

Jayasingh, Sudarsan

**Article**

## Consumer brand engagement in social networking sites and its effect on brand loyalty

Cogent Business & Management

**Provided in Cooperation with:**

Taylor & Francis Group

*Suggested Citation:* Jayasingh, Sudarsan (2019) : Consumer brand engagement in social networking sites and its effect on brand loyalty, Cogent Business & Management, ISSN 2331-1975, Taylor & Francis, Abingdon, Vol. 6, pp. 1-22,  
<https://doi.org/10.1080/23311975.2019.1698793>

This Version is available at:

<https://hdl.handle.net/10419/244762>

**Standard-Nutzungsbedingungen:**

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

**Terms of use:**

*Documents in EconStor may be saved and copied for your personal and scholarly purposes.*

*You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.*

*If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.*



<https://creativecommons.org/licenses/by/4.0/>

## Consumer brand engagement in social networking sites and its effect on brand loyalty

Sudarsan Jayasingh |

To cite this article: Sudarsan Jayasingh | (2019) Consumer brand engagement in social networking sites and its effect on brand loyalty, Cogent Business & Management, 6:1, 1698793, DOI: [10.1080/23311975.2019.1698793](https://doi.org/10.1080/23311975.2019.1698793)

To link to this article: <https://doi.org/10.1080/23311975.2019.1698793>



© 2019 The Author(s). This open access article is distributed under a Creative Commons Attribution (CC-BY) 4.0 license.



Published online: 08 Dec 2019.



Submit your article to this journal [↗](#)



Article views: 11368



View related articles [↗](#)



View Crossmark data [↗](#)



Citing articles: 1 View citing articles [↗](#)



Received: 01 August 2019  
Accepted: 25 November 2019  
First Published: 30 November 2019

\*Corresponding author: Sudarsan Jayasingh, SSN School of Management, Rajiv Gandhi Salai, Kalavakkam, Tamil Nadu, India  
E-mail: [sudarsanj@ssn.edu.in](mailto:sudarsanj@ssn.edu.in), 603110

Reviewing editor:  
Len Tiu Wright, Faculty of Business and Law, De Montfort University, Leicester, UK

Additional information is available at the end of the article

## MARKETING | RESEARCH ARTICLE

# Consumer brand engagement in social networking sites and its effect on brand loyalty

Sudarsan Jayasingh<sup>1\*</sup>

**Abstract:** Marketers today use social networking sites as their communication channel to promote their brands. There is a growing importance to this media to increase consumer's online participation and engagement. The aim of this research is to identify the determinants of consumer brand engagement behavior in Facebook brand pages and its impact on brand loyalty. This study applies the uses and gratification theory (UGT), social influence theory and technology adoption models to explain why consumers are engaged in Facebook brand pages. This research adopted mixed approach of research, which involves qualitative and quantitative analyses. The data about Facebook brand page activities of 100 brands were collected using Fanpage Karma, a social media evaluation tool. The second part of the study used an online questionnaire to conduct empirical research, and collected and analyzed data of 334 respondents using SEM. The finding shows computer, mobile and airlines brand categories exhibits higher engagement rate compared to retail, electronics and restaurants brands. The information seeking is the key determinant for consumers' engagement behavior in brand pages. Social influence and economic benefits also found to stimulate the participation of consumers on social networking sites. The results also show that there is a strong relationship between engagement and brand loyalty. This study provides a new

## ABOUT THE AUTHOR



Sudarsan Jayasingh

Sudarsan Jayasingh is working as an assistant professor in SSN School of Management, India. Prior to joining SSN School of Management, he worked as a faculty member in Swinburne University of Technology (Malaysia Campus), KDU College (Malaysia) and Vels University. His research interests are in the area of consumer behavior, digital marketing and social media marketing. His previous research work has been published in the *International Journal of E-Business Research*, *International Journal of Business and Information*, *Asian Social Science* and *International Business Management*.

## PUBLIC INTEREST STATEMENT

The purpose of this research article is to identify the determinants of consumer brand engagement behavior in Facebook brand pages and its consequences. Marketers today use social networking sites as their communication channel to promote their brands. This research finding will help to provide directions to brand managers to increase consumer's engagement with brands on their Facebook pages in turn will increase brand loyalty. There is a growing importance to this media to increase consumer's online participation and engagement. The finding suggests that information seeking; social influence and economic benefits are the key determinants to stimulate the participation of consumers on Facebook pages. The results also show that there is a strong relationship between engagement and brand loyalty. This study provides a new framework to understand consumer brand engagement behavior in social networking sites like Facebook.

framework to understand consumer brand engagement behavior in social networking sites like Facebook.

**Subjects:** Marketing; Digital Marketing; Social Media Marketing; Marketing Research

**Keywords:** consumer engagement; social networking sites; social media; Facebook brand pages; brand loyalty; online brand community; uses and gratification theory; information seeking

## 1. Introduction

Social media can be described as an online application that allows user to create content and share it with others (Kaplan & Haenlein, 2010). Social Networking Sites (SNSs) is an internet-based service that allows people to build their own public profile, which allows other members on the site to get connected and share comments, images, videos, photos and links with others (Boyd & Ellison, 2007; Lin & Lu, 2011). Social networking is one of the popular Internet activities today among consumers in India and the rest of the world. The worldwide statistics on social networking shows that time spend on SNSs is around 1.59 minutes per day and it is found that 2.46 minutes per day time is spend by age group 18–32 and it is only 1.47 minutes spend by age group 33–51 years old (Global Web Index, 2017). The most popular profile-based SNSs in world is Facebook with around 1.97 billion users (Statista, 2017). Content-based SNSs are Flickr, YouTube, etc. that does not focus on members profile but focus more on the contents like photos and videos. Facebook is one of the SNSs, which is very popular around the world. United States has the leading number of registered Facebook users in the world with 219 million users and India comes second with 213 million users (Statista, 2017).

Facebook allows businesses or brands to create a public profile page to post business information or content related to their product or services. This page can invite their consumers to get in touch with their business and update them on what's going on. According to Facebook, globally around 60 million businesses have active Facebook pages (Cohen, 2016). The increase in number of users in social networking platforms has created opportunities for new business models to manage their customer relationship in this new channel. Consumers today have moved from passive receiver of marketing communication content to active participants in brand communication (Brodie, Hollebeek, Juric, & Llic, 2011). SNSs have enabled consumers to follow, consume, react, create, and share information, opinions and experiences about any specific brands with the company and other consumers. van Doorn et al. (2010) defined consumer engagement (CE) as customer's behavioral manifestations that have a brand or firm focus, beyond purchase, resulting from motivational drivers (p.254).

SNSs like Facebook brand pages has created new consumer behavior in regards to communicating, searching for information, buying, sharing, interacting and helping other consumers in decision making process. Increasing brand presence in SNSs, but recent commercial research shows that companies find it difficult to maintain CE in SNSs (Barger, Peltier, & Schultz, 2016; Jayasingh & Venkatesh, 2016). SNSs are a relatively new marketing phenomenon, and there is growing need to understand and increase the engagement (Barger et al., 2016; Schivinski, Christodoulides, & Dabrowski, 2016). Less number of empirical researches was conducted on Facebook brand pages and on factors influencing the engagement (Dessart et al., 2015; Jahn & Kunz, 2012). Limited research is done related to Facebook brand pages, most studies related to conceptual research and less related to empirical support (Azar, Machado, Vacas-de Carvalho, & Mendes, 2016; Zhang & Mao, 2016). The reasons for low participation in SNSs have not been understood or explained so far and it may lead to an important topic for further research. Previous studies focused more towards determinants and not many studies conducted are related to CE consequences (Boyd & Ellison, 2007; Poorrezaei, 2016; van Doorn et al., 2010). This study proposes to cover determinants and also consequences of brand engagement behavior on SNSs like Facebook.

## 2. Literature review

Online brand communities are social group of brand followers who make public conversations on SNSs. Initially online brand communities were set using chat rooms, newsgroups and discussion forums where users communicate with each other to exchange and share information and emotions (Brogi, 2014). Some of the early studies on brand communities were conducted in chat rooms like AOL, MSN and Yahoo group (Dholakia, Bagozzi, & Pearo, 2004). The evolution of social networks originated when Classmates.com was created and it leads to development of new networks like Myspace, Orkut, Facebook, Flickr, LinkedIn, YouTube, Ning, Twitter, Foursquare, Pinterest, Instagram and Google+. Wirtz et al. (2013) consider brand communities are created in social networks to build strong relationships with their consumers and followers of their brand. CE is relatively new concept in the field of marketing and it is presented in marketing literature only in last 12 years (Brodie et al., 2011). In the marketing literature, many researchers attempted to define CE or customer engagement widely in different ways (Tsai & Men, 2017). The term CE can be defined as a psychological mindset, which includes emotional, cognitive and behavior (Brodie et al., 2011).

