

## Consumer-Generated Visual Advertisements in Social Media Brand Communities

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Despite the advent of social media, few studies on online brand communities examine how user-generated content influence community members' perceptions and behaviors toward a brand. Thus, we study how consumer-generated visual advertising influences brand community advertising and marketing. Our model includes motivation and the perceived value of consumer-generated visual advertisements, consumers' brand attitudes in a brand community, attitudes toward other members of the community, brand community identification, engagement, word-of-mouth marketing, and purchase intention toward brands. We demonstrate the importance of brand communities and their implications on social media marketing.

*Keywords: user-generated visual content, consumer-generated visual advertisements, brand community, community engagement, community identification*

Global social media advertising revenue is estimated to reach \$187.6 billion by 2023 (Statista, 2019), prompting an increasing number of advertisers to transfer most of their traditional advertising budgets to social media. Online brand communities provide fans of various brands with a virtual place to meet, discuss, share, exchange information, and make suggestions, stimulating fans to actively engage in word-of-mouth marketing (WOMM; Zhang, Meng, Guo, Yin & Luo, 2015). Brands can also inform or interact with fans to improve brand loyalty and enhance purchase motivation (Tsimonis & Dimitriadis, 2014). Brand loyalty is often positively correlated with the level of engagement on fan pages or in brand communities.

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Consumer engagement with brands involves co-creating experiences and is a psychological state that leads to positive behavior (Brodie, Ilic, Juric, & Hollebeek, 2013).

Thus, questions about how to use social networking platforms, encourage interactions through brand community information (e.g., Facebook fan pages) with consumers or fans, and use information exchanges to co-create positive experiences have become important for brand marketers (Kamboj & Rahman, 2016). Contents of brand communities are generally derived from discussion topics followed by consumers or fans and the comments or issues that they raise therein; therefore, user-generated content (UGC)—an area that warrants further research (Knoll, 2016)—is critical for brand communities (Kamboj & Rahman, 2017).

Scholars have studied topics related to consumers, online brand communities, and brands. For example, Payne, Storbacka, Frow, and Knox (2009) proposed four factors that contribute to value co-creation: Customers' value-creation process, suppliers' value-creation process, encounters where interactions create these experiences, and the impact of additional sources of brand knowledge. Hajli, Shanmugam, Papagiannidis, Zahay, and Richard (2017) found through brand quality, loyalty, social media marketing, and value co-creation, consumers can interact with brands within online brand communities. Munnukka, Karjaluoto, and Tikkanen (2015) developed a conceptual model to link brand community commitment, community promotion behavior, and brand loyalty.

User-generated advertisements refer to UGC related to advertising, including images or videos related to a brand or advertising content created by consumers. In recent years, these have often been shared on social media platforms such as Instagram (Kim, Seely, & Jung, 2017), whose monthly active users worldwide exceeded 100 million since June 2018 (Statista, 2023). Instagram users use photos to share their life stories for social interactions (Lee, Lee, Moon, & Sung, 2015). In addition, self-expression, self-realization, and the desire to be seen are important motivations for using Instagram (Ridgway & Clayton, 2016). These sharing behaviors can influence brand trust and purchase intention through the subjective norm, information quality, and source credibility of UGC on social media platforms (Demba, Chilya, Chuchu, & Nodoro, 2019). Although this study focuses on Instagram, UGC is also applicable to other social media platforms and industries.

Yet, few online brand community studies examine how members use consumer-generated visual advertisements to influence members' perceptions and behaviors toward brands. Given this gap, our objective is to propose a model for consumer-generated visual advertising (CGVA) effect, using theories on customer engagement, consumer-generated content, value co-creation, WOMM, and relationship marketing.

## **Literature Review**

### ***Online Brand Community***

Social media have become ideal marketing platforms for brands. Their popularity and Web 2.0 technologies facilitate easier computer-mediated communication, thus empowering consumers with free expression and minimizing the gatekeeping power of large organizations. Facebook, Instagram, and

YouTube are customer-centric platforms that are public arenas for autonomy and expression of opinions (Šnuderl, 2008). Rather than censorship, these platforms enable users to create a wide variety of content compared with traditional media (Cunningham & Craig, 2016). These changes reflect the importance of online brand communities.

Brand communities not only catalyze interaction among community members but are also useful marketing tools (Hajli et al., 2017) whereby marketing personnel can contact consumers easily and directly. With social media, advertisements can easily target consumers. Consequently, brand communities are extremely important for marketing strategies. A brand community is "a specialized, non-geographically bound community, based on a structured set of social relationships among admirers of a brand" (Muniz & O'Guinn, 2001, p. 412), where "consumer groups of varying sizes that meet and interact for the sake of achieving personal as well as shared goals of their members" (Dholakia, Bagozzi, & Pearo, 2004, p. 241).

