# Investigating the Impact of Firm and User-Generated Social Media Communication on Brand Equity, Brand Trust, and the Post-Purchase Behavior: The Moderating Role of Brand Experience

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## Keywords

Firm-generated social media communication
User-generated social media communication
Brand equity
Brand trust
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Brand experience
Repurchase behavior
Word of mouth

## Abstract.

This study investigated the effect of firm-generated social media communication and user-generated social media communication on brand equity, brand trust, brand satisfaction, repurchase intention, and word of mouth. The moderating effect of brand experience on brand satisfaction was also evaluated. Partial least square structural equation modeling (PLS-SEM) was used to examine the hypothesis development based on the data from a sample of 371 survey respondents. The results demonstrated that both firm-generated and user-generated social media communication have a positive influence on brand equity and brand trust. Additionally, the influence of brand equity and brand trust on brand satisfaction, repurchase intention, and word of mouth is positive. Furthermore, the brand experience was found to have a positive moderating effect that amplified the relationship between brand trust and brand satisfaction. As a result, this study's findings opened up a valuable milestone into the significant function of firm-generated and user-generated social media communication. Our results also offered the directions to study additionally such kinds of constructs and the influence of firm-generated and user-generated social media communication on brand trust, brand equity, brand satisfaction, repurchase intention, and word of mouth models. Therefore, the results of this study could be beneficial for further validations in the market segment.

## 1. Introduction

In a globalized environment, social media, cultural and social phenomenon has impacted significant many perspectives of consumer behavior, including awareness, infor-

mation acquisition and sharing, options, attitudes, purchase, post-purchase behavior, and word of mouth (see Grubor et al. [31] and Tatar and Erdogmus [77]). According to a recent report, nearly 100% of firms are present on at least one social media website, 89 % of marketing managers use social media platforms to engage customers, 4.66 billion people around the world use the internet in January 2021 and 4.20 billion social media users around the world (see World Digital report [39]). Therefore, social media is playing an important role in operating as an official communication channel of organizations, which is used to operate and relate to consumers and their partners to maintain advantages compare to their competitors (see Paniagua et al. [65]).

According to Arrigo et al. [4], firms have the opportunity to communicate with consumers directly during their online conversations without any screens and to understand insight into customers' interests through social media platforms. Recent studies further emphasized that companies have widely used social media as a formal communication channel to understand customers' preferences, competitors' activities, market trends, and product feedback as well as influence user beliefs and habits (see Paniagua et al. [65]). Additionally, by utilizing such kinds of social media, users can also communicate with other brand community members, share their product/service experiences, and learn from other customers, thereby consistently and pervasively affecting the decisions of community members (see Tatar and Erdogmus [77]). Most firms seek to leverage websites to promote communication with their customers to build brand equity, trust, and closeness in relationships within their virtual brand communities (see Chen and Lin [15]).

Traditionally, marketing communication is controlled by the firm. Based on the theory of reasoned action, firm-generated social media communication tends to influence brand equity and brand trust (see Schivinski and Dabrowski [73]) through a process from stimuli, beliefs, attitudes to behavior intention. On the other hand, user-generated social media communication tends to influence brand equity through trustworthiness, reliability, and credibility which further facilitate brand loyalty and perceived quality. Hence, the influential routes of user-generated and firm-generated social media communication may be different. However, a comparison of the effects of firm-generated and user-generated social media communication has never been conducted. Furthermore, Gambetti et al. [27] demonstrated that studies regarding consumer-brand equity have been criticized as lacking overall investigation of firms and consumers on brand equity and brand trust, thus making it difficult to develop a comprehensive framework of brand-related constructs. Therefore, the present study will develop a comprehensive framework to investigate the effect of firm and user-generated social media communication on brand equity, brand trust, brand satisfaction, post-purchase behavior, and word of mouth.

## 2. Literature Review and Hypothesis Development

### 2.1. The effect of firm-generated social media communication on brand equity and brand trust

The firm-generated social media communication is a multi-faceted construct and its influences will depend on the message opinion, customers' reaction to the message, and

consumers' instinct temperament towards social media. Additionally, the firm-generated social media communication can support firms to strengthen one-on-one relationships with their customers (see Kumar et al. [50]). Firm-generated social media communication is managed by the company, whereas user-generated social media communication is not controlled by the company (Vanden Bergh et al. [79]). In applying firm-generated social media communication, firms attempt to communicate in a manner that evokes feelings of affinity, confidence, trust, and amity in consumers (see Zehir et al. [83]). According to Zehir et al. [83], brand communication is critical to building and managing the relationships between a brand and all relevant stakeholders. Additionally, brand equity has been described as a set of assets associated with a brand that increases its perceived value to customers (see Liu [55] and Ramaseshan and Stein [68]). Aaker [1] classified brand equity into five categories: brand loyalty, brand awareness, perceived quality, brand association, and other proprietary brand assert-patents (such as trademarks and channel relationships). In the present era of pervasive online marketing, brand communication is being used to enhance brand equity via social media (see Grubor et al. [31]). Typically, firm-generated social media communication is employed to develop consumer perceptions and expectations regarding the brand association and brand loyalty (see Ha and Park [32]). Schivinski and Dabrowski [73] found firm-generated social media communication to positively affect perceived brand quality, brand association, and brand awareness. Social media is comprised of web-based applications that allow firms and users to communicate and share opinions and knowledge about using products/services (see Kaplan and Haenlein [43]). Thus, firm-generated social media communication can facilitate brand equity (see Kumar et al. [50] and Moorthy and Hawkins [59]).

Brand trust has been defined as the feelings of satisfaction and trustworthiness held by consumers in their communication with a firm (see Delgado-Ballester and Munuera-Aleman [20] and Nawaz et al. [63]). Trust is manifested when a consumer evaluates their current brand preference with confidence in their current brand preference when encountering an alternative brand (see Delgado-Ballester and Munuere-Aleman [19]). When customers have confidence in a brand, they hold high expectations of and beliefs about that brand. Kim et al. [46] further indicated that the level of brand trust may impact a company's brand recognition and brand image as well as the related consumer purchasing behaviors. Bruhn et al. [12] found that brand communication through social media positively influences consumers' knowledge regarding a brand's profile, symbol, and characteristics. Social media communities have become important spaces for users to post their views and ideas. Therefore, we hypothesize that firm-generated social media communication influences brand equity and brand trust positively.

