

Investigating Brand Page Engagement in the SNS Marketing Context

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ABSTRACT

Customer engagement has been the main objective of brand companies in their marketing through social networking sites (SNS). Facebook is the most popular platform for SNS marketing, especially for companies that try to engage with their customers by providing various values through their brand pages (i.e., brand communities). The management of brand pages, therefore, becomes “the means” by which to achieve the result (“the end”) of SNS marketing, and visitors to the brand pages (i.e., brand communities) then come to have a favorable attitude toward the brand. Based on a “means-ends” framework, this study examines the development of engagement between customers and brands in terms of brand page engagement as the means objective and brand attitude as the ends objective in the context of Facebook. This study further examines the antecedents and consequences of brand page engagement based on the customer value theory with two-stage data collection. This study contributes to the literature by explaining the roles and effects of brand page engagement in SNS marketing. This study further provides guidance to SNS providers and practitioners on SNS marketing strategies.

Keywords: Social Network Sites (SNS), SNS Marketing, Brand Page Engagement, Brand Attitude, Means-ends Network, Customer Value Theory

I . Introduction

Social media largely use as an effective tool that contributes to the firms’ marketing aims and blur the boundaries for business-related communication (Alalwan et al., 2017; Estrella-Ramón et al., 2019). In addition, 63% of customers actually expect that

companies would provide customer services through social media, and 90% of social media users are shown to use social media to communicate with brands.¹⁾ Social media marketing has several objectives such as customer engagement, revenue generation, and an improved customer experience.²⁾ Because engagement promotes companies’ competitiveness by estab-

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lishing and reinforcing long-term relationships with consumers, engagement between customers and brands is considered the most important objective of social media marketing and the primary metric for judging its success.³⁾ Companies have begun to realize that brand communities (e.g., brand pages on Facebook) on social networking sites (SNS) are vital tools for building brand - consumer relationships and nurturing customer loyalty (Dholakia et al., 2004; Lee et al., 2018; Pacauskas et al., 2018).

Facebook, used by 86.8% of U.S. companies, is the most popular SNS for this form of marketing.⁴⁾ In the context of Facebook, with more than 60 million brand pages, companies use brand pages (i.e., fan pages) to develop brand communities for SNS marketing. As a result, a brand community is an important platform (i.e., means) for developing brand - customer relationships (i.e., ends) (Gummerus et al., 2012). It is estimated that 95% of online users aged 18 - 34 years are likely to follow a brand via SNS.⁵⁾ For this reason, there are more than 60 million businesses using Facebook brand pages to connect with their customers.

Although brand communities have been the main channel for the development of engagement between customers and brands, there is lack of in-depth understanding regarding how brand communities help develop brand - customer relationships. Previous research on customer engagement in SNS marketing has mainly addressed the conceptualization of this marketing channel (Dessart et al., 2015; Hollebeek and Chen, 2014; Oviedo-Garcia et al., 2014; Van Doorn et al., 2010), its conceptual framework

(Kuvykaite and Piligrimiene, 2014; Pansari and Kumar, 2017), and scale development (Baldus et al., 2015; Vivek et al., 2014). Some studies empirically examine the antecedents and consequences of customer engagement (Chan et al., 2014; De Vries and Carlson, 2014; Luarn et al., 2015; Verhagen et al., 2015). However, previous research has largely ignored the role and effects of brand communities in the development of engagement between customers and brands.

Because brand communities are the main channel for the development of brand - customer relationships in the SNS marketing context, brand communities take the role of “means” while brand - customer relationships (i.e., customer engagement) take the role of “ends.” Based on the framework of a means - ends network (Keeney, 1999), this study aims to examine the development of brand - customer relationships in terms of brand page engagement in the context of Facebook. As for the means objective, this study examines the antecedents of brand page engagement based on the customer value theory (Sheth et al., 1991; Sweeney and Soutar, 2001; Zeithaml, 1988). Based on the customer value theory, brand page-based SNS marketing characteristics are represented as antecedents of brand page engagement. In terms of the ends objective, this study examines the consequences of brand page engagement, i.e., its effects on customers’ brand attitude, customers’ purchase intention toward the brand, and electronic word-of-mouth (eWOM) on the brand page.

Our model was validated by collecting from Facebook brand pages both subjective and objective data about the antecedents and consequences of brand page engagement. Our data were collected at two different points in time. The objective data for one of the dependent variables, eWOM on the brand page, were collected several months after the subjective data for the antecedents so as to better

1) <https://www.dreamgrow.com/21-social-media-marketing-statistics/>

2) <http://www.emarketer.com/Article/Tying-Social-Media-Business-Objectives-Measurement-Tactics/1009357>

3) <http://www.emarketer.com/Articles/Print.aspx?R=1010116>

4) <https://sproutsocial.com/insights/social-media-statistics/>

5) <https://www.dreamgrow.com/21-social-media-marketing-statistics/>

test for causality. This study found that brand page engagement plays a significant role in the development of engagement between customers and brands in the SNS marketing context. This study contributes to the literature by explaining the development of brand - customer relationships in the context of brand pages in terms of a means - ends network. Moreover, this study provides guidance to SNS providers and practitioners on how to manage brand communities (i.e., brand pages) for SNS marketing.

II. Conceptual Background

2.1. Customer Engagement and Brand Page Engagement

Certain interpretations of customer engagement focus on the psychological aspects (Bowden, 2009), whereas others refer to the concept of engagement as specific activities (Van Doorn et al., 2010). Although marketing practitioners tend to focus on behavioral measures of customer engagement (Cheung et al., 2011), customer engagement has also been conceptualized in terms of willingness (Van Doorn et al., 2010), psychological involvement (Hollebeek et al., 2014), or emotional attachment (Thomson et al., 2005). The willingness perspective refers to an individual customer's willingness to maintain a relationship with the corresponding brand (Van Doorn et al., 2010). The psychological involvement perspective refers to an individual's level of positive affect, thought processing, and time and effort spent in their relationship with the corresponding brand (Hollebeek et al., 2014). The emotional attachment perspective refers to an individual customer's emotion-laden target-specific bond with the corresponding brand (Thomson et al., 2005). To develop custom-

er engagement, brand companies use SNS mostly as a tool to maintain continuous relationships with customers. A brand community on SNS is a social aggregation of a brand's members and an important role in realizing the value of relationship marketing with higher efficiency (Habibi et al., 2014; Wu et al., 2018). Therefore, this study uses SNS brand pages as brand communities to develop engagement between customers and brands in SNS marketing.