In the era of social commerce, the role of consumers in establishing and strengthening brand loyalty (Shen, Huang, Chu, & Liao, 2010) in the market is more active (Zwass, 2010). On Twitter (now X), most consumer interactions with brands revolve around topics related to products, services, and promotions. These tweets reveal consumer emotions and are critical to brands seeking to understand their consumers (Liu, Burns, & Hou, 2017). On Facebook, fans following brands tend to be heavy buyers (Nelson-Field, Riebe, & Sharp, 2012), where influential users serve as a conduit for advertising (Li, Lee, & Lien, 2012). Online communities play a crucial role in establishing word-of-mouth (Zhang, Guo, Hu, & Liu, 2017), creating brand value (Kim & Thapa, 2018), and promoting consumer engagement (Zhang et al., 2017).

### ***User-Generated Content***

Online brand communities can produce a variety of consumer-generated content or UGC, media content created by the public and distributed through the Internet (Daugherty, Eastin, & Bright, 2008), which have a powerful influence on consumers in virtual stores, where they may also make purchases simultaneously (Sethna, Hazari, & Bergiel, 2017). Therefore, UGC is an important situational factor affecting consumer behavior (Olbrich & Holsing, 2011).

Studies have shown the importance of UGC in advertising and marketing. For example, a study on Dove's "Campaign for Real Beauty" that analyzed YouTube's user comments found that users' general discussions were heavily influenced by these comments (Feng, Chen, & He, 2019). Although there are differences across industries, a study on Twitter involving 20 brands showed UGC on product, service, and promotion dominate consumer-brand interactions in fast food, department stores, footwear, telecommunications, and electronics industries (Liu et al., 2017). This suggests that UGC can be effectively used to frame advertising. In the tourism industry, these contents convey user emotions and experiences from tourist destinations that effectively inform prospective travelers' decisions (Wang, Guo, Zhang, & Xu, 2022). Truong, Jesudoss, and Molesworth (2022) identified 12 major brands with successful UGC campaigns on Twitter, including Starbucks (#whitecuocontest), Qantas Airlines (#qantasluxury), JP Morgan (#askJPM), and others. Consumers create content that is influential via the brands' hashtags.

Detailed implications of UGC are not well-understood (Kwak, Kim, & Zimmerman, 2010), and few studies have investigated the effects of primarily visual UGC on advertising attitudes and behaviors. Given the key advertising effects of user-generated visual content, we focus on the perceived value of consumer-generated visual content and investigate attitudes toward such content and brand community marketing, as well as the resulting influence on WOMM and purchase intention.

### ***Consumer-Generated Visual Content***

User-generated advertising differs from those of marketers (Chatterjee, 2011). User-generated content, especially images or photos, provides opportunities for social interaction. Furthermore, UGC is editable and accessible by others. User-generated images (UGI) are often accompanied by simple textual descriptions by the provider, such as a title or tag, expressing the provider's thoughts (Yang, Wang, Guan, Shen, & Yu, 2014). Online social networks increasingly welcome visual content (You, Bhatia, & Luo, 2016). Among YouTube users, user-generated videos have a greater influence on brand attitudes than brand-generated advertisements (Diwanji & Lee, 2022). User-generated advertisements on YouTube are deemed to be more engaging and trustworthy (Lawrence, Fournier, & Brunel, 2013), and their recipients are more positively influenced by peer producers than experts (Paek, Hove, Jeong, & Kim, 2011). On Facebook, user endorsements from fellow users with strong ties have been found to elicit stronger purchase intentions (Chang, Chen, & Tan, 2012). Flickr, the pioneer of online "photo sharing" networks, allowed users to create their own networks according to their interests to share photos (Dasgupta, 2013). In recent years, image-sharing social networks like Pinterest and Instagram have gained a lot of popularity. Instagram has many attractive features, such as the ability to tag one's photos. Furthermore, Instagram is often used to record and share life events and stories through images or videos. User-generated visual content can be used to understand personal attributes, such as age, gender, and political stances (Kosinski, Stillwell, & Graepel, 2013). You and colleagues (2016) identified user interests through user-generated visual content. However, few studies have focused on user motivation and attitudes to address the effects of brand identity, brand engagement, and WOMM. We address these gaps.

### ***Motivations of User-Generated Advertising***

Motivations of community fans or users actively posting UGC on websites include social and personal goals (Shifman, 2016). Vong and Stax (2017) analyzed studies conducted between 2003 and 2017 and found users are motivated by various personal and social motives.

These motives constitute four major trends: "self-expression," "perceived enjoyment," "social interaction," and "information exchange" (Vong & Stax, 2017). First, "self-expression"—this motivation includes the three items listed by Vong and Stax (2017): "Self-presentation," "self-expression," and "self-realization" and refers to the use of real actions as a method to present one's personality traits (p. 24). It also influences others' assessments and views of oneself, which is a part of impression management (Leary & Kowalski, 1990). Marwick (2015) argued that compared with textual descriptions, the use of Instagram is more effective in impression management and presentation of individual expression. "Self-expression" and "self-presentation" are similar. The process of self-expression distinguishes between the characteristics of the actor and others, so it is possible to transmit one's own needs or self-concept (Kim & Ko, 2007).