**Hypothesis 1:** *Firm-generated social media communication positively influences brand equity.*

**Hypothesis 2:** *Firm-generated social media communication positively influences brand trust.*

## 2.2. The effect of user-generated social media communications on brand equity and brand trust

The popularity of user-generated social media communication has risen with the growing popularity of online brand communities and social network services and user-generated social media communication is now used by consumers to share all manner of information with other consumers to promote their individual consumption choices (see Schivinski [72]). Through this online medium, consumers may express their comments, thoughts, and perceptions, both positive and negative, about a brand (see Gensler et al. [29]). Smith et al. [75] suggested that brand communication may be increased by employing user-generated social media communication. Furthermore, other authors have concluded that user-generated content positively influences brand trust, brand equity, and purchase intent (see Grubor et al. [31]).

Similarly, the relationships among perceived brand quality, brand association, and brand awareness are positively influenced by social-media-based user-generated content (see Schivinski and Dabrowski [73]). Riegner [69] indicated that online user-generated content was the most important medium used by customers to obtain information on products/service quality. Moreover, a majority of the customers surveyed in Foux's [26] study placed greater trust in information obtained from social media than in traditional promotional information. In marketing contexts, trust has been described as the willingness of a customer to visit a brand repeatedly due to its quality (see McKinney and Benson [58]). Thus, when customers trust a firm, they typically do not purchase products/services from that firm's competitors (see Nawaz et al. [63]. This phenomenon may be attributed to the direct and rapid interactions through social media (see Tatar and Eren-Erdomu [77]). Therefore, this study hypothesizes that user-generated social media communication influences brand equity and brand trust positively.

**Hypothesis 3:** *User-generated social media communication positively influences brand equity.*

**Hypothesis 4:** *User-generated social media communication positively influences brand trust.*

## 2.3. The effect of brand equity on brand satisfaction and brand trust

Nam et al. [62] demonstrated that satisfaction reflects a buyer's evaluation of a seller based on prior purchase. Brand satisfaction has been described as an active or conative response based on an evaluation of product quality, product consumption experience, or product attributes (see Belaid and Behi [8]). According to Nawaz et al. [63], customer satisfaction is a leading indicator of consumer behavior. Previous studies have found brand satisfaction to be a positive antecedent of brand equity (see Muala [61]. Basheer et al. [6] suggested that brand satisfaction may change consumer opinions from negative to positive, which allows brand owners to reduce expenditures on advertising and marketing. If a brand fulfills expectations, customer satisfaction will increase (see Ha and Perks [31], Ha et al. [34], and Nawaz et al. [63]).

Brand equity is most often considered by firms to be a relational, market-based asset that is obtained through building and maintaining brand trust (see Delgado-Ballester and Munuera-Alemn [19]). Basheer et al. [6] provided evidence that brand equity has a significant impact on brand satisfaction and brand trust. Moreover, Nam et al. [62] concluded that brand trust is rooted in the brand consumption experience and is positively associated with brand loyalty as one element of brand equity. Since brand equity is a fundamental feature of any successful long-term brand-consumer relationship, the dimensions of brand equity, such as brand association and brand awareness, are the strongest drivers of brand trust in service brands (see Han et al. [35]). Therefore, this study proposes the following hypotheses:

**Hypothesis 5:** *Brand equity positively influences brand trust.*

**Hypothesis 6:** *Brand equity positively influences brand satisfaction.*

### 2.4. The effect of brand trust on brand satisfaction

The connected variables that satisfaction always builds trust for a brand are examined and confirmed in the findings of previous studies (see Nawaz et al. [63]). The ease with which firms can satisfy customers is negatively associated with the level of quality expectations of customers (see Erci et al. [23]). Previous studies have indicated that trust is a predictor of loyalty and that brands that are trusted by their customers satisfy consumers (see Chaudhuri and Holbrook [14]). Brand trust facilitates customer satisfaction and develops brand loyalty because it stimulates highly significant exchanges of trust messages between a firm and consumers (see Zehra and Arshad [84]). Nam et al. [62]) identified customer satisfaction as one of the most valuable elements of brand loyalty. Kim and Peterson [48] argued that online trust is the strongest predictor of online brand satisfaction. Based on the above discussion, this study suggests the following hypothesis:

**Hypothesis 7:** *Brand trust positively influences brand satisfaction.*

### 2.5. The consequences of brand satisfaction: repurchase intention and word of mouth

Developing retention strategies and repeating post-purchase intention are the most important issues in brand management. Repurchase intention reflects the willingness of consumers to purchase a brand regularly for an extended period (see Ebrahim et al. [22]). Kaura et al. [44] suggested that satisfaction plays a key role in explaining repurchase intention, especially when customer retention is more dynamic than customer attraction. Hume and Grillian [37] found that customer satisfaction contributed positively via customer retention to firms' financial strength and competitiveness. Satisfaction is known to significantly affect repurchase intention, given that satisfied customers are more willing to purchase products/services of the same brand and to exhibit brand loyalty (see Chiu and Cho [18], Liang et al. [53]).

Word of mouth was defined as the number of people to which a message has been relayed and input for decision-making and output of purchasing (see Donthu et al. [21]

and Taghizadeh et al. [76]). Additionally, word of mouth exerts a strong influence on consumer choice. Thus, all companies need to develop positive word of mouth among their customers, which will help companies to increase market sales (see Taghizadeh et al. [76]). Fakharyan et al. [25] identified a link between customer satisfaction and word of mouth. Other studies also found that word of mouth is affected by satisfaction (see Kuo et al. [51] and Lien and Cao [54]). Therefore, this study hypothesizes that brand satisfaction positively affects repurchase intention and word of mouth.

**Hypothesis 8:** *Brand satisfaction positively influences repurchase intention.*

**Hypothesis 9:** *Brand satisfaction positively influences word of mouth.*

## 2.6. The moderating effect of brand experience on the relationship between brand equity and brand trust and brand satisfaction

Previous studies have demonstrated that brand experience affects consumer behavior both directly and indirectly and leads to consumer satisfaction (see Kim et al. [47]). Recent studies also asserted that experience may be a determinant of satisfaction because it is a crucial factor that affects satisfaction (see Hwang et al. [40] and Lacap and Tungcab [52]). Brand experience is positive when the net value of customer interactions with a particular brand exceeds the net value of such interaction with other brands (see Christodoulides et al. [17]). Iglesias et al. [41]) further indicated that brand experience has the potential to positively affect customer satisfaction with a brand and that high levels of brand-experience-related identified value are associated with high levels of satisfaction.