In the social networking context, consumer responses or engagement is usually measured in terms of comments, following, subscribing, sharing, liking, posting, etc. Higher engagement or activities on brand pages increases the posts reach, as it is key metrics used in Facebook's News Feed algorithm (Simply Measured, 2013). Cvijikj and Michahelles (2013) studies on 100 brand pages show that entertainment and informative content found to exhibit higher engagement rate. Important motivators to participate are to acquire new knowledge and to establish social relationship with other where users like to share common interests (Fernandes & Remelhe, 2016). Their studies found that rewarded for their participation was not a significant factor for CE. Leung (2012) research on hotel Facebook brand pages reveals that content characteristics is the main factor which influence page engagement and they measured engagement in terms of number of likes, comment and share of the post. The online brand page post allows the company to include more dynamic animations, colors or pictures; posts can achieve higher customer attention and therefore engagement (Cvijikj & Michahelles, 2013; Kujur & Singh, 2016).

Good number of theories and models are applied to understand social media behavior (Ngai, Tao, & Moon, 2015). The objective of studying various models and theories is to develop an acceptable framework to study social networking engagement behavior. List of theories referred for this research is listed in Table 1. Examining various literatures related to social media research author found that Uses and Gratification Theory (UGT) is one of the widely used theories to explain consumer's motivation to engage in social media content (Hsu, Chang, Lin, & Lin, 2015). Chen, Yang, and Tang (2013) research shows that entertainment, social need and information needs have stronger effects on their attitudes toward using online brand community, thereby supporting the arguments of UGT. Gao and Feng (2016) research on micro blogging sites and other SNSs in China found that social interaction, entertainment and information seeking (IS) factors significantly motivate CE. Lee and Lee (2014) studies with university students found that motivations to engage in SNSs were enjoyment of posted content and maintaining interpersonal relationships with others in SNSs.

According to Dessart, Veloutsou, and Morgan-Thomas (2015) engagement in online brand community increased the level of loyalty towards the brand. France, Merrilees, and Miller (2016) study on Australian brand pages shows that CE direct effect on brand loyalty and brand value. Several studies conceptualize the links between CE and brand loyalty (Brodie et al., 2011; van Doorn et al., 2010; Vivek, Beatty, & Morgan, 2012). The highly engaged consumer found to exhibit higher loyalty behavior Vivek et al. (2012), Wirtz et al. (2013), France et al. (2016). Jang et al., (2008) have identified from his research that increased participation in online brand communities increased brand loyalty. This was also supported in the research findings of France et al. (2016), Jahn and Kunz (2012), Hollebeek (2011). These authors have shown that in online brand

**Table 1. Theories adopted in social networking research**

No.	Theories	Author(s)
1	Personality Theories	Lu and Hsiao (2010); Orchard, Fullwood, Galbraith, and Morris (2014)
2	Uses and Gratifications Theory (UGT)	Weman (2011); Zheng, Cheung, Lee, and Liang (2015); Azar et al. (2016); Gao and Feng (2016); Kleine-Kalmer (2016); Kujur and Singh (2016)
3	Technology Acceptance Model (TAM)	Casaó, Flavián, and Guinaliu (2010); Leung (2012); Senthil, Ramachandran, and Panboli (2015); Al-Ghaith (2016)
4	Elaboration Likelihood Model (ELM)	Lee and Lee (2014); Chung, Han, and Koo (2015); Li and Suh (2015); Zhou, Lu, and Wang (2016); Poorrezaei (2016)
5	Social Cognitive Theory	Khang, Han, and Ki (2014)
6	Theory of planned behavior (TPB)	Casaó et al. (2010); Senthil et al. (2015)

communities, members tend to feel a strong commitment to the community, which, in turn, leads to the creation of loyalty to the brand or its products.

The literature review reveals that there is lack of research on how CE in Facebook brand pages drives brand engagement behavior like brand loyalty. Literature review shows that many studies on CE are related to firm-based and less studies is related to customer based (Alversia, Michaelidou, & Moraes, 2016). The literature review highlighted the important gap, which is a lack of clear and tested framework for identifying the determinants of CE. The literature review also revealed that there is lack of a reliable and valid scale for the CE construct (Brodie et al., 2013; Hollebeek, 2011). Limited research is made using mixed model for online brand community. Very few comparative studies between industry and CE in social media are made. Social media engagement behavior research continues to be research priority area of Marketing Science Institute (MSI) in 2014–16.

## **2.1. Conceptual framework for consumer engagement behavior**

The conceptual framework is developed based on the literature review. Based on UGT researcher found that IS, social benefits (SB), entertainment and economic benefits (EB) will impact the CE behavior. Based on TAM models researcher included trust and social influence (SI), which can influence the SNS engagement behavior. Since this study is related to brand community it's assumed that Brand love may have a directly influence the CE. This research researcher defined CE in terms consuming, posting, reacting, commenting and sharing user generated content. The SNSs have changed the consumer brand engagement drastically. Based on the previous studies, researchers are able to identify some the important determinants that increases consumer brand engagement behavior in SNSs.

### **2.1.1. Information seeking**

The previous studies on SNSs brand engagement behavior show that IS is an important determinant for CE (Azar et al., 2016; Lin & Lu, 2011). Research shows that searching and receiving information about the company or product or brand is one of the key factors for consumer participation in online brand communities like Facebook brand pages (Andre, 2015; Azar et al., 2016; Cvijikj & Michahelles, 2013; Muntinga, Moorman, & Smith, 2011). The posts made in Facebook brand pages contain information related to brand or product, which is one of the determinants for consumer to engage with the brand in the SNS (Kujur & Singh, 2016). According to Whiting and Williams (2013) studies, the main reason for following a brand page is to get information related to product, pre-purchase information and look for product reviews. Previous research finding shows that IS behavior is prevalent in Facebook (Asghar, 2015) and is positively related with CE (Andre, 2015; Fernandes & Remelhe, 2016; Gao & Feng, 2016; Lin & Lu, 2011).



*H<sub>1</sub>: Information seeking positively impacts consumer engagement behavior.*

#### 2.1.2. Entertainment

Many researchers consider SNSs as an enjoyment system where entertainment content may be a strong motivating factor for members to visit it (Cvijikj & Michahelles, 2013; Lin & Lu, 2011). The main determinants for the consumers' participation in Facebook brand pages depend upon entertaining content in the brand post. Cvijikj and Michahelles (2013) defined entertaining content as posts that may not be related to a brand or company or product but posted to entertain the members. Entertainment has four main activities associated: relaxation or escape (Muntinga et al., 2011; Whiting & Williams, 2013); inspiration and mood management motives (Heinonen, 2011); enjoyment and having fun and to pass the time (Muntinga et al., 2011; Whiting & Williams, 2013). Previous research finding shows that entertainment is positively related with CE and is one of the reasons for following brand pages (Andre, 2015; Lin & Lu, 2011).

*H<sub>2</sub>: Entertainment benefits positively impacts consumer engagement behavior.*

#### 2.1.3. Economic benefits

EB is another determinant to engage with a brand SNSs, because it is an easy and comfortable way to receive brand related campaigns and/or special offers (Gironda & Korgaonkar, 2014). Consumers who use social media look for economic incentives, reward, prize, etc. offered by the brand (Muntinga et al., 2011). Previous research finding shows that EB is positively related with CE (Andre, 2015). The users usually would expect some remuneration in return for engaging in liking, commenting and sharing activities towards brand posts (Kujur & Singh, 2016). Zheng et al. (2015) research on Facebook brand page users found that EB is one of the main factors for brand engagement behavior.

*H<sub>3</sub>: Economic benefits positively impacts consumer engagement behavior.*

#### 2.1.4. Social benefits

One of the important determinants for using social media is to get a feel of belonging and getting linked to the friends, family and community (Muntinga et al., 2011). Leung (2012) studies show that Internet is found to be a platform to express their views and feelings to their friends and family members. Dholakia et al. (2004) study on various online brand communities found that SB such as maintaining interpersonal connectivity is a significant factor for engagement. Kleine-Kalmer (2016) research related to Facebook brand pages found that social value significantly associated with brand page attachment. Virtual brand communities can satisfy various social needs, like friendship, social support and finding others with similar likes and behaviors (Martínez-López, Anaya-Sánchez, Aguilar-Illescas, & Molinillo, 2016). Therefore, researchers believe that SB like getting new friends may be one of the determinants for consumers to join and engage in SNSs.

*H<sub>4</sub>: Social benefits positively impacts consumer engagement behavior.*

#### 2.1.5. Trust

Trust is widely accepted as a major component of human social relationships. Census wide research shows that 30% of people have little or no trust in brand information they see on Facebook brand pages (Vizard, 2016). One of the reasons for not using Facebook brand pages is very low trust as it deals with personal data (Kleine-Kalmer, 2016). Most studies in social media research have neglected the trust issue (Kleine-Kalmer, 2016). Consumers assume SNSs as a trustworthy source of information concerning products and services than the communications

made by the companies (Mangold & Faulds, 2009). Therefore, researchers expect that trust will influence CE.

*H<sub>5</sub>: Trust positively impacts consumer engagement behavior.*

#### 2.1.6. Social influence

Social pressure from friends and society influence their decision to join and participate in the brand related community (Gironda & Korgaonkar, 2014; Muntinga et al., 2011). Research by Wang and Sun (2016) shows that SI affects the intentional engagement behavior. Therefore, research proposes that SI will influence CE. The reason why others have an influence on individuals lies in the fact that one tends to adapt his/her attitudes, behaviors and beliefs to the social environment (Bolton et al., 2013). Based on the previous research findings, researcher can infer that SI will have direct impact on CE behavior.