User-generated content benefits brand value by encouraging consumers to increase their numbers of purchases (cf. Goodrich & de Mooij, 2014), increasing consumer involvement in brands (cf. Malthouse, Calder, Kim, & Vandenbosch, 2016), and reducing promotional costs (cf. Tang, Gu, & Whinston, 2012). Liu and colleagues (2017) found that when information is related to a brand's product, service, and promotion, it will attract consumers to interact with the brand on Twitter. Similarly, Kim, Jin, Kim, and Shin (2012) advocated the practical value that UGC can provide to users, such as knowledge of new products, services, or discounts, producing substantial and beneficial information for users.

The emotional value of UGC may be apparent in its entertainment characteristics or positive emotional experiences (cf. Duan & Dholakia, 2017). Messaging content that includes entertainment value characteristics can increase the degree of contact between community members and brands (Weiger, Wetzel, & Hammerschmidt, 2017). Kim and colleagues (2012) argued that emotional reactions (e.g., happiness or relaxation caused by entertainment) of community members elicited by UGC can improve the degree of member participation in brand communities, thereby indirectly heightening the intensity of brand equity.

Li, Yang, and Huang (2014) found that in the initial period after the establishment of a community, the willingness of community members to post UGC is positively correlated with whether they post content to interact with and receive support from others. Thus, having similar values regarding their views is crucial for members to be able to sustain interaction with, and support for, one another. Thus, online community members' motivation to post UGC on a platform is related to the social value of interaction and identification with community members.

Consumers willingly post content related to brands on the Internet, and communities formed through interaction with other social media users become trusted sources of information, which consumers consult when making purchase decisions. In contrast, brands now occupy a passive position, allowing consumers to use information within UGC as a new means to create "marketing buzz." Brands, as well as the creators and readers of UGC, can derive value from UGC. Thus, we advance Hypotheses 1, 2 and 3:

- H1: Self-expression positively influences motivation for consumer-generated visual content.*
- H2: Social interaction positively influences motivation for consumer-generated visual content.*
- H3: Motivation for consumer-generated visual content positively influences the value of consumer-generated content.*

### ***User-Generated Content, Online Communities, and Member Attitudes***

Opportunities to interact with the community or other members that result from posting content affect the assessment, attitudes, identification, and degree of involvement of members (Schaedel & Clement, 2010) and thereby affect community members' purchase behaviors (Keng, Chang, Chen, & Chang, 2016). Interaction among brand community members, and between the community or other members, is not only closely related to their willingness to post UGC but also an indicator of how it affects member attitudes toward the community, other members, or the brand, thereby affecting purchase decisions.

In this study, we focus on attitudes, as a reaction to UGC, and interaction of online community members with other community members and the community itself. Interactions among customers in a community are positively correlated with strengthening or extending people's conceptions of the brand or product and are helpful for the innovation and development of brands or products (Wu & Fang, 2010). Often, interaction among members of online communities begins when users share and post UGC; this content, and topics of conversation jointly generated by members on the platform, leads to exchange and interaction. Reputation, social interaction, and trust have positive effects on the quality of content that community members express. Pertaining to members, their ability to sense support and identification from the community or other members (Chang & Chuang, 2011; Wu & Fang, 2010) strengthens their community loyalty (Wang, Shen, Tang, & Skitmore, 2013).

Community members interact on community platforms through UGC, thereby generating attitudes toward one another that can affect the quality of information posted in the future (Chang & Chuang, 2011; Wu & Fang, 2010). Wu and Fang (2010) found that interaction and discussion among brand community members within brand communities affect brands' product design decisions. Tracking brand operations on Twitter, Kwon, Kim, Sung, and Yun Yoo (2014) found that the more the members interact with a brand, the more positive their brand attitudes. Keng and colleagues (2016) found that purchase intention and attitude toward a brand are strongly affected by image than textual content. Furthermore, endorsements from influential users increase advertising effectiveness (Li et al., 2012). Social media users, such as celebrities and opinion leaders, are important in engaging UGC readers through their social media interactions (Naeem & Ozuem, 2021).

Community members' willingness to post information on platforms is subject to reciprocity and identification (Chang & Chuang, 2011), which are the result of whether and to what extent members of the community can be influenced by other members when presenting and reacting to their values (Li et al., 2014). Brand community members have different attitudes to other members and the community resulting from their communication, thereby affecting their levels of involvement with the community and purchase intention (Keng et al., 2016; Wu & Fang, 2010). Thus, we advance Hypotheses 4 and 5:

*H4: The value of consumer-generated visual content positively influences brand attitudes within the brand community.*

*H5: The value of consumer-generated visual content positively influences fan attitudes within the brand community.*

### ***Community Engagement/Community Identification***

The degree of community members' participation in online communities is determined by their interactions (Kang, Shin, & Gong, 2016). Furthermore, members with higher degrees of interaction with communities also have higher levels of loyalty, satisfaction, empowerment, connection, emotional bonding, trust, and commitment toward the community (Brodie et al., 2013).