Recently, brand experience has been regarded as a key marketing practice, as it plays a crucial role in building brand equity (see Beig and Nika [7]). Zarantonello and Schmitt [82] determined that brand equity is positively influenced by sensory experience, affective experience, intellectual experience, and behavioral experience. Chen [16] found that brand experience positively affects brand equity, as measured by attractiveness, uniqueness, brand image, and brand strength. Moreover, Berry and Seltman [10] emphasized the critical role of experience in creating brand equity. Organizations that provide a strong and memorable brand experience gain significant advantages over competitors (see Brakus et al. [11]). In fact, firms want their customers to be attached to their brands with strong feelings. It is necessary to fulfill customer satisfaction for such loyalty. When customers are satisfied, they show commitment to continuously buy the same brand and become loyal customers (see Ballantyne et al. [5]).

Additionally, Brakus et al. [11] demonstrated that the conceptualization and scale development of brand experience is essential to understanding and managing the brand trust. Brand experience plays an important role in creating and developing the trust-based relationship platform between the brand and the user (see (see Hwang et al. [40] and Sahin et al. [71]). Ha and Perks [33] showed that having an excellent brand experience encourages customers to interact with a particular brand and subsequently to express high satisfaction with it. Furthermore, brand experience has a strong effect on customer satisfaction and brand trust and also plays a role in various settings where consumers

search for, shop for, and consume brands (see Sahin et al. [71]). Therefore, the following hypotheses are proposed:

**Hypothesis 10:** *Brand experience has a significant moderating impact on the relationship between brand equity and brand satisfaction.*

**Hypothesis 11:** *Brand experience has a significant moderating impact on the relationship between brand trust and brand satisfaction.*
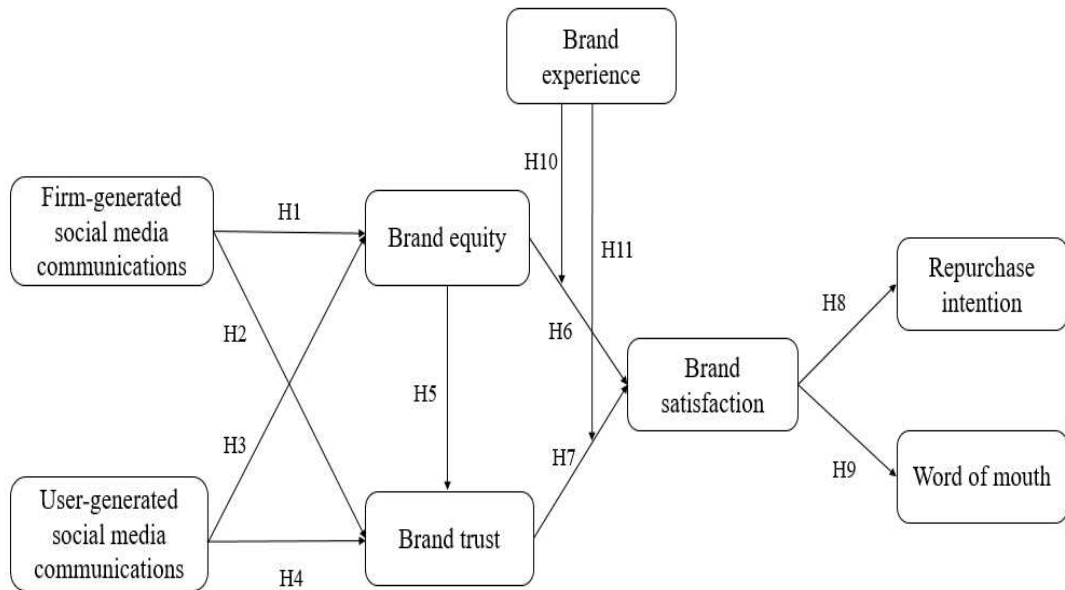


Figure 1: Research framework.

## 3. Methodology

### 3.1. Questionnaire design and sampling method

The data were collected via popular online social media platforms between September 2019 and January 2020 in Cambodia. A convenience sampling method was employed. Khmer translations of the original English-language questionnaire items were utilized in this study. 515 respondents were invited to fill out the questionnaire and 396 completed questionnaires were received. 25 of the completed questionnaires were deemed invalid due to missing responses. Thus, data from 371 questionnaires were used in the analysis.

For the demographic details of the 371 valid study respondents, 254 were female (68.46%) and most respondents (76.01%) were between 25 and 35 years old, and 16.44% were between 20 and 25 years old. A large majority (62.8%) of the respondents had earned a bachelor's degree. In terms of income, 65.23% of the respondents earned less than $1,000 per month while around 14% reported earning no income.

## 3.2. Construct measurement

This study adopted the measurement items developed by Schivinski and Dabrowski [73] for firm-generated social media communication and user-generated social media communication. Brand awareness was modified from Yoo et al. [81] and Schivinski and Dabrowski [73]. The brand association was used from Aaker [1]. Brand quality was developed by Pappu et al. [66] and Schivinski and Dabrowski [73]. Brand loyalty was adopted from Moreira et al. [60] and Sahin et al. [64]. The brand experience was adopted from Khan and Fatma [45], Sahin et al. [64], and Ebrahim et al. [21]. Brand trust was modified from Chaudhuri and Holbrook [14] and Kao and Lin [42]. Brand satisfaction was modified from Moreira et al. [60] and Sahin et al. [64]. Repurchase intention was adopted from Ebrahim et al. [21]. Word of mouth was adopted by Khan and Fatma [45]. All of these items were measured by using a seven-point Likert scale with scores ranging from 1 = strongly disagree to 7 = strongly agree.

## 4. Results

### 4.1. Evaluation of the measurement model

This study utilized partial least square structural equation modeling (PLS-SEM) to evaluate the model measurements. The strengths of the relationships among the research constructs may have been inflated or deflated by common method variance (see Podsakoff et al. [67]). As demonstrated in Table 1, each of the square roots of the average variance-extracted is higher than its correlation coefficients, suggesting strong evidence of discriminant validity.

