The Brand Personality Effect: Communicating Brand Personality on Twitter and its Influence on Online Community Engagement*

Ruth Angelie B. Cruz
Department of Business Administration,
The Catholic University
(ruthabcruz@gmail.com)

Hong Joo Lee
Department of Business Administration,
The Catholic University
(hongjoo@catholic.ac.kr)

···

The use of new technology greatly shapes the marketing strategies used by companies to engage their consumers. Among these new technologies, social media is used to reach out to the organization's audience online. One of the most popular social media channels to date is the microblogging platform Twitter. With 500 million tweets sent on average daily, the microblogging platform is definitely a rich source of data for researchers, and a lucrative marketing medium for companies. Nonetheless, one of the challenges for companies in developing an effective Twitter campaign is the limited theoretical and empirical evidence on the proper organizational usage of Twitter despite its potential advantages for a firm's external communications. The current study aims to provide empirical evidence on how firms can utilize Twitter effectively in their marketing communications using the association between brand personality and brand engagement that several branding researchers propose.

The study extends Aaker's previous empirical work on brand personality by applying the Brand Personality Scale to explore whether Twitter brand communities convey distinctive brand personalities online and its influence on the communities' level or intensity of consumer engagement and sentiment quality. Moreover, the moderating effect of the product involvement construct in consumer engagement is also measured. By collecting data for a period of eight weeks using the publicly available Twitter application programming interface (API) from 23 accounts of Twitter-verified business-to-consumer (B2C) brands, we analyze the validity of the paper's hypothesis by using computerized content analysis and opinion mining.

The studyis the first to compare Twitter marketing across organizations using the brand personality concept. It demonstrates a potential basis for Twitter strategies and discusses the benefits of these strategies, thus providing a framework of analysis for Twitter practice and strategic direction for companies developing their use of Twitter to communicate with their followers on this social media platform.

This study has four specific research objectives. The first objective is to examine the applicability of brand personality dimensions used in marketing research to online brand communities on Twitter. The second is to establish a connection between the congruence of offline and online brand personalities in building a successful social media brand community. Third, we test the moderating effect of product involvement in the effect of brand personality on brand community engagement. Lastly, we investigate the sentiment quality of consumer messages to the firms that succeed in communicating their brands' personalities on Twitter.

··

---

1. Introduction

One in four Internet users is using social networks in 2013 according to the report published by eMarketer.com. The number of social network users is estimated to rise by 18% from 1.47 billion in 2012 to 1.73 billion by 2013 and by the year 2017, global users will total 2.55 billion. Moreover, the report says that by 2014, the ranking of social network users will mostly reflect the regional shares of the global population. This inevitable growth shows how social network usage have moved from being an activity for advanced economies to being a common activity for citizens around the world (eMarketer.com, 2013).

This huge percentage of users for social networks has driven companies to utilize social media for their marketing and promotional activities (Bae, Son, and Song, 2013). Businesses have since encouraged people to log into social networking sites as they are providing necessary product-related and service-related information on their brand pages. Consequently, customers use social media to express their satisfaction or dissatisfaction about products and services. Thus, social media has provided firms with a new tool for customer engagement (Rishika et al., 2013). Businesses are increasingly investing building their brands through new marketing channels such as social shopping, review marketing, social customer support, and viral marketing. Consumer brands, electronics, and even automobiles, are focusing on their marketing budgets on engaging customers in Facebook and Twitter (Kumar et al., 2013).

On the other hand, there has been an increasing doubt on the efficacy of social media because the direct link of social media investments to profits has not been established. Despite the vast amount of individual and relationship data available in social media, firms have been unable to directly measure the effectiveness of social media strategies using substantial metrics. The absence of industry-recognized methodologies to measure the impact of social media efforts in monetary terms pushes companies to use substandard marketing strategies (Kumar et al., 2013). Nonetheless, a recent study by Rishika et al. (2013) suggests that customer involvement to a firm's social media efforts leads to an increase in the frequency of customer shopping visits. The researchers found that the effect of participation is significantly higher when there are greater levels of activity in the firm's social media site. The participation effect is also higher for customers who exhibit a strong patronage with the company, purchase premium products, and exhibit lower levels of buying focus and deal sensitivity. Another study using a social media campaign for an ice cream chain of retailers promoting on Twitter and Facebook shows percentage of sales attributable to both social networks (Kumar et al., 2013). Furthermore, the essential nature of social media as a platform for consumers to interact and influence each other has a more direct impact on brand communities which have higher response rates and customer engagement compared with traditional marketing methodologies (Trusov, Bucklin, and Pauwels, 2009).

Aside from the above mentioned concerns for social media marketing, another factor in social media is the type of media content being published online. Several studies have investigated which type of media (photos, videos and text) gets more customer interaction in social media networks. This research provides a different dimension on handling social media communications as it applies the concept of brand personality on online brand communities using content analysis methodologies to test whether well-accepted marketing theories are relevant to online marketing, specifically to the social media microblogging platform of Twitter. The subject of brand personality and the relationships that consumers form with brands draw the attention of managers (Birkner, 2011) and scholars (Aaker, 1997; Geuens et al., 2009; Grisaffe and Nguyen, 2011; Maehle et al., 2011) who share interest in understanding how and why consumers develop relationships with brands (Goldsmith and Goldsmith, 2012).

The specific research objectives of this study are as follows; first, to examine the applicability of brand personality dimensions used in marketing research to online brand communities on Twitter. Second, to establish a connection between the congruence of offline and online brand personalities in building a successful social media brand community. Third, we test the moderating effect of product involvement in the effect of brand personality on brand community engagement. Lastly, this study investigates the sentiment quality of consumer messages to the firms which succeed in communicating their brands' personalities on Twitter.

2. Literature Review

2.1 Brand Personality

Brand Personality is defined as the "set of human characteristics associated with a brand" (Aaker, 1997, p. 347). Practitioners use the concept of brand personality as a key way to distinguish a brand in a product category (Halliday, 1996), as a crucial driver of consumer preference and usage (Biel and Aaker, 1993), and as a common denominator to market brand across different cultures (Plummer, 1985). Plummer (1984) describes brand personality as an inanimate object associated with personality's lines which results from interactions of the consumer with it or through its marketing communication. Perceptions of brand personality are influenced by direct or indirect contact of the consumer with the brand. Associations can be transferred directly through the personality traits of the people related to the brand – such as the brand's user imagery or self-concept which we define as "the set of human characteristics associated with the typical user of the brand"; the firm's employees or CEO; and the brand's endorsers; including the demographic characteristics, like gender, age and class (Levy, 1959; McCracken, 1989). Indirect associations, on the other hand, can come from product-related attributes, product category associations, brand name, symbol or logo, advertising style, price, and distribution channel (Batra, Lehmann, and Singh, 1993). A well established brand personality influences consumer preference and patronage, and

develops stronger emotional ties (Biel, 1993), trust and attachment with the brand. In contrast with product attributes which are mainly functional, brand personality tends to have a symbolic function which is related to self-expression. In contextualizing this paper, brand personality will be defined as the set of human characteristics associated with a particular brand and how these are communicated through its official Twitter account.

Aaker (1997) used the "big five" or the five-factor model of human personality developed by Norman (1963) and McCrae and Costa (1990) to create the brand personality scale (BPS) which measures the extent to which a given brand possesses any of the five personality dimensions consisting of 42 related individual personality traits. The BPS consists of the following framework;

These five dimensions of brand personality has proven to be an adaptable measuring tool which can be adjusted according to the products' categories and has made it possible to discriminate different products or services (Aaker, Benet-Martinez, and Garolera, 2001; Achouri and Bouslama, 2010; Bauer, Mader, and Keller, 2000). Moreover, the brand personality scale has been applied by different researchers in their study of the effects of brand personality Diamantopoulos, Smith, and Grime, 2005; Siguaw, Mattila, and Austin, 1999). Within the same line of Aaker's works, the scale has been applied, tested and validated in other cultures Aaker et al., 2001; Achouri and Bouslama, 2010; Chun and Davies, 2001). Moreover, Ambroise et al. (2003) have modified variations of Aaker's BPS in different cultural contexts. These studies show that the brand personality scale by Aaker is a transposable,
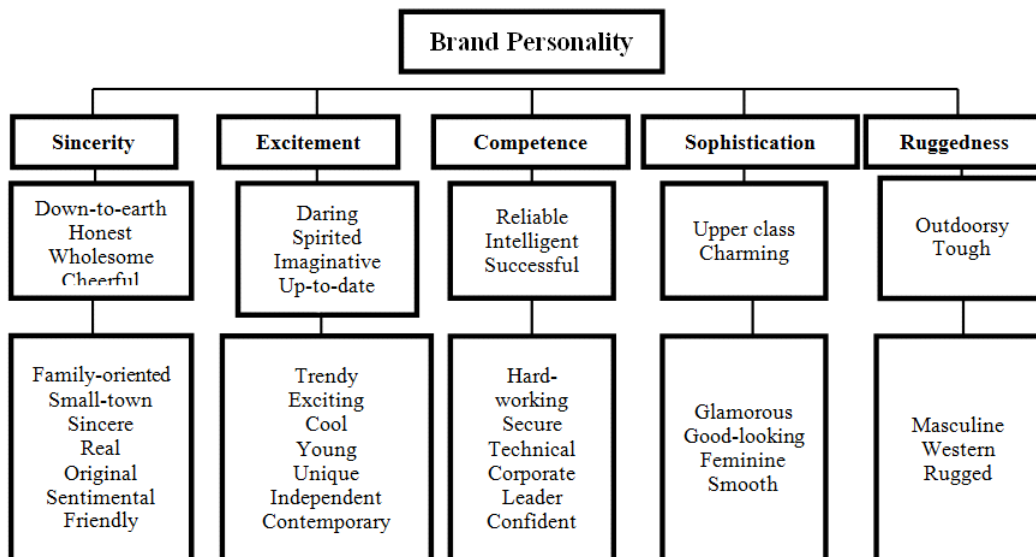
〈Figure 1〉 Brand Personality Scale and Related Constructs (J. Aaker, 1997)

adaptable and internationally applicable (Opoku et al., 2008). To avoid semantic errors regarding language used, this research uses data from global brand communities that uses English as its main language. Moreover, the customized dictionaries developed to process the text for content and sentiment analysis will only cover English words.

Goldsmith and Goldsmith (2012) expressed that the interaction between the brand's personality and the consumer's engagement with it results to brand identity, brand equity, long term relationships and brand advocacy. For this reason, managers need to create brand strategies that will reinforce their brand's personalities and image to the consumer. Although how consumers invest brands with human-like characteristics is understood (Maehle et al., 2011), empirical links between brand personality and consumer brand engagement remains to be limited.

2.2 High and low involvement products

Day (1970, p. 45) defined involvement as "the general level of interest in the object, or the centrality of the object to the person's ego-structure". While Zaichkowsky (1985) defined involvement in terms of advertisements which says that "a person's perceived relevance of the advertisement based on inherent needs, values, and interests". For the purpose of this study, product involvement will be defined in terms of product-meaning and consumer-product relationships which according to Antil (1984, p. 203) is "one of the most important variables in consumer research".

Bowen and Chaffee (1974, p. 613) defined product involvement as a unique relationship between consumer and product. Similarly, Bloch (1980, p. 413) built on Bowen and Chaffee's definition and described product involvement as a unique relationship between consumer and product which he continues as; "an unobservable state reflecting the amount of interest, arousal or emotional attachment evoked by the product in a particular individual". While Martin (1998, p. 9) referred to involvement as "the degree of psychological identification and affective, emotional ties the consumer has with a stimulus or stimuli – here, the stimuli being the product category or specific brand." Other related definitions equate involvement with importance suggesting that meaning, value, and the nature of relationships among consumers and product categories could be expressed in relation to involvement profiles (Howard and Sheth, 1969; Laurent and Kapferer, 1985). Subsequently, Evrard and Aurier (1996) found the concept of involvement to be at the heart (centrality) of the person-object relationship and that this relational variable is the most predictive of purchase behavior for consumers.