When community members' degree of participation increases, their content click-through and conversation rates in online brand communities also increase (Yang, Lin, Carlson, & Ross, 2016). Malthouse

and colleagues (2016) found that when members actively participate and post UGC in communities, they generate elaborate content and are more willing to purchase. Per the elaboration likelihood model (Petty & Cacioppo, 1986), if information is processed through central routes, member behaviors (i.e. purchase decisions) will be affected.

Members' identification with communities is crucial to brands. In commercial markets, brands or brand communities form social identities. Algesheimer, Dholakia, and Herrmann (2005) defined brand community identification as members' belief in their membership in the community, which is a very important influencing factor for communities and brands (López, Sicilia, & Moyeda-Carabaza, 2017). Thus, identification occurs when an online brand community member identifies with the community based on one's similarities with the characteristics of the community and considers oneself a member of the community.

When members' levels of social identification with a community are high, they tend to participate more actively (Bagozzi & Dholakia, 2006; Casaló, Flavian, & Guinalú, 2010). Their self-identification with the community affects the degree to which they would recommend the brand (Casaló et al., 2010). Hence, we advance Hypotheses 6 to 13:

- H6: Attitudes toward the brand in a brand community positively influence community identification.*
- H7: Attitudes toward other members in a brand community positively influence community identification.*
- H8: Attitudes toward the brand in a brand community positively influence community engagement.*
- H9: Attitudes toward other members in a brand community positively influence community engagement.*
- H10: Community identification positively influences willingness to conduct word-of-mouth communication.*
- H11: Community engagement positively influences willingness to conduct word-of-mouth communication.*
- H12: Community identification positively influences purchase intention.*
- H13: Community engagement positively influences purchase intention.*

### **Research Method**

Given the rising popularity of social media platforms like Instagram, (Ahmadinejad & Asli, 2017), we used them to study brand communities, deploying an online survey to recruit participants who follow brands on Instagram and asking them about their experiences. This method enabled us to reach a wide range of brand community consumers exposed to various Instagram brand visuals. Prior studies have adopted a similar method (cf. Ahmadinejad & Asli, 2017; Alalwan, 2018).

The online questionnaire was released on an instant-messaging software and well-known online community platforms such as Facebook and Instagram through convenience and snowball sampling via researchers’ personal networks. We obtained 400 complete responses, comprising 203 men and 197 women, with an average age of 28 years. Similar to Alalwan (2018), we used structural equation modeling (SEM) to test our research model (Figure 1).

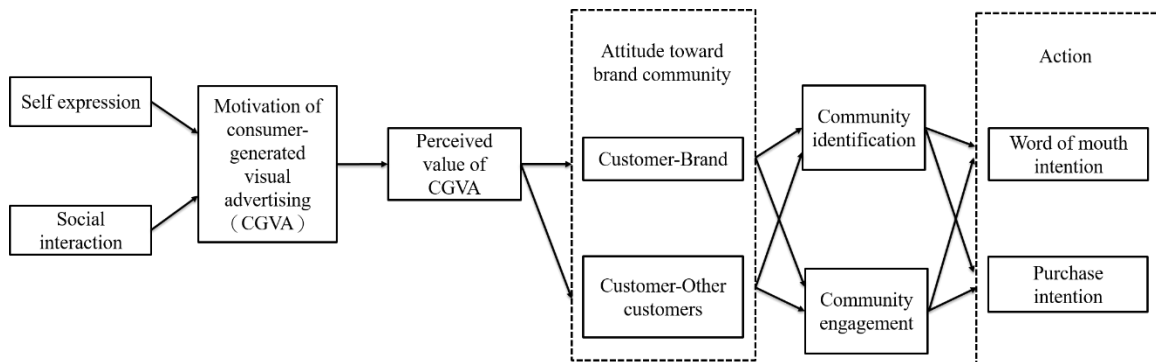


Figure 1. Research model.

Measurement

A 7-point Likert scale was adopted for measurement, with scores ranging from 1 (strongly disagree) to 7 (strongly agree), to measure the 10 constructs separately. The question items are given in Table 1.

Table 1. Survey Items.

Construct	Items
Self-expression	<ul style="list-style-type: none"> <li>to be noticed by others</li> <li>to express my actual self</li> <li>to share my personal information with others</li> <li>to show off (adapted from Lee et al., 2015)</li> </ul>
Social interaction	<ul style="list-style-type: none"> <li>to interact with a number of people, I maintain a good relationship with others (for networking)</li> <li>to get updates on close friends and family</li> <li>to keep in touch with friends far away</li> <li>to communicate with friends and family because people around me use Instagram</li> <li>to know about things that are happening around me</li> <li>to connect/meet with people who share similar interests (Lee et al., 2015)</li> </ul>
Motivation of CGVA	<ul style="list-style-type: none"> <li>I will keep updating in the brand community on Instagram</li> <li>I will maintain an active part in the brand community of Instagram</li> <li>I will keep contributing to the brand community of Instagram</li> <li>I will actively participate in the brand community of Instagram. (Ma &amp; Agarwal, 2007; Wang &amp; Li, 2017)</li> </ul>