*H<sub>6</sub>: Social influence positively impacts consumer engagement behavior.*

#### 2.1.7. Brand love

Brand love is defined as the degree of passionate emotional attachment a satisfied consumer has for a particular trade name (Carroll & Ahuvia, 2006). Brand love can be explained as extreme emotions, which can be positive or negative the consumers have for brands (Fetscherin & Heinrich, 2014). Andre's (2015) studies show that brand love is strong correlated with CE behavior and brand loyalty in SNS. Brand love is a newly researched marketing concept, which has been shown to influence CE and brand loyalty (Kleine-Kalmer, 2016). Based on the previous research findings, we can infer that brand love will also positively influence CE.

*H<sub>7</sub>: Brand love positively impacts consumer engagement behavior.*

#### 2.1.8. Brand loyalty

Several studies conceptualize the links between CE and brand loyalty (France et al., 2016; Jahn & Kunz, 2012; Reitz, 2012). The highly engaged consumer found to exhibit higher loyalty behavior (France et al., 2016; Vivek et al., 2012). Hollebeek (2011) suggests that there is exists a strong relationship between CE and brand loyalty, whilst a study by Woisetschläger et al. (2008) examines customer satisfaction as an outcome of customer engagement. The engagement behaviors in brand community will leads to perceived value of consumers; consequently, customer satisfaction and loyalty will be increased. The investigation of the online brand community by Brodie et al. (2011) study shows that customers express their loyalty and satisfaction to a brand by recommending this preferred brand to others. Based on these assumptions, we believe that CE behavior will have a direct effect on brand loyalty towards the brand.

*H<sub>8</sub>: Consumer engagement behavior positively impacts brand loyalty towards the brand.*

### 3. Research methodology

To validate our proposed research framework of CE, researcher applied mixed approach of research. The mixed research uses multi-step approach, which involves qualitative and quantitative analyses. In the first stage qualitative, data will be collected and analyzed and which is followed by quantitative data collection and analysis (Creswell, 2014). First exploratory research design was conducted in order to initial understanding of the CE in brand pages and then to develop construct and its dimensions. A descriptive research design was conducted for the second stage of the research. The reasons for employing descriptive research were to test the



relationships between customer engagement and other identified constructs. The research design for this study involves three stages. First exploratory research design was conducted in order to initial understanding of the CE in brand pages and then to develop construct and its dimensions.

Data analysis of Indian Facebook Brand pages is conducted to get an insight about Indian Brands and consumer activities in their brand pages. The 100 brands are selected based on most number of fans. The data about Facebook brand page activities like brand post content, post type and the number of likes, comments, shares and reactions were collected using Fanpage Karma, a social media evaluation tool. The Facebook brand activities data was collected between the time periods of January 2014 to December 2016. The consumer interaction is calculated as the sum of likes, comments shares and reactions of the individual posts (Social Bakers, 2013). Average CE rate is calculated as total number of reactions/likes + total number of comments \* 3 + total number of shares \* 5 divided by number of fans power of 0.8 (Unmetric, 2016). Unmetric (2016) developed engagement score formula through user research and observations. On social networks, weights become the strength with which a particular response a Comment, a Share or a Like influences the calculation of the resulting Engagement Score. In Unmetric formulae, comments and share are weighed higher than likes because comments and replies start a conversation. Unmetric analysts using empirical data points found a way to estimate the number of brand fans/followers who stand to actively receive and view a brand's content. The reception rate of a brand's Facebook post best varies as a function of the number of brand fans to the power of 0.8. Estimated reach is computed based on our advanced machine-learning model. Unmetric formulae weighed 5 for shares, 3 for comments and 1 for likes and other reactions.

A descriptive research design was conducted for the second stage of the research. The reasons for employing descriptive research were to test the relationships between customer engagement and other identified constructs. A cross-sectional design is selected for the study. The second stage was to perform a pre-test of the survey, with 50 respondents, in order to determine if the questions were clear. Third stage uses self-administered online survey was conducted to understand the CE. A link to the online survey was sent through instant messaging on Facebook pages to the participants. The invitation to participate in the survey was send by posting in the Facebook brand pages of the selected 100 brands. Three fifty respondents participated in this survey; researchers are able to collect 334 fully completed questionnaires of Facebook brand page participants.

A self-administered online survey was conducted to understand the CE. The survey was conducted in India from July 2016 to September 2016. A link to the online survey was sent through instant messaging on Facebook pages to the participants. The invitation to participate in the survey was send by posting in the Facebook brand pages of the selected 100 brands. Three fifty respondents participated in this survey; researchers are able to collect 334 fully completed questionnaires of Facebook brand page participants. The target populations for this study are Indian consumers who are following at least one Facebook brand page. The Social Bakers is one of the leading social media analytics company has classified brand pages into 20 industries or categories. This study selected 17 industries from the list. They are Airlines, Automobile, Banks, Beverages, Computer, Electronics, eRetailers, Fashion, FMCG Food, Health/Beauty, Household Goods, Hotels, Mobile, Restaurants, Retail, Sporting Goods and Telecom. Three industry was left out of the study are related to software, gambling and alcohol which is not the focus of this study. The 100 brands are selected from these 17 category listed in social bakes page based on active number of posts made in last one year and number of fans following the brand pages.

The sampling technique adopted for the quantitative phase of the study is convenience non-probability sampling technique. Since the study is related to online engagement and the target respondents also familiar in using online environment; therefore, it may be appropriate to conduct online survey. The sample data was collected using Survey Monkey, which is a cloud-based online survey software and questionnaire tool. The target participants were send online survey link

through chat box message and also the link was posted in all the 100 brand pages daily during the collection period. We are able to collect 350 responses from the online survey from the Facebook brand page users. The nine constructs (IS, entertainment, EB, SB, SI, trust and brand love) used for the study were all measured using multiple item scales using a seven point Likert scale with seven options range from strongly disagree to strongly agree. The nine-construct scale item statement was adopted from various authors. The item scale adopted for this research is presented in Table 2. The operationalization of the latent constructs is carefully selected for this research after checking the validity results of previous authors.

#### 4. Data analysis and results

The first research step was to measure the engagement rate of the selected 100 brands of Facebook Brand Pages. The data about Facebook brand page activities like brand post content, post type and the number of likes, comments, shares and reactions were collected using Fanpage Karma, a social media evaluation tool. The total engagement rate was calculated using Social bakers formula, which was explained, in methodology section. The consumer total interaction is calculated as the sum of number of likes, reactions, comments and shares of the individual posts and is presented in Table 3.

It's clear from Table 4 that computer, mobile and airlines brand categories exhibits higher engagement rate compared to retail, electronics and restaurants brands. Total 16,71,188 post was made in Facebook Brand pages of the selected 100 brands between 2014 and 2016. Most of the posts are made by Mobile, Automobile and eRetailers brands and low number of posting made in FMCG Food. The Photo format is most popular type of post adopted by the brands. The lowest engagement rate is recorded for retail brands category with average engagement rate of 0.95 and highest engagement is recorded for computer category brands with average engagement rate of 6.05. This result shows that technology related brands post higher engagement rate.

The respondent's demographic characteristics are presented in Table 5. The demographics profile of the respondents are close to the recent statistics that found more people who use social media in India were men. The sample consists of 71.9% men and only 28.1% was female which is close to the population. According to recent statistics on Facebook users in India, it was found that only 24% are female users in India (We Are Social, 2017). The table shows that most number of users are in the age group of 18–33 years old. According to We Are Social (2017) research report, 73% of Facebook users are between the age group of 17 and 34 years old. The sample fits close the population. The respondents were all educated and 77.5% do have completed undergraduate degree. The last demographic data is related to location of the respondents. It was recorded that Chennai and Delhi has most number of respondents with 35.6% and 29% of the sample. We Are Social (2017) research also shows that Delhi, Chennai and Mumbai are the three Indian cities where most of the Facebook users reside.

The preliminary data analysis was conducted to examine the data quality, accuracy, missing data, presence of outliers and normality test. Out of 350 responses, 16 responses have some form of missing values. After eliminating the records of the missing value, 334 usable responses were selected for further analysis. Prior to confirmatory factor analysis (CFA), researcher conducted exploratory factor analysis (EFA) using principal component analysis with varimax rotation to check the structure of the CE components. Exploratory principle component analysis with varimax rotation identified nine components with an Eigen value greater than 1, these nine variables explained over 75.26% of the variance which indicated a good fit and hence we can assume that model represents the data and can continue with further analysis.