In a study done by Martin (1998), his survey generated an extensive list of 276 high- and 263 low-involvement product categories, as summarized in Table 1. With regards to high-involvement products, active information processing generally shapes existing tendencies which affects preferences and purchase intentions. These intentions subsequently precede behavior.

⟨Table 1⟩ Product Categories by Involvement Levels (Martin, 1998)

High Involvement Products	Low Involvement Products
Automobiles	Appliances
Bedding soft goods (e.g.,quilts, bed spreads, linens)	Books & Magazines
Cameras	Socks
Shoes & Boots	Food products & beverages
Coats	Furniture
Collections (e.g.,stamps, coins, etc.)	Health & beauty aids
Compact discs(CDs), albums and casette tapes)	Household cleaning supplies
Computers (hardware, software, computer games)	Kitchen items
Documents (e.g., passports & deeds)	Paper products
Eyeglasses and contact lenses	Pens and pencils
Jewelries	Plants & flowers
Letters & cards	Television sets & VCRs
Musical instruments	Tools
Photos, photo albums & portraits	
Stereo & stereo equipment	
Toys	
Watches	

This extended decision making is demonstrated in the more popular consumer behavior models applied in consumer research (Engel, Blackwell, and Miniard, 1986; Howard and Sheth, 1969). Conversely, for low involvement products, the consequences of the decision are perceived as irrelevant or made out of "force of habit," therefore, individuals passively exposed to information will frequently act prior to forming an attitude (Holmes and Crocker, 1987; Rothschild, 1979).

2.3 Brand Community

Brands with a strong image, rich history and fierce competition are likely to develop a community. By tradition, prominent brand communities only form around brands operating around niche markets and requiring major time or money investments from consumers, i.e. Mercedes, Harley Davidson, etc. (Sicilia and Palazon, 2008). However, recent trends and research (Cova and Pace, 2006; McWilliam, 2000) show that brand community management is also an option for products offering convenience such as soaps, tools, or softdrinks. Muniz and O'Guinn (2001) describe a brand community as a triad relationship among customer-customer-brand established either between brand-customers or customers-customers. While Cova and Pace (2006) defined brand community as any group of people that possess a shared interest on a specific brand and form a parallel social universe with its own myths, values,

rituals, vocabulary and hierarchy. Brand communities facilitate sharing of information, propagating the history and culture of the brand, and providing assistance to consumers (Laroche, Habibi, Richard, and Sankaranarayanan, 2012). Brand communities enhance consumer identification and foster the development of a strong corporate feeling with the brand (Hoppe, Matzler, and Terlutter, 2007; McAlexander, Schouten, and Koenig, 2002). Brand communities may differ in social context, size, temporality and geographic concentration (Bagozzi and Dholakia, 2006; McAlexander et al., 2002). Members may know each other or they may know nothing about one another.

Consumers have their own motivations for joining brand communities. Brands fulfill important psychological and social needs by expressing who an individual is through the group he aligns himself with (Elliott and Wattanasuwan, 1998). It is viewed that consumers join brand communities to identify themselves with brands to meet their social need of being identified as persons with appropriate self-identity is fulfilled. Consumers have their own ways for searching for symbols or signs in the communities which help them interpret who they want to be and how they really want to be seen by others (Laroche et al., 2012).

The development of Internet has also paved the way for the emergence of virtual communities or online brand communities. On the Internet, brand communities are no longer bound by geographic co-presence of its members because the interaction takes through a technological interface. Therefore, the internet goes beyond the geographical limitations that have restricted the building of brand communities offline (Sicilia and Palazon, 2008). In the recent years, more companies are realizing the benefits of online brand communities, which include the opportunity for effective communications with their customers and gaining valuable information. These communities not only deliver an additional communication channel but also provide a possibility of establishing relationships with devoted users (Anderson, 2005). McAlexander et al. (2002) show that by participating in brand festivals, companies are able to achieve the feelings of integration into the brand community of 'Jeep' and increase positive feelings about the brand.

The combination of both brand community and social media leads to a concept called social media based brand community (Laroche et al., 2012). The only difference of social media based brand communities to online communities is the specificity of the platform being used. However, this paper uses online community and social media community interchangeably to refer to the Twitter brand communities being studied. Similar with offline brand communities, people who participate in online communities are motivated to do so for different reasons (Bagozzi and Dholakia, 2006). Through the lenses of the uses and gratification theory, media help consumers in satisfying their social and psychological needs. Gratifications are given by the content provided by the medium and

the social and physical contexts with which each medium is typically associated with (Katz, Gurevitch, and Haas, 1973). Several researchers confirm that this theory is very useful in understanding why consumers participate in online communities (Dholakia, Bagozzi, and Pearo, 2004; Valck and Dambrin, 2007).

2.4 Consumer engagement and brand engagement

Vivek, Beatty, and Morgan (2012) define consumer engagement as the intensity of an individual's involvement and connection with the organization's promotions and activities initiated by either the customer or the organization. This paper uses brand engagement to refer to consumer engagement. Moreover, though some researchers try to differentiate the term 'involvement' with 'engagement', this paper treats those terms as one and the same.

Brodie, Ilic, Juric, and Hollebeek (2011) listed the consequences of consumer engagement based on other studies, these may include the concepts of trust (Hollebeek, 2011), satisfaction (Bowden, 2009), commitment, emotional connection/ attachment (Chan and Li, 2010), empowerment, consumer value (Gruen, Osmonbekov, and Czaplewski, 2006), and loyalty (Bowden, 2009). Of all these, the concepts of loyalty, commitment and empowerment (Cova and Pace, 2006) are prominent in online brand community contexts.

This paper supports Brodie et al. (2011) definition which states that "Consumer engagement is a multidimensional concept comprising cognitive, emotional, and/or behavioral dimensions, and plays a central role in the process of relational exchange where other relational concepts are engagement antecedents and/or consequences in iterative engagement processes within the brand community." Moreover, consumer engagement in an online brand community involves specific interactive experiences between consumers and the brand, and/or other members of the community.

Hennig-Thurau et al. (2004) report eight specific factors that persuade consumers to engage with/in online communities' (1) expressing negative feelings, (2) concern for other consumers, (3) self-enhancement, (4) advice-seeking, (5) social benefits, (6) economic benefits, (7) platform assistance, and (8) helping the company. Among these, social benefits influence consumers most strongly underscoring the interactive, two-way characteristic of the consumer engagement concept.

3. Hypothesis Development

Because in so many product categories brands are manufactured to have the same quality standards and provide comparable levels of functional benefits, managers must rely on their brand images to differentiate them from one another and to entice consumers to their specific brands (Goldsmith and Goldsmith, 2012). The congruence between brand personality and the consumer's self-concept influences the relationship that develops between the consumer and the brand.

Qualitative studies suggest that the personalities that marketers imbue into their brands do lead to emotional bonds with consumers because consumers aim to express themselves in brand choices and prefer products that match their self-concept－ the total set of beliefs and attitudes towards the self (Rosenberg, 1979)－ since purchases offer a means for self-expression of one's image or personality (Kim, Han, and Park, 2001; Maehle et al., 2011; Wee, 2004). To add to that, because brands have their own personalities, consumers could form preferences based on which product's image was more consistent with their own personality needs (Milewicz and Herbig, 1994).

An effective differentiation of a brand requires the brand's personality to be desirable, robust, distinctive, and constant (Lannon, 1993). Doyle (1990) added that successful brands create a strong brand personality by being able to encourage customers to perceive the attribute to which they aspire as being strongly associated with the brand. Wee (2004) expressed the importance of clearly defining brand personalities and then striving to achieve and maintain brand congruity in all aspects of the brand in order to achieve brand management success. He also mentioned that all elements of communication of the brand should be considered including its name, heritage, logo, symbols, consumer and corporate images, key benefits, price and distribution (Wee, 2004). Plummer (1984) presented two angles with which the brand personality could be seen; the first is on how a brand presents itself to the world－ through the product, its packaging, its name, distribution channels and its marketing communications. The second angle is how the world actually interprets the brand after it has gone through the filters of experiences, perceptions, misconceptions and the values and cultural systems of individuals processing it. With this argument, this paper aims to prove the importance of a consistent and congruent online and offline personality in order to effectively engage a brand's target market on the internet.

So why do consumers join online communities? Aside from the functions and benefits mentioned in the literature review of this paper, the theory of social identification gives an explanation on why people join brand communities. The theory of social identification refers to a person's sense of belongingness to a certain group or organization (Bhattacharya, Rao, and Glynn, 1995; Mael and Ashforth, 1992). Consequently, a consumer's identification with a certain brand makes that consumer differentiate the brand from the others and therefore will make the consumer consider the brand as their long term companion Kim, 1998; Kim et al., 2001). Therefore, people following a brand on Twitter shows their desire to belong to a reference group they identify with or to a group they aspire to belong in as part of their expression of their self-concept.

Subsequently, the theories of Social Exchange and Uses and Gratifications developed in social psychology explains the cost-benefit structure that underlies involvement with social

media brands. Because of the benefits and functions that the online brand community affords to its members, followers of the brand are more motivated to express themselves and engage with the brand on Twitter. As mentioned, these exchanges between the actors are not limited to material goods like money or resources, but they may also include symbolic values like respect or prestige (Cropanzano and Mitchell, 2005). As is the case with other mass media, people may be motivated to be participate in an online brand community in order to satisfy different needs (Katz et al., 1973). Moreover, the gratification of individual motives and needs in an online brand community will depend on the perceived value of being a part of the group (Dholakia et al., 2004; Mathwick, 2006). These values can be functional, social and entertainment (Sicilia and Palazon, 2008). In the Twitter brand community, the firm is able to build its brand equity through the interactions with its followers while followers get updates about the brands and communicate their queries. Building on these ideas then, it is hypothesized that:

H1a. The congruence between the offline and online brand personalities positively affects engagement – number of replies, retweets and favorites in the brand community.

H1b. The congruence between offline and online brand personalities positively affects the consumer's attitude toward the brand (sentiment quality of the replies and direct tweets).

H1c. Online brand personalities positively affects online brand engagement.

H1d. Online brand personalities positively affects online brand sentiment.

Since high-involvement products are socially visible, meaning these are products that other people are likely to see the consumers use or wear, then these products are considered of high sign value and therefore, reinforce the consumer's sense of self (Martin, 1998). Moreover, based upon the elaboration likelihood model of persuasion (ELM) (Petty and Cacioppo, 1986, p. 128), which says that "when conditions foster people's motivation and ability to engage in issue-relevant thinking, the elaboration-likelihood is said to be high." In relation to ELM, Bargh (2002) also explained the role of how consumer motivations can change the focus of attention and the evaluation of objects and events. These motivations are consumer needs or goals which could be intimacy goals, health-related goals or gratification or hedonistic goals. If the objects or events help to satisfy these goals, then they are positively evaluated and approached. While, if they interfere with pursuing these goals, then they are negatively evaluated and avoided. Therefore, people will engage with the high-involvement brands on Twitter that is congruent with their self-concept which will enable them to establish their statement of their own self-identity. Low-involvement products, on the other hand, still benefits from a brand personality because it helps them distinguish themselves from other brands which basically fulfill the same functional needs of

the consumer. However, the significance of brand personality for high and low involvement products and its benefits for the consumer seem to be of different values, it is then hypothesized that:

H2a. The congruence of offline and online brand personality will be positively significant for both high and low involvement products.