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Perceived value of CGVA	<ul style="list-style-type: none"> <li>• In my opinion, the CGVA of this brand community of Instagram is useful for me (Ducoffe, 1996)</li> <li>• The CGVA of this brand community on Instagram is valuable to me</li> <li>• The CGVA of this brand community on Instagram is important to me</li> </ul>
Consumer-brand	<ul style="list-style-type: none"> <li>• The brand is of the highest quality</li> <li>• The brand understands my needs</li> <li>• I value the brand heritage (Luo, Zhang, &amp; Liu, 2015)</li> </ul>
Consumer-other	<ul style="list-style-type: none"> <li>• I have met wonderful people because of the community</li> <li>• I feel a sense of kinship with other community members</li> <li>• I have an interest in the community for the other brand owners (Luo et al., 2015)</li> </ul>
Community identification	<ul style="list-style-type: none"> <li>• I am very attached to the community</li> <li>• I identify myself with other fans at this meeting</li> <li>• I see myself as a part of this fan community</li> <li>• Other brand community members and I share the same objectives</li> <li>• The friendships I have with other brand community members mean a lot to me</li> <li>• If brand community members planned something, I'd think of it as something "we" would do rather than something "they" would do (Matzler, Pichler, Füller, &amp; Mooradian, 2011)</li> </ul>
Community engagement	<ul style="list-style-type: none"> <li>• I benefit from following the brand community's rules</li> <li>• I am motivated to participate in the brand community's activities because I feel better afterward</li> <li>• I am motivated to participate in the brand community's activities because I am able to support other members</li> <li>• I am motivated to participate in the brand community's activities because I am able to reach personal goals (Algesheimer et al., 2005).</li> </ul>
Word-of-mouth intention	<ul style="list-style-type: none"> <li>• I want to write my opinion regarding brand, product, or service in this social media outlet</li> <li>• I want to give my opinion regarding the brand, product, and service to others in this social media outlet</li> <li>• I want to upload the contents of these social media to my blog or microblog (adapted from Do, Ko, &amp; Woodside, 2015)</li> </ul>
Purchase intention	<ul style="list-style-type: none"> <li>• I want to buy the product shown in this brand community</li> <li>• I immediately considered buying the product shown in this brand community</li> <li>• In the future, I may consider purchasing the products that appeared in this brand community (Meyers-Levy &amp; Maheswaran, 2004)</li> </ul>

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### **Data Analysis and Results**

Confirmatory factor analysis (CFA) was used to test the validity of each question item. Their convergent validity and discriminant validity (Table 2) were tested. For convergent validity, each question

item's variance extracted had to be tested. The average variance extracted (AVE) values discussed in this study were all higher than 50% of the standard value, indicating that the items are of convergent validity (Fornell & Larcker, 1981). The AVE values of all constructs exceeded the square of the correlation coefficient between the two constructs, satisfying the criterion for discriminant validity. Overall, the reliability of the constructs was sufficiently high ( $\alpha = 0.87\text{--}0.95$ ).

**Table 2. CFA Results.**

Construct	Indicator	Standardized Factor Loadings	Composite Reliability	AVE
Self-expression	Sel1	.89	.92	0.78
	Sel2	.88		
	Sel3	.88		
Social interaction	Soc1	.88	.92	0.76
	Soc 2	.91		
	Soc 3	.87		
	Soc 4	.82		
Motivation of CGVA	Mot1	.81	.93	0.77
	Mot 2	.88		
	Mot 3	.91		
	Mot 4	.90		
Perceived value of CGVA	Val1	.81	.87	0.70
	Val2	.87		
	Val3	.82		
Customer-brand	bra1	.87	.89	0.75
	bra2	.90		
	bra3	.81		
Consumer-other consumers	cus1	.90	.93	0.84
	cus2	.96		
	cus3	.88		
Community identification	Ide1	.88	.93	0.77
	Ide2	.89		
	Ide3	.85		
	Ide4	.88		
Community engagement	Eng1	.89	.89	0.75
	Eng3	.87		
	Eng4	.83		
Word-of-mouth intention	Wor1	.88	.89	0.74
	Wor2	.93		
	Wor3	.77		
Purchase intention	Pur1	.83	.91	0.77

Pur2	.96
Pur3	.84

We used SEM to test the various hypotheses in this research model. Regarding overall suitability, the  $\chi^2$  value of the degree of freedom ( $df$ ) = 3.40, indicating an ideal fit (Schumacker & Lomax, 2015). Jöreskog and Sörbom (1989) suggested that goodness-of-fit index (GFI) and adjusted GFI values between 0.8 and 0.9 are acceptable. Furthermore, criteria such as comparative fit index (CFI), incremental fit index (IFI), and estimated residual value root mean square error of approximation (RMSEA) must comply with the general empirical law (Schumacker & Lomax, 2015). The measurements in this study have an acceptable level of fit (GFI = 0.81). In addition, CFI = 0.92 (> 0.9), IFI = 0.92 (> 0.9), and RMSEA = 0.078 (< 0.08), which are all in line with the criteria. Figure 2 shows the coefficients of causal relationships between pairs of variables. The result shows that all hypotheses are supported except H6 and H12 (Table 3).