The present study adopted Straub's (1989) method of scale validation procedures which involves two steps: they are testing the convergent validity and then test the discriminant validity. The convergent validity and discriminant validity for this study is presented in Table 6 and Table 7. The convergent validity was checked by calculating the factor loading of each item variable on their

**Table 2. Questionnaire scale**

Construct	Item Scale	Author/s
Information Seeking	I feel that in order to know more about a brand or store, I have to like its page	Andre (2015)
	I think reading Facebook feed is informative	Asghar (2015)
	I use Facebook to post questions because Facebook users provide me with better information than an Internet search	Andre (2015)
	Facebook Page provides me quick and easy access to information I seek.	Anderson (1988)
Entertainment	Reading Facebook Brand Page posts and comments is entertaining.	Asghar (2015)
	It is fun to go over Facebook Brand Page posts and comments.	Asghar (2015)
	I have a good time reading posts shared through Facebook Brand Pages.	Asghar (2015)
	To pass time when I am bored	Gummerus et al. (2012)
Economic Benefits	I interact with brands on Facebook in order to access discounts and promotions	Azar et al. (2016)
	To participate in Competitions and Games to win prizes	Azar et al. (2016)
	To get reward/free gifts	Gummerus et al. (2012)
	To meet other users who share similar interests	Fernandes and Remelhe (2016)
Social Benefits	I can find out about people like me on this fan page.	Jahn and Kunz (2012)
	I can interact with people like me on this fan page.	Jahn and Kunz (2012)
	This is a wonderful brand.	Andre (2015)
	This brand makes me feel good.	Andre (2015)
Brand Love	This brand makes me feel happy.	Andre (2015)
	This brand is a delight.	Andre (2015)
	I am passionate about this brand.	Andre (2015)
	I believe it is safe to interact with brands on Facebook	Andre (2015)
Trust	I believe that brands respects my privacy when I interact with them on Facebook	Andre (2015)
	I trust the information published by other consumers on Facebook on the brand page	Andre (2015)
	I believe that brands will not provide the information that they have obtained about me, through Facebook, to other people or entities	Andre (2015)

(Continued)

**Table 2. (Continued)**

Construct	Item Scale	Author/s
Social Influence	I will share information about the brand with friends and family.	Andre (2015)
	By interacting with the brand on Facebook, I feel I am part of a community	Azar et al. (2016)
	I interact with the brand on Facebook to state my interests and preferences to my friends	Azar et al. (2016)
	My interaction with the brand on Facebook allows me to increase my social involvement	Azar et al. (2016)
Consumer Engagement	I read posts related to Brands on Facebook pages	Schivinski et al. (2016)
	I express my reactions to brand posts and comments using Facebook buttons Like, angry, etc.	Schivinski et al. (2016)
	Engaging in conversations on the brand's Facebook page (e.g., commenting, asking, and answering questions)	Andre (2015)
	Sharing the brand's Facebook posts on my own Facebook page (e.g., videos, audios, pictures, texts)	Andre (2015)
	I initiate new posts related to Brand on Facebook pages	Schivinski et al. (2016)
Brand Loyalty	I am most likely to purchase this brand I follow	Andre (2015)
	I will recommend the brand to others.	Andre (2015)
	I consider myself to be loyal to the brand	Jahn & Kunz (2012)

**Table 3. Post format and total interactions**

Post Format	Posts	Likes	Comments	Shares	Reactions	Total Interactions	Avg. Int.
Event	20	436	129	252	0	817	41
Link	12,134	80,420,358	680,672	493,789	180,821	81,775,640	6739
Offer	307	1,159,901	17,703	29,712	271	1,207,587	3934
Photo	138328	572,311,035	6,345,750	8,456,235	1,747,556	588,860,576	4257
Status	4259	1,256,633	219,026	30,978	8395	1,515,032	356
Music	9	929	31	43	0	1003	111
Video	12,131	45,543,510	1,113,551	3,325,828	1,491,661	51,474,550	4243
Total/Avg.	167,188	700,692,802	8,376,862	12,336,837	3,428,704	724,835,205	4335

**Table 4. Brand category and the consumer engagement rate**

Post Format	Posts	Interactions	Avg. Int.	Avg. CE
Airlines	10,714	1,11,90,016	1,044	3.21
Automobile	16,805	9,82,22,485	5,845	3.02
Banks	9,383	5,06,96,874	5,403	3.86
Beverages	2,759	5,06,96,874	4,776	3.63
Computer	10,368	6,21,32,438	5,993	6.05
Electronics	9,004	1,27,46,287	1,416	1.37
eRetailers	17,672	6,71,70,838	3,801	2.22
Fashion	4,349	3,58,68,223	8,247	3.87
FMCG Food	4,048	1,06,63,897	2,634	2.93
Health/Beauty	12,335	6,14,09,829	4,979	3.71
Household Goods	6,875	1,58,76,774	2,309	3.2
Hotels	8,423	17,80,607	211	2.34
Mobile	22,310	13,98,34,818	6,268	5.03
Restaurants	10,935	3,42,37,584	3,131	2.06
Retail	10,132	1,40,93,818	1,391	0.95
Sporting Goods	3,158	89,74,803	2,842	2.75
Telecom	7,918	8,67,58,119	10,957	3.5
Total	1,67,188	72,48,35,205	4,335	

respective latent construct variable (Anderson & Gerbing, 1988). According to Hair, Black, Babin, and Anderson (2014), the calculated standardized factor loading of each item variable should be clearly linked to their respective latent construct variable and it is ideal to have the factor loading estimate of 0.5 and above. One of the item variable CEa was found to have less than 0.5; therefore, as recommended we have removed the item from further analysis. The squared multiple correlation (SMC) of the CEa was also found to be less than 0.3 as recommended. To countercheck convergent validity, two additional measures were studied, namely Average Variance Extracted (AVE), Maximum Shared Variance (MSV), Average Shared Variance (ASV) and the Construct Reliabilities (CR). The calculation of AVE, MSV, ASV and CR was done manually as they are available in AMOS. Standardized loadings estimates should be 0.5 or higher, and ideally 0.7 or higher; to give

**Table 5. Demographic variable of respondents**

Demographic	Characteristics	Frequency	Percentage
<b>Gender</b>	Male	240	71.9
	Female	94	28.1
<b>Age</b>	18–25	174	52.1
	26–33	92	27.5
	34–41	47	14.1
	42–49	21	6.3
<b>Education</b>	Undergraduate Degree	259	77.5
	Masters and Above	75	22.5
<b>Location</b>	Chennai	119	35.6
	Delhi	97	29.0
	Mumbai	55	16.5
	Bangalore	63	18.9
<b>Total</b>		334	100

**Table 6. Confirmatory factor analysis for convergent validity**

Construct	Item	Lambda	CR	AVE	MSV	ASV
Brand Love	BLb	0.649	0.8801	0.6520	0.2611	0.1066
	BLc	0.734				
	BLd	0.943				
	BLe	0.871				
Information Seeking	ISa	0.726	0.8057	0.5835	0.2611	0.1620
	ISb	0.88				
	ISd	0.67				
Entertainment	ENTa	0.791	0.8282	0.5487	0.2401	0.1245
	ENTb	0.767				
	ENTc	0.774				
	ENTd	0.618				
Economic Benefits	EBa	0.862	0.8928	0.7355	0.1318	0.0584
	EBb	0.894				
	EBc	0.815				
Social Benefits	SBa	0.698	0.9019	0.7576	0.1089	0.0655
	SBb	0.985				
	SBc	0.903				
Trust	TRUa	0.72	0.8974	0.6874	0.2247	0.1047
	TRUb	0.871				
	TRUc	0.867				
	TRUd	0.849				
Brand Loyalty	BLYa	0.808	0.9297	0.8161	0.3215	0.1154
	BLYb	0.977				
	BLYc	0.917				
Social Influence	SIa	0.767	0.8381	0.6059	0.2070	0.1339
	SIb	0.83				
	SIc	0.707				
	SIId	0.804				
Customer Engagement	CEb	0.631	0.8966	0.6889	0.3215	0.1408
	CEc	0.882				
	CEd	0.948				
	CEe	0.825				

Note: AVE = Average Variance Extracted, MSV = Maximum Shared Squared Variance, ASV = Average Shared Squared Variance.

indication of sufficient convergent validity, the AVE should be 0.5 or greater; to provide evidence of discriminant validity.

The acceptable level of Cronbach's alpha coefficient for an item in a scale should be at least 0.70 to confirm the internal consistency of the scale item (Nunnally & Bernstein, 1995). Reliability and validity was calculated using composite reliability and average variance extracted. The composite reliability ranged between 0.82 and 0.91 exceeding the threshold value of 0.7 (Nunnally & IBernstein, 1995). The average variance extracted ranged between 0.53 and 0.77, exceeding the 0.5 threshold value (Nunnally & Bernstein, 1995).



Table 7. Discriminant validity and correlation matrix

Constructs	EB	BL	IS	Ent	SB	Trust	SI	BrLoy	CE
EB	0.858								
BL	0.160	<b>0.807</b>							
IS	0.214	0.511	<b>0.764</b>						
Ent	0.363	0.340	0.490	<b>0.741</b>					
SB	0.208	0.218	0.285	0.310	<b>0.870</b>				
Trust	0.132	0.330	0.474	0.241	0.330	<b>0.829</b>			
SI	0.269	0.419	0.416	0.360	0.218	0.339	<b>0.778</b>		
BrLoy	0.193	0.254	0.245	0.283	0.244	0.305	0.455	<b>0.903</b>	
CE	0.306	0.233	0.458	0.380	0.200	0.334	0.389	0.567	<b>0.830</b>

Note: The square root value of each AVE in bold.