Table 1: Correlation matrix of research constructs.

| Construct | Mean | SD | FCSM | UGSM | BEQ | BT | BS | RI | WOM | BEX |
|---|---|---|---|---|---|---|---|---|---|---|
| 1. Firm-generated social media communication | 5.17 | 0.95 | **.793** | | | | | | | |
| 2. User-generated social media communication | 5.00 | 0.95 | .698** | **.781** | | | | | | |
| 3. Brand equity | 5.26 | 0.72 | .660** | .639** | **.777** | | | | | |
| 4. Brand trust | 5.08 | 0.92 | .576** | .517** | .762** | **.797** | | | | |
| 5. Brand satisfaction | 5.22 | 0.92 | .578** | .554** | .775** | .716** | **.809** | | | |
| 6. Repurchase intention | 4.91 | 0.90 | .514** | .512** | .638** | .609** | .718** | **.800** | | |
| 7. Word of mouth | 4.95 | 0.88 | .523** | .533** | .612** | .605** | .659** | .645** | **.825** | |
| 8. Brand experience | 4.82 | 0.89 | .531** | .489** | .562** | .602** | .587** | .637** | .626** | **.788** |

Note: 1. Figures on the diagnosis line are the square root of the average variance-extracted, while figures below the diagnosis line are the correlation between constructs.
2. ** $p < 0.01$.
3. SD = Standard Deviation; FGSM = Firm-generated social media communication; UGSM = User-generated social media communication; BEQ = Brand equity; BT = Brand trust; BS = Brand satisfaction; RI = Repurchase intention; WOM = Word of mouth; BEX = Brand experience.

Additionally, the coefficients of determination (R2) for the endogenous latent variables were substantial (brand equity, 0.498; brand trust, 0.602; brand satisfaction, 0.739; repurchase intention, 0.416; word of mouth, 0.474; and brand experience, 0.486) (see Schroer and Hertel [74]). The Cronbach's alpha coefficients of firm-generated social media communication (0.803), user-generated social media communication (0.786), brand equity (0.983), brand trust (0.904), brand satisfaction (0.892), repurchase intention (0.892), word of mouth (0.882), and brand experience (0.813), which means all were higher the minimum value of 0.7 and ensured the reliability of the construct (see Loewenthal. [56]). The composite reliability coefficients of firm-generated social media communication (0.871), user-generated social media communication (0.862), brand equity (0.946), brand trust (0.924), brand satisfaction (0.918), repurchase intention (0.714), word of mouth (0.714), and brand experience (0.829), which means all were also above the minimum value of 0.7 and supported the variance shared by the respective indicators as robust (see Hair et al. [35]). Additionally, average variance extracted value of firm-generated social media communication (0.629), user-generated social media communication (0.610), brand equity (0.604), brand trust (0.635), brand satisfaction (0.655), repurchase intention (0.640), word of mouth (0.680), and brand experience (0.621), suggesting strong evidence for the validation of the constructs (see Rodgers and Pavlou [70]). Furthermore, the goodness of fit (GoF) of 0.584 is higher than the cutoff value of 0.36 for large effect sizes. Therefore, the model fit is appropriate for hypotheses testing (see Wetzels et al. [80]).

### 4.3. Results and discussions
### 4.3.1. The influence of firm-generated social media communication

As shown in Table 2, firm-generated social media communication is shown to have a significant and positive influence on brand equity and brand trust. The empirical results indicate that firm-generated social media communication has significant effects on brand equity ($\beta = 0.437$, $t = 18.026$) and brand trust ($\beta = 0.106$, $t = 6.717$). Therefore, H1 and H2 are supported. These results are in line with those of previous studies, Berthon et al. [9] reported that firm-generated social media communication influences brand equity metrics through brand information, knowledge, and products, while Yoo et al. [81] observed that brand communication stimuli positively affect customer-perceived brand equity, which further increases customer satisfaction. In this context, brand equity reflects the image of a brand that has been constructed in the mind of a consumer based on their acquired brand knowledge (see Yoo et al. [81]). In addition, Zhou et al. [85] demonstrated that social media communication creates strong associations and value in long-term interactions between firms and their customers, which can stimulate brand trust.

### 4.3.2. The influence of user-generated social media communication

The empirical results support the hypothesis that user-generated social media communication has a significant and positive influence on all dimensions of brand equity ($\beta = 0.325$, $t = 9.507$) and brand trust ($\beta = 0.213$, $t = 2.354$). Therefore, H3 and H4 are

Table 2: Results for the hypothesized model using PLS.

| Hypothesis | Path coefficient | $t$-value | Supported |
|---|---|---|---|
| H1. Firm-generated social media communication → Brand equity | 0.437 | 18.026*** | Yes |
| H2. Firm-generated social media communication → Brand trust | 0.106 | 6.717*** | Yes |
| H3. User-generated social media communication → Brand equity | 0.325 | 9.507*** | Yes |
| H4. User-generated social media communication → Brand trust | 0.213 | 2.354*** | Yes |
| H5. Brand equity → Brand trust | 0.727 | 12.439*** | Yes |
| H6. Brand equity → Brand satisfaction | 0.347 | 2.490*** | Yes |
| H7. Brand trust → Brand satisfaction | 0.485 | 4.132*** | Yes |
| H8. Brand satisfaction → Repurchase intention | 0.645 | 48.034*** | Yes |
| H9. Brand satisfaction → Word of mouth | 0.689 | 56.117*** | Yes |
| H10. Brand equity * Brand experience → Brand satisfaction | -0.148 | 5.645 | No |
| H11. Brand trust * Brand experience → Brand satisfaction | 0.112 | 3.693** | Yes |

Note: ***$p < 0.001$, **$p < 0.01$.

supported. The findings in this study are in line with those of previous research. Bruhn et al. [12] found that the context and perception of social media brand communication positively influence brand equity. Additionally, Hutter et al. [38] also demonstrated a similar effect for the correlation between the engagement of consumers with social media brand pages and brand trust.