SNS brand communities allow consumers to build relationships with other members and become members of a specific brand in which they are interested. Many brand companies use their brand communities (i.e., brand pages) as a means of marketing to develop and maintain relationships with customers. Repeated interactions with brand communities (i.e., brand pages) can build followers' commitment to the brand page as well as their relationship with the brands. The engagement more explicitly accounts for customers' interaction brand-related dynamics (Brodie et al., 2011). When customers feel satisfied with the values received from a brand community (i.e., a brand page), they may have affection for the brand community (i.e., brand page) and invest time and energy in their relationship with it, i.e., brand page engagement. Engagement represents a multi-dimensional concept comprising relevant emotional, cognitive, and behavioral dimensions (Hollebeek, 2011; Hollebeek, 2014). This study conceptualizes brand page engagement as *an individual's level of positive affect, thought processing, and interaction with a brand page* from the involvement perspective (Hollebeek et al., 2014).

As for the development of engagement between customers and brands (i.e., brand - customer relationship) in the context of brand communities (i.e., brand pages), we consider its development in terms of a means - ends objective network (Keeney, 1999). Keeney (1999) suggested that means objectives can

be differentiated from ends objectives. If one objective is important because it will help achieve another objective, then it is a means objective. The other is an ends (fundamental) objective, which refers to the objectives underlying the essential reasons for the situation (Nah et al., 2005). In considering customer engagement within the framework of a means - ends objective network (Keeney, 1999), brand communities (i.e., brand pages), as the means objective, help achieve the fundamental objective, which is customers' favorable attitude toward a brand. Brand communities (i.e., brand pages) as the means objective are especially important because they then suggest mechanisms for how brand companies can develop their ends objective, i.e., customers' favorable attitude toward the brand. Brand communities (i.e., brand pages), therefore, serve as a means to build and engage customers in relationships with brands (John et al., 2017).

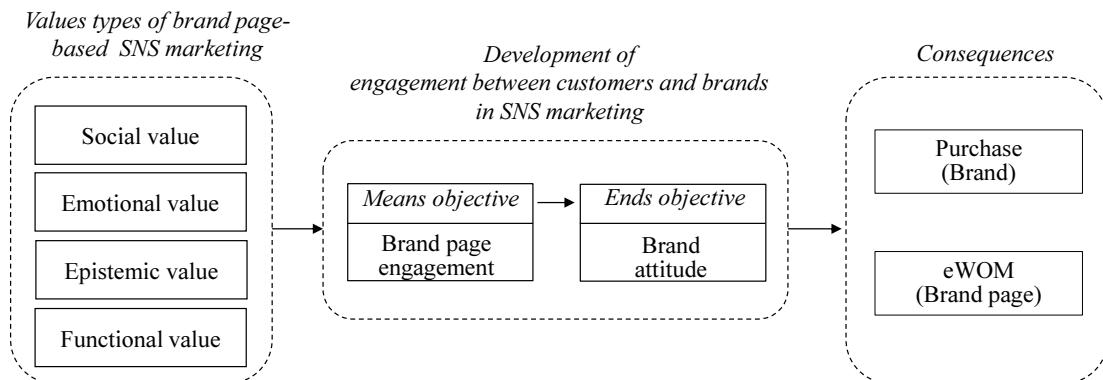
With the recent increase of interest in customer engagement, companies are undertaking diverse marketing activities with the goal of establishing their brand communities. Most previous studies focused on the conceptualization and framework of customer engagement (Ángeles Oviedo-García et al., 2014; Dessart et al., 2015; Hollebeek and Chen, 2014; Kuvykaite and Piligrimiene, 2014; Pansari and Kumar, 2017). Recently, some studies have empirically examined the antecedents and consequences of customer engagement (Chan et al., 2014; De Vries and Carlson, 2014; Luarn et al., 2015; Verhagen et al., 2015). Chan et al. (2014) examined how system support, community value, freedom of expression, and reward and recognition encourage customer engagement as well as how customer engagement influences repurchase intention and word-of-mouth intention. De Vries and Carlson (2014) examined the role of gratifications customers derive from brand pages influencing cus-

tomers engagement. Luarn et al. (2015) demonstrated that the media and content type of posts exert a significant effect on user online engagement. Verhagen et al. (2015) showed that cognitive, social, integrative, and hedonic benefits appear to be significant in their influence on customer engagement intentions.

However, these studies lack a theory-grounded empirical approach to the role and effects of brand communities (i.e., brand pages) in the development of brand - customer relationships. Furthermore, most previous studies considered only limited aspects of customer engagement with its uni-dimension (Peterson, 2007) and multi-dimensions (Hollebeek, 2011; Van Doorn et al., 2010). Therefore, this study examines the development of brand - customer relationships in the context of brand pages and brand page engagement with its three dimensions: emotional (i.e., positive affection), cognitive (i.e., concentration), and behavioral (i.e., energy, effort, and time spent). We also examine the role and effects of brand page engagement based on the customer value theory in an SNS marketing context.

2.2. Conceptual Framework and Customer Value Theory

The conceptual framework (<Figure 1>) shows the development of engagement between customers and brands in the context of the brand page and its antecedents and consequences. The development of engagement between customers and brand in SNS marketing of <Figure 1> represents the development of a customer's engagement with a specific brand in SNS marketing (i.e., customer engagement or brand engagement). By considering the means - ends objective network (Keeney, 1999), brand page engagement in this study represents the means objective and brand attitude is the ends objective in the develop-



<Figure 1> Conceptual Framework

ment of engagement between customers and a brand. That is, brand page engagement and brand attitude are included as the means objective and the end objective, respectively, for the development of engagement between customers and brands in SNS marketing. Brand page engagement helps customers form a favorable attitude toward the brand. Ultimately, this affects their relationship with the brand page and results in a favorable attitude toward the brand involved.

We selected brand attitude as the ends objective in the development of engagement between customers and a brand. Brand attitude refers to *an individual's level of positive evaluation about the brand* (Mitchell and Olson, 1981). As for the consequences of engagement between customers and a brand, we consider *eWOM on the brand page* and *purchase intention* toward the brand. A feature of SNS is enabling communication between individuals; eWOM, which is related to this feature, has a huge effect on potential consumers' decisions. Therefore, we chose eWOM on the brand page as an important consequence. eWOM on the brand page refers to *the activities of users, i.e., delivering the content of a brand to other people via the brand page of SNS*. The activities of "clicking like," "commenting," and "sharing" with

other members on the SNS brand page are displayed within the context of this study. In particular, "liking" is a symptom of being fond of a brand (John et al., 2017). As another consequence, we propose customers' purchase intention from the chosen brand because brand companies want to increase sales through their SNS marketing.

As for the antecedents of brand page engagement, this study employs the customer value theory (Sheth et al., 1991; Sweeney and Soutar, 2001; Zeithaml, 1988) to identify the antecedents. In both marketing and e-commerce literature, customer value is considered an important predictor of customer behavior and decision making (Sheth et al., 1991; Sweeney and Soutar, 2001). People show a strong tendency to maximize value in their behavior and when making their decisions (Zeithaml, 1988), and this value enhances consumer loyalty. Brand companies may provide value to their customers through their brand pages during their SNS marketing. After receiving value from brand page-based SNS marketing, an individual may come to develop a relationship with the brand, especially with the brand page.