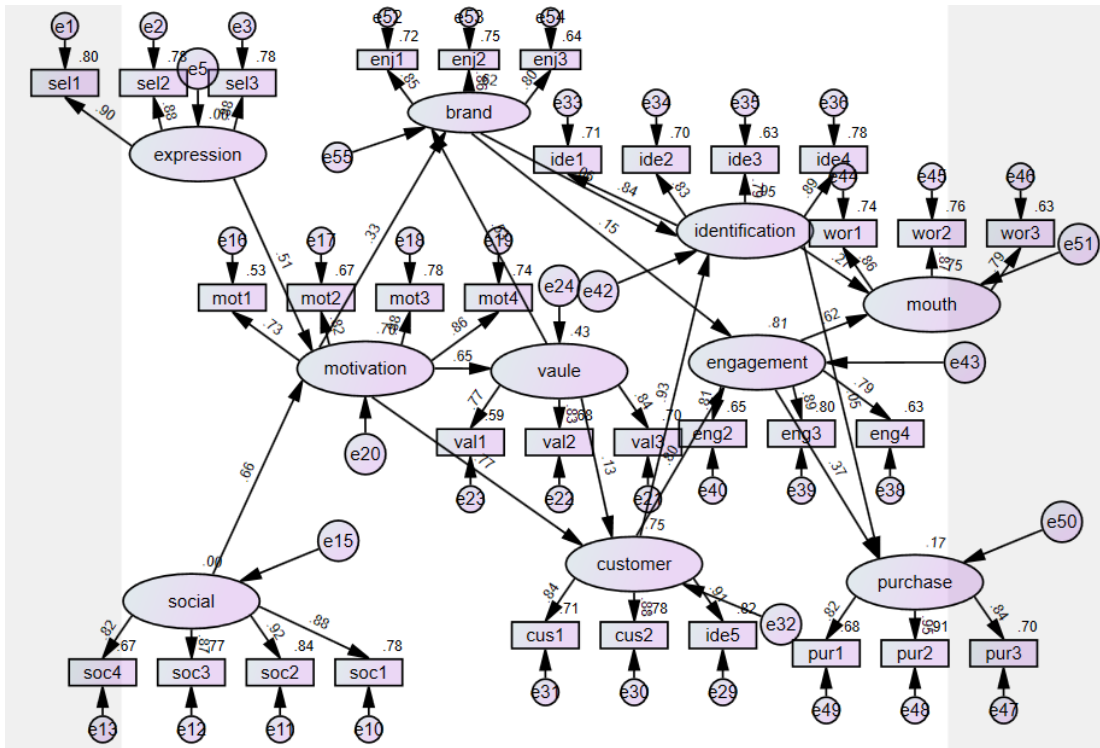


Figure 2. Linear structural relations model and unstandardized coefficients.

Table 3. Proposed Structural Model Estimation Results (Linear Structural Relation Analysis).

Hypotheses	Unstandardized Coefficients	Standardized Coefficients	Standard Error	$p$
H1: Self-expression → motivation	.268	.51	.023	***
H2: Social interaction → motivation	.444	.66	.033	***
H3: Motivation → value	.697	.61	.062	***

H4: Value → brand	.187	.53	.068	**
H5: Value → customer	.519	.13	.062	***
H6: Brand → identification	.086	.60	.049	.080
H7: Customer → identification	.904	.94	.046	***
H8: Brand → engagement	.174	.15	.049	***
H9: Customer → engagement	.613	.80	.041	***
H10: Identification → mouth	.225	.27	.079	**
H11: Engagement → mouth	.657	.62	.105	***
H12: Identification → purchase	.031	.05	.087	.718
H13: Engagement → purchase	.309	.37	.112	**

Note. \*\*\*<.001 \*\*<.01.

### Discussion and Conclusion

In the context of social media advertising, the influence of UGC, along with users' motivation and social interactions, is an area warranting further research (Knoll, 2016). This study examines the effects of CGVA content on the marketing performance of a brand community and proposes a model on the effects of CGVA. Overall, our results illustrate the importance of UGC in brand communities in the era of online advertising. These communities enhance consumer engagement (Zhang et al., 2017) and create brand value (Kim & Thapa, 2018), making them critical in social media marketing. Active users in these communities establish and strengthen brand loyalty (Shen et al., 2010), leading to implications, and hence, opportunities in social media marketing. Although our study used Instagram as the context, the findings are applicable to other social media platforms as well, given the relevance of UGC (Li et al., 2012; Liu et al., 2017; Nelson-Field et al., 2012).