#### 4.1. Confirmatory factory analysis

First phase of SEM analyses is to perform CFA. The data analysis was done using maximum likelihood estimation method using AMOS 22. The maximum likelihood estimation method is most used and preferred estimation method in SEM (Blunch, 2013). The CFA was performed on the nine factors used in our research, which are: brand love, IS, entertainment (Ent), EB, SB, trust, SI, brand loyalty (BrLoy) and CE. While conducting CFA, all constructs are to be considered exogenous and correlated with one another (Hair et al., 2014). First we performed CFA for all the 35 items involving nine constructs as EFA analysis show reasonable fit for all the items. The CFA analysis results showed reasonable fit with CFI = 0.918 and RMSEA with 0.063. The model fit indices is not satisfactory so we conducted further refinement of the CFA model. One of recommended step is to check the factor loading and SMC value of the items. Byrne (2013) in his research recommends factor loading must be greater than 0.7 and SMC values should be higher than 0.5. Based on these recommendations, one latent variable CEa was removed as the factor loading was less than 0.7 and SMC value was less than 0.5. Most of the other item variables were found to be above 0.7 value. The unidimensionality of measuring items will be confirmed if factor loadings are higher than 0.7 for their respective latent variable. We have deleted CEa item from the further analysis as the factor loading is lower than acceptable level and to ensure unidimensionality of the measurement model is maintained. The measurement model fit index for this research is presented in Table 8.

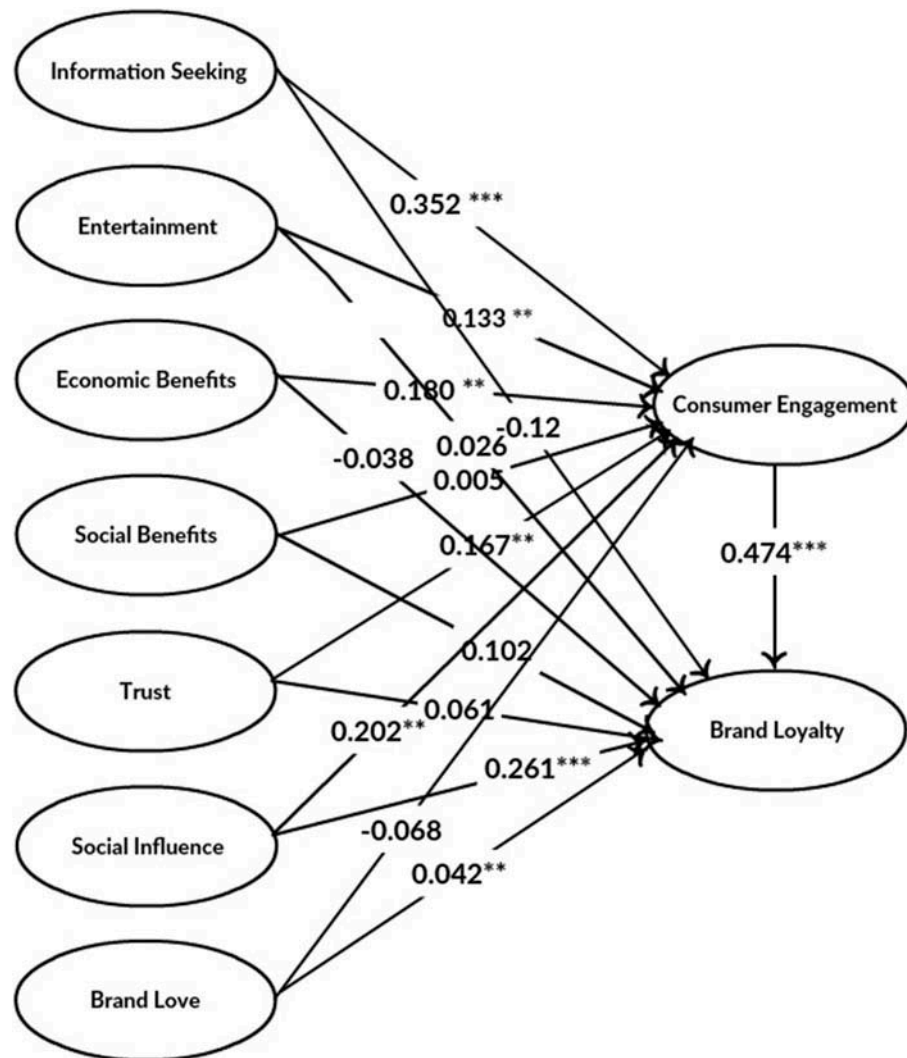
The last step of the analysis is to perform structural model evaluation and check the path for hypotheses testing. In the conceptual model, CE is proposed as the mediator for brand loyalty. So first the researcher tested the mediating role of CE using the evaluation process recommended by (Iacobucci, Saldanha, & Deng, 2007). The direct and indirect effects of structural model is presented in Figure 1. Based on Iacobucci et al.'s (2007) suggestions, we calculated the path coefficient of direct path which is exogenous variable directly affect brand loyalty and then we checked the path coefficient of indirect path which is through CE. The structural model estimated also showed a good fit ( $\chi^2/df = 2.174$ , RMSEA = 0.059, CFI = 0.928). The path coefficients for the direct effects are not significant for all the variable except brand love, whereas path coefficient of five variables show significant indirect effects through CE as they all are significant except brand love, hence there is some evidence of some mediation effect. Second stage is to confirm the mediating effect by calculating the z value and to test explicitly the strength of the indirect vs. direct paths (Iacobucci et al., 2007).

Regression estimation of the research is presented in Table 9. IS has a direct relationship with CE ( $\beta = 0.355$ ) were positive at  $p < 0.001$ , thus supporting H1. The results show that Entertainment has a direct relationship with CE ( $\beta = 0.133$ ) were positive at  $p < 0.048$ , thus supporting H2. EB were also found to have a direct impact on CE behavior ( $\beta = 0.194$ ) with  $p < 0.001$ , thus supporting H3.

**Table 8. Measurement model fit index**

Category	Name of Index	Index Value	Level of Acceptance
Absolute fit	Chi-Square	0.001	$P\text{-value} > 0.05$
	RMSEA	0.044	RMSEA $< 0.08$
	GFI	0.898	GFI $> 0.80$
Incremental fit	AGFI	0.868	AGFI $> 0.80$
	CFI	0.962	CFI $> 0.90$
	TLI	0.955	TLI $> 0.90$
	NFI	0.91	NFI $> 0.90$
Parsimonious fit	$\chi^2/df$	1.643	$\chi^2/df < 3.0$

**Figure 1. Structural model (with direct and indirect effects).**



However, the research found that there is no significant relationships between SB and brand love and CE ( $\beta = -0.005$  and  $\beta = -0.068$ , respectively), which therefore failed to support H4 and H7. The results also shows that trust and SI has direct effect on CE ( $\beta = 0.157$  and  $\beta = 0.184$ , respectively) were positive at  $p < 0.012$  and  $p < 0.004$ , thereby support H5 and H6. The path coefficient between CE and brandy loyalty indicates a significant relationship ( $\beta = 0.474$ ), thereby supporting H8.

This research investigated seven set of specific relationship of anticidents with CE. Specifically seven hypothesised paths, IS (H1), Entertainment (H2), EB (H3), SB (H4), Trust (H5), SI (H6) and Brand Love (H7) were suggested to be positively related to CE. Empirical results supported five of the hypothesis. The IS, entertainment, EB, trust and SI found to the key determinants for CE behavior in SNSs. However, the research shows that SB and brand love was not positively related to CE behavior.

The research finding supports this hypothesis that IS is the most important motivator for consumer to visit SNSs like Facebook brand pages. The consumer visit brand pages to search and receive brand relevant content in Facebook brand pages. This relationship between IS and customer engagement is consistent with previous studies where IS exhibits a significant relationship with engagement in SNSs like Facebook brand pages (Andre, 2015; Azar et al., 2016; Gao & Feng, 2016; Kujur & Singh,

**Table 9. Regression estimation**

Hypothesis	Path	$\beta$	$p$	Comment
H1	Information Seeking → Consumer Engagement	0.352	0.001	Accepted
H2	Entertainment → Consumer Engagement	0.133	0.046	Accepted
H3	Economic Benefits → Consumer Engagement	0.18	0.002	Accepted
H4	Social Benefits → Consumer Engagement	-0.005	0.926	Rejected
H5	Trust → Consumer Engagement	0.167	0.009	Accepted
H6	Social Influence → Consumer Engagement	0.202	0.003	Accepted
H7	Brand Love → Consumer Engagement	-0.068	0.302	Rejected
H8	Consumer Engagement → Brand Loyalty	0.474	0.001	Accepted

2016; Wang et al. 2015). The Facebook brand page followers who found the brand page entertaining exhibit higher engagement rate. This research finding is consistent with previous studies conducted by Cvijikj and Michahelles (2013), Andre (2015), Wang et al. (2015). Global Web Index (2017) research shows that 60% of the people use networking sites to get entertainment content. It is necessary for the brands to host entertainment content in form of videos to increase engagement. The exploratory study of 100 pages found that video content has higher shares and comments. This was also consistent with Cvijikj and Michahelles (2013) research which mentions that video content have higher number of comments and shares. Therefore, brands not only should focus on informative content they should also post entertainment content to increase engagement rates in their brand pages.