Content design of marketing is important for customer exposure and engagement (Shareef et al., 2017). Therefore, the contents of brand pages are described

separately for each of value types of the customer value theory (Sheth et al., 1991; Sweeney and Soutar, 2001). This study classifies the value types of brand page-based SNS marketing, i.e., content, as social, emotional, epistemic, and functional based on Sheth et al. (1991) and Sweeney and Soutar (2001). We thus identify key characteristics of SNS marketing in the brand page context and propose them as antecedents of brand page engagement based on the customer value types (Sheth et al., 1991; Sweeney and Soutar, 2001). Social value refers to social relationship benefits to a brand's customers (Sheth et al., 1991). Brand page users can develop and manage relationships with the brands via the brand pages. This can help develop a brand - customer relationship. Brand page users can also develop and manage relationships with other users or their SNS friends via the brand pages. In particular, customers can build relationships with other customers by sharing brand-related content, and they can find most suitable relationships by browsing other customers' profiles that represent their preferences for brands they like (Kane et al., 2012). It can also help develop customer - customer relationships. This study identifies *brand - customer relationship support* and *customer - customer relationship support* from the social value perspective.

Emotional value represents consumer interest, pleasure, and curiosity (Sheth et al., 1991). This means arousing consumers' interest and inducing their participation on a brand page. This can be recognized as consumer pleasure and curiosity about the contents or services of a brand provided by SNS. Consumers enjoy the value of pleasure through content provided by companies' brand pages and then become involved in the brand page. This study identifies *brand page enjoyment* from the emotional value perspective.

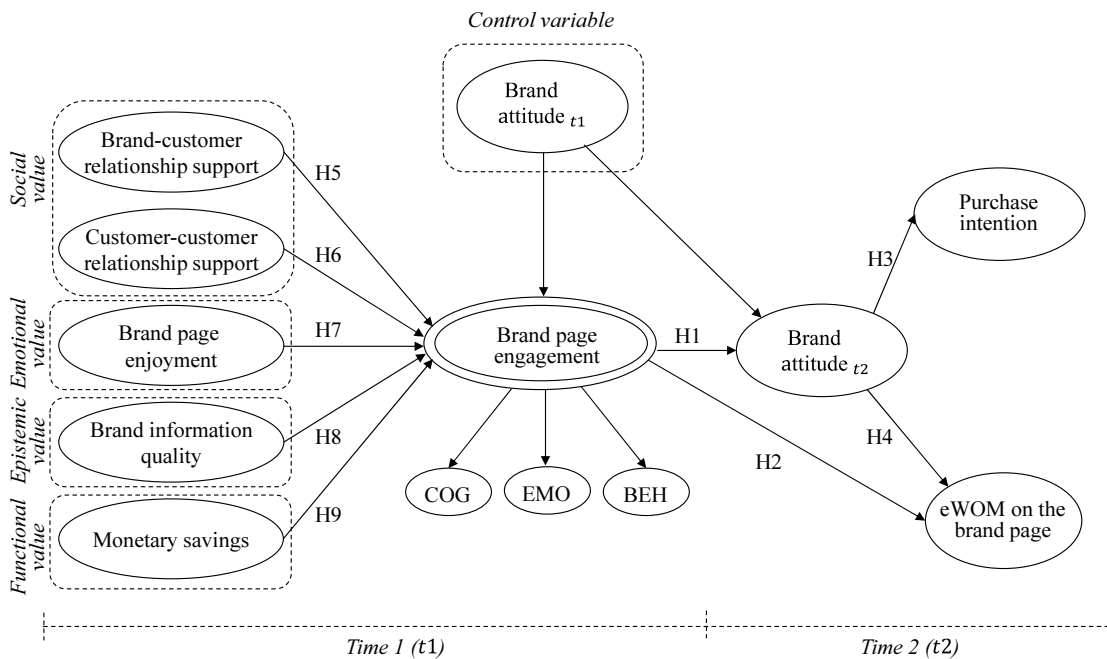
Functional value refers to the utilitarian benefits to customers, including performance and monetary

value (Sweeney and Soutar, 2001). Brand page users pay less attention to the performance aspect of brand pages. In contrast, brand companies provide monetary saving opportunities (e.g., discount information) to their customers via their brand pages. Monetary value involves monetary discount benefits including discount coupons or free coupons that brands offer. Offering discount opportunities can serve as a tool to maintain a continuous relationship with customers. This study identifies *monetary savings* from the functional value perspective.

Epistemic value represents novelty and knowledge (Sheth et al., 1991). Brand companies can provide the latest and most diverse information to customers via their brand pages. If brand pages provide quality information, then customers may want to develop and maintain relationships with the brand pages. In contrast, low-quality information of brand pages may inhibit the development of a relationship with the brand pages. This study identifies *brand information quality* from the epistemic value perspective.

III. Research Model and Hypotheses

Based on the conceptual framework in <Figure 1>, we propose a research model with nine hypotheses (<Figure 2>). We propose five antecedents based on the four value types of brand page-based SNS marketing. As for brand page engagement, Hollebeek et al. (2014) described three engagement dimensions: cognitive, emotional, and behavioral. This study models brand page engagement as a reflective second-order construct based on Hollebeek et al. (2014)'s three dimensions. As customers invest greater amounts of time and effort in a brand page, eventually, this engagement results in a favorable attitude toward the brand. We further propose *purchase intention*



Notes: 1) Brand page engagement is modeled as a second-order reflective construct based on its three dimensions (COG, EMO, and BEH)
 2) Cognitive brand page engagement (COG), emotional brand page engagement (EMO), behavioral brand page engagement (BEH)

<Figure 2> Research Model

and *eWOM on the brand page* as the consequences. We examine brand attitude at two different time stages: Time 1 (t1) and Time 2 (t2). In other words, the brand attitude is measured twice at three month interval. We measure brand attitude at Time 1 (brand attitude_{t1}) as a control factor in testing brand page engagement and brand attitude at Time 2 (brand attitude_{t2}).

This study proposes brand page engagement as the means objective and brand attitude as the ends objective in developing engagement between customers and brands in SNS marketing. In other words, brand pages play an important role because they help instill a favorable attitude toward the brand as their fundamental objective (Keeney, 1999). As engagement with a brand page develops, it may be linked with various positive outcomes for the brand

(Blanchard and Markus, 2004). In particular, an individual tends to have a favorable attitude and beliefs toward a target after spending a lot of time and effort on it so as to reduce cognitive dissonance (Festinger, 1962). As consumers form attachments to brand pages and invest their time and effort in them, they also become engaged with the brand. In contrast, an individual does not necessarily engage with a brand page on Facebook, although he or she may have a favorable attitude toward the brand in an offline context.