### 4.3.3. The influence of brand equity and brand trust

The results of this study demonstrate that brand equity has a considerable and positive influence on brand trust ($\beta = 0.726$, $t = 12.439$) and brand satisfaction ($\beta = 0.344$, $t = 2.490$). Therefore, H5 and H6 are supported. Similarly, Torres and Tribó [78] also found that brand equity has a positive effect on brand trust. Brands that are considered good and reliable earn trust from customers, who subsequently continue purchasing the products/services associated with these brands (see Afzal et al. [3]. Muala [61] asserted that brand reputation reduces uncertainty and creates trust. Furthermore, other researchers have also identified a direct effect of brand equity on brand trust (see Han et al. [36]).

In addition, the results of this study indicate that brand trust has a significant and positive influence on brand satisfaction ($\beta = 0.462$, $t = 4.132$). Therefore, H7 is supported. This finding is in agreement with previous studies in which trust was

identified as an essential factor affecting customer satisfaction (see Berry [10]). Erciş et al. [23] further argued that people who trust a brand are willing to repurchase the products/services which have made them with greater trust and satisfaction (see Erciş et al. [23]).

Along with other intangible properties, brand equity reflects the qualities necessary to increase a firm's advantage over its competitors (see Delgado-Ballester and Munuere-Aleman [19]). It has been argued that customers feel more confident, safe, and satisfied when using the products/services of firms with high brand equity. Therefore, creating and maintaining trust and satisfaction are critical to establishing and sustaining brand equity, since these factors are crucial elements in the relationship between a firm and its customers (see Garbarino and Johnson [28]).

### 4.3.4. The consequence of brand satisfaction

The results of this study demonstrate that brand satisfaction has a significant and positive impact on repurchase intention ($\beta = 0.645$, $t = 48.034$) and word of mouth ($\beta = 0.689$, $t = 56.117$). Consequently, H8 and H9 are supported. This finding is consistent with prior studies. Mbango [57] reported a significant and positive association between consumer satisfaction with a brand and both consumer commitment to that brand and post-purchase behavior. Chen [16] indicated that brand satisfaction has an enhancement effect on the repurchase intention and word-of-mouth communication of consumers. Thus, understanding customer satisfaction is vital to better understanding customers' needs and wants (see Kotler and Keller [49]). When customers are satisfied with a particular brand, they may continue purchasing products/services associated with that brand (see Elbeltagi and Agag [24]).

### 4.3.5. The moderating effects of brand experience

Based on the empirical results of this study, the moderating effect of brand experience has an insignificant and negative influence on the influence of brand equity on brand satisfaction ($\beta = -0.148$, $t = 5.645$). Whereas, the moderating effect of brand experience has a significant and positive impact on the influence of brand trust on brand satisfaction ($\beta = 0.112$, $t = 3.693$). Therefore, H10 is not supported while H11 is supported. The results of moderating effect indicate that the influences of brand trust on brand satisfaction are amplified. The reason that can be explained by our result is that that brand trust can be impacted by their experiences, awareness, feelings, cognitions, and behavioral responses through their interaction with the brand which further increases customer satisfaction and loyalty (see Nysveen et al. [64]). Similarly, Brakus et al. [11] stated that brand experience appears to be a stronger predictor of actual buying behavior, which is a better predictor of brand satisfaction. While it is difficult to impact equity only by experience. Based on our knowledge, these findings have not been reported in previous studies. Therefore, it should be addressed by academics seeking to advance conceptual models and by professionals conducting brand management research.

## 5. Conclusions

Social media marketing has grown tremendously during the first two decades of the twenty-first century (see Tatar and Eren-Erdoğmuş [77]). This form of marketing is showing great potential and already creates major benefits and opportunities for both researchers and practitioners. This study investigated the effect of firm-generated social media communication and user-generated social media communication on brand equity, brand trust, brand satisfaction, repurchase intention, and word of mouth. The moderating effect of brand experience on brand satisfaction was also evaluated. This study results confirmed that firm-generated social media communication and user-generated social media communication are both important drivers of brand equity and brand trust. Additionally, brand equity and brand trust are both essential factors that can improve brand satisfaction. Importantly, brand satisfaction is an important factor affecting repurchase behavior and word of mouth. Furthermore, the brand experience was considered as one of the crucial constructs to enhance the relationship between brand trust and brand satisfaction. Therefore, it is an essential period for both companies and consumers to focus greater attention on social-media-communication-related marketing and consider its influence on core consumer-related constructs (see Tatar and Eren-Erdoğmuş [77]).

## 6. Theoretical and Managerial Implications

Several academic implications could be drawn from the results of this study. As the firm-generated social media communication has been carried out with fruitful results from the literature and the user-generated social media communication is created relative lower attention. From the viewpoint of integrated marketing communication (see Kotler and Keller [49]), firm-generated social media communication tends to influence brand satisfaction through brand awareness, brand association, and brand equity (see Schivinski [72]). In the past, firm-generated social media communication can only affect brand trust and brand satisfaction through the promotion of brand awareness and brand satisfaction (see Chahal et al. [13]). However, our findings indicated that user-generated social media communication can simultaneously influence brand trust and brand equity. As a result, this study's findings opened up a valuable milestone into the significant function of firm-generated and user-generated social media communication. Our results also offered the directions to study additionally such kinds of constructs and the influence of firm-generated and user-generated social media communication on brand trust, brand equity, brand satisfaction, repurchase intention, and word of mouth models. Therefore, the results of this study could be significantly beneficial for further validations in the market segment.

There are also some managerial implications from the results of this study. While firms have spent a lot of expenditures on firm-generated social media communication, user-generated messages are created by the customers, people normally give higher credit and trust toward these messages. Therefore, marketing executives should be aware of this issue and develop both firm-generated and user-generated messages for different clusters of customers. Additionally, user-generated messages were found simultaneously to influence customer brand equity and trust, and both of them then influence satisfaction. Marketing executives may need to concentrate on the management of user-generated

social media communication, especially on the issues of building brand trust, creating brand equity, and achieving brand satisfaction (see Schivinski and Dabrowski [73]). Furthermore, the marketing manager should design different kinds of customer participation promotions so that customers can experience product usage. In line with previous research findings, the present study identified both social media marketing communication and brand communication as essential tools in modern brand marketing (see Schivinski and Dabrowski [73]). Brand awareness, brand association, perceived quality, and brand loyalty are considered as core elements in promoting brand equity, thus, firms should pay more attention to how consumers perceive brand equity (see Nam et al. [62]). Moreover, marketing managers should also pay more attention to the influence of word-of-mouth marketing activities as well as repurchase intention, particularly through the promotional campaign in social media. By doing so, firms can successfully identify and provide necessary marketing efforts to fit customer needs and survive in a complicated and completive environment (see Nawa et al. [58]). Importantly, our study findings could be significant benefits for practitioners to provide brand through firm-generated and user-generated social media communication and customer relationship management.

