundamental purposes of such communities [4]. We collaborate with one of the largest social networking websites in China, which provided us with anonymized member information of a brand community set up by a large furniture company. On the community page the firm posts product information such as pictures, product specifications, and prices, which fall into the category of product-related MGC. The firm also socializes with members by sending regards and greetings; the content of which falls into the category of social-related MGC. Members may respond to these contents and in the process interact with one another. We labeled the ensuing content as product-related UGC and social-related UGC according to whether they revolve around the corresponding nature of MGC. Instances of MGC and UGC in this brand community were tracked and recorded for 233 days, which were then related to the daily growth rates of the community (i.e., the number of additional members joining the community over the number of existing members). We conducted the analysis using a vector autoregressive (VAR) modeling approach that accounts for endogeneity and the dynamic response and interactions between antecedents and outcomes [7]. In next section, we present the conceptual background of this study.

2. Conceptual background

Signaling theory and word-of-mouth (WOM) communication framework serve as the theoretical bases of this study which we build on to formulate our research hypotheses.

2.1. Signaling theory

Signaling theory posits that observable attributes of an entity (e.g., a firm) can serve as a signal of quality and change stakeholder perceptions in situations of information asymmetry [8,9]. In his seminal work, Spence demonstrated how job applicants use higher education degree to signal their quality to prospective employers in the labor market [9]. Quality in general refers to the underlying, unobservable ability of the signaler to meet the needs of an observing outsider [10]. The notion of quality may be socially constructed depending on the investigation context of interest [10]. In this study, quality is taken to be the attractiveness to join a social media brand community.

There are two major traits in an efficacious signal, namely observability and cost [9]. A signal should be observable for it to be able to change stakeholders’ perceptions [8]. The notion of signal cost involves the resources incurred in implementing a signal. For instance, it takes a firm high level of resources (ensuring requirements are met) to obtain ISO9000 certification, which can send out signal suggesting its superior quality over its competitors who fail to obtain the certification.

It has been noted that on social media, signals are not only broadcast by firms; rather, users may also serve as sources that emanate signals for firms [11,12]. On social media where users co-produce signals in the forms of WOM, a salient signal cost is the time and effort users spend on writing and communicating the WOM [11]. As generating content on social media takes time and efforts, users prefer to share views on firms which they think are worthy for them to do so [11]. To understand why users are willing to involve in generating content for a firm, we turn to the WOM communication framework.

2.2. WOM communication framework

Users play an active role in both consuming and generating content on social media [13]. Engaging users to generate content on a social media brand community can be likened to involving consumers in WOM communication [14]. A seminal framework for understanding WOM communication was developed by Dichter, which explicates four inter-related motivators of consumer involvement in WOM communication: 1) product involvement; 2) message involvement; 3) self involvement; and 4) other involvement [15].

Product involvement concerns how WOM acts as a tension-releasing mechanism that drives consumers to share what they know or feel about a product or a brand. Message involvement concerns how consumers’ discussion of a product or a brand is stimulated by messages created by the firm or other consumers i.e., MGC and UGC. Compared with the transient nature of offline WOM that “disappears into thin air,” social media platforms persistently record and store the messages created by the firm and users [14], which allows users to observe, engage with, and respond to what others are saying about a brand.

Self involvement suggests that consumers participate in content generation to enhance their image. Social media brand community allows users to express their views on a product, attract attention from others, show expertise, and boost their status. Other
involvement concerns users’ genuine desire to help others e.g., in understanding a brand for better purchase decision making.

Linking the motivational categories above to consumers’ purchase behaviors, Dichter suggested that WOM communications by highly involved consumers are more contagious, in that they are likely to be deemed more convincing by the audiences [15]. In our context, this implies that UGC by highly involved users are likely to be influential in attracting people to join a brand community.

3. Research model and hypotheses

Figure 1 below depicts our research model.

![Figure 1. Research model](image)

Figure 1. Research model (dotted line indicates the relationship is not hypothesized to be significant)

3.1. Effects of MGC on growth

Product-related MGC displays product information such as pictures, product features, specifications, and prices. Such information is provided by the firm hosting the brand community with the purpose of promoting its products. It has been argued that product-related MGC can help reduce information asymmetry for customers when they seek product information, and thus assist them in purchase decision making [1].

Social-related MGC may include greeting messages for the firm’s customers (e.g., “hi”, “how are you today”), and community socialization materials such as histories, brand stories and myths, and insider talk. Such content may be used as a way for the hosting firm to socialize and build relationships with its customers [16].