H1: Brand page engagement has a positive effect on brand attitude.

eWOM on the brand page refers to *an individual using the brand page to communicate or to share in-*

formation or opinions about the brand with other SNS users. Such activities represent a form of eWOM communication and potentially promote information to other consumers (Luarn et al., 2015). As the level of involvement in a brand page (i.e., brand page engagement) increases, customers may want to exhibit prosocial behavior toward the brand page by making a personal investment (Blanchard and Markus, 2004). In particular, an individual would like to share his/her experience on a brand page with others when the person is satisfied and psychologically involved in the page (Dholakia and Durham, 2010).

H2: Brand page engagement has a positive effect on eWOM on the brand page.

Purchase intention refers to *the extent to which an individual intends to buy a product or service of a chosen brand* related to the target brand page. Dabholkar and Bagozzi (2002) mentioned that attitude plays a fundamental role in the formation of behavioral intention. Similarly, brand attitude plays an important role in customers' decision making (Suh and Youjae, 2006). Customers' favorable attitude toward a specific brand has an effect on their purchase behavior, which leads to intent to use a product or service of the brand. Similarly, previous research found that positive evaluations about an online vendor led to purchase intention toward the vendor (Kim, 2014). Therefore, customers' positive evaluation of a specific brand should result in the use of products and services of the brand.

H3: Brand attitude has a positive effect on purchase intention.

SNS are the ideal tools of eWOM as evidenced

by the way customers freely share and deliver information on brands with other SNS users (Vollmer and Precourt, 2008) in exchanges that the SNS brand page facilitates. Customers especially like to talk with other customers about brands or products they like (Yang, 2012). In particular, an individual may exhibit eWOM behavior based on his or her attitude toward a brand on the brand page in line with the theory of planned behavior (Ajzen, 1991).

H4: Brand attitude has a positive effect on eWOM on the brand page.

This study defines brand - customer relationship support as *the extent to which the brand page of a brand supports a relationship between it and its customers* by referring to previous research (Bowlby et al., 1969; Maslow, 1968). Brand pages serve as an important platform for customers to voice their opinions about products or services of the brands. Brand pages further reflect part of the customer relationship with the brands (McAlexander et al., 2002) due to the ease of communication they make possible. In terms of social value in the customer value theory (Sheth et al., 1991; Sweeney and Soutar, 2001), customers perceive a brand page to be valuable if it provides opportunities for customers to interact and form relationships with a company through the brand page. In particular, brand pages on SNS enable customers to easily interact with brand representatives and build relationships with the brands. If an individual perceives such social value from a brand page, then the person will use the brand page and engage with it from the customer value theory perspective (Sheth et al., 1991; Sweeney and Soutar, 2001).

H5: Brand - customer relationship support has a positive effect on brand page engagement.

This study defines customer - customer relationship support as *the extent to which the brand page of a brand supports relationships between customers* by referring to previous research (Bowlby et al., 1969; Maslow, 1968). People use SNS mainly to satisfy their socio-emotional needs (Chen et al., 2014). SNS allow users to connect with their peers, which facilitates communication, especially among peer groups (Zhang and Daugherty, 2009). Brand pages are important brand communities where customers socialize with other users who share similar brand preferences (Tsai and Men, 2013). Brand page users can increase their ties with other users and strengthen the trust relationships between them because on SNS, these brand pages are channels of interaction that allow exchanges of information and opinions (Powell, 2009). If an individual perceives such social value from a brand page, then the person will use the brand page and engage with it from the customer value theory perspective (Sheth et al., 1991; Sweeney and Soutar, 2001).

H6: Customer - customer relationship support has a positive effect on brand page engagement.

Brand page enjoyment refers to *the extent to which the brand page of a brand provides a feeling of intrinsic interest or pleasure* (Van der Heijden, 2004). Enjoyment is an important factor for attracting people's attention and increasing emotional feedback and commitment (Cheung et al., 2015). This emotional benefit has a positive influence on attitudes toward a brand (Mitchell and Olson, 1981). Users who have an enjoyable experience are motivated to hold on to their pleasurable mental state; as such, they are likely to avoid any information that threatens their experience (Lee and Park, 2014). This is an experiential value and could be motivating community participation

(Gummerus et al., 2012). Customers who enjoy feelings of pleasure through the content or services provided by specific brand pages will thus use these brand pages and maintain relationships with them based on the emotional value (Sheth et al., 1991; Sweeney and Soutar, 2001).

H7: Brand page enjoyment has a positive effect on brand page engagement.

Brand information quality refers to *the extent to which the brand page provides current, accurate, and varied information about a brand* (DeLone and McLean, 1992; Wixom and Watson, 2001). Brand pages can deliver current, accurate, and varied information to customers directly via SNS. Yoo and Donthu (2001) found that perceived information quality creates a positive attitude toward the advertisement. The information quality provided by brand pages when customers buy a product or service works as a key factor in decision making (Jeong and Lambert, 2001). This helps build a positive image of the company and helps maintain continuous relationships with the brand pages of the brands. From an epistemic value perspective, customers want to access new and accurate information, which they highly value. If an individual perceives such epistemic value from a brand page, then the person will use the brand page and engage with it from the customer value theory perspective (Sheth et al., 1991; Sweeney and Soutar, 2001).

H8: Brand information quality has a positive effect on brand page engagement.

This study defines monetary savings as *the extent to which the brand page provides opportunities to save money when purchasing brand products or services* by

referring to previous research (Gefen and Devine, 2001). Previous research has showed the relationship between monetary value and customer engagement (Van Doorn et al., 2010). In addition, people join brand communities in order to gain discounts and time savings (Gummerus et al., 2012). In terms of customer value (Sheth et al., 1991; Sweeney and Soutar, 2001), customers want higher monetary value compared with the cost. Therefore, when brand pages provide discounts, including discounted or free coupons to customers, customers tend to use these pages frequently according to the customer value theory (Sheth et al., 1991; Sweeney and Soutar, 2001).

H9: Monetary savings have a positive effect on brand page engagement.

IV. Research Methodology

We developed the survey instrument for the research model by adapting existing validated scales wherever possible. The measurement items for brand page engagement were adopted from Hollebeek et al. (2014). For the antecedents and consequences of brand page engagement, we adopted items from previous literature (see Appendix). As for the objective data, eWOM on the brand page indicates the actual numbers of “likes,” “comments,” and “shares” that users click on the Facebook brand page. In previous studies, they also use activities of “clicking like,” “commenting,” and “shareing” as the measurement of eWOM (Andrei, 2013; Shen and Bissell, 2013). Three researchers reviewed the survey instrument along with the definitions of the constructs. We then conducted a sorting exercise with four senior graduate students as judges. The result of this sorting indicated that the average overall placement ratio

of items within the targeted constructs was 0.88. The measurement items were anchored on a seven-point Likert scale (1 = strongly disagree, 7 = strongly agree).