H2b. The effect of brand personality will be positively higher for high-involvement products than low-involvement products.

4. Research Methodology

Figure 2 illustrates the conceptual framework for the study. As explained earlier, the existence of brand personality and its congruence to the consumer's self-concept have been proven to be beneficial to brand engagement.

Moreover, in related literature, the concept of brand personality is usually tested through the use of respondents. In this study, the importance of having congruent online and offline brand personalities to engage the consumer is tested using a survey and actual data from firms. The brand personality dimensions are; sincerity, competence, excitement, sophistication and ruggedness.

Consequently, brand community engagement intensity is measured based on the number of replies, retweets and favorites – this is the quantitative part of the study. While brand community sentiment quality is classified into
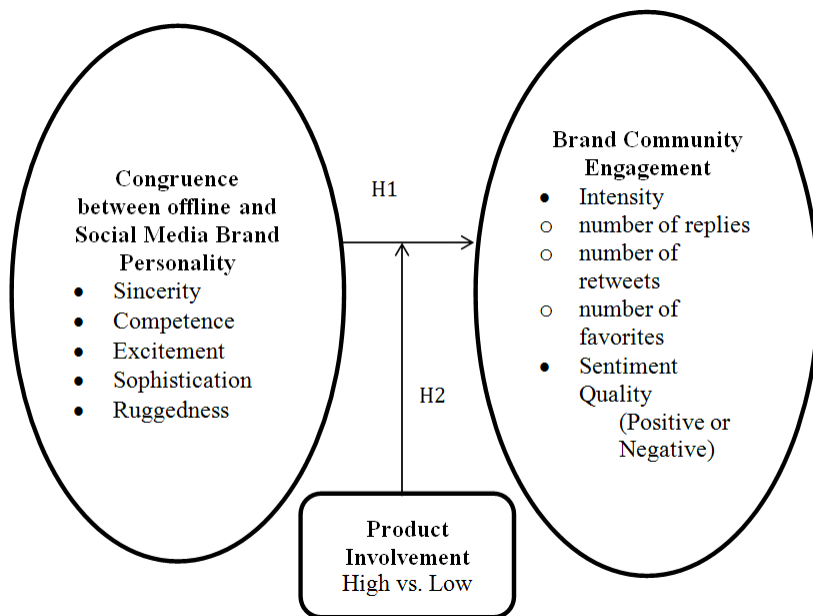
〈Figure 2〉 Conceptual Framework

positive and negative. Product involvement is the moderating variable based on the cognitive function required for each product category tested in the sample.

The brand communities to be included in this study were chosen using the following method; first, industries were chosen based on related literature to reflect high-involvement and low-involvement product categories. A total of six product industries were chosen with ten brands for each product involvement category. The distribution for each product category was unequal because brands with regular posts on their Twitter accounts and with at least 20,000 followers were preferred in order to ensure having adequate data for examination. Service companies were intentionally excluded in the sample. Moreover, the brand community accounts selected were firm-managed brand accounts used for marketing and information dissemination in contrast with brand accounts dedicated for customer service and inquiries.

The Twitter communities included in the study were verified official accounts managed and promoted by the represented firm. A total of 23 companies were chosen for this research. The selection of brands for the study is based on Interbrand's 2013 ranking of the world's top brand and Headstream's Social 100 listing for 2013. When the qualified choices on the Interbrand list were exhausted, brands listed on Headstream's Social 100 listing was used. Table 2 presents the final list of brands included in the study.

〈Table 2〉 List of Brands Selected for the Study

Industry	High Involvement Brands	Industry	Low Involvement Brands
Technology - Cameras	Nikon	Personal Care	L'Oreal
	Canon		Estee Lauder
	Sony		Oral B
Apparel	Dr. Martens		Gillette
	Nike		Dove
	H&M		Nivea
	Converse	Beverage	Coca-Cola
	Louis Vuitton		Pepsi
	Calvin Klein		Red Bull
Mobile Phones	Samsung	Fast Food	Subway
			Mcdonald's
	Nokia		Starbucks

The dataset used in this study was created by monitoring the public timeline of 23 Twitter brand communities for a period of eight weeks from August 16, 2013 to October 14, 2013 using the publicly-available Twitter API run on the Python. A set of recent updates where fetched once per week as the Twitter API only allows an extraction of seven days data from its website. The first set of data contains the tweets posted by the firms being monitored and the corresponding retweets and favorites. The second set of data contains the mentions and replies to the firms by consumers. There are a total of 19,462 tweets from 23 accounts in this collection and 1,257,151 tweets for mentions and replies to all firms considered in the sample. The data for mentions and replies were reduced by removing the retweeted messages from the companies because these has been quantified in the corresponding retweet information recorded for

the firm's tweets.

To identify the offline brand personalities of the sample, an online survey was done to 67 college and graduate students from 17 to 35 years old. Using the brand personality scale developed by Aaker, the respondents were asked to choose the word or words that describe the brands mentioned. The words used in the survey were the 42 personality traits derived by Aaker's research. To address respondent fatigue, the words were rearranged for each product category. English-speaking respondents were considered for the study because the language used for content analysis is English and Aaker's BPS also used English-speaking respondents from the United States although some studies have already applied and tested the robustness of the measure across cultures. Nonetheless, the brands used in the study were globally-recognized and well-reputed brands.

To summarize the results, each brand personality and its related words were counted as one mention if it was selected as an associated word by a respondent. To standardize the results, the final totals were divided by the total number of respondents.

Content analysis was used to analyze the firms' tweets and the tweets to the firms by their followers. Content analysis or text mining is a technique for gathering and evaluating text content (You et al., 2013). For this study, Wordstat, a word-use-analysis software was used to evaluate the textual data, count frequencies, classify the words into categories of the brand personality scale. For the categorization of the brand personalities exhibited by each firm's Twitter account, the researcher designed a comprehensive dictionary of terms by compiling synonyms of Aaker (1997)'s five brand personality dimensions using the online version of Encyclopedia Britannica's thesaurus function, Roget's Online Thesaurus and the dictionary builder of Wordstat. This paper utilized the 42 personality trait norms mentioned in the BPS and expanded the words using synonyms of all these traits, as well as the synonyms for the five fundamental dimensions. To increase the reliability of the instrument, one of the researchers, and 2 other graduate students, reviewed the word list and eliminated seemingly unrelated words. This procedure generated a final list of words that were relatively distributed across Aaker's five dimensions of brand personality (see Appendix).

Consequently, the word list was converted into electronic format according to each category of brand personality using the Wordstat software package to form the study's customized dictionary. With the help of Wordstat's exclusion function, another dictionary was developed to contain the stop words. To further develop this set of words, the Wordnet exclusion list was added. After a thorough pretesting of the customized categorization dictionary for this study, the collected tweets from the 25 brands was converted into an analyzable format and imported into Wordstat. A computerized content analysis was performed on the data in order to find out which brand personalities were exhibited in their Twitter accounts.

Next, brands were categorized into congruent and non-congruent whether their top offline and online brand personalities are the same. Then, statistical measures, with the aid of SPSS, were used to see the relationships between the congruent brands and the intensity of brand engagement, operationalized as the number of replies, retweets and comments. The same steps were used to non-congruent brands and then the results were compared. To validate the next hypothesis, sentiment analysis using the widely used Lexicoder Sentiment Dictionary (Young and Soroka, 2012) was utilized using Wordstat. Then, for the second set of hypotheses, the effect of product involvement was examined for the results of congruent and non-congruent brands.

For statistical measures, non-parametric tests were applied to the collected data to test relationships and differences across congruent and incongruent groups. Stepwise linear regression is also used to measure the effects of online brand personality characteristics to retweets, favorites, mentions and sentiment.

5. Results and Discussions

The following chapter is divided into parts. The first part contains the descriptive statistics of the data and the second until the last part contains the results and discussion, respectively for each of the dependent variables included in the study. A total of 1,276,613 Twitter posts or tweets were collected for the two-month sample period from the 23 firms (see Table 2).

Analyzing the firm tweets using the Wordstat Software, actual word counts and percent to total words for the usage of the brand

〈Table 3.1〉 Descriptive Statistics

	Minimum	Maximum	Mean	Std. Deviation
Valid Cases Firm Tweets	59	5861	846.17	1291.302
Total Tweets with Personalities	12	1501	335.26	393.547
Online - Competence - Count	1	377	79.35	100.443
Online - Excitement - Count	2	374	67.35	86.165
Online - Sincerity - Count	2	594	89.26	139.500
Online - Ruggedness - Count	0	58	18.30	16.438
Online - Sophistication - Count	1	264	51.83	68.429
Online - Comp - % to Total Words	0.00%	4.80%	.01	.012
Online - Exct - % to Total Words	0.10%	9.90%	.01	.020
Online - Sinc - % to Total Words	0.10%	9.80%	.01	.022
Online - Rugg - % to Total Words	0.00%	1.40%	.00	.003
Online - Soph - % to Total Words	0.00%	4.30%	.00	.011

〈Table 3.2〉 Descriptive Statistics

	Minimum	Maximum	Mean	Std. Deviation
Positive Sentiment % to Total Words	.0000	.3500	.031174	.0764161
Negative Sentiment % Total Words	.0000	.0760	.012391	.0217480
Retweets (RT)	67	58381	10826.87	17297.871
RT% to followers	0.18%	16.23%	2.8550%	3.78117%
Favorites (FV)	84	40684	5503.74	9020.957
FV% to Followers	0.11%	6.14%	1.3887%	1.58972%
Mentions	647	375258	51496.57	95001.075
Mentions % to Followers	0.01%	0.37%	0.0859%	.08602
No. of Followers (11/5/2013)	23743	5096131	991188.00	1490226.674

〈Table 3.3〉 Descriptive Statistics

	Minimum	Maximum	Mean	Std. Deviation
Offline - Competence	.07	.70	.4507	.16693
Offline - Excitement	.13	.77	.3928	.17348
Offline - Sincerity	.07	.80	.3261	.19174
Offline - Ruggedness	.00	.63	.2043	.19957
Offline - Sophistication	.00	.87	.2797	.22355

personality keywords as listed in our developed dictionary were collected and tabulated (see Tables 3.1 to 3.3). Valid cases firm tweets are the exact number of tweets for each brand from their Twitter accounts while Total tweets with personalities are the posts of brands which contain brand personality-related keywords.

Using the Lexicoder Sentiment Dictionary and Wordstat, the percentage to total words of Positive and Negative Sentiment of the @mentions per brand were also collected. Totals for retweets, favorites and @mentions were also collected per brand. While the retweets, favorites and mentions

were normalized by the firm's number of followers on their Twitter accounts.

As of November 5, 2013, Canon had the lowest number of followers at 23,743 while Starbucks had the most number of followers at 5,096,131. The number of tweets for each firm within the time of investigation ranged between 59 to 5,861 tweets. While replies containing @mentions for each firm range from 647 to 375, 258 tweets. The number of @mentions and replies included in the study were reduced by the number of retweets already recorded. Since all tweets containing the @twittername of the firm will be included in the

extraction of data using the API, the retweets by the followers of the firms posts will also be included in the raw data. Therefore, only the unique mentions and replies that were not counted in the retweets were considered. For our data, mentions and replies were labeled as @mentions.

The results for the offline brand personalities were computed and normalized according to the number of respondents. The results show that respondents mostly identified brands to exhibit competence, excitement and sincerity while ruggedness and sophistication is not a common personality to all brands in the sample.