Both types of MGC may serve as signals to outsiders about the quality of the firm [9]. However, we argue that when the focal outcome is growth, social-related MGC would be more effective in promoting growth than product-related MGC. Specifically, the kind of quality information emitted by social-related MGC has a better fit with customers’ desire to connect with the brand and interact with other consumers sharing similar interest and passion in the brand by joining a brand community [4]. The provision of social-related MGC shows that the firm cares about its customers and would like to engage in relationships beyond sales transactions with them. Also the social nature of such content may help build up a sense of community among the customers [17,18]. This is in contrast to product-related MGC that intends to promote products and its effect may be more salient in promoting purchase behavior rather than growth. As noted by Laverie et al., emotional bond with customers does a better job in attracting and keeping consumers than product quality [19]. Hence, we hypothesize the following:

\[ H1 (a): \text{Product-related MGC does not affect brand community growth.} \]
\[ H1 (b): \text{Social-related MGC positively affect brand community growth.} \]

3.2. Effects of MGC on UGC

While only social-related MGC is expected to promote growth but not product-related MGC, we expect both types of MGC to be able to lead to an increased corresponding UGC (i.e., product-related UGC and social-related UGC) in the brand community.

Dichter’s theory of product- and message-involvements suggests that the provision of product-related messages by a firm could stimulate consumers to generate and share WOM with others [15]. In a similar vein, the presence of product-related MGC may stimulate customers to generate product-related UGC in a brand community. That is, when customers see product-related MGC such as product pictures, features, and specifications, they may be motivated to share with others their feelings, expectations, and suggestions regarding the products. For customers who have used the product, seeing the product information may stimulate them to share their use experience and recommendation with an intention to help others, i.e., other-involvement [14]. Thus, product-related MGC should lead to an increased product-related UGC.

Also per the message involvement perspective [15], the creation of social-related MGC by the hosting firm should stimulate customers to generate more social-related UGC. This is because the presence of such relationship-building messages may remind users of their intention to connect with the brand and with other passionate customers of the brand, which are among the major motivations of users’ joining a brand community [20]. Additionally, the self-involvement perspective [15] suggests that consumers generate WOM with a desire to improve their social image and status. By responding to social-related MGC, a user may draw others’ attention and signify their standing
as a loyal customer and an active ambassador of the brand to other community members. Therefore, we hypothesize:

**H2 (a): Product-related MGC positively affect product-related UGC.**

**H2 (b): Social-related MGC positively affect social-related UGC.**

### 3.3. Effects of UGC on growth

In contrast to MGC which we only expect such content of social nature can promote growth, we expect both product-related and social-related UGC to be effective in this regard.

Compared to product information provided by firms, research has shown that product information provided by consumers is regarded as more credible and trustworthy due to their relatively unbiased nature [21]. Consumers also tend to heed what other consumers share [22,23], and are likely to absorb the sentiments disseminated by fellow consumers [24]. Additionally, when a user contributes a product-related UGC, the information will be automatically displayed on his or her profile page in social networking websites such as Facebook and the one under study. Hence, the information can be seen by the user’s friends who may not be members of the brand community, which enhances the visibility of the information. Coupled with the high involvement of users in generating product-related UGC as previously discussed, such content should act as an efficacious signal to potential members on whether it is worthy to join the brand community. Perceiving that the brand community contains abundant product information (i.e., product-related UGC) that is credible and trustworthy, non-members may be attracted to join.

Social-related UGC is also expected to promote growth, because such content can enhance non-members’ confidence that they can find a sense of connection (with the brand and with other passionate customers of the brand) in the brand community [20]. Also as with product-related UGC, when a user contributes a social-related UGC, it is automatically displayed on the user’s profile page which his or her friends can see. This enhances the visibility of the information to non-members. Moreover, a large volume of social-related UGC reflects a high level of existing members’ involvement with the brand. This emanates a signal that the brand community is a vibrant and friendly environment, and has charm to involve its members to actively socialize. Taken together, social-related UGC should promote the growth of the brand community. This led us to hypothesize:

**H3 (a): Product-related UGC positively affect brand community growth.**

**H3 (b): Social-related UGC positively affect brand community growth.**

### 4. Research methodology

#### 4.1. Research context and data

Our research context is a brand community set up in a leading social networking website in China. Founded in 2008, the website is one of the most popular social networking websites among young white-collars in the country. The brand community under study was set up by a large multinational furniture retailer in 2010. On the brand community page the hosting firm can post product-related information under the “picture” section, such as product pictures, features and specifications, and prices. The firm may also post social-related information under the “status” section, such as social regards and seasonal greetings. Members of the community can respond to the postings made by the firm, and may interact among themselves. When they make a comment or interact with other members, the information will be automatically reposted on their personal profile page which can be seen by their friends on the social networking website. The community page is made public i.e., any user of the social networking website can visit and view the content on the brand community page.