We collected data twice, three months apart, from users of Facebook brand pages (i.e., fan pages). We asked respondents to list the names of brand pages (including the brand names) that they visit. We then asked each respondent to select one of those brand pages and answer the survey questions by considering the chosen brand page. The design of a two-stage longitudinal data collection with primary and secondary data provides evidence of strong internal validity (Ou et al., 2014). A three-month time lag between the independent variable and the dependent variable has been commonly used in electronic commerce (Ou et al., 2014) and other information systems research (Hsieh et al., 2011). As mentioned, our data collection consisted of two rounds at different points of time: during the first round (Time 1), we collected subjective data for the independent and control variables and during the second round (Time 2) three months later, we collected subjective and objective data for the dependent variables.

In the first round, we conducted an online survey of users of Facebook brand pages. Participants were asked to answer the survey questions by choosing a brand page from among those on Facebook. We obtained 261 valid survey responses from this first round of data collection. We assessed nonresponse bias by comparing early and late respondents. T-tests performed on the groups showed that the early and late respondents did not differ significantly. Three months later, we collected the second round of data by contacting the same 261 respondents. We also compared the brand pages reported in the first round and second round to ensure that respondents reported the same brand page in both rounds. They

were then asked to answer the survey questions and send us the number of their WOM acting statistics (i.e., likes, shares, and comments). We offered a gift certificate valued at US\$5 to the first and second round respondents as an incentive to participate. This design of different time stages is consistent with the causal chain in psychology literature, which considers motivations and behavior as sequential and not simultaneous (Mitchell and Daniel, 2003).

From the second round of data collection, we obtained 200 valid and complete responses (78 males and 122 females) as shown in <Table 1>. The majority of the respondents were between 20 and 39 years of age (mean = 26.7, s.d. = 4.2). Most respondents were office workers (48.5%) or undergraduate students (24.5%). The respondents had used Facebook for an average of 42.24 months (s.d. = 18.75) and a Facebook brand page for an average of 10.16 months (s.d. = 10.31); they had 255.97 Facebook friends on average. They used Facebook on average 25.80 minutes per day (s.d. = 27.19). <Table 2> shows the distribution of the product types, search goods, and

experience goods (Kotler et al. 1991) on the brand pages selected by the respondents.

V. Data Analysis and Results

5.1. Instrument Validation

We first conducted an exploratory factor analysis involving all multi-item measures using principal component analysis with varimax rotation. We identified 10 factors with eigenvalues greater than 1.0. Except for two items (ENJ3 and INQ4), which were excluded from further analysis, all other items were loaded on distinct factors. Together, all 10 factors explained 83.20% of the total variance. For the confirmatory factor analysis, we used Smart PLS 2.0 based on the structural equation modeling (SEM) guidelines for data analysis for this study (Gefen et al., 2000; Gefen et al., 2011). We selected Smart PLS 2.0 for our data analysis because of issues of model complexity and model identification (Chin, 1998).

<Table 1> Descriptive Statistics of Respondents

Demographic variable		Data
Gender	Male	78 (39.0%)
	Female	122 (61.0%)
Age (years) (Mean = 26.7, S.D. = 4.2) *Minimum age: 18 years	10 - 19	4 (2.0%)
	20 - 29	154 (77.0%)
	30 - 39	40 (20.0%)
	40 - 49	1 (0.5%)
	50 ≤	1 (0.5%)
Occupation	Undergraduate student	49 (24.5%)
	Graduate student	40 (20.0%)
	Office worker	97 (48.5%)
	Homemaker	6 (3.0%)
	Others	8 (4.0%)
Total		200 (100.0%)

<Table 2> Distribution of Products on the Brand Pages Selected by Respondents

Products on the brand pages	Frequency (Percentage)	Type of goods	Frequency (Percentage)
Entertainment and Culture	51 (25.5%)	Search goods	127 (63.5%)
Electronics and Software	35 (17.5%)	Experience goods	73 (36.5%)
Beverage and Food	27 (13.5%)		
Beauty	24 (12.0%)		
Clothes and Shoes	21 (10.5%)		
Meal	14 (7.0%)		
Commerce	13 (6.5%)		
Finance	6 (3.0%)		
Automobile	2 (1.0%)		
Others	7 (3.5%)		
Total	200 (100.0%)		

<Table 3> Results of Convergent Validity Testing

Construct	Std. Loading of each Item	AVE	CR	Cronbach's α
Brand - customer relationship support (BCR)	0.89, 0.89, 0.88, 0.89	0.79	0.94	0.91
Customer - customer relationship support (CCR)	0.94, 0.95, 0.95, 0.95	0.76	0.93	0.96
Brand page enjoyment (ENJ)	0.94, 0.91, 0.89	0.83	0.93	0.90
Brand information quality (INQ)	0.87, 0.86, 0.86	0.65	0.88	0.81
Monetary savings (MOS)	0.87, 0.92, 0.92, 0.92	0.89	0.96	0.94
Cognitive brand page engagement (COG)	0.86, 0.90, 0.85	0.76	0.90	0.84
Emotional brand page engagement (EMO)	0.91, 0.89, 0.91, 0.93	0.82	0.95	0.93
Behavioral brand page engagement (BEH)	0.84, 0.91, 0.92	0.79	0.92	0.87
Brand attitude (ATT)	0.88, 0.90, 0.83, 0.85, 0.82	0.73	0.93	0.91
Purchase intention (PEI)	0.93, 0.95, 0.95, 0.95	0.72	0.91	0.96

As shown in <Table 3>, the standardized path loadings were all significant (t -value > 1.96) and exceeded 0.7. The average variance extracted (AVE) for each construct exceeded 0.5. Thus, the convergent validity of the constructs was supported. We then assessed the discriminant validity of the measurement model. As shown in <Table 4>, the square root of AVE for each construct exceeded the correlations between the construct and other constructs (off-diagonal terms), which indicates discriminant validity (Gefen et al., 2000).

For the second-order reflective construct, brand page engagement, we obtained factor scores for each of the first-order dimensions (cognitive brand page engagement, emotional brand page engagement, and behavioral brand page engagement). The path coefficients from brand page engagement underlying first-order factors as reflective indicators (the factor loadings) were 0.86, 0.84, and 0.72, respectively, and all were significant at the 0.001 level. The composite reliability and Cronbach's α of brand page engagement were 0.87 and 0.78, respectively. To check for

<Table 4> Correlations Between Variables

	Mean	S.D.	CCR	ENJ	MOS	BCR	INQ	ACT	AFF	COG	ATT	PEI	WOM
CCR	3.25	1.45	0.87										
ENJ	4.49	1.18	0.45	0.73									
MOS	3.66	1.57	0.28	0.02	0.89								
BCR	4.61	1.14	0.39	0.49	0.10	0.79							
INQ	5.41	1.12	0.09	0.36	0.01	0.46	0.73						
BEH	3.56	1.40	0.43	0.56	0.19	0.41	0.10	0.79					
EMO	4.92	1.11	0.33	0.62	0.06	0.58	0.51	0.38	0.76				
COG	4.03	1.19	0.53	0.56	0.18	0.48	0.21	0.53	0.59	0.62			
ATT	5.03	1.01	0.04	0.19	0.02	0.25	0.18	0.09	0.32	0.26	0.84		
PEI	4.97	1.34	0.09	0.20	0.17	0.27	0.19	0.23	0.30	0.18	0.63	0.72	
WOM	2.18	1.64	0.13	0.18	0.03	0.04	0.11	0.12	0.19	0.09	0.13	0.14	-

Note: Leading diagonal in bold font shows the squared root of AVE of each construct.