The research finding reveals that SI does affect CE and also brand loyalty. This result was supported by research findings of Wang and Sun (2016). Facebook is social platform where users are exposed to other people's influences as their interactions are visible to others. The individual who participate in Facebook brand pages would like to comply with the expectations of other users in the community and also their followers. This research is able to show that CE strongly increases the brand loyalty. This result was supported by research findings of Wirtz et al. (2013), Zheng et al. (2015), Poorrezaei (2016), the research which reveals that brand engagement leads to positive brand loyalty which usually in the form of consumer advocating the brand in SNSs. Most of the studies were focused on determinants of CE and very few studies was conducted related to consequences (Poorrezaei, 2016; Zheng et al., 2015) and this study able to fill this gap.

## 5. Conclusion, limitations and research contribution

The first part of analysis was conducted is related to engagement rate in 100 brand pages. 1,67,188 post in 100 brand pages was analyzed and it was found that there were around 72,48,35,205 interactions was made. The interactions were in the form of like, comment, share and in form of emoticons like love, ahaa, wow, angry, sad. It clearly shows that 81.24% of the posts were made using photo format and 7.1% of posts made as video format. Looking at the average interaction rate link format found to be highest with the average of 6,739 interactions. Music, Events and Offer formats was less used by the brands. Offer format found to exhibit higher average interactions rate. The results are consistent with (Cvijikj & Michahelles, 2013) research studies on Facebook brand pages. The average number of share for video post format is 274 and 97 for offers. Similarly average numbers of comments are recorded for video is 92 and only 58 for offer post formats. It's clear from this that Link, Video and Offer format exhibits the higher interaction rate. Results presented in previous section shows that highest engagement

rate was found related to brands from computer, Mobile beverages, banks, fashion and health/beauty related category. These findings are similar to results shown by Menezes (2013). According to Menezes (2013), tech industry and food and beverages found to have higher engagement rate.

This research explored various factors that influence the consumer brand engagement behavior in Facebook brand pages and its consequences on brand loyalty. The research results show that all six variables have some effect on CE but SI is the main determinant for engagement behavior. SI and EB also found to stimulate the participation of consumers on SNSs. The results also show that there is a strong relationship between engagement and brand loyalty. One of the main theoretical contributions of this research is to apply extended UGT theory framework to new communication channel like SNSs and examining consumers' intention to use, interact and also recommending the channel to others who need to get linked with brand community. The tested new framework can be applied to other SNSs like Twitter and YouTube to identify the key motivators for consumers to engage in brand related communication. Yet very few academic research articles are available to assist companies in understanding their consumers' engagement behavior and the best practices for building loyal relationships with them. Most of the studies on brand pages focused on determinants of CE and very few studies investigated the consequences (Poorrezaei, 2016) and this study able to fill this gap. The current research contributes to the literature on increasing brand loyalty; the finding reveals that engaged consumer in the online brand community show higher levels of brand loyalty.

This research also contributes in adopting mixed research framework, which is relatively new methodology but quite often used for social media research. This mixed approach is good to get some clear understanding and explaining the new concept like consumer brand engagement. The research clearly shows that the CE rate in brand pages does not depend on brand or brand category it depends completely on how the Facebook page is managed. The motivation to search for information was also important to the consuming type of engagement. Consumers resort to the brand's Facebook page to get information about the products, not only provided by the brand but also provided by other users. The sharing of experiences and giving or receiving product reviews are valued activities by the consumers. Brands should therefore allow and encourage consumers to like, comment and give their opinions. Consumer promotion campaigns to be frequently posted in brand pages to increase engagement and increase the number of fans. The promotional campaign can be in the form of sales offer, discount, free gifts, competitions, games, etc. The research finding shows that entertainment is also important determinant for consumers to get engaged in SNSs. Brand pages should post various entertaining, visually stimulating, and enjoyable content, such as jokes, puzzles, games, humor videos and cartoons to appeal to SNS users. Another important determinant identified in our study is SI. This means that consumers seek to be part of a community and fit within a group. The brands should focus on strengthening the social relationships between users to leverage SI. Increasing the social media engagement behavior will directly improve the business by increasing the brand loyalty. These suggestions may help the brand managers to increase CE behavior in SNSs like Facebook brand pages in turn increases brand loyalty.

Brand loyalty is one of the main outcomes of online CE and is an important area to study, as loyalty is considered a crucial marketing issue (Reitz, 2012; Casaó et al., 2010). Limited studies are made related to theoretical understandings of brand loyalty in online brand communities (Zheng et al., 2015). This research is able to show that CE strongly increases the brand loyalty. This result was supported by research findings of Wirtz et al. (2013), Zheng et al. (2015), Poorrezaei (2016), the research which reveals that brand engagement leads to positive brand loyalty which usually in the form of consumer advocating the brand in SNSs. Most of the studies were focused on determinants of CE and very few studies was conducted related to consequences (Poorrezaei, 2016; Zheng et al., 2015), and this study able to fill this gap.

There are limitations in this research that leave room for further research. This research studied only the consumer related determinants and not brand related determinants. Further research could include brand-based antecedents for engagement behavior. The second limitation involves the use of self-report survey measures. Consumer brand engagements do also takes place in customer created communities but this research only covered firm initiated SNSs. Further researchers can cover other brand communities available in social media platform. This research only measured the level of CE but it has not classified based positive and negative engagement. Further research can include negative engagement as the key consequences and its effect on brand loyalty. This research did not try to study one brand or product category in particular. The aim was to study the motivations for engagement with brands in general, and to understand how engagement influences brand equity. Therefore, it would be interesting to understand the particular motivations for engagement with SNS pages in a specific industry or for a particular brand and then analyze how it influences brand equity. It would also be interesting to study if the motivations are the same ones for different product categories, from more utilitarian to more hedonic products.

This research proposes a theoretical model toward an understanding of consumer interactions with a Facebook brand page community; the research framework can be extended to other social networking brand communities in Instagram, Twitter, Pinterest, YouTube and many others. Very few studies are conducted related to disengagement with online social networking brand communities Dutot and Mosconi (2016). This happens due to some negative experience with the brand that may lead to closing or terminating the relationship Bowden et al. (2015). The future research is required to study disengagement behavior and its effect on online brand community members.

#### Funding

The author received no direct funding for this research.

#### Author details

Sudarsan Jayasingh<sup>1</sup>

E-mail: [sudarsanj@ssn.edu.in](mailto:sudarsanj@ssn.edu.in)

ORCID ID: <http://orcid.org/0000-0002-3754-1033>

<sup>1</sup> SSN School of Management, Rajiv Gandhi Salai, Kalavakkam, Tamil Nadu, 603110, India.

#### Citation information

Cite this article as: Consumer brand engagement in social networking sites and its effect on brand loyalty, Sudarsan Jayasingh, *Cogent Business & Management* (2019), 6: 1698793.

#### References

- Al-Ghaith, W. (2016). Applying and extending the technology acceptance model to understand social networking sites usage: Toward proposing a comprehensive model. In *Proceedings of the 3rd Multidisciplinary International Social Networks Conference on Social Informatics 2016, Data Science 2016* (Vol. 20., pp. 1–20). New York: ACM. doi:10.1145/2955129.2955149
- Alversia, Y., Michaelidou, N., & Moraes, C. (2016). Online consumer engagement behaviour: The consumer-based antecedents. In C. Campbell & J. J. Ma, (Eds.), *Looking Forward, Looking Back: Drawing on the Past to Shape the Future of Marketing: Proceedings of the 2013 World Marketing Congress* (pp. 849–852). Cham: Springer International Publishing. doi:10.1007/978-3-319-24184-5\_206
- Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, 103(3), 411–423.
- Andre, C. R. (2015). *Consumer engagement with a brand on Facebook* (Master's thesis). Catholic University of Portugal, Portugal. Retrieved from [https://repositorio.ucp.pt/bitstream/10400.14/19303/1/TFM\\_Ana%20Raquel%20Andr%C3%A9.pdf](https://repositorio.ucp.pt/bitstream/10400.14/19303/1/TFM_Ana%20Raquel%20Andr%C3%A9.pdf)
- Asghar, H. M. (2015). Measuring information seeking through Facebook: Scale development and initial evidence of information seeking in Facebook scale (isfs). *Computers in Human Behavior*, 52, 259–270. doi:10.1016/j.chb.2015.06.005
- Azar, L. S., Machado, C. J., Vacas-de Carvalho, L., & Mendes, A. (2016). Motivations to interact with brands on Facebook-towards a typology of consumer brand interactions. *Journal of Brand Management*, 23(2), 153–178. doi:10.1057/bm.2016.3
- Barger, V., Peltier, J. W., & Schultz, D. E. (2016). Social media and consumer engagement: A review and research agenda. *Journal of Research in Interactive Marketing*, 10(4), 268–287. doi:10.1108/JRIM-06-2016-0065
- Blunch, N. (2013). *Introduction to structural equation modeling using IBM SPSS statistics and Amos*. London: Sage Publications.
- Bolton, R. N., Parasuraman, A., Hoefnagels, A., Migchels, N., Kabadayi, S., Gruber, T., ... Solnet, D. (2013). Understanding generation y and their use of social media: A review and research agenda. *Journal of Service Management*, 24(3), 245–267. doi:10.1108/09564231311326987
- Bowden, J. L. H., Gabbott, M., & Naumann, K. (2015). Service relationships and the customer disengagement- engagement conundrum. *Journal of Marketing Management*, 31(7-8), 774–806. doi: 10.1080/0267257X.2014.983143
- Boyd, D. M., & Ellison, N. B. (2007). Consumer engagement in a virtual brand community: An exploratory analysis. *Journal of Computer Mediated Communication*, 13, 210–230. doi:10.1111/j.1083-6101.2007.00393.x
- Brodie, J. R., Hollebeek, L., Juric, B., & Llic, A. (2011). Customer engagement: Conceptual domain, fundamental propositions, and implications for research. *Journal of Service Research*, 14(3), 252–271. doi:10.1177/1094670511411703
- Brodie, R. J., Ilic, A., Juric, B., & Hollebeek, L. (2013). Consumer engagement in a virtual brand community: An exploratory analysis. *Journal of Business*