## 7. Limitations and Future Research Directions

Since studies on this subject are still in progress, no definitive statements can yet be made regarding specific consumer market trends. Accordingly, future research should consider both online and offline consumer behaviors to comprehensively identify the behaviors that typify consumers. Additionally, while many theories were proposed in this study to explain the influential paths of the research model, no comparison of the respective explanatory power of these various theories was conducted. Future studies may use a competing model to compare the explained variances utilizing different theories from different perspectives to explain the phenomena of social media marketing communication, consumer behavior, and brand equity. Finally, brand equity was found in this study to be a crucial factor in the successful promotion of brand trust. This result supports the view that firms should work to boot BS through social media marketing communication (see Kaura et al. [44]). Consequently, future studies can investigate the effect of marketing communication as a primary strategy to improve brand equity, given the strong and positive customer feedback that is elicited by brand equity.

### Acknowledgements

### References

[1] Aaker, D. A. (1991). Managing brand equity: Capitalizing on the value of a brand name, New York: Free press.

[2] Aaker, D. A. (1996). Measuring brand equity across products and markets, California Management Review, Vol.38, 102-120.

[3] Afzal, H., Khan, M. A., Rehman, K., Ali, I. and Wajahat, S. (2010). *Consumer trust in the brand: can it be built through brand reputation, brand competence and brand predictability*, International Business Research, Vol.3, 43-49.

[4] Arrigo, E. (2018). *Social media marketing in luxury brands*, Management Research Review, Vol.41, 657-679.

[5] Ballantyne, R., Warren, A. and Nobbs, K. (2006). *The evolution of brand choice*, The Journal of Brand Management, Vol.13, 339-352.

[6] Basheer, M. F., Nadeem, S., Azeem. M. and Mahmood, A. (2017). *Impact of customer satisfaction on brand equity under the influence of brand trust*, International Journal of Research and Development, Vol.2, 60-64.

[7] Beig, F. A. and Nika, F. A. (2019). *Brand experience and brand equity*, Vision: The Journal of Business Perspective, Vol.23.

[8] Belaid, S. and Temessek, B. A. (2010). *The role of attachment in building consumer-brand relationships: An empirical investigation in utilitarian consumption context*, Journal of Product & Brand Management, Vol.20.

[9] Berthon, P. R., Pitt, L. F. and Campbell, C. (2008). *Ad lib: When customers create the ad*, California Management Review, Vol.50, 6-31.

[10] Berry, L. L. (2000). *Cultivating service brand equity*, Academy of Marketing Science, Vol.28, 128-37.

[11] Brakus, J. J., Schmitt, B. H. and Zarantonello, L. (2009). *Brand experience: What is it? How is it measured? Does it affect loyalty?* Journal of Marketing, Vol.73, 52-68.

[12] Bruhn, M., Schoenmueller, V. and Schfer, D. B. (2012). *Are social media replacing traditional media in terms of brand equity creation?* Management Research Review, Vol.35, 770-790.

[13] Chahal, H., Wirtz, J. and Verma, A. (2019). *Social media brand engagement: dimensions, drivers and consequences*, Journal of Consumer Marketing, Vol.37, 191-204.

[14] Chaudhuri, A. and Holbrook, M. B. (2001). *The chain of effects from brand trust and brand affect to brand performance: The role of brand loyalty*, Journal of Marketing, Vol.65, 81-93.

[15] Chen, S. C. and Lin, C. P. (2019). *Understanding the effect of social media marketing activities: The mediation of social identification, perceived value, and satisfaction*, Technological Forecasting and Social Change, Vol.140, 22-32.

[16] Chen, Y. S. (2010). *The drivers of green brand equity: green brand image, green satisfaction, and green trust*, Journal of Business Ethics, Vol.93, 307-319.

[17] Christodoulides, G., De Chernatony, L., Furrer, O., Shiu, E. and Abimbola, T. (2006). *Conceptualising and measuring the equity of online brands*, Journal of Marketing Management, Vol.22, 799-825.

[18] Chiu, W. and Cho, H. (2019). *E-commerce brand*, Asia Pacific Journal of Marketing and Logistics, Vol.31, 1-24.

[19] Delgado-Ballester, E. and Luis Munuera-Alemn, J. (2005). *Does brand trust matter to brand equity?* Journal of Product and Brand Management, Vol.14, 187-196.

[20] Delgado-Ballester, E., Munuera-Alemn, J. L. and Yagüe-Guilln, M. J. (2003). *Development and validation of a brand trust scale*, International Journal of Market Research, Vol.45, 1-18.

[21] Donthu, N., Kumar, S., Pandey, N., Pandey, N. and Mishra, A. (2021). *Mapping the electronic word-of-mouth (eWOM) research: A systematic review and bibliometric analysis*, Journal of Business Research, Vol.135, 758-773.

[22] Ebrahim, R., Ghoneim, A., Irani, Z. and Fan, Y. (2016). *A brand preference and repurchase intention model: The role of consumer experience*, Journal of Marketing Management, Vol.32, 1230-1259.

[23] Erciş, A., Ünal, S., Candan, F. B. and Yıldırım, H. (2012). The effect of brand satisfaction, trust and brand commitment on loyalty and repurchase intentions, Social and Behavioral Sciences, Vol.58, 1395-1404.

[24] Elbeltagi, I. and Agag, G. (2016). *E-retailing ethics and its impact on customer satisfaction and repurchase intention*, Internet Research, Vol.26, 288-310.

[25] Fakharyan, M., Omidvar, S., Khodadadian, M. R., Jalilvand, M. R. and Nasrolahi Vosta, L. (2014). *Examining the effect of customer-to-customer interactions on satisfaction, loyalty, and word-of mouth behaviors in the hospitality industry: The mediating role of personal interaction quality and service atmospherics*, Journal of Travel and Tourism Marketing, Vol.31, 610-626.