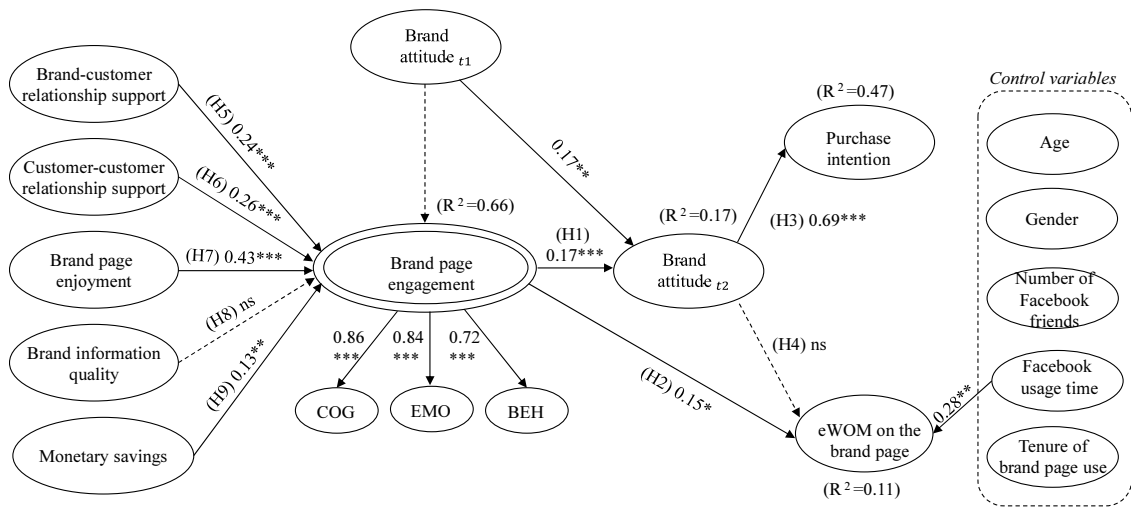
discriminant validity, the calculated AVE (0.69) exceeded 0.50, indicating that a majority of the variances in the first-order dimensions were shared with the second-order latent construct. In line with the guidelines of MacKenzie et al. (2011), these tests supported the proposed second-order reflective model of brand page engagement and verified its validity and reliability.

5.2. Hypotheses Testing

We applied a bootstrapping resampling technique based on the pooled data to test our hypotheses. <Figure 3> shows the structural model test results. Brand page engagement (H1) and brand attitude ($t1$), as a control factor have significant effects on brand attitude ($t2$), explaining 17% of its variance. Brand page engagement also has a significant effect on eWOM on the brand page (H2), explaining 11% of its variance. Brand attitude ($t2$), has a significant effect on purchase intention (H3), explaining 47% of its variance. However, brand attitude ($t2$), does not have a significant effect on eWOM on the brand

page (H4). Next, brand - customer relationship support (H5), customer - customer relationship support (H6), brand page enjoyment (H7), and monetary savings (H9) have significant effects on brand page engagement. They explain 66% of its variance. However, we did not find a significant effect of brand information quality (H8) on brand page engagement. We also did not find a significant effect of brand attitude ($t1$), as a control variable on brand page engagement.

We conducted two *post hoc* tests to better understand our results: (1) a mediating test of brand page engagement for its antecedents on brand attitude ($t2$), and (2) a moderating test on two categories of goods – experience goods and search goods – for SNS marketing characteristics and brand page engagement. In the first *post hoc* test, we used a bootstrapping procedure in accordance with the guidelines of Hayes (2013). This test showed significant indirect effects on brand attitude₂ through brand page engagement; this included brand - customer relationship support (indirect effect = 0.34, standard error = 0.05, lower confidence interval =



Note: $*p < 0.05$, $**p < 0.01$, $***p < 0.001$, ns: insignificant at the 0.1 level

No other control variables were found to be significant in the consequences of brand page engagement except the relationship between SNS usage time and eWOM on the brand page

<Figure 3> Hypotheses Test Results

<Table 5> Path Comparison between Search Goods and Experience Goods

Path	Search goods (N = 127)		Experience goods (N = 73)		T-value	Result
	Path coefficient	Standard Error	Path coefficient	Standard error		
CCR → ENG	0.233***	0.070	0.277**	0.097	-3.704	Significant
ENJ → ENG	0.400***	0.089	0.421***	0.120	-2.460	Significant
INQ → ENG	0.172*	0.079	-0.143 (ns)	0.084	26.525	Significant

Note: $*p < 0.05$, $**p < 0.01$, $***p < 0.001$, ns: insignificant at the 0.1 level

Customer - customer relationship support (CCR), brand page enjoyment (ENJ), brand information quality (INQ), and brand page engagement (ENG)

0.03, upper confidence interval = 0.20); customer - customer relationship support (indirect effect = 0.34, standard error = 0.03, lower confidence interval = 0.06, upper confidence interval = 0.21); brand page enjoyment (indirect effect = 0.34, standard error = 0.04, lower confidence interval = 0.03, upper confidence interval = 0.30); and monetary savings (indirect effect = 0.34, standard error = 0.01, lower confidence interval = 0.01, upper confidence interval = 0.08).

The second *post hoc* test examined whether SNS marketing characteristics have different effects, depending on the type of goods, on brand page engagement. We conducted path comparisons based on the guidelines provided by Chin (1998). <Table 5> summarizes the testing results. It explains that three factors have significantly different effects on brand page engagement depending on the type of goods: customer - customer relationship support (CCR) and brand page enjoyment (ENJ) have stron-

ger effects on brand page engagement for experience goods rather than for search goods, whereas brand information quality (INQ) has a stronger effect on brand page engagement for search goods rather than for experience goods.

VI. Discussion and Implications

6.1. Discussion of Findings

This study has three key findings based on the development of brand page engagement. First, in the development of engagement between customers and brands, we found a significant relationship between brand page engagement and brand attitude. Prior researchers mainly emphasized the importance of customer engagement itself in SNS marketing, but the important role and effect of brand page as a means for the development of customer engagement have not been discussed. Previous research also lacked a conceptual consensus regarding engagement as part of a conclusive model. We propose brand page engagement as a conceptual extension of customer engagement that has emotional, cognitive, and behavioral dimensions (Hollebeek, 2011; Hollebeek et al., 2014). Brand page engagement as a means objective helps to achieve the fundamental objective, in terms of customer engagement, which is to favorably influence customers' attitudes toward the brand on a brand page. The results of this study show that brand page engagement increases the brand attitude for the development of customer engagement; therefore, brand page engagement plays a key role in the development of engagement between customers and brands in SNS marketing.