After the results of the offline and online brand personalities were computed, the congruence between the two were compared and analyzed for each brand. Table 4.1 to 4.2 shows the congruence tables between brands for both high and low

involvement brands.

Table 4.1 shows that for high-involvement products, only three brands have congruent online and offline personalitie. Calvin Klein and Louis Vuitton both have sophistication as their top personality based on the content analysis of their tweets and the respondent results. While Nokia used competence-related keywords in their tweets and was also identified by respondents as a brand with a competent personality. Out of the 11 high-involvement brands in the sample, on three have congruent offline and online brand personalities. This classification between congruent and non-congruent brands is the grouping used in the non-parametric tests later on in this study. Moreover, the next table shows the congruence results for the low involvement brands identified in the sample.

〈Table 4.1〉 Congruence for Online and Offline Brand Personalities for High-involvement Brands

Brands	Online Brand Personalities					Offline Brand Personalities					Congruence
	Com	Exc	Sin	Rug	Sop	Com	Exc	Sin	Rug	Sop	1: Matched
Nikon	0.30	0.40	0.30	0.20	0.30	60	47	17	10	37	0
Canon	1.60	1.90	2.30	0.30	1.90	63	50	27	27	33	0
Sony	0.20	0.40	0.40	0.10	0.40	63	37	20	13	23	0
Dr. Martens	0.00	0.10	0.10	0.00	0.10	23	33	20	43	30	0
Nike	0.30	0.20	0.10	0.30	0.00	57	70	10	50	27	0
H&M USA	0.30	0.40	0.40	0.10	0.30	37	77	33	10	43	0
Converse	0.00	0.10	0.10	0.00	0.00	37	33	50	50	10	0
Calvin Klein	0.10	0.20	0.10	0.10	0.20	30	47	20	0	57	1
Louis Vuitton	0.00	0.10	0.10	0.00	0.20	33	20	7	0	87	1
Nokia	4.80	2.70	2.40	1.40	2.60	63	13	17	47	7	1
Samsung	3.50	9.90	9.80	0.70	3.40	70	63	30	17	40	0

(Com – Competence, Exc – Excitement, Sin – Sincerity, Rug – Ruggedness, Sop – Sophistication, Unit - %)

〈Table 4.2〉 Congruence for Online and Offline Brand Personalities for Low Involvement Brands

Brands	Online Brand Personalities					Offline Brand Personalities					Congruence
	Com	Exc	Sin	Rug	Sop	Com	Exc	Sin	Rug	Sop	1: Matched
L'oreal	2.00	1.80	0.90	0.60	1.60	40	33	47	3	37	0
Estee Lauder	0.30	0.40	0.60	0.20	0.80	23	33	30	3	50	1
Oral B	0.40	0.30	0.60	0.10	0.20	70	20	53	20	10	0
Gilette	0.20	0.10	0.10	0.00	0.20	50	13	17	63	13	0
Dove	2.40	2.10	5.70	0.70	4.30	47	43	60	7	27	1
Nivea	0.00	0.20	0.50	0.10	0.20	27	27	40	10	33	1
Coca-Cola	0.90	0.90	0.90	0.40	0.50	37	33	20	10	3	1
Red Bull LAX	0.60	0.40	0.50	0.30	0.40	7	57	17	53	3	0
Pepsi	1.00	1.80	0.80	0.20	0.70	47	50	30	17	0	1
Mcdonald's	2.40	1.60	3.70	1.00	1.20	53	27	40	7	3	0
Starbucks	0.50	0.50	1.00	0.10	0.10	53	53	67	0	63	1
Subway	1.20	1.70	2.10	0.20	0.80	47	23	80	10	7	1

(Com – Competence, Exc – Excitement, Sin – Sincerity, Rug – Ruggedness, Sop – Sophistication, Unit - %)

On the other hand, out of the 12 low-involvement brands identified in the sample, seven came out as having congruent online and offline brand personalities, namely, Estee Lauder, Dove, Nivea, Coca-cola, Pepsi, Starbucks and Subway. This means that the brands used the brand personality-related keywords that were correspondent to the brand personality words associated with them by the survey respondents.

After the congruence of offline and online brand personalities were identified and presented, the independent variable Congruence (marked as 0 = non-congruent, 1 = congruent) were compared to the dependent variables, RT% to Followers, FV% to followers, Mentions % to Followers, Positive Sentiment % to Total Words and Negative Sentiment % to Total Words using Non-parametric

Tests. The congruence tables show 10 congruent and 13 non-congruent brands. Using the non-parametric tests, we do not assume normal distribution. This is applicable in this research because of the limited number of firms in the sample.

At 0.05 significance level, Mann-Whitney U-test shows that there is a significant difference on the distribution of positive sentiment between congruent and incongruent brands with a p = .003. Congruent brands have a mean rank of 16.60 while incongruent brands have a mean rank of 8.46. This result is supported by related literature and proves hypothesis 1b of this study. Moreover, there is also a significant difference between the two groups on the distribution of negative sentiments with a p = .004. Congruent brands have

〈Table 5〉 Non-Parametric Tests on Dependent Variables and Congruence Variable

Non-Parametric Tests Summary – Hypothesis 1a and 1b
(Independent-Samples Mann-Whitney U-test)

		Null Hypothesis	Sig.	Decision
H1a	1	The distribution of Retweets is the same across categories.	.186	Accept the null hypothesis
	2	The distribution of Favorites is the same across categories.	.284	Accept the null hypothesis
	3	The distribution of Mentions is the same across categories.	.784	Accept the null hypothesis
H1b	4	The distribution of Positive Sentiment is the same across categories.	.003	Reject the null hypothesis
	5	The distribution of Negative Sentiment is the same across categories.	.004	Reject the null hypothesis

(Asymptotic significance are displayed. p < .05, Sig = Exact Significance is displayed for this test)

a mean rank of 16.45 as compared to the mean rank of incongruent brands which is 8.58. This result shows that congruent brands also receive more negative sentiments than incongruent brands. For both, positive and negative sentiments, congruent brands get more quality sentiments. This is not an undesirable thing because firms benefit from customer feedback in order to improve products and services. Moreover, this could also be the result of an active brand community whereas negative sentiments could give the company consumer feedback and response where companies can provide assistance to consumers as mentioned by Laroche et al. (2012). Further investigation regarding the subjects of positive and negative feedback could be done to give more explanation to the setiment quality results. Retweets, Favorites and Mentions are not affected by the congruence of the top online brands personalities and offline brand personalities. These could be affected by other factors like advertising campaigns, endorsers, events by the brand and other marketing announcements by the company.

Since firm tweets and mentions were collected online, this study also looked into the effects of the difference brand personalities' percentage to total words on the dependent variables – retweets, favorites, mentions and sentiment. Tests for multicollinearity were done for each regression model to make sure that no violations exist.

Using stepwise regression analysis to identify which brand personalities strongly affect intensity of engagement, results show that ruggedness increases retweets by 871.530 at a t-value of 3.945 with p = .001 at a .05 level of significance. While sincerity decreases retweets by -72.207 at a t-value of -2.100 with p = .049. These results show that firms that use ruggedness-related keywords in their tweets tend to receive more retweets than other keywords. For the number of favorites, competence-related keywords increases favorites by 119.975 at a t-value of 3.960 with p = .001 at .05 level of significance. In contrast, excitement-related keywords was found to decrease favorites by -50.406 at a t-value of -2.715 with p

〈Table 6〉 Regression Analysis for Hypothesis 1c

**Regression Results for Dependent Variables and
Online Brand Personalities － Hypothesis 1c**

a. Dependent Variable: Retweets % to Followers

	Model	B	t	p
1	Ruggedness	871.530	3.945*	.001
	Sincerity	-72.207	-2.100*	.049

Note: $R^2 =$ .439, Adj. $R^2 =$ .383, F=7.815, p < .05, *significant

b. Dependent Variable: Favorites % to Followers

	Model	B	t	p
1	Competence	119.975	3.960*	.001
	Excitement	-50.406	-2.715*	.013

Note: $R^2 =$ .440, Adj. $R^2 =$ .384, F=7.856, p < .05, *significant

c. No Significant Relationships for Mentions % by Followers

〈Table 6〉 Regression Analysis for Hypothesis 1d

**Regression Analysis for Dependent Variables and
Online Brand Personalities － Hypothesis 1D**

d. No significant relationships between Positive Sentiment and Brand Personalities

e. Dependent Variable: Negative Sentiment

	Model	B	t	p
1	Competence	.853	2.602*	.017

Note: $R^2 =$ .244, Adj. $R^2 =$ .208, F=6.771, p < .05, *significant

= .013. These show that competence-related keywords used by firms in their tweets receive more favorites compared to other words.

Meanwhile, the number of mentions that firms receive on their Twitter-brand communities shows no relationship to the brand-personality related keywords. This implies that there are other factors that could be affecting the number of mentions as mentioned by related literature. Based on our hypothesis 1c, there is a significant relationship between brand personalities and online brand engagement intensity for retweets and favorites.

On hypothesis 1d, regarding whether online brand personalities affect sentiment toward the brand, regression tests show that Competence-

related keywords increase negative sentiment by .853 at a t-value of 2.602 with a p-value of .017. Whereas, there is no significant relationship between the brand personality keywords and positive sentiment in the regression test. These results show that when firms use competence-related keywords in their tweets, there is a tendency to get negative reactions from their followers. Nonetheless, as mentioned above, negative sentiment is also a form of consumer feedback for companies and therefore is also useful for them in evaluating promotions, products and services. This also means they get meaningful feedback from their followers through the Twitter platform and moreover, this follows an active social media brand community.

Non-parametric tests are used to test the difference between high-involvement and low-involvement product groups for congruent and incongruent brands.

Testing the effects of congruence on low-involvement brands using non-parametric test, table 6 show a significant difference between mentions for congruent and incongruent brands. With p = .010 at .05 significance level, mentions to followers are different between the two groups. Looking into the results of the Mann-Whitney U-test, however, shows that the incongruent brands have a higher Mean Rank = 9.60 compared to the congruent brands' Mean Rank = 4.29. This result is opposite of hypothesis 2a for low-involvement brands and merits further investigation. Retweets, favorites and sentiment is the same across congruent and incongruent brands. Though the distribution of sentiment is same across the categories, the difference between the distribution of mentions of the brands for the congruent and incongruent brands deserves more investigation (see Table 7). Though related literature supports hypothesis 2a, there maybe a stronger underlying factors that affects interactions and engagement more than brand personalities.

〈Table 7〉 Non-Parametric Tests on Dependent Variables and Congruence Variable

Non-Parametric Tests Summary － Low-involvement
(Independent-Samples Mann-Whitney U-test) － Hypothesis 2a and 2b

	Null Hypothesis	Sig.	Decision
1	The distribution of Positive Sentiment is the same across categories.	.106	Accept the null hypothesis
2	The distribution of Negative Sentiment is the same across categories.	.073	Accept the null hypothesis
3	The distribution of Retweets is the same across categories.	.073	Accept the null hypothesis
4	The distribution of Favorites is the same across categories.	.073	Accept the null hypothesis
5	The distribution of Mentions is the same across categories.	.010	Reject the null hypothesis

Asymptotic significance are displayed. $p < .05$

Sig = Exact Significance is displayed for this test

<Table 8> Non-Parametric Tests on Dependent Variables and Congruence Variable

Non-Parametric Tests Summary – High Involvement
(Independent-Samples Mann-Whitney U-test) – Hypothesis 2a and 2b

	Null Hypothesis	Sig.	Decision
1	The distribution of Positive Sentiment is the same across categories.	.239	Accept the null hypothesis
2	The distribution of Negative Sentiment is the same across categories.	.109	Accept the null hypothesis
3	The distribution of Retweets is the same across categories.	.412	Accept the null hypothesis
4	The distribution of Favorites is the same across categories.	.648	Accept the null hypothesis
5	The distribution of Mentions is the same across categories.	.0527	Accept the null hypothesis

Asymptotic significance are displayed. $p < .05$
Sig = Exact Significance is displayed for this test

Results of the non-parametric tests for high-involvement brands show no significant difference between congruent and incongruent groups. This shows that congruence is not important for high-involvement brands. There might be stronger factors affecting engagement for these brands instead of brand personality dimensions. In general, product involvement is not a salient moderating variable in brand personality effects to Twitter engagement. Both low and high-involvement products play on level ground in terms of capturing audience attention to their posts on Twitter.