To minimize novelty effect in the initial period of the brand community establishment, we did not choose the first two and a half months during which the growth was starkly more rapid compared to subsequent periods. During this initial period users who joined the community are likely to be those highly loyal customers of the firm, whose decision to join is more internally driven rather than influenced by external factors such as the presence of MGC and UGC in the community. As we are primarily interested in how MGC and UGC can promote sustainable growth over time (after the initial boom of the brand community), we employed 233-day length of data that is available to us, specifically the records of the daily number of members in the brand community.

#### 4.2. Variables

**4.2.1. Dependent variable.** As the dependent variable, growth rate was computed daily as the number of new members on the current day divided by the number of existing members on the previous day.
4.2.2. Independent variables. We tracked all occurrences of MGC and UGC in the brand community, which serve as the independent variables of interest in this study. As aforementioned, we further divide MGC and UGC into product-related and social-related types to more comprehensively test their role on brand community growth. The “picture” and “status” sections of the brand community page, in which the hosting firm posts product-related and social-related information respectively, afford us a natural delineator of the two types of contents. The volumes of these four types of contents (product-related MGC, social-related MGC, product-related UGC, and social-related UGC) were recorded on a daily base.

4.2.3. Control variable. We control for the possible influence of network density on growth. Network density indicates the extent to which members of a social network are connected to each other [26]. A network in which members are densely connected may signify a high sense of community among the members [27], which could influence the community growth since at a collective level they may tend to act according to community well-being. Formally, it is defined as the proportion of the present dyadic ties to all potential ties:

\[ D_n = \frac{2L}{n(n-1)} \]

where \( L \) = actual dyadic connections that are present; \( n \) = number of community members; and all potential ties among members = \( \frac{n(n-1)}{2} \). We computed this variable based on the friendship information among the members (anonymized) made available to us.

4.3. Analysis approach

To analyze the dynamic relationships between the independent variables and the dependent variable, we employed vector autoregression (VAR) modeling that accounts for endogeneity and the dynamic response and interactions between antecedents and outcomes [7]. All variables in a VAR model are treated symmetrically in a structural sense and each variable has an equation explaining its evolution based on its own lags and the lags of the other model variable [27].

An unrestricted VAR model describes the evolution of a set of \( k \) variables (called endogenous variables) over the same sample period (\( t = 1, ..., T \)) as a linear function of only their past values:

\[ y_t = A_1 y_{t-1} + ... + A_p y_{t-p} + \varepsilon_t \]

\[ y_{t-p} = A_1 y_{t-1} + ... + A_p y_{t-p} + \varepsilon_t \]

i.e. \( t = 1,2, ..., T \)

\( p \) indicates the lag order; \( A_1, ..., A_p \) are \( k \times k \) coefficient matrix to be estimated and \( \varepsilon_t \) is assumed as white noise time series. STATA 12.0 was employed to conduct the analysis.

4.4. Results

We performed data centralization to avoid data scale issue. All the time series were examined for stationary issue to ensure the accuracy of the VAR model through unit root test of Augmented Dickey-Fuller (ADF). Only density (i.e., the control variable) was found to be non-stationary. To preserve the original meaning of density, we employed the measure as is and checked if it affects the stability of the final VAR analysis. All the lag orders were derived based on Akaike information criterion.

1. We went through postings in the “picture” and “status” sections and verified that the contents (both MGC and UGC) belong to the corresponding nature (i.e., product-related or social-related).