Second, we found different roles and effects of brand page engagement and brand attitude. We found

that brand page engagement has an effect on eWOM on the brand page, although brand attitude has no effect on eWOM on the brand page. Unlike in the existing literature (Chan et al., 2014), we did not find a significant effect of brand attitude on eWOM on the brand page. In this study, eWOM on the brand page consists of the communication activities on Facebook, which is the context of this study. Brand page engagement on Facebook establishes values as consumers use the brand page that can be carried over as positive activities within the same context. The greater their brand page engagement, the more consumers want to pursue prosocial behaviors for the brand page (Blanchard and Markus, 2004). However, although the evaluation of the brand (i.e., brand attitude) improves, it has no effect on the communication activities within such a specific SNS platform (a brand page). Such context-specific eWOM is similarly explained by Wu et al. (2018), who show that community engagement plays an influential role in positive WOM for longer-tenured customers. However, in this study, we conducted a survey of brand page users who chose a brand page which they had liked a while ago to start the survey. Therefore, they were not longer-tenured customers.

Next, this study found a significant effect of brand attitude_{e2} on purchase intention. We used an approach based on bootstrapping (Hayes, 2013) to further test the mediating effect of brand attitude_{e2} on the relationship between brand page engagement and purchase intention. This test showed that through brand attitude_{e2}, brand page engagement exerts a significant indirect effect on purchase intention (indirect effect = 0.38, standard error = 0.06, lower confidence interval = 0.12, upper confidence interval = 0.37). This test result supports the means - ends network (Keeney, 1999) in developing brand - customer relationships in terms of brand page engagement in SNS

marketing.

Third, this study found four significant antecedents of brand page engagement in terms of brand page-based SNS marketing characteristics: brand - customer relationship support, customer - customer relationship support, brand page enjoyment, and monetary savings. Most previous research (Chan et al., 2014; Luarn et al., 2015; Tsai and Men, 2013) examined the antecedents of customer engagement without considering its background theory. In contrast, our research focused on involvement with the brand pages (i.e., brand page engagement) and identified its antecedents by applying the customer value theory (Sheth et al., 1991; Sweeney and Soutar, 2001) in the context of SNS marketing. Thus, this study is the first based on the customer value theory to find the impact of brand page-based SNS characteristic factors on brand page engagement as a way to develop engagement between customers and brands.

However, our study did not find a significant effect of brand information quality on brand page engagement. According to the customer value theory, information quality as an epistemic value is an important factor when it comes to consumers' decisions. However, because customers can easily get brand information from SNS and other online sites, they want to receive more appropriate and customized information. Previous research (Heller Baird and Parasnis, 2011) also found that what customers wanted from companies' brand sites diverged from the companies' assessments of consumers' needs, exposing a clear gap between the business and consumer perspectives. Customers may want specific information, not generalized information; thus, they still consider the information on brand pages less than satisfactory. Another possible reason is that most customers want to obtain the necessary information

or skills to better use the product of the brand from others like them (Habibi et al., 2014). Customers tend to perceive blogs or online communities as more credible than other websites (Tsai and Men, 2013). Such a peer-review mechanism similarly exists on brand pages where customers can voice their opinions. In other words, customers prefer to obtain information regarding the brand from other customers, not from the brand company itself.

Additionally, the testing results, including the first *post hoc* test, which was a mediating test of brand page engagement for its antecedents on brand attitude (t_2), highlight the salience of brand page engagement in developing engagement between customers and brands. We also found that regarding attitudes toward the brand at different points in time, brand attitude₁ has a positive effect on brand attitude₂, whereas brand attitude₁ has no effect on brand page engagement and purchase intention. This finding also verifies the key role of a brand page in leading consumers to develop engagement with the brand. Finally, based on the second *post hoc* test, we found that depending on the type of goods (search goods or experience goods), SNS marketing characteristics (i.e., customer - customer relationship support, brand page enjoyment, and brand information quality) have different effects on brand page engagement.

6.2. Limitations and Future Research

Despite the significant findings of this study, our results should be interpreted in light of some limitations. First, this study relied exclusively on users of Facebook brand pages for survey data. Considering the large universe of brand pages in operation on other SNS, additional study is expected to examine brand page users on more diverse SNS platforms. In other words, it would be useful to further test

the robustness of the results by replicating this study across a variety of SNS. Second, this study used the customer value theory to identify the antecedents of brand page engagement. Additional antecedents may determine brand page engagement in the context of SNS marketing. Future research can explore potential antecedents other than the five factors we identified as representative of the key characteristics of SNS.

Third, this study used brand attitude, purchase intention, and eWOM on the brand pages as the consequences of brand page engagement. For eWOM on the brand pages, we collected objective data on actual customer activities; however, perception data were used for the consequences of the other factors. Future research is expected to identify the effect of brand page engagement more precisely by collecting objective data on actual purchase behaviors. Finally, in this study, only brand attitude at time 1 (brand attitude_{t1}) was considered as a control variable. However, we can consider that not only, the brand attitude at time 1 (brand attitude_{t1}), but also the marketing activities of brands or their participation could be influential. Therefore, in the future research, other control variables could be considered.

6.3. Implications for Research

Because it is the first to address a means - ends network for the development of engagement between customers and brands in SNS marketing, this study has three implications for further research: (1) identification of the key roles and effects of brand pages in the development of engagement between customers and brands; (2) determination of the salient antecedents of brand page engagement based on the customer value theory; and (3) adoption of a comprehensive approach to the three sub-dimensions of

brand page engagement.

The main implication of this study is the application of brand pages to the development of engagement between customers and brands in terms of a means - ends network (Keeney, 1999) in the SNS marketing context. Previous research (Ángeles Oviedo-García et al., 2014; Baldus et al., 2015; Dessart et al., 2015; Hollebeek and Chen, 2014; Pansari and Kumar, 2017) has mainly examined customer engagement with a brand itself. These studies do not adequately account for the role and effects of brand pages (i.e., brand communities) in SNS marketing, which requires means and a fundamental objective to create and maintain ongoing relationships between customers and brands. In light of this past research, a major contribution to the literature by the present study is its introduction of brand page engagement as a means of engagement between customers and brands. In other words, our study examined, in terms of a means - ends objective network (Keeney, 1999), the development of engagement between customers and brands in SNS marketing in terms of customers' involvement in brand pages and with brand attitudes. Thus, our study investigated the hitherto unexplored area of the roles and effects of brand page engagement. In particular, this study demonstrated the different effects of brand page engagement and brand attitude on eWOM on the brand page and purchase intention.