6. Conclusion

Although firms are still unsure on how to use their Twitter brand communities, results of this study give them a clue on what is working for their brands. The weakness of congruence as a factor in this study may be due to the fact that consumers already have a predetermined association of brand personalities to certain brands and therefore they readily project them on the brand communities online. Also, during the course of the study and a manual check on the tweets of firms and followers, several other factors were identified to affect engagement and sentiment. These other factors are worth looking on to for further research and investigation. Nonetheless, diving into the online brand personality categories, we see significant relationships between the ruggedness, sincerity, competence and excitement brand personalities and engagement – retweets and favorites. This shows that the brand personality-related keywords of ruggedness, sincerity, competence and excitement get the most attention and engagement. However, sincerity and excitement-related keywords have negative effects on the engagement variables. Based on related literature, this could mean that ruggedness and

competence is the personality that people would like to acquire for themselves and present to other people. Their engagement with this personality may help them show their self-concept as competent and outgoing individuals. However, the explanation why there is a negative effect for sincerity and excitement needs further investigation. Several other factors could be at play in this case and therefore it is hard to make a conclusion as to the main reasons for the negative relationship.

The main contribution of this research is that it opens an avenue for researchers to study twitter and to identify ways on how to categorize brand tweets based on content analysis and product involvement. Also the current research has compared content analysis data on quantified engagement measure on Twitter such as retweets, favorites and mentions. Overall, sentiment is the variable affected by congruence of offline and online brand personalities. The positive and negative sentiment is significant for firms because it enables them to get customer feedback and response from their followers. It is important for them to manage these sentiments well. Results also show that companies should choose the words they use to show competence in order to manage negative sentiments from followers.

In conclusion, firms should be able to have a proper strategy on Social Media, especially Twitter. Meaningful posts that mean something to the followers are important. By knowing what is suitable to post and how to engage followers in a media that is defined mostly by words is a tricky task. Twitter brands should take into consideration the different reasons why followers engage and join actively in brand communities and come up with the right measures for success.

The results are based on the Twitter practice of 23 accounts of brand communities labeled as a global account using English as its main language or with the lack of it, a corporate account for the United States, as of August 2013 to October 2013. As with any evolving medium, practices of the different organizations in the sample may have changed since that time. Moreover, the words used to develop the corpus for the dictionary used to classify the brand personalities are from the researcher's collection of synonyms and related words using Wordstat's Dictionary builder, Encyclopaedia Britannica's thesaurus function and Roget's Online Thesaurus. Any new words used and internet lingo that maybe used to express the personalities are not part of the dictionary because their categorization may need further research that is not covered by this study. Moreover, the misspellings of words or "textspeak" were not part of the processing of the data. Only those covered by Wordstat's spelling checker were assumed to have been corrected. Only English words were processed by the researcher's dictionary of brand personalities and Lexicoder Sentiment Dictionary.

The brand personality index by Aaker is only a starting point in trying to categorize firm tweets. Further research can include development of topic dictionaries and better sentiment dictionaries custom-made for Twitter in order to better understand tweets and Twitter engagement.

Content analysis on which words get more engagement is also an area for future investigation. Moreover, a bigger sample size can be used to better streamline results. It is also possible to identify other factors that could affect engagement to tweets like the use of endorsers or viral hashtags. A way to measure "tone" used by firms to talk to their followers can also be studied. Firms offering services as their main products may also comprise another set of investigation and a comparison between product and services firms in terms of their engagement on Twitter may be studied. Moreover, the combination of certain words in one message/tweet may also studied regarding their overall effect or result to engagement intensity and sentiment.

In terms of moderating variables, since this study has shown that product involvement does not matter in terms of getting attention from followers, other product classifications could be tested to find out if there are differences between different types of products or else, prove that all product types lie on a level ground in terms of Twitter and social media marketing.

The study of Twitter for organizations is still very young. There are a lot more areas and questions to answer in terms of engagement and sentiment on social media as more and more people use it. Moreover, the platform keeps on evolving and improving as additional functionalities and extensions to other networks are continually being added. And as rich as human personalities, social media – as extensions of people's personal spaces will always be evolving

and versatile. Though scholars have expressed that the interaction between the brand's personality and consumer engagement results to brand identity, brand equity, long term relationships and brand advocacy, empirical evidence as to how to operationalize these factors remains to be an ongoing trial-and-error feat for social media. Managers are still at a loss on which method is the most effective in trying to reach out to their consumers online on different social media networks.

This study applies a content-analysis method on investigating engagement intensity and sentiment on Twitter in contrast to media-type that is commonly applied by researchers today. Twitter, being a microblogging platform, uses words as its initial vehicle for reaching out to followers as compared to images and videos that are more emphasized in other social networks. Results of this research show that the choice of words in social media is as important as the media type being posted. The differences in the engagement in posts containing brand-personality related keywords expresses how different words can communicate different tones and evoke different types of reactions from the followers. Findings of this study can help community managers and social media teams to streamline their messages on Twitter and plan carefully how to phrase and send out their messages in order to get their desired results. Categorizing words into groups and testing their effect on engagement reflects the area of copywriting in marketing in advertising. However, today, in the advent of

engagement metrics in social media, it is now easier to test the effects of different words/copy to followers. Knowledge on the appropriate words to use and the right media type, as presented in other studies, provide marketers and social media community managers with a better grasp on developing an informed strategy in their social media plans for Twitter.

Reference

Aaker, D., *Managing Brand Equity*. New York: The Free Press, 1991.

Aaker, J., Dimensions of Brand Personality. *Journal of Marketing Research,* Vol.34, No.3 (1997), 347-356.

Aaker, J., V. Benet-Martinez, and J. Garolera, Consumption Symbols as Carriers of Culture: A Study of Japanese and Spanish Brand Personality Constructs. *Journal of Personality and Social Psychology,* Vol. 21, No. 3(2001), 249-264.

Achouri, M. A., and N. Bouslama, The Effect of the Congruence between Brand Personality and Self-Image on Consumer's Satisfaction and Loyalty: A Conceptual Framework. *IBIMA Business Review,* Vol. 2010(2010), Article ID 627203.

Ambroise, L., J. Ferrandi, A. Jolivot, P. Valette-Florence, and S. ZineDanguir, *Modelling and Measuring Brand Personality: A Cross-Cultural Application.* Paper presented at the Ninth Cross-Cultural Research Conference, Rose Hall, 2003.

Anderson, P. H., Relationship marketing and brand involvement of professionals through web-enhanced brand communities: The case of Coloplast. *Industrial Marketing Management,* Vol.34, No.3(2005), 285-297.

Antil, J. H. *Conceptualization and operationalization of involvement.* Paper presented at the Advances in Consumer Research, Provo, UT, 1984.

Bae, J., J. Son, and M. Song, Analysis of Twitter for 2012 South Korea Presidential Election by Text Mining Techniques. *Journal of Intelligent and Information Systems*, Vol.19, No.3(2013), 141-156.

Bagozzi, R. P., and U. M. Dholakia, Antecedents and purchase consequences of customer participation in small group brand communities. *International Journal of Research in Marketing Science,* Vol.23, No.1(2006), 45-61.

Bargh, J. A., Losing consciousness: Automatic infl uences on consumer judgment, behavior, and motivation. *Journal of Consumer Research,* Vol.*29,* No.2(2002), 280-285.

Batra, R., D. Lehmann, and D. Singh, The brand personality component of brand goodwill: Some antecedents and consequences. In D. Aaker and A. Biel (Eds.), *Brand equity and advertising* (pp. 83-96). Hillsdale, NJ: Lawrence Erlbaum Associates, Inc, 1993.

Bauer, H., R. Mader, and T. Keller, *An investigation on the brand personality scale assessment of validity and implications with regards to brand policy in European cultural domains.* Paper presented at the Multicultural Marketing Conference, Hong Kong, 2000.

Bhattacharya, C., H. Rao, and M. Glynn, Understanding the bond of identification: an

investigation of its correlates among art museum members. *Journal of Marketing, Vol.59, No.4(1995)*, 46-57.

Biel, A., and D. Aaker, *Brand Equity and Advertising: advertising's role in building strong brands.* Hillsdale, NJ: Lawrence Erlbaum Associates, 1993.

Birkner, C., Lifestyle Brands Make It PERSONAL. *Marketing News,* Vol.45, No.2(2011), 22.

Bloch, P. H., An exploration into the scaling of consumers' involvement with a product class. In K. B. Monroe (Ed.), *Advances in Consumer Research*, Vol.8(1981), 61-65.

Bowden, J., The process of customer engagement: a conceptual framework. *Journal of Marketing Theory and Practice,* Vol.17, No.1(2009), 63-74.

Bowen, L., and S. Chaffee, Product involvement and pertinent advertising appeal. *Journalism Quarterly*, Vol. 21, No.51(1974), 613-621.

Brodie, R. J., A. Ilic, B. Juric, and L. Hollebeek, Consumer engagement in a virtual brand community: An exploratory analysis. *Journal of Business Research*, Vol.66, No.1(2011), 105-114.

Chan, K. W., and S. Y. Li, Understanding consumer-to-consumer interactions in virtual communities: the salience of reciprocity. *Journal of Business Research, Vol.63, No.1(2010)*, 1033-1040.

Chun, R., and G. Davies, E-reputation: The Role of Mission and Vision Statements in Positioning Strategy. *Journal of Brand Management,* Vol.8, No.4-5(2001), 315-333.

Cova, B., and S. Pace, Brand community of convenience products. New forms of customers empowerment. The case of My Nutella Community. *European Journal of Marketing Science,* Vol.40, No.9-10(2006), 1087-1105.

Cropanzano, R., and M. Mitchell, Sociel exchange theory: An interdisciplinary review. *Journal of Management,* Vol.31, No.6(2005), 874-900.

Dholakia, U., R. Bagozzi, and L. Pearo, A social influence model of consumer participation in network and small-group-based virtual communities. *International Journal of Research in Marketing,* Vol.21(2004), 241-263.

Diamantopoulos, A., G. Smith, and I. Grime, The impact of brand extensions on brand personality: experimental evidence. *European Journal of Marketing,* Vol.39, No.1/2(2005), 129-149.

Doyle, P., Building Successful Brands: The strategic options. *Journal of Consumer Marketing,* Vol.7, No.2(1990), 5-20.

Elliott, R., and K. Wattanasuwan, Brands as Symbolic resources for the construction of identity. *International Journal of Advertising,* Vol.17(1998), 131-144.

eMarketer.com, Worldwide Social Network Users: 2013 Forecast and Comparative Estimates. Retrieved September 26, 2013, from http://www.emarketer.com/Article/Social-Networking-Reaches-Nearly-One-Four-Around-World/1009976

Engel, J., R. Blackwell, and P. Miniard, *Consumer Behavior* (5 ed.). New York: Dryden Press, 1986.