- Research, 66(1), 105–114. doi: [10.1016/j.jbusres.2011.07.029](https://doi.org/10.1016/j.jbusres.2011.07.029)
- Brogi, S. (2014). Online brand communities: A literature review. *Procedia - Social and Behavioral Sciences*, 109, 385–389. doi:[10.1016/j.sbspro.2013.12.477](https://doi.org/10.1016/j.sbspro.2013.12.477)
- Byrne, B. M. (2013). *Structural equation modeling with AMOS: Basic concepts, applications, and programming*. New York: Routledge.
- Carroll, B. A., & Ahuvia, A. C. (2006). Some antecedents and outcomes of brand love. *Marketing Letters*, 17(2), 79–89. doi:[10.1007/s11002-006-4219-2](https://doi.org/10.1007/s11002-006-4219-2)
- Casaó, L. V., Flavián, C., & Guinali, M. (2010). Antecedents and consequences of consumer participation in on-line communities: The case of the travel sector. *International Journal of Electronic Commerce*, 15(2), 137–167. doi:[10.2753/JEC1086-4415150205](https://doi.org/10.2753/JEC1086-4415150205)
- Chen, G., Yang, S., & Tang, S. (2013). Sense of virtual community and knowledge contribution in a p3 virtual community: Motivation and experience. *Internet Research*, 23(1), 4–26. doi:[10.1108/10662241311295755](https://doi.org/10.1108/10662241311295755)
- Chung, N., Han, H., & Koo, C. (2015). Adoption of travel information in user generated content on social media: The moderating effect of social presence. *Behaviour and Information Technology*, 34(9), 902–919. doi:[10.1080/0144929X.2015.1039060](https://doi.org/10.1080/0144929X.2015.1039060)
- Cohen, D. (2016). Facebook: More than 4 million active advertisers; 60 million-plus businesses using pages. Retrieved from <http://www.adweek.com/digital/facebook-more-than-4-million-active-advertisers-60-million-plus-businesses-using-pages/>
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches*. Los Angeles: Sage Publishing.
- Cvijikj, I. P., & Michahelles, F. (2013). Online engagement factors on Facebook brand pages. *Social Network Analysis and Mining*, 3(4), 843–861. doi:[10.1007/s13278-013-0098-8](https://doi.org/10.1007/s13278-013-0098-8)
- Dessart, L., Veloutsou, C., & Morgan-Thomas, A. (2015). Consumer engagement in online brand communities: A social media perspective. *Journal of Product and Brand Management*, 24, 28–42. doi:[10.1108/JPBm-06-2014-0635](https://doi.org/10.1108/JPBm-06-2014-0635)
- Dholakia, M. U., Bagozzi, P. R., & Pearo, K. L. (2004). A social influence model of consumer participation in network and small group based virtual communities. *International Journal of Research in Marketing*, 21(3), 241–263. doi: [10.1016/j.jresmar.2003.12.004](https://doi.org/10.1016/j.jresmar.2003.12.004)
- Dutot, V., & Mosconi, E. (2016). Understanding factors of disengagement within a virtual community: An exploratory study. *Journal of Decision Systems*, 25(3), 227–243. doi: [10.1080/12460125.2016.1187547](https://doi.org/10.1080/12460125.2016.1187547)
- Fernandes, T., & Remelhe, P. (2016). How to engage customers in co-creation: Customers' motivations for collaborative innovation. *Journal of Strategic Marketing*, 24 (3–4), 311–326. doi:[10.1080/0965254X.2015.1095220](https://doi.org/10.1080/0965254X.2015.1095220)
- Fetscherin, M., & Heinrich, D. (2014). Consumer brand relationships: A research landscape. *Journal of Brand Management*, 21(5), 366–371. doi:[10.1057/bm.2014.22](https://doi.org/10.1057/bm.2014.22)
- France, C., Merrilees, B., & Miller, D. (2016). An integrated model of customer-brand engagement: Drivers and consequences. *Journal of Brand Management*, 23(2), 119–136. doi:[10.1057/bm.2016.4](https://doi.org/10.1057/bm.2016.4)
- Gao, Q., & Feng, C. (2016). Branding with social media: User gratifications, usage patterns, and brand message content strategies. *Computers in Human Behavior*, 63, 868–890. doi:[10.1016/j.chb.2016.06.022](https://doi.org/10.1016/j.chb.2016.06.022)
- Gironda, J. T., & Korgaonkar, P. K. (2014). Understanding consumers' social networking site usage. *Journal of Marketing Management*, 30(5–6), 571–605. doi:[10.1080/0267257X.2013.851106](https://doi.org/10.1080/0267257X.2013.851106)
- Global Web Index. (2017). *Trends to watch in 2017*. Retrieved from <http://insight.globalwebindex.net/trends-17>
- Gummerus, J., Liljander, V., Weman, E., & Pihlström, M. (2012). Customer engagement in a facebook brand community. *Management Research Review*, 35(9), 857–877. doi: [10.1108/01409171211256578](https://doi.org/10.1108/01409171211256578)
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2014). *Multivariate data analysis*. New York: Pearson.
- Heinonen, K. (2011). Consumer activity in social media: Managerial approaches to consumers' social media behavior. *Journal of Consumer Behaviour*, 10(6), 356–364. doi:[10.1002/cb.376](https://doi.org/10.1002/cb.376)
- Hollebeek, D. L. (2011). Demystifying customer brand engagement: Exploring the loyalty nexus. *Journal of Marketing Management*, 27(7–8), 785–807. doi: [10.1080/0267257X.2010.500132](https://doi.org/10.1080/0267257X.2010.500132)
- Hsu, M. H., Chang, C. M., Lin, H. C., & Lin, Y. W. (2015). Determinants of continued use of social media: The perspectives of uses and gratifications theory and perceived interactivity. *Information Research*, 20(2), 65–74. Retrieved from <http://InformationR.net/ir/20-2/paper671.html>
- Iacobucci, D., Saldanha, N., & Deng, X. (2007). A meditation on mediation: Evidence that structural equations models perform better than regressions. *Journal of Consumer Psychology*, 17(2), 139–153. doi:[10.1016/S1057-7408\(07\)70020-7](https://doi.org/10.1016/S1057-7408(07)70020-7)
- Jahn, B., & Kunz, H. W. (2012). How to transform consumers into fans of your brand. *Journal of Service Management*, 23(3), 344–361. doi:[10.1108/09564231211248444](https://doi.org/10.1108/09564231211248444)
- Jang, H., Olfman, L., Ko, I. S., Koh, J., & Kim, K. (2008). The influence of on-line brand community characteristics on community commitment and brand loyalty. *International Journal of Electronic Commerce*, 12(3), 57–80. doi: [10.2753/JEC1086-4415120304](https://doi.org/10.2753/JEC1086-4415120304)
- Jayasingh, S., & Venkatesh, R. (2016). Determinants of customer brand engagement in social media sites: A conceptual framework. *International Business Management*, 10(15), 2802–2807. doi:[10.36478/ibm.2016.2802.2807](https://doi.org/10.36478/ibm.2016.2802.2807)
- Kaplan, M. A., & Haenlein, M. (2010). Users of the world, unite! the challenges and opportunities of social media. *Business Horizons*, 53(1), 59–68. doi:[10.1016/j.bushor.2009.09.003](https://doi.org/10.1016/j.bushor.2009.09.003)
- Khang, H., Han, E. K., & Ki, E. J. (2014). Exploring influential social cognitive determinants of social media use. *Computers in Human Behavior*, 36(1), 48–55. doi:[10.1016/j.chb.2014.03.038](https://doi.org/10.1016/j.chb.2014.03.038)
- Kleine-Kalmer, B. (2016). *Brand page attachment: An empirical study on facebook users*. Germany: Springer Gabler. doi:[10.1007/978-3-658-12439-7](https://doi.org/10.1007/978-3-658-12439-7)
- Kujur, F., & Singh, S. (2016). Engaging customers through online participation in social networking sites. *Asia Pacific Management Review*, 22(1), 16–24. doi:[10.1016/j.apmr.2016.10.006](https://doi.org/10.1016/j.apmr.2016.10.006)
- Lee, Y. S., & Lee, J. (2014). Do brands talk differently?: An examination of product category involvement of elaboration likelihood model in Facebook. *The Journal of Advertising and Promotion Research*, 3(2), 45–84. doi:[10.14377/japr.2014.9.30.45](https://doi.org/10.14377/japr.2014.9.30.45)
- Leung, X. Y. (2012). *The marketing effectiveness of hotel Facebook pages: From perspectives of customers and messages* (PhD thesis). University of Nevada, Las Vegas. Retrieved from <https://digitalscholarship.unlv.edu/cgi/viewcontent.cgi?referer=https://www.google.co.in/&httpsredir=1&article=2681&context=thesesdissertations>