[26] Foux, G. (2006). *Consumer-generated media: Get your customers involved*, Brand Strategy, Vol.8, 38-39.

[27] Gambetti, R. C., Graffigna, G. and Biraghi, S. (2012). *The grounded theory approach to consumer-brand engagement: The practitioner's standpoint*, International Journal of Market Research, Vol.54, 659-687.

[28] Garbarino, E. and Johnson, M. S. (1999). *The different roles of satisfaction, trust, and commitment in customer relationships*, Journal of Marketing, Vol.63.

[29] Gensler, S., Völckner, F., Liu-Thompkins, Y. and Wiert, C. Z. (2013). *Managing brands in the media environment*, Journal of Interactive Marketing, Vol.27, 242-256.

[30] Ghansah, N. E., Ghansah, B., Benuwa, B. B. and Ocquaye, E. N. N. (2015). *Using social media as a marketing tool in tertiary institutions: A case study of data link university, Ghana*, International Journal of Engineering Research in Africa, Vol.20, 218-232.

[31] Grubor, A., Djokic, I. and Milovanov, O. (2017). *The influence of social media communication on brand equity: The evidence for environmentally friendly products*, Applied Ecology and Environmental Research, Vol.15, 963-983.

[32] Ha, H. Y. and Park, K. H. (2012). *Effects of perceived quality and satisfaction on brand loyalty in China: The moderating effect of customer orientation*, African Journal of Business Management, Vol.6, 6745.

[33] Ha, H. Y. and Perks, H. (2005). *Effects of consumer perceptions of brand experience on the web: brand familiarity, satisfaction and brand trust*, Journal of Consumer Behaviour: An International Research Review, Vol.4, 438-452.

[34] Ha, H. Y., John, J., Janda, S. and Muthaly, S. (2011). *The effects of advertising spending on brand loyalty in services*, European Journal of Marketing, Vol.45, 673-691.

[35] Hair, J. F., Risher, J. J., Sarstedt, M. and Ringle, C. M. (2018). When to use and how to report the results of PLS-SEM, European Business Review.

[36] Han, S. H., Nguyen, B. and Lee, T. J. (2015). *Consumer-based chain restaurant brand equity, brand reputation, and brand trust*, International Journal of Hospitality Management, Vol.50, 84-93.

[37] Hume, M. and Gillian, S.M. (2010). The consequence of appraisal emotion, service quality, perceived value and customer satisfaction on repurchase intent in the performing arts, The Journal of Services Marketing, Vol.24, 170-182.

[38] Hutter, K., Hautz, J., Dennhardt, S. and Füller, J. (2013). *The impact of user interactions in social media on brand awareness and purchase intention: The case of MINI on Facebook*, Journal of Product and Brand Management, Vol.22, 342-351.

[39] https://datareportal.com/global-digital-overview.

[40] Hwang, J., Choe, J. Y (Jacey)., Kim, H. M. and Kim, J. J. (2021). *Human baristas and robot baristas: How does brand experience affect brand satisfaction, brand attitude, brand attachment, and brand loyalty?* International Journal of Hospitality Management, Vol.99, 103050.

[41] Iglesias, O., Markovic, S. and Rialp, J. (2018). *How does sensory brand experience influence brand equity? Considering the roles of customer satisfaction, customer affective commitment, and employee empathy*, Journal of Business Research, Vol.96, 343-354.

[42] Kao, T. W. and Lin, W. T. (2016). *The relationship between perceived e-service quality and brand equity: A simultaneous equations system approach*, Computers in Human Behavior Vol.57, 208-218.

[43] Kaplan, A. M. and Haenlein, M. (2010). *Users of the world, unite! The challenges and opportunities of social media*, Business Horizons, Vol.53, 59-68.

[44] Kaura, V., Durga Prasad, C. S. and Sharma, S. (2015). *Service quality, service convenience, price and fairness, customer loyalty, and the mediating role of customer satisfaction*, International Journal of Bank Marketing, Vol.33.

[45] Khan, I. and Fatma, M. J. (2017). *Antecedents and outcomes of brand experience: an empirical study*, Journal Brand Management, Vol.24, 439-452.

[46] Kim, B. Y. R., Yoon, D. H., Chao, Y. and Dang, N. (2015). *Effects of brand experience and product involvement on brand loyalty for Vietnamese consumers*, DLSU Business and Economics Review, Vol.25, 1-15.

[47] Kim, K. H., Kim, K. S., Kim. D. Y., Kim. J. H. and Kang, S. H. (2008). *Brand equity in hospital marketing*, Journal of Business Research, Vol.61, 75-82.

[48] Kim, Y. and Peterson, R. A. (2017). *A Meta-analysis of online trust relationships in e-commerce*, Journal of Interactive Marketing, Vol.38, 44-54.

[49] Kotler, P. and Keller, K. (2012). Marketing Management, Prentice Hall.

[50] Kumar, A., Bezawada, R., Rishika, R., Janakiraman, R. and Kannan, P. K. (2016). *From social to sale: the effects of firm-generated content in social media on customer behavior*, Journal of Marketing, Vol.80, 7-25.

[51] Kuo, Y. F., Hu, T. L. and Yang, S. C. (2013). *Effects of inertia and satisfaction in female online shoppers on repeat purchase intention: The moderating roles of word of mouth*, Journal of Service Theory and Practice, Vol.23.

[52] Lacap, G. P. J. and Tungcab. P. A. (2020). *The influence of brand experience on brand loyalty among mobile phone users in Pampanga, Philippines: A mediation analysis*, Asia-Pacific Social Science Review, Vol.20, 17-31.

[53] Liang, L. J., Choi, H. C. and Joppe, M. (2018). *Exploring the relationship between satisfaction, trust and switching intention, repurchase intention in the context of Airbnb*, International Journal of Hospitality Management, Vol.69, 41-48.

[54] Lien, C. H. and Cao, Y. (2014). *Examining WeChat users' motivation, trust, attitudes, and positive word of mouth*, Computers in Human behavior, Vol.41, 104-111.

[55] Liu, C. H. (2020). *Integration of different perspectives of culinary brand equity*, Journal of Hospitality and Tourism Management, Vol.45, 152-161.