Evrard, Y., and P. Aurier, Identification and validation of the components of the person-object relationship. *Journal of Business Research,* Vol.37(1996), 127-134.

Geuens, M., B. Weijters, and K. D. Wulf, A New Measure of Brand Personality. *International Journal of Research in Marketing,* Vol.26, No.2(2009), 97-107.

Goldsmith, R., and E. Goldsmith, Brand Personality and Brand Engagement. *American Journal of Management,* Vol.12, No.1(2012), 11-20.

Grisaffe, D. B., and H. P. Nguyen, Antecedents of Emotional Attachments to Brands. *Journal of Business Research,* Vol.64, No.10(2011), 1052-1059.

Gruen, T., T. Osmonbekov, and A. Czaplewski, EWOM: the impact of customer-to-customer online know-how exchange on customer value and loyalty. *Journal of Business Research,* Vol.59, No.4(2006), 449-456.

Halliday, J., Chrysler Brings Out Brand Personalities with '97 Ads. *Advertising Age,* (1996, September 30), accessed http://adage.com/article/news/chrysler-brings-brand-person alities-97-ads-automaker-dealer-groups-expect ed-spend-2-bil-effort/76902/.

Hennig-Thurau, T., K. P. Gwinner, G. Walsh, and D. Gremler, Electronic word-of-mouth via consumer opinion platforms: what motivates consumers to articulate themselves on the Internet? *Journal of Interactive Marketing,* Vol.18, No.1(2004), 38-52.

Hollebeek, L. D., Demystifying customer brand engagement: exploring the loyalty nexus. *Journal of Marketing Management,* Vol.27, No.7/8(2011), 785-807.

Holmes, J. H., and K. E. Crocker, Predispositions and the Comparative Effectiveness of Rational, Emotional and Discrepant Appeals for Both High Involvement and Low Involvement Products. *Journal of the*

Academy of Marketing Science, Vol.15, No.1(1987), 27-35.

Hoppe, M., K. Matzler, and R. Terlutter, *The functional chain of brand communities and their impact on brand loyalty and brand recommendation*. Paper presented at the 36th EMAC Conference, Reykjavik, 2007.

Howard, J. A., and J. N. Sheth, *The Theory of Buyer Behavior*. New York, NY.: John Wiley & Sons, 1969.

Katz, E., M. Gurevitch, and H. Haas, On the use of the mass media for important things. *American Sociological Review,* Vol.38(1973), 164-181.

Kim, C., Brand personality and advertising strategy: an empirical study of mobile-phone services. *Korean Journal of Advertising,* Vol.9(1998), 37-52.

Kim, C., D. Han, and S.-B. Park, The effect of brand personality and brand identification on brand loyalty: Applying the theory of social identification. *Japanese Psychological Research,* Vol.43, No.4(2001), 195-206.

Kumar, V., V. Bhaskaran, R. Mirchandani, and M. Shah, Creating a Measurable Social Media Marketing Strategy: Increasing the Value and ROI of Intangibles and Tangibles for Hokey Pokey. *Informs Marketing Science*, Vol.32, No.2(2013), 194-212.

Lannon, J., Asking the Right Questions: What do people do with advertising? In D. Aaker and A. Biel (Eds.), *Brand Equity and Advertising: Advertising's Role in Building Strong Brands* (pp. 162-176). Hillsdale, NJ: Lawrence Erlbaum Associates Inc, 1993.

Laroche, M., M. R. Habibi, M.-O. Richard, and R. Sankaranarayanan, The effects of social

media based brand communities on brand community markers, value creation practices, brand trust and brand loyalty. *Computers in Human Behavior,* Vol.28(2012), 1755-1767.

Laurent, G., and J. Kapferer, Measuring consumer involvement profiles. *Journal of Marketing Research,* Vol.22(1985), 41-53.

Levy, S., Symbols for Sales. *Harvard Business Review,* Vol.37, No.4(1959), 117-124.

Maehle, N., C. Otnes, and M. Supphellen, Consumers' Perceptions of the Dimensions of Brand Personality *Journal of Consumer Behavior,* Vol.10, No.5(2011), 290-303.

Mael, F., and E. Ashforth, Social Identity theory and the organization. *Academy of Management Review, Vol.14, No.*1(1992), 20-39.

Martin, C., Relationship marketing: a high-involvement product attribute approach. *Journal of Product and Brand Management,* Vol.7, No.1(1998), 6-26.

Mathwick, C., Building loyalty by sponsoring virtual peer-to-peer problem solving (P3) communities. *American Marketing Association Educators Conference,* 2006, 211-212.

McAlexander, J. H., J. W. Schouten, and H. Koenig, Building brand community. *Journal of Marketing Science,* Vol.66, No.1(2002), 38-54.

McCracken, G., Who is the Celebrity Endorser? Cultural Foundations of the Endorsement Process. *Journal of Consumer Research,* Vol.16, No.3(1989), 310-321.

McCrae, R. R., and P. T. J. Costa, *Personality in Adulthood*. New York: The Guildford Press, 1990.

McWilliam, G., Building stronger brands through online communities. *Sloan Management Review,* Vol.41, No.3(2000), 43-54.

Milewicz, J., and P. Herbig, Evaluating the brand extension decision using a model of reputation building. *Journal of Product and Brand Management,* Vol.3, No.1(1994), 39-47.

Muniz, A. M., and T. C. O'Guinn, Brand community. *Journal of Consumer Research,* 27(2001), 412-432.

Norman, W., Toward an adequate taxonomy of personality attributes: replicated factor structure in peer nomination personality ratings. *Journal of Abnormal and Social Psychology,* Vol.66, No.6(1963), 574-583.

Opoku, R., M. Hultman, and E. Saheri-Sangari, Positioning in Market Space: The Evaluation of Swedish Universitie's Online Brand Personalities. *Journal of Marketing for Higher Education, Vol.18, No.*1(2008), 124-144.

Petty, R. E., and J. T. Cacioppo, *The Elaboration Likelihood Model of persuasion*. New York: Academic Press, 1986.

Plummer, J., How personality makes a difference. *Journal of Advertising Research,* Vol.24 (1984), 27-31.

Plummer, J., *Brand Personality: A Strategic Concept for Multinational Advertising*. Paper presented at the Marketing Educator's Conference, New York, 1985.

Rishika, R., A. Kumar, R. Janakiraman, and R. Bezawada, The Effect of Customer's Social Media Participation on Customer Visit Frequency and Profitability: An Empirical Investigation. *Information Systems Research,* Vol.24, No.1(2013), 108-127.

Rosenberg, M., *Conceiving the Self*. New York: Basic Books, 1979.

Rothschild, M. L., Advertising Strategies for High and Low Involvement Situations. In Maloney and Silverman (Eds.), *Attitude Research Plays for High Stakes* (pp. 74-93). Chicago: American Marketing Association, 1979.

Sicilia, M., and M. Palazon, Brand communities on the internet: A case study of Coca-Cola's Spanish virtual community. *Corporate Communications: An International Journal,* Vol.13, No.3(2008), 255-270.

Siguaw, J., A. Mattila, and J. Austin, The brand personality scale: An application for restaurants. *Cornell Hotel and Restaurant Administration Quarterly,* Vol.40, No.3 (1999), 48-55.

Trusov, M., R. Bucklin, and K. Pauwels, Effects of word-of-mouth versus traditional marketing: Findings from an Internet social networking site. *Journal of Marketing,* Vol.73, No.5(2009), 90-102.

Valck, K. D., and C. Dambrin, *Look who's talking! Technology-supported impression management and formation in virtual communities*. Paper presented at the 36th EMAC Conference, Reykjavik, 2007.

Vivek, S. D., S. E. Beatty, and R. M. Morgan, Customer Engagement: Exploring Customer Relationships Beyond Purchase. *Journal of Marketing Theory & Practice,* Vol.20, No.2(2012), 122.

Wee, T. T. T., Extending human personality to brands. The stability factor. *Journal of Brand Management,* Vol.11, No.4(2004), 317-330.

You, E., Y. Kim, N. Kim, and S. Jung, Predicting the Direction of the Stock Index by Using a Domain-Specific Sentiment Dictionary. *Journal of Intelligent and Information Systems*, Vol.19, No.1(2013), 95-110.

Young, L., and S. Soroka, Lexicoder Sentiment Dictionary, Montreal Canada: McGill University, 2012.

Zaichkowsky, J. L., Measuring the Involvement Construct, *Journal of Consumer Research,* Vol.12, No.3(1985), 341-352.

Appendix. Dictionary of Brand Personality Dimensions and their Related Words

Competence			
• ABLE	• CUNNING	• INDUSTRY	• STEADY
• ACCOMPLISHED	• DEPENDABLE	• INFALLIBLE	• SUCCESSFUL
• ACE	• DETERMINED	• INFLUENTIAL	• SUFFICIENT
• ACKNOWLEDGED	• DEXTEROUS	• INFORMED	• SUFFICIENTLY
• ADEPT	• DILIGENCE	• INGENIOUS	• SUITABLE
• ADEQUATE	• DILIGENT	• INSIGHTFUL	• SUPERIOR
• ADEQUATE_TO	• DISCERNING	• INTELLECTUAL	• SURE
• ADROIT	• DOINGWELL	• PROFIT	• SYSTEMATIC
• ADVANTAGEOUS	• DOMINANT	• PROFIT-MAKING	• TALENTED
• AGGRESSIVE	• DYNAMIC	• PROFITABLE	• TECHNICAL
• AHEAD_OF_THE_GAME	• EDUCATED	• PROMISING	• THOROUGH
• APT	• EFFECTIVE	• PROSPER	• THOROUGHGOING
• ARTICULATE	• EFFECTIVELY	• PROSPERING	• THRIVING
• ASSIDUOUS	• EFFICACIOUS	• PROSPEROUS	• TIRELESS
• ASSURED	• EFFICIENT	• PROTECTED	• TOP
• ASTUTE	• EFFICIENTLY	• PROUD	• TOPPLACE
• ATTESTED	• ELOQUENT	• PROVEN	• TRADE
• AT_THE_TOP	• ENDOWED	• PRUDENT	• TRAINED
• AT_TOP_OF_LADDER	• ENLIVENED	• PUNCTILOUS	• TRANSNATIONAL
• AUTHENTICATED	• ENTERPRISE	• PURPOSEFUL	• TRIED
• AUTHORITATIVE	• ENTERPRISINGNESS	• QUALIFIED	• TRIED-AND-TRUE
• AWARD-WINNING	• EQUIPOTENT	• QUICK-WITTED	• TRIUMPHAL
• BEST	• ERUDITE	• RATIONAL	• TRIUMPHANT
• BESTSELLING	• ESTABLISHMENT	• REASONABLE	• TRUE
• BETTER	• EXHAUSTIVE	• RELEVANT	• TRUSTWORTHY
• BLOOMING	• EXPERIENCED	• RELIABLE	• TRUSTY
• BLOSSOMING	• EXPERT	• RESOURCEFUL	• UNATTACKABLE
• BOOMING	• EXTRAORDINARY	• RESPONSIBLE	• UNBEATABLE
• BRAINY	• EXULTANT	• REWARDING	• UNBEATEN
• BRIGHT	• FAIL-SAFE	• ROBUST	• UNBENDABLE
• BRILLIANT	• FIRST-PLACE	• SAFE	• UNDEFEATED
• CAPABLE	• FIT	• SAGACIOUS	• UNDEVIATING
• CELEBRATORY	• FLOURISHING	• SAGE	• UNDISTURBED
• CEREBRAL	• FOOLPROOF	• SALABLE	• UNERRING
• CERTIFIABLE	• FOREFRONT	• SALEABLE	• UNFAILING
• CERTIFIED	• FOR_CERTAIN	• SAPIENT	• UNFALTERING
• CHAMPION	• FRUITFUL	• SATISFACTORY	• UNFLAGGING
• CLEAR	• FUNCTIONAL	• SAVVY	• UNFLUCTUATING
• CLEVER	• FUNCTIONALLY	• SCHOLARLY	• UNIMPEACHABLE
• COHERENT	• GAINFUL	• SCHOOLED	• UNPERTURBED
• COLLECTED	• GENIUS	• SCIENTIFIC	• UNQUESTIONABLE
• COMPELLING	• GET-AHEAD	• SEASONED	• UNSHAKABLE
• COMPETENCE	• GIFTED	• SECURE	• UNSWERVING
• COMPETENT	• GLORIOUS	• SELF-ASSURED	• UNWAVERING
• COMPETENTLY	• GOOD	• SELF-CONFIDENT	• UP-AND-COMING
• COMPLACENT	• GOVERNANCE	• SELF-IMPORTANT	• USEFUL
• COMPOSED	• GUARANTEE	• SELF-POSSESSED	• VALID
• COMPREHENSIVE	• GUARANTEED	• SELF-SATISFIED	• VALIDATED
• CONCERN	• HARDWORKING	• SELLABLE	• VENDABLE
• CONCLUSIVE	• HARD_WORKING	• SENSIBLE	• VENDIBLE
• CONFIDENCE	• HAVING_A_KNACK	• SERENE	• VENTURE
• CONFIDENT	• HI-TECH	• SHARP	• VERIFIED
• CONFINED	• ILLUSTRIOUS	• SHARP-WITTED	• VETERAN
• CONFIRMED	• IMPORTANT	• SHELTERED	• VICTORIOUS
• CONGLOMERATE	• IN-CHARGE	• SKILLED	• WELL
• CONQUERING	• IN-FRONT	• SKILLFUL	• WELL-QUALIFIED
• CONSCIENTIOUS	• IN-NO-DOUBT	• SKILLFULLY	• WELL-READ
• CONSISTENT	• INDUSTRIAL	• SKILLFULNESS	• WELL_ORGANIZED
• CONSTANT	• INDUSTRIALISE	• SMART	• WELL_REASONED
• CORPORATE	• INDUSTRIALISED	• SOLID	• WILY
• CRAFTINESS	• INDUSTRIALIZED	• SOUND	• WISE
• CRAFTY	• INDUSTRIOUS	• STAUNCH	• WITTY
• CREATIVE	• INDUSTRIOUSNESS	• STEADFAST	