Consistent with the literature, the results support H1 and H2 on self-expression and social interaction. These translate to personal and social motives that motivate UGC on websites (Shifman, 2016; Vong & Stax, 2017). Muntinga, Moorman, and Smit (2011) indicated that the creation of brand-related content covers three sub-motivations: Self-presentation, self-expression, and self-assurance. Furthermore, Instagram users use photos to portray their personalities, lifestyles, tastes, and ideas because achieving self-expression and impression management are easier via photos than words (Lee et al., 2015). Therefore, self-presentation has a positive impact on motivation for consumer-generated visual content. Compared with status updates and video sharing, Instagram mainly focuses on the visual presentations of photos (Phua, Jin, & Kim, 2017). The sense of self-presentation makes users more motivated to use the function of image presentation, especially when users can apply filters or add text to photos to make them look more artistic and show their creativity (Sheldon & Bryant, 2016). This is not only applicable to Instagram. Other social media platforms like Facebook and Twitter also support self-expression for similar purposes (Shane-Simpson, Manago, Gaggi, & Gillespie-Lynch, 2018). In addition, social interaction is an important motivating factor for Instagram users to build and maintain social relationships with others (Lee et al., 2015). Expressing emotions, following fashion trends, and demonstrating sociability are common reasons why users follow brands on Instagram (Phua et al., 2017). Likewise, this is also applicable to other social media platforms (Alhabash & Ma, 2017).

Our results also support H3. Consumers use social media to interact with brands about products, services, and promotions (Liu et al., 2017). The interactions generate increased understanding of consumer interests and preferences (Liu-Thompkins, Maslowska, Ren, & Kim, 2020), which can generate value for brands. Zhang and Mao (2016) examined how consumers' online motivation influences ad clicks through perceived informative and perceived entertainment values of advertising. They (Zhang & Mao, 2016) found that consumer motivation significantly affects both perceived values, consistent with our results, showing that motivation for consumer-generated visual content has a positive impact on the value of consumer-generated visual content.

Hypotheses 4 and 5 are also supported. Liu and colleagues (2017) found that brands leverage various forms of UGC to increase consumer engagement, leading to a more lasting positive brand attitude. Thus, UGC, such as brand postings, product reviews, product-related video comments, and brand testimonials, featuring consumers themselves in photos or videos, make the brand community connections more credible, objective, and trustworthy. Moreover, it enhances fan attitudes within the brand community and has a positive impact on the brand (Phua & Kim, 2018). Accordingly, the value of consumer-generated visual content has a positive impact on fan attitudes and brand attitudes within the brand community. Not surprisingly, among YouTube users, fan-made content from official TV media, such as fragments of official TV episodes, garners considerable user attention and interaction (Rodríguez-Ferrández, Tur-Viñes, & Contreras, 2016). Brand interactions involving products, services, and promotions also constitute the majority of consumer engagement on Twitter (Liu et al., 2017), and on Facebook, advertising occurs through influential users (Li et al., 2012), such as celebrities and opinion leaders, who effectively engage users via UGC through their social media interactions (Naeem & Ozuem, 2021). Thus, the implications may be extended to other social media platforms.

We did not find evidence to support H6. The result is inconsistent with the previous finding (Hsu, Chen, Fan, Lin, and Chiu, 2015). However, we found support for H7. Consumers with a strong identification with a group will have a strong commitment to the group and be characterized by the collective identity shared by other members of the group (Algesheimer et al., 2005; López et al., 2017). These consumers are more likely to participate and share information with other members (Bagozzi & Dholakia, 2006), thereby constituting indirect advertising. Besides, Liao, Huang, and Xiao (2017) also argued that consumers tend to share their brand experiences with brand followers to pass on relevant brand knowledge, attitudes, and behaviors, thus promoting common culture and identity within the community. Altogether, the more positive the attitudes toward other members in the brand community, the higher the sense of community identification. The greater their community identification, the more likely they will recommend the brand (Casaló et al., 2010).

Consistent with the literature (Sheeraz, Tanweer, Khan, & Mahmood, 2017), we find support for H8. Our results also support H9, advocating arguments by Habibi, Laroche, and Richard (2014) that community engagement contributes to the positive effect of a brand community's recognition of its members. A positive attitude toward other members within the brand community can encourage consumers and community members to share photos, videos, likes, and comments, and have other community engagements on the community pages. Therefore, attitudes toward the brand in the brand community and toward other members in the brand community have a positive impact on community engagement.

Hypotheses 10 and 11 are also supported. Consistent with the literature, brand community identification is a key influencing factor for communities and brands (López et al., 2017). Consumers who are satisfied with the brand community will voluntarily publish their support and promote WOMM, which can help shape other consumers' attitudes (Alnsour & Faour, 2019). This applies especially to those with authority in social media, such as celebrities and opinion leaders, who engage UGC readers through their social media interactions (Naeem & Ozuem, 2021). Thus, the higher the brand community identity or brand community engagement, the greater the willingness to promote a brand. Apart from H6, H12 is also not supported by our results, contrary to the literature. However, we found evidence to support H13, consistent with Alnsour and Faour's (2019) finding that the higher the degree of consumer engagement in the social media brand community, the greater the intention to purchase. When community members identify themselves as part of a community, they become likely to recommend the brand (Casaló et al., 2010) and become more engaged. Accordingly, brand community identity does not directly affect the purchase intention, but there is no doubt that the higher the brand community engagement, the greater the purchase intention.