- Li, R., & Suh, A. (2015). Factors influencing information credibility on social media platforms: Evidence from Facebook pages. *Procedia Computer Science*, 72, 314–328. doi:10.1016/j.procs.2015.12.146
- Lin, K., & Lu, H. (2011). Why people use social networking sites: An empirical study integrating networks externalities and motivation theory. *Computers in Human Behavior*, 27(3), 1152–1161. doi:10.1016/j.chb.2010.12.009
- Lu, H. P., & Hsiao, K. L. (2010). The influence of extro/introversion on the intention to pay for social networking sites. *Information and Management*, 47, 150–157. doi:10.1016/j.im.2010.01.003
- Mangold, W. G., & Faulds, D. J. (2009). Social media: The new hybrid element of the promotion mix. *Business Horizons*, 52(4), 357–365. doi:10.1016/j.bushor.2009.03.002
- Martínez-López, F. J., Anaya-Sánchez, R., Aguilar-Illescas, R., & Molinillo, S. (2016). *Types of virtual communities and virtual brand communities*. Cham: Springer International Publishing. doi:10.1007/978-3-319-24826-4\_8
- Menezes, C. R. (2013). *Advantages of strong brands on customer reach and customer engagement on social media marketing* (Master's thesis). Rotterdam School of Management, Erasmus University, Netherlands.
- Muntinga, D. G., Moorman, M., & Smith, E. G. (2011). Introducing cobras: Exploring motivations for brand-related social media use. *International Journal of Advertising*, 30(1), 13–46. doi:10.2501/IJA-30-1-013-046
- Ngai, E. W., Tao, S. S., & Moon, K. K. (2015). Social media research: Theories, constructs, and conceptual frameworks. *International Journal of Information Management*, 35(1), 33–44. doi:10.1016/j.ijinfomgt.2014.09.004
- Nunnally, J. C., & Bernstein, H. I. (1995). *Psychometric theory*. New York, NY: McGraw-Hill.
- Orchard, L. J., Fullwood, C., Galbraith, N., & Morris, N. (2014). Individual differences as predictors of social networking. *Journal of Computer Mediated Communication*, 19(3), 388–402. doi:10.1111/jcc4.12068
- Poorrezaei, M. (2016). *Customer engagement: Conceptualisation, Measurement and validation* (PhD thesis). Salford Business School, Salford. Retrieved from <http://usir.salford.ac.uk/39377/>
- Reitz, A. R. (2012). *Online consumer engagement: Understanding the antecedents and outcomes* (PhD thesis). Colorado State University, Colorado. Retrieved from <https://mountainscholar.org/handle/10217/68197>
- Schivinski, B., Christodoulides, G., & Dabrowski, D. (2016). Measuring consumers' engagement with brand-related social-media content. *Journal of Advertising Research*, 56, 64–80. doi:10.2501/JAR-2016-004
- Senthil, K. S., Ramachandran, T., & Panboli, S. (2015). Product recommendations over Facebook: The roles of influencing factors to induce online shopping. *Asian Social Science*, 11(2), 202–218. doi:10.5539/ass.v11n2p202
- Simply Measured. (2013). *Facebook metrics defined: Engagement rate*. Retrieved from <http://simplymeasured.com/blog/facebook-metrics-defined-engagement-rate>
- Social Bakers. (2013). *Engagement rate: A metric you can count on*. Retrieved from <https://www.socialbakers.com/blog/1427-engagement-rate-a-metric-you-can-count-on>
- Statista. (2017). *Leading social networks worldwide in 2017*. Retrieved from <https://www.statista.com/statistics/272014/global-social-networks-ranked-by-number-ofusers/>
- Straub, D. (1989). Validating instruments in MIS research. *MIS Quarterly*, 13(2), 147–169. doi: 10.2307/248922
- Tsai, S. W., & Men Rita, L. (2017). Consumer engagement with brands on social network sites: A cross-cultural comparison of China and the USA. *Journal of Marketing Communications*, 23(1), 2–21. doi: 10.1080/13527266.2014.942678
- Unmetric. (2016). *Engagement score revised*. Retrieved from <https://unmetric.com/engagement>
- van Doorn, J., Lemon, K. N., Mittal, V., Nass, S., Pick, D., Pirner, P., & Verhoef, P. C. (2010). Customer engagement behavior: Exploring customer relationships beyond purchase. *Journal of Service Research*, 13(3), 253–266. doi:10.1177/1094670510375599
- Vivek, S., Beatty, S. E., & Morgan, R. M. (2012). Customer engagement: Exploring customer relationships beyond purchase. *Journal of Marketing Theory and Practice*, 20(2), 127–145. doi:10.2753/MTP1069-6679200201
- Vizard, S. (2016, June 8). Consumer trust in brands on social media falls as line between marketing and non-commercial blurs. *Marketing Week*. Retrieved from <https://www.marketingweek.com/2016/06/08/consumer-trust-in-brands-on-social-media-falls-as-line-between-marketing-and-non-commercial-blurs/>
- Wang, N., & Sun, Y. (2016). Social influence or personal preference? Examining the determinants of usage intention across social media with different sociability. *Information Development*, 32(5), 1442–1456. doi:10.1177/0266666915603224
- Wang, W., Segev, S., & Liu, Y. (2015). Use of social networking sites for product communication: A comparative study of hispanics and non-hispanic whites. *Computers in Human Behavior*, 49, 86–93.
- We Are Social. (2017). *Digital in 2017: Global overview*. Retrieved from <http://wearesocial.com/uk/blog/2017/01/digital-in-2017-global-overview>
- Weman, E. (2011). *Consumer motivations to join a brand community on Facebook* (Master's thesis). Hanken School of Economics, Helsinki. Retrieved from <https://helda.helsinki.fi/bitstream/handle/10227/798/weman.pdf?sequence>
- Whiting, A., & Williams, D. (2013). Why people use social media: A uses and gratifications approach. *Qualitative Market Research: An International Journal*, 16(4), 362–369. doi:10.1108/QMR-06-2013-0041
- Wirtz, J., den Ambtman, A., Bloemer, J., Horváth, C., Ramaseshan, B., van de Klundert, J., ... Kandampully, J. (2013). Managing brands and customer engagement in online brand communities. *Journal of Service Management*, 24(3), 223–244. doi:10.1108/09564231311326978
- Woisetschlager, D. M., Hartleb, V., & Blut, M. (2008). How to make brand communities work: Antecedents and consequences of consumer participation. *Journal of Relationship Marketing*, 7(3), 237–256. doi:10.1080/15332660802409605
- Zhang, J., & Mao, E. (2016). From online motivations to ad clicks and to behavioral intentions: An empirical study of consumer response to social media advertising. *Psychology and Marketing*, 33(3), 155–164. doi:10.1002/mar.20862
- Zheng, X., Cheung, C. M. K., Lee, M. K., & Liang, L. (2015). Building brand loyalty through user engagement in online brand communities in social networking sites. *Information Technology and People*, 28(1), 90–106. doi:10.1108/ITP-08-2013-0144
- Zhou, T., Lu, Y., & Wang, B. (2016). Examining online consumers' initial trust building from an elaboration likelihood model perspective. *Information Systems Frontiers*, 18(2), 265–275. doi:10.1007/s10796-014-9530-5



© 2019 The Author(s). This open access article is distributed under a Creative Commons Attribution (CC-BY) 4.0 license.



You are free to:

Share — copy and redistribute the material in any medium or format.

Adapt — remix, transform, and build upon the material for any purpose, even commercially.

The licensor cannot revoke these freedoms as long as you follow the license terms.

Under the following terms:

Attribution — You must give appropriate credit, provide a link to the license, and indicate if changes were made.

You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use.

No additional restrictions

You may not apply legal terms or technological measures that legally restrict others from doing anything the license permits.

***Cogent Business & Management* (ISSN: 2331-1975) is published by Cogent OA, part of Taylor & Francis Group.**

**Publishing with Cogent OA ensures:**

- Immediate, universal access to your article on publication
- High visibility and discoverability via the Cogent OA website as well as Taylor & Francis Online
- Download and citation statistics for your article
- Rapid online publication
- Input from, and dialog with, expert editors and editorial boards
- Retention of full copyright of your article
- Guaranteed legacy preservation of your article
- Discounts and waivers for authors in developing regions

**Submit your manuscript to a Cogent OA journal at [www.CogentOA.com](http://www.CogentOA.com)**