Excitement			
• ACTION	• DESIGNER	• IMPASSIONED	• SMASHING
• ACTIVE	• DESIROUSNESS	• IMPELLING	• SOLE
• ACTIVITY	• EAGER	• IMPRESSIVE	• SOLITARY
• ADVENTURE	• EARLY	• IMPULSE	• SOLO
• ADVENTURESOME	• EFFERVESCENT	• IMPULSIVE	• SOVEREIGN
• ADVENTURESOMENESS	• ELATION	• INCITE	• SPANKING
• ADVENTUROUS	• ELECTRIFYING	• INDEPENDENT	• SPARKLING
• ADVENTUROUSNESS	• ELEVATE	• INDIVIDUAL	• SPARKY
• AGITATION	• EMANCIPATE	• INNOVATIVE	• SPECIFIC
• AGITATIVE	• EMANCIPATED	• INSPIRE	• SPELLBIND
• ALACRITY	• EMBOLDENED	• INSPIRING	• SPINE-TINGLING
• ALERT	• EMOTION	• INSTIGATION	• SPIRITED
• AMBITION	• ENERGETIC	• INTEREST	• SPRINGY
• APPEALING	• ENERGISE	• INTERESTING	• SPUNK
• APPETITE	• ENERGISING	• INTOXICATING	• SPUNKY
• ARDENT	• ENERGIZE	• INTOXICATION	• STATE-OF-THE-ART
• ARDOR	• ENERGIZING	• INTREPID	• STIMULATE
• AROUSE	• ENGAGED	• INTRIGUE	• STIMULATING
• AROUSING	• ENLIVEN	• INTRIGUING	• STIMULATION
• ARRESTING	• ENTERPRISING	• IN_FASHION	• STIMULUS
• ARTISTIC	• ENTHRALL	• IN_VOGUE	• STIR
• ARTY	• ENTHUSIASM	• JUVENILE	• STIRRING
• ASTONISHING	• ENTHUSIASTIC	• KEENNESS	• STRONG-WILLED
• AUDACIOUS	• EXALT	• LATEST	• SWANK
• AUDACIOUSNESS	• EXALTING	• LIBERATED	• THIRST
• AUDACITY	• EXCITATION	• LIFTING	• THRILL
• AUTONOMOUS	• EXCITE	• LIVEN_UP	• THRILLED
• AVANT-GARDE	• EXCITED	• LONE	• THRILLING
• AVID	• EXCITEMENT	• MIND-BLOWING	• TITILLATING
• AVIDITY	• EXHILARANT	• MODERN-DAY	• TONIC
• AWE-INSPIRING	• EXHILARATE	• MODERNISTIC	• TONY
• AWESOME	• EXHILARATING	• MODERNNESS	• TRENDY
• BOLD	• EXUBERANT	• MODISH	• EXCITING
• BOLDNESS	• EYE-POPPING	• MOTIVATION	• TURN_ON
• BOOST	• FAR-OUT	• MOTIVE	• UNCONSTRAINED
• BRAND-NEW	• FASHIONABLE	• MOVEMENT	• UNDEVELOPED
• BRANDNEW	• FEARLESS	• MOVING	• UNFETTERED
• BRASSINESS	• FEARLESSNESS	• NERVE	• UNMARKED
• BRASSY	• FEELING	• NERVED	• UNMATCHED
• BRAVE	• FEISTY	• NERVY	• UP-TO-DATE
• BRAVENESS	• FERMENT	• NEW	• UP-TO-THE-MINUTE
• BRAVERY	• FERVENT	• NEWLY_ARISEN	• VALIANCE
• BREATHTAKING	• FIERY	• OVERWHELMING	• VALIANT
• BRISK	• FIRE_EATING	• PASSION	• VENTURESOME
• BUDDING	• FLASHY	• PASSIONATE	• VENTURESOMENESS
• BURNING	• FRENZY	• PLUCK	• VENTUROUS
• CHEEKY	• FRESH	• PLUCKY	• VIBRANT
• CHIRPY	• FRESHNESS	• POPULAR	• VIBRATE
• COLORFUL	• FRISKY	• PRESENT	• VIGOROUS
• COLOURFUL	• FULL_OF_LIFE	• PRESENT-DAY	• VITAL
• CONTEMPORARY	• GROOVY	• PREVAILING	• VOGUISH
• COOL	• GUSTO	• PRISTINE	• VOUGE
• COURAGE	• GUTS	• RECENT	• WILD
• COURAGEOUS	• GUTSY	• REFRESHED	• WITH-IT
• COURAGEOUSNESS	• GUTTY	• REFRESHEN	• YOUNG
• COURANT	• HAIR-RAISING	• REFRESHFUL	• UNIQUE
• CRAZY	• HAPPENING	• REFRESHING	• YOUTHFUL
• CREATIVITY	• HARDY	• REPRESENT	• ZAPPY
• CRISP	• HEADY	• RESOLUTE	• ZEALOUS
• DANGEROUS	• HECTIC	• RIP-ROARING	• ZEST
• DAREDEVILRY	• HEROISM	• RISKY	• ZESTFUL
• DAREDEVILTRY	• HIGH-SPIRITED	• RIVET	• ZINGY
• DARING	• HIP	• ROCKING	• ZIPPY
• DARINGNESS	• HOT	• ROUSING	• À_LA_MODE
• DASHING	• HYPER	• SENSATIONAL	• ZESTY
• DAUNTLESS	• HYSTERIA	• SHAKE_UP	
• DELIGHT	• IMAGINATIVE	• SHOWY	

Ruggedness

• ABIDING	• EXTINCT	• JOLTING	• PUNISHING	• TESTING
• ABLE-BODIED	• EXTREME	• JOLTY	• RAMBOESQUE	• THICK-SKINNED
• ALFRESCO	• EXTREMUM	• JUNGLE	• RAMPAGEOUS	• THICKSET
• AL_FRESCO	• FEROCIOUS	• LABOURIOUS	• RASH	• TIGHT
• ANIMAL	• FIGHTING_FIT	• LASTING	• RED-BLOODED	• TIMBERLAND
• ANIMALS	• FIRM	• LEATHERY	• RESILIENT	• TOLERANCE
• ANNEALED	• FORCE	• LIONHEARTED	• RESISTANT	• TOOTHED
• ARDUOUS	• FORCEFUL	• LONG-LASTING	• RIGID	• TOUCH-AND-GO
• AS_FIT_AS_A_FIDDLE	• FORCIBLE	• LONG-LIVED	• RIGOROUS	• TOUGH
• AS_FIT_AS_A_FLEA	• FORMIDABILITY	• LONG-TERM	• RIPPED	• TOUGHENED
• AS_STRONG_AS_AN_OX	• FORMIDABLE	• MACHO	• ROCKLIKE	• TOUGHNESS
• AS_STRONG_AS_A_HORSE	• FORTIFIED	• MADE_TO_LAST	• ROCKY	• TOUGH_AS_NAILS
• AS_STRONG_AS_A_LION	• FRESCO	• MALE	• ROUGH	• TREACHEROUS
• ATHLETIC	• FRESHAIR	• MALENESS	• ROUGH-TEXTURED	• TREK
• BALLSY	• FRONTIER	• MAN	• ROUGHENED	• TREKKING
• BEEFY	• FURROW	• MANFUL	• ROUGHISH	• TRICKY
• BOISTEROUS	• GALLANT	• MANFULLY	• RUGGED	• TWO-FISTED
• BRAWNY	• GODFORSAKEN	• MANHOOD	• RUGGEDNESS	• UNBREAKABLE
• BROAD-SHOULDERED	• GRANITELIKE	• MANLINESS	• RUSTIC	• UNCHARITABLE
• BRUTAL	• GRANITIC	• MANLY	• RUTHLESS	• UNCIVILISED
• BRUTE	• GRATING	• MANNISH	• RUTTED	• UNCIVILIZED
• BUFF	• GRAVEL	• MASCULINE	• SAFARI	• UNCOMFORTABLE
• BUILT_TO_LAST	• GRUELING	• MAVERICK	• SALOON	• UNCOVERED
• BULKY	• GRUELLING	• MIGHTY	• SAVANNA	• UNDOMESTICATED
• BUMPY	• GRUFF	• MOLDED	• SAVANNAH	• UNDYING
• BURLY	• HALE_AND_HEARTY	• MOUNTAIN	• SCRAGGY	• UNEVEN
• BURSTING_WITH_HEALTH	• HARD-BITTEN	• MOUNTAINOUS	• SCRATCHY	• UNFADING
• CALLOUS	• HARD-BOILED	• MOUNTAINS	• SERRATED	• UNFORGIVING
• CASUAL	• HARD-HITTING	• MUSCLE-BOUND	• SEVERE	• UNKIND
• CHALLENGE	• HARD-WEARING	• MUSCLY	• SHREDDED	• UNMERCIFUL
• CHALLENGING	• HARDENED	• MUSCULAR	• SINEWY	• UNPADDED
• CHIVALROUS	• HARD_AS_NAILS	• MUSCULARITY	• SPARTAN	• UNPLEASANT
• CLINGING	• HARSH	• NATURE-LOVING	• SPORTY	• UNPOLISHED
• COARSE	• HAZARDOUS	• MACHISMO	• STABLE	• UNREFINED
• CONDITIONED	• HEALTHY	• NERVE-RACKING	• STALLION	• UNRELENTING
• CONFRONTATION	• HEAVY-DUTY	• NERVE-WRACKING	• STALWART	• UNRESTRAINED
• CONTINUING	• HEFTY	• OPEN-AIR	• STAMINA	• UNRESTRICTED
• COWBOY	• HERCULEAN	• OUT-OF-DOOR	• STARK	• UNSHAKEABLE
• CRAGGED	• HEROIC	• OUT-OF-DOORS	• STAUNCH_OR_STANCH	• UNSMOOTH
• CRAGGY	• HOARSE	• OUTDOOR	• STEELED	• UNSTEADY
• CRIMSON	• HOARSENESS	• OUTDOORS	• STERN	• UNTAMED
• CRUDENESS	• HULKING	• OUTDOORSY	• STIFF	• UNYIELDING
• CRUDITY	• HUNK	• OUTER	• STONY	• VALOROUS
• CRUEL	• HUNT	• OUTSIDE	• STOUT	• VIGOR
• DAUNTING	• HUNTING	• PACHYDERMATOUS	• STOUT-HEARTED	• TENACIOUS
• DAYBREAK	• HUSKINESS	• PATIO	• STOUTHEARTED	• VIOLENT
• DAYSPRING	• HUSKY	• PERDURABLE	• STRAINING	• VIRILE
• DEEP-ROOTED	• IMMOVABLE	• PERILOUS	• STRAPPING	• WEATHER-BEATEN
• DEFENSE	• IMPERISHABLE	• PERMANENT	• STRENGTH	• WEATHERED
• DEMANDING	• INDESTRUCTIBLE	• PERSISTENT	• STRENUOUS	• WEATHERWORN
• DENSE	• INFLEXIBLE	• PERSISTING	• STRONG	• WEIGHTY
• DESERT	• INFORMAL	• PHYSICAL	• STRONG-ARM	• WELL-BUILT
• DIFFICULT	• INSENSITIVE	• PICNIC	• STRONGER	• WELL-MADE
• DIFFICULTY	• IN_THE_OPEN	• POINTY	• STRONGLY_MADE	• WELL_KNIT
• DOUGHTY	• IN_TIP-TOP_CONDITION	• POTENCY	• STRUGGLE	• WELL_MUSCLED
• DURABLE	• IN_TRIM	• POTENT	• STUD	• WESTERLY
• EFFORTFUL	• IRON	• POTHOLED	• STURDY	• WESTERN
• ENDEAVOR	• IRREGULAR	• POWER	• SUBSTANTIAL	• WILDLIFE
• ENDEAVOUR	• JACKED	• POWERFUL	• SUNRISE	• WITHSTANDING
• ENDURANCE	• JAGGED	• POWERFULLY_BUILT	• SUNSET	• WOODLAND
• ENDURE	• JEANS	• POWERHOUSE	• SURVIVOR	• WOODS
• ENDURING	• JERKING	• PRAIRIE	• SWASHBUCKLING	• EPIC
• EVERLASTING	• JERKY	• PRECARIOUS	• SWEAT	• RELENTLESS
• EXTERNAL	• JOCK	• PROHIBITED	• TEMPERED	