[56] Loewenthal, K. M. (2004). An introduction to psychological tests and scales (2nd Edition b), Hove: UK: Psychology Press.

[57] Mbango, P. — Jos Belso-Martinez (Reviewing editor). (2018). *Examining the effects of customer satisfaction on commitment and repurchase intentions of branded products*, Cogent Social Sciences, Vol.4.

[58] McKinney, M. E. and Benson, A. (2013). *The value of brand trust*, Journal Brand Strategy, Vol.2, 76-86.

[59] Moorthy, S. and Hawkins, S. A. (2005). *Advertising repetition and quality perception*, Journal of Business Research, Vol.58, 354-360.

[60] Moreira, A., Silva, P. M. and Moutinho, V. M. (2017). *The effects of brand experiences on quality, satisfaction, and loyalty: An empirical study in the telecommunications multiple-play service market*, Innovar: Revista de Ciencias Administrativas y Sociales, Vol.27, 23-38.

[61] Muala, A. A. (2018). *Influence of viral marketing dimensions on customer satisfaction in fast food restaurants in Jordan*, Journal of Management and Sustainability, Vol.8, 149-155.

[62] Nam, J., Ekinci, Y. and Whyatt. G. (2011). *Brand equity, brand loyalty and consumer satisfaction*, Annals of Tourism Research, Vol.38, 1009-1030.

[63] Nawaz, S., Jiang, Y., Alam, F., and Nawaz, M. Z. (2020). Role of brand love and consumers' demographics in building consumer-brand relationship. SAGE Open, Vol.10.

[64] Nysveen, H., Pedersen, P. E. and Skard, S. (2013). *Brand experiences in service organizations: Exploring the individual effects of brand experience dimensions*, Journal of Brand Management, Vol.20, 404-423.

[65] Paniagua, J., Korzynski, P. and Mas-Tur, A. (2017). *Crossing borders with social media: Online social networks and FDI*, European Management Journal, Vol.35, 314-326.

[66] Pappu, R., Quester, P. G. and Cooksey, R. W. (2006). *Consumer-based brand equity and country-of-origin relationships: Some empirical evidence*, European Journal of Marketing, Vol.40, 696-717.

[67] Podsakoff, P. M., MacKenzie, S.B., Lee, J. Y. and Podsakoff, N. P. (2003). *Common method biases in behavioral research: A critical review of the literature and recommended remedies*, Journal of Applied Psychology, Vol.88, 879-903.

[68] Ramaseshan, B. and Stein, A. (2014). *Connecting the dots between brand experience and brand loyalty: The mediating role of brand personality and brand relationships*, Journal of Brand Management, Vol.21, 664-683.

[69] Riegner, C. (2007). *Word of mouth on the web: the impact of Web 2.0 on consumer purchase decisions*, Journal of Advertising Research, Vol.47, 436-447.

[70] Rodgers, W. and Pavlou. P. (2003). *Developing a predictive model: A comparative study of the partial least squares vs. maximum likelihood techniques* (Working Paper), Graduate School of Management, University of California, Riverside.

[71] Sahin, A., Zehir, C. and Kitapçi, H. (2011). *The effects of brand experiences, trust and satisfaction on building brand loyalty: An empirical research on global brands*, Procedia - Social and Behavioral Sciences, Vol.24, 1288-1301.

[72] Schivinski, B. (2011). *Effects of social media communication on brand equity and brand purchase intention*, Interdisciplinary Journal, Vol.2, 157-162.

[73] Schivinski, B. and Dabrowski, D. (2015). *The impact of brand communication on brand equity through Facebook*, Journal of Research in Interactive Marketing, Vol.9, 31-53.

[74] Schroer, J. and Hertel, G. (2009). *Voluntary engagement in an open web-based encyclopedia: Wikipedians and why they do it*, Media Psychology, Vol.12, 96-120.

[75] Smith, A. N., Fischer, E. and Yongjian, C. (2012). *How does brand-related user-generated content differ across YouTube, Facebook, and Twitter*? Journal of Interactive Marketing, Vol.26, 102-113.

[76] Taghizadeh, H., Taghipourian, M. J. and Khazaei, A. (2013). *The effect of customer satisfaction on word-of-mouth communication*, Research Journal of Applied Sciences, Engineering and Technology, Vol.5, 2569-2575.

[77] Tatar, Ş. B. and Eren-Erdoğmuş, İ. (2016). *The effect of social media marketing on brand trust and brand loyalty for hotels*, Information Technology and Tourism, Vol.16, 249-263.

[78] Torres, A. and Tribó, J. A. (2011). *Customer satisfaction and brand equity*, Journal of Business Research, Vol.64, 1089-1096.

[79] Vanden Bergh, B. G., Lee, M., Quilliam, E. T. and Hove, T. (2011). *The multidimensional nature and brand impact of user-generated ad parodies in social media*, International Journal of Advertising, Vol.30, 103-131.

[80] Wetzels, M., OdekerkenSchröder, G. and Van Oppen, C. (2009). *Using PLS path modeling for assessing hierarchical construct models: Guidelines and empirical illustration*, MIS Quarterly, Vol.33, 177-195.

[81] Yoo, B., Donthu, N. and Lee, S. (2000). *An examination of selected marketing mix elements and brand equity*, Journal of the Academy of Marketing Science, Vol.28, 195-211.

[82] Zarantonello, L. and Schmitt, B. H. (2013). *The impact of event marketing on brand equity: The mediating roles of brand experience and brand attitude*, International Journal of Advertising, Vol.32, 255-280.

[83] Zehir, C., Şahin, A., Kitapçı, H. and Özşahin, M. (2011). *The effects of brand communication and service quality in building brand loyalty through brand trust; The empirical research on global brands*, Procedia - Social and Behavioral Sciences, Vol.24, 1218-1231.

[84] Zehra, S. J. and Arshad, U. (2019). *Brand trust and image: Effect on customers' satisfaction*, Journal of Marketing and Logistics, Vol.2, 50-64.

[85] Zhou, Z., Zhang, Q., Su, C. and Zhou, N. (2012). *How do brand communities generate brand relationships? Intermediate mechanisms*, Journal of Business Research, Vol.65, 890-895.

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