Overall, only H6 (brand attitude toward community identification) and H12 (community identification toward purchase intention) were not supported. A plausible explanation is that attitudes toward the brand and community are two different entities. Kim, Hong, and Lee (2021) analyzed Fortune 500 companies' Instagram accounts and content and found that most brand companies only see their social media accounts, such as Instagram, as a one-way channel to promote their brand image. This explains why a customer who supports a brand may not automatically transfer that same attitude to the brand community. Furthermore, even if customers strongly identify with the brand community and engage in word-of-mouth communication, this identification does not necessarily apply to purchase actions either. However, once customers' identifications become engaged, community engagement influences purchase intention (H13). The motivation of customer-generated visual advertising is crucial to positively influence customers' attitudes toward brand communities, but customers' purchase intention will be evoked only when they engage with the brand community and form healthy relationships with other members. This highlights the importance of influential social media users, such as celebrities and opinion leaders, who can effectively engage other users via UGC through their social media interactions (Naeem & Ozuem, 2021). Their endorsements can increase advertising effectiveness (Li et al., 2012).

### ***Theoretical and Practical Implications***

Studies on UGC have shown their advertising effectiveness on social media in many brands (Feng et al., 2019; Liu et al., 2017; Truong et al., 2022; Wang et al., 2022). Comparatively, there is less attention given to consumer-generated visual content despite its relevance, resulting in a relative lack of studies in this area. Visual presentation via photos or videos is popular among consumers, and their effectiveness has been shown on a variety of social media (Dasgupta, 2013; Diwanji & Lee, 2022; Lawrence et al., 2013; Paek et al., 2011). However, even though this content can be used to understand users' attributes and interests (Kosinski et al., 2013; You et al., 2016), few studies have focused on user motivation and attitudes to address the effects of brand identity, brand engagement, and WOMM.

Therefore, we propose an advertising effects model for CGVA. Our results support the idea that self-presentation and social interaction can increase consumer-generated advertising content delivered through photos or videos. For example, selfies and group photos with the brand can enhance the perceived value of CGVA, thereby improving the attitude toward the brand community, as well as brand community identity and engagement, which in turn increases the willingness to use word-of-mouth promotion and purchase the products. In practice, a dedicated team can be established to track social media users' attitudes toward a brand and to improve followers' interaction and engagement.

With media technology advancement, social media advertising strategies are poised to evolve (Hsu, 2020). Today, when consumers have become active players in advertising (Patterson, 2012), brand communities can be used as an effective marketing tool by leveraging interaction among community members (Hajli et al., 2017). CGVA are critical in establishing word-of-mouth (Zhang et al., 2017), creating brand value (Kim & Thapa, 2018), and promoting consumer engagement (Zhang et al., 2017). Consumer interactions with brands center around products, services, and promotions, which help brands understand their consumers (Liu et al., 2017).

This study proposes a model that illustrates the impact of CGVA on brand marketing. Brand attitudes can create a sense of trust that is initially generated by consumer-generated visual content, allowing consumers to interact with brand communities, thereby building a long-term relationship between them and making them effective marketing tools (Hajli et al., 2017) that support a wide variety of UGC (Cunningham & Craig, 2016).

If consumers can create visual advertising content through Instagram spontaneously, the perceived value of CGVA can be further enhanced, which can improve the attitudes toward the brand community, enhance brand community identity and engagement, and increase the willingness to use word-of-mouth promotion and purchase willingness. Extrapolating this further, despite the relative lack of research on CGVA related to user motivation, attitudes, brand identity, brand engagement, and WOMM, we argue that our findings are also applicable to other social media platforms, given the effectiveness of consumer-generated visual content on other social media (cf. Dasgupta, 2013; Diwanji & Lee, 2022; Lawrence et al., 2013; Paek et al., 2011). In addition, since several brands have successfully leveraged UGC for advertising (cf. Feng et al., 2019; Liu et al., 2017; Truong et al., 2022; Wang et al., 2022), we posit our findings are also applicable to a wide variety of brands.

Pertaining to limitations and future recommendations, our convenience sample was adequate in size to provide internal validity but not generalizability. Moreover, we did not specifically examine the virtual community of a certain brand. Future research can look into communities of different brands to explore the marketing effects of consumer-generated visual content. Furthermore, even though our findings can be extrapolated to different social media platforms and brands, the effectiveness of CGVA may differ. Future studies can replicate our design on other social media platforms and brands to ascertain similarities and differences. Taken together, social media platforms empower users to create content that can be leveraged for advertising. Although there are algorithms that can influence the extent to which these contents are seen, it is beyond the scope of our study. Future studies can explore how different algorithms influence the effectiveness of UGC in different contexts.

As social media use becomes increasingly prevalent, the presentation of visual content becomes more popular and the visual marketing of brands on social media is increasingly emphasized. Against this backdrop, consumers' motivation to use CGVA content can be taken as an impetus to strengthen its perceived value for formulating synergistic marketing strategies.

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