By applying the customer value theory (Sheth et al., 1991; Sweeney and Soutar, 2001), this study has examined which brand page-based SNS marketing characteristics lead to brand page engagement. In accordance with the customer value theory, this study extracts brand page-based SNS marketing characteristics as the antecedents of brand page engagement. We conceptualized customer value using four values (epistemic, social, functional, and emotional), thus providing a structured theoretical framework and

new insights into SNS marketing research. This study demonstrates how the dimensions of customer value representing the key characteristics of SNS marketing play key roles in explaining brand page engagement in SNS marketing.

Our study also contributes to the online commerce literature by taking a comprehensive approach to the study of customer engagement. Previous research examined customer engagement either as a uni-dimensional construct (e.g., customer or brand engagement) or through one or two of its sub-dimensions (Hollebeek, 2011; Peterson, 2007; Van Doorn et al., 2010). In examining only one or two sub-dimensions of customer engagement, previous research failed to consider every facet of a sophisticated form of customer engagement. The present study is the first to examine the three sub-dimensions (i.e., emotional, cognitive, and behavioral dimensions) of brand page engagement as a second-order reflective construct. This present study, therefore, expands the literature by incorporating its conceptual model in a comprehensive set of brand page engagement, thereby stimulating the development of engagement between customers and brands in SNS marketing.

6.4. Implications for Practice

This study presents several practical implications for promoting engagement between customers and brands in SNS marketing. In particular, SNS providers and practitioners should pay attention to the key role played by brand page engagement. Whereas previous research (e.g., Mollen and Wilson, 2010; Spratt et al., 2009) highlighted the importance of customer engagement itself, our study highlights the key role played by brand page engagement in the development of engagement between customers and brands. Because our findings show that brand page engage-

ment leads to brand attitude, companies should be mindful of the development of brand page engagement when developing SNS marketing plans and activities.

First of all, SNS providers and practitioners should pay attention to the four factors (brand - customer relationship support, customer - customer relationship support, brand page enjoyment, and monetary savings) in the development of brand page engagement as representative of the key characteristics of SNS marketing in developing brand page engagement. SNS are communication tools that help build and maintain relationships with others by facilitating their communication. As for support of the brand - customer relationship, brand pages (i.e., brand communities) can provide new communication services so that customers can communicate more with each other and interact more with brands. In particular, customers want to build relationships with brands to express their thoughts and ideas regarding products or services that they like on the SNS brand page (i.e., SNS brand community). Therefore, brand pages (i.e., brand communities) should provide customers with various opportunities to convey their opinion regarding new services and feedback to be satisfied with reflecting their comments.

As for support of the customer - customer relationship, brand pages (i.e., brand communities) should consider creating a service whereby customers are able to know other customers' preferences and experiences regarding each brand page (i.e., brand community) that they like. Customers can then get information from other customers whom they prefer. In terms of brand page enjoyment, the content of brand pages should be interesting, attractive, and should amuse customers. For instance, in addition to providing funny videos and photographs, a continuous feed of interesting stories could be provided

to interested customers. As for monetary savings, a price discount or free coupon can be offered so that customers can buy the brand product or service at a lower price. Because there are a lot of brand advertisements on SNS, brand pages (i.e., brand communities) should offer useful discount information or coupons. Otherwise, customers would not pay much attention to the brand pages (i.e., brand communities).

This study further explains that SNS features have different effects on the development of brand page engagement depending on the type of goods. Companies can refer to this finding when establishing different strategies (Kotler et al., 1991) to respond and develop consumers' brand page engagement based on the type of goods, search or experience goods. If a company's key product is a search good,

then it needs to provide the latest, most precise, and highly diverse kinds of information on that product. If a company's key product is a good that can only be experienced, then the firm needs to offer more functions to stimulate and support customer-to-customer communication on its brand page (i.e., brand community) while also developing content and services of interest to customers. Companies can develop diverse messenger and sharing functions, for instance, on their brand pages (i.e., brand communities) to stimulate interactions between customers. Firms can add dynamic and interesting content to their service or provide a function to reinforce interest in an existing service experience. Thus, this work contributes to current practice by providing guidance for SNS marketing planning and activities.

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<Appendix> Measurement Instrument

Construct	Item	Wording	References
Brand - customer relationship support	BCR1	The brand page enables me to form a better bond with the brand	Bowlby et al., 1969; Maslow, 1968
	BCR2	The brand page helps me maintain my relationship with the brand	
	BCR3	The brand page enhances my relationship with the brand	
	BCR4	Overall, the brand page supports my relationship with the brand	
Customer - customer relationship support	CCR1	The brand page enables me to form better bonds with other Facebook users	Bowlby et al., 1969; Maslow, 1968
	CCR2	The brand page helps me maintain my relationship with other Facebook users	
	CCR3	The brand page enhances my relationship with other Facebook users	
	CCR4	Overall, the brand page supports my relationship with other Facebook users	
Brand page enjoyment	ENJ1	The brand page provides me with a lot of enjoyment	Agarwal and Karahanna, 2000; Moon and Kim, 2001
	ENJ2	The brand page makes me funny	
	ENJ3*	The brand page stimulates my curiosity	
	ENJ4	The brand page is enjoyable for me	
Monetary savings	MOS1	The brand page provides many opportunities for a price discount	Kim et al., 2012
	MOS2	Using the brand page, it may be possible to buy products of the brand at lower prices	
	MOS3	It may be possible to get a better discount with the brand page than with other services	
	MOS4	The brand page enables me to save money when buying products of the brand	
Brand information quality	INQ1	The brand page provides the latest information about the brand	Wixom and Watson, 2011
	INQ2	The brand page offers accurate information about the brand	
	INQ3	The brand page provides a variety of information about the brand	
	INQ4*	The brand page offers relevant information for my decisions	Nicolaou and McKnight, 2006
Purchase intention	PEI1	It is highly likely that I will consider buying a product/service of the brand	Kim et al., 2012
	PEI2	I am very willing to buy a product/service of the brand	
	PEI3	There is a high likelihood of my purchasing a product/service of the brand	
	PEI4	I intend to purchase a product/service of the brand	
Emotional brand page engagement	EMO1	I feel happy using the brand page of the brand	Hollebeek et al., 2014
	EMO2	I feel good when I use the brand page of the brand	
	EMO3	I feel very positive when I use the brand page of the brand	
	EMO4	I'm proud to use the brand page of the brand	
Cognitive brand page engagement	COG1	I'm interested in learning more about the brand page of the brand	Hollebeek et al., 2014
	COG2	I often pay attention to the brand page of the brand	
	COG3	I often think about the brand page of the brand	
Behavioral brand page engagement	BEH1	When I use Facebook, I usually spend a lot of time using the brand page of the brand	Hollebeek et al., 2014
	BEH2	The brand page of the brand is one of the services I usually use when I use Facebook	
	BEH3	Whenever I use Facebook, I often use the brand page	
Brand attitude		What do you think about the brand?	Yoo and Donthu, 2001
	ATT1	Desirable	
	ATT2	Likeable	
	ATT3	Nice	
	ATT4	Attractive	
	ATT5	Good	

Note: *Dropped after the exploratory factor analysis

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