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Table 1. Results of testing H1 (a), H1 (b), H3 (a), H3 (b)

<table>
<thead>
<tr>
<th>Equation</th>
<th>Growth</th>
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<tbody>
<tr>
<td></td>
<td>Growth</td>
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<tr>
<td></td>
<td>(self-impact of past growth rate on current growth rate)</td>
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<tr>
<td></td>
<td>L1.</td>
</tr>
<tr>
<td></td>
<td>L2.</td>
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<td></td>
<td>L3.</td>
</tr>
<tr>
<td>Product-related MGC on growth (H1 (a))</td>
<td>L1.</td>
</tr>
<tr>
<td></td>
<td>L2.</td>
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<tr>
<td></td>
<td>L3.</td>
</tr>
<tr>
<td>Social-related MGC on growth (H1 (b))</td>
<td>L1.</td>
</tr>
<tr>
<td></td>
<td>L2.</td>
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<tr>
<td></td>
<td>L3.</td>
</tr>
<tr>
<td>Product-related UGC on growth (H3(a))</td>
<td>L1.</td>
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<tr>
<td></td>
<td>L2.</td>
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<td></td>
<td>L3.</td>
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<tr>
<td>Social related UGC on growth (H3 (b))</td>
<td>L1.</td>
</tr>
</tbody>
</table>

(* - p<0.05, ** - p<0.01, *** - p<0.001)
Table 2. Result of testing H2(a)
(* - p<0.05, ** - p<0.01, *** - p<0.001)

<table>
<thead>
<tr>
<th>Equation</th>
<th>Product_Related_UGC</th>
</tr>
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<tbody>
<tr>
<td>R-sq</td>
<td>chi2</td>
</tr>
<tr>
<td></td>
<td>0.1931</td>
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<td></td>
<td>z</td>
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<tr>
<td></td>
<td>Product-related UGC</td>
</tr>
<tr>
<td>(self-impact of past volume on current volume)</td>
<td></td>
</tr>
<tr>
<td>L1.</td>
<td>0.39</td>
</tr>
<tr>
<td>Product-related MGC on product-related UGC (H2 (a))</td>
<td></td>
</tr>
<tr>
<td>L1.</td>
<td>6.08</td>
</tr>
<tr>
<td>Social-related MGC on product-related UGC (control)</td>
<td></td>
</tr>
<tr>
<td>L1.</td>
<td>1.69</td>
</tr>
<tr>
<td>_cons</td>
<td>-0.35</td>
</tr>
</tbody>
</table>

Table 3. Result of testing H2 (b)
(* - p<0.05, ** - p<0.01, *** - p<0.001)

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Supported?</th>
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<tbody>
<tr>
<td>H1 (a)</td>
<td>Product-related MGC on growth</td>
</tr>
<tr>
<td>H1 (b)</td>
<td>Social-related MGC on growth</td>
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</tbody>
</table>
UGC; and lag of 0 for social-related MGC in stimulating social-related UGC, which means that the effect is on the same day). Hence, although on the outset product-related MGC does not matter for growth, given its rapid effect on UGC that in turn promotes growth, firms should nonetheless invest in creating more product-related MGC for this purpose.

The fast reaction time of social-related MGC on growth (lag of 1 day) and social-related UGC (same day) may also suggest that users are particularly sensitive and pleased with the provision of socializing messages from the hosting firm in the brand community. This supports the idea that socializing with customers should be a priority for firms on brand communities apart from using them merely for product promotion [4]. The implication for firm hosting a brand community is that if they hope to raise the growth of the community within a short time, they should take effort to generate more social-related MGC. This could be particularly pertinent in the stage after the initial boom during which the growth rate of the community starts to slow down. By employing VAR modeling that allows us to capture the dynamic relationships among the variables of interest, nuanced insights such as the above that concerns the temporal aspect of the effects of the different content types could be unveiled.

Additionally, our delineation of MGC and UGC into product and social nature, which correspond to the two central purposes of a brand community (product promotion and relationship building) advances literature in this area. For instance, Trusov et al. examine UGC (in terms of WOM referrals by consumers) and MGC (in terms of traditional advertising and promotion) on customer acquisition in a different context (user signing up for social networking websites) [28]. They conclude that UGC has substantially longer carryover effects than MGC in that particular context. By delineating between product-related and social-related content, our research offers richer insights into the role of MGC and UGC in the context of social media brand communities. Had the two not been differentiated, it is prone to conclude that MGC does not matter for promoting growth of these communities (we tested a combined measure of MGC that include both social-related and product-related content and it was insignificant).

Notwithstanding these contributions, it should be recognized that the findings from this study, which was conducted in China, may not be entirely generalizable to other contexts due to potential cultural differences. Future works may validate the findings in other contexts due to potential cultural differences. Future research may also apply the product and social delineation of contents to other social media contexts (e.g., blogs) to investigate if the role of MGC and UGC differ.

6. References