Sincerity

- ABOVE-BOARD
- ACCOMMODATING
- ACCURATE
- ACTUAL
- AFFABLE
- AFFECTIONATE
- AMIABLE
- AMICABLE
- APPROACHABLE
- APPROACHING
- ARTLESSNESS
- ATTENTIVE
- AUTHENTIC
- BENEFICIAL
- BENEVOLENT
- BENIGN
- BLUNT
- BONAFIDE
- BUOYANT
- CANDID
- CANDOR
- CARE
- CERTAIN
- CHARITABLE
- CHEERFUL
- CHEERY
- CHUMMY
- CIVIL
- CIVILISED
- CIVILITY
- CLEAN-CUT
- CLEAR-CUT
- COMMON
- COMMONPLACE
- COMPANIONABLE
- COMPASSIONATE
- COMRADELY
- CONCILIATORY
- CONFIDING
- CONGENIAL
- CONTENT
- CONTENTED
- CONVENTIONAL
- CONVINCING
- CONVIVIAL
- COOPERATIVE
- CORDIAL
- CORRECT
- CREDIBLE
- CUSTOMARY
- DECENT
- DEDICATED
- DEDICATION
- DEFENSIBLE
- DIRECT
- DISTINCTIVE
- DOWN-TO-EARTH
- EARNEST
- EARNESTNESS
- EBULLIENT
- EMOTIONAL
- EXISTING
- FACT-BASED
- FACTUAL
- FAIRLY
- FAITHFUL
- FAMILIAR
- FAMILY-ORIENTED
- FAVORABLE
- FOND
- FORTHCOMING
- FORTHRIGHT

- FRANK
- FRANKNESS
- FRIENDLY
- FULL_OF_PEP
- GAY
- GENEROUS
- GENIAL
- GENUINE
- GENUINENESS
- GLAD
- GLADSOME
- GOOD-HEARTED
- GOOD-HUMORED
- GOOD-HUMOURED
- GOOD-NATURED
- GOODWILL
- GOOD_FAITH
- GRACIOUS
- GREGARIOUS
- GUILELESS
- GUILELESSNESS
- HAPPY
- HARD
- HEALTHFUL
- HEART
- HEARTFELT
- HEARTY
- HELPFUL
- HONEST
- HONESTNESS
- HONESTY
- HONOR
- HONORABLE
- HONORABLENESS
- HONOURABLE
- HONOURABLENESS
- HOPEFUL
- HUMANE
- HUMBLE
- IDEALISTIC
- IMPARTIALITY
- IMPRESSIONABLE
- INDISPUTABLE
- INEXPERIENCED
- INGENUOUS
- INIMITABLE
- INNOCENCE
- INNOCENT
- INSPIRED
- IN_GOOD_SPIRITS
- IN_HIGH_SPIRITS
- IRREPLACEABLE
- JOLLY
- JOVIAL
- JOYFUL
- JUST
- JUSTICE
- JUSTIFIED
- KIN
- KIND
- KINDLY
- KINSHIP
- LEGITIMATE
- LEGITIMATISE
- LEGITIMATIZE
- LEGITIMISE
- LEGITIMIZE
- LEVELHEADED
- LIGHTHEARTED
- LIGHTSOME
- LIVELY
- LOVING

- LUCKY
- MALLEABLE
- MATCHLESS
- MAUDLIN
- MERCIFUL
- MERRY
- MIRTHFUL
- MODEST
- MUSHY
- NAIVE
- NATURAL
- NEIGHBORLY
- NO-NONSENSE
- NOSTALGIC
- NOURISHING
- NOVEL
- OBLIGING
- OLD-FASHIONED
- ON_GOOD_TERMS
- OPEN
- OPENHEARTED
- OPENNESS
- OPTIMISTIC
- ORDINARY
- ORIGINAL
- ORIGINALITY
- PEACEABLE
- PEACEFUL
- PERSUADABLE
- PLAIN
- PLAINSPOKEN
- PLEASANT
- PLEASED
- PLENTIFUL
- POLITENESS
- POSITIVE
- PRACTICAL
- PRAGMATIC
- PROPER
- PROPERNESS
- PURE
- REAL
- REALISTIC
- REASONED
- RECEPTIVE
- RELATION
- RELATIONS
- RELATIONSHIP
- RELIABILITY
- REMARKABLE
- RESPECTABLE
- RESPONSIVE
- RIGHT
- RIGHTEOUS
- ROSEATE
- ROSY
- SANGUINE
- SCRUPULOUS
- SELF-EFFACING
- SENTIMENTAL
- SERIOUSNESS
- SILLY
- SIMPERING
- SIMPLE
- SIMPLE-MINDED
- SIMPLEMINDED
- SINCERE
- SINCERENESS
- SINCERITY
- SINGLE
- SINGLENESS
- SMALL-TOWN

- SMILING
- SNAPPY
- SOAPY
- SOBER
- SOCIABLE
- SOFT
- SOFTHEARTED
- SOLICITOUS
- SPRIGHTLINESS
- SPRIGHTLY
- STANDARD
- STRAIGHT
- STRAIGHTFORWARD
- STRAIGHTNESS
- SUBSTANTIATED
- SUNNY
- SYMPATHETIC
- TEAR-JERKING
- TEARFUL
- TENDER
- THE_RIGHT_WAY
- TOUCHING
- TRUE-LIFE
- TRULY
- TRUSTFUL
- TRUSTING
- TRUSTWORTHINESS
- TRUTH
- TRUTHFUL
- TRUTHFULNESS
- TYPICAL
- UNACCUSTOMED
- UNADORNED
- UNADULTERATED
- UNAFFECTED
- UNASSUMING
- UNCHANGING
- UNCONCERNED
- UNDERSTANDING
- UNFAMILIAR
- UNFORCED
- UNGLAMOROUS
- UNGLAMOUROUS
- UNHEARD-OF
- UNINTERESTED
- UNKNOWN
- UNOSTENTATIOUS
- UNPRECEDENTED
- UNPRETENDING
- UNPRETENTIOUS
- UNSOPHISTICATED
- UNSPOILT
- UNSTUDIED
- UNWORLDLY
- UP-FRONT
- UPBEAT
- UTILITARIAN
- VERACITY
- VERITABLE
- VERITY
- VIRTUOUS
- VISIONARY
- VIVACIOUS
- WARM
- WELCOMING
- WELL-DISPOSED
- WELL-FOUNDED
- WELL-MANNERED
- WHOLESOME
- WHOLEHEARTEDNESS
- WINSOME

Sophistication

- ABSORBING
- ADORABLE
- AGREEABLE
- ALLURING
- ANGELIC
- ARISTOCRACY
- ARISTOCRAT
- ARISTOCRATIC
- ARISTOCRATICAL
- ATTRACTIVE
- A_LA_MODE
- BARONIAL
- BEAUTIFUL
- BECKONING
- BEWITCHING
- BLAND
- BLASÉ
- BLUE-BLOODED
- BLUE_BLOOD
- BORED
- BRUSH_UP
- CAPTIVATE
- CAPTIVATING
- CELEBRATED
- CHARISMATIC
- CHARM
- CHARMING
- CHERUBIC
- CITIFIED
- CIVILIZED
- CLASSY
- COMELY
- COMPLICATEDNESS
- COSMOPOLITAN
- COTOURE
- COURTEOUS
- COURTIER
- COURTLY
- CULTIVATED
- CULTURED
- CUTE
- DAINTY
- DANDYISH
- DAZZLING
- DEBONAIR
- DELECTABLE
- DELICATE
- DELIGHTFUL
- DESIRABLE
- DE_LUXE
- DIGNIFIED
- DISTINCTION
- DISTINGUISHED
- DOWNY
- DROP-DEAD_GORGEOUS
- DULCET
- EDIFICATION
- EFFEMINATE
- ELABORATENESS
- ELEGANT
- ENAMORING

- ENCHANT
- ENCHANTING
- ENDEARING
- ENGAGING
- ENGROSSING
- ENNOBLING
- ENRAPTURE
- ENTHRAL
- ENTHRALLING
- ENTICING
- ENTRANCING
- EPICUREAN
- ESTEEMED
- ESTHETIC
- EXCELLENT
- EXCLUSIVE
- EXCLUSIVITY
- EXPENSIVE
- EXQUISITE
- EXQUISITELY
- EXTRAVAGANT
- EYE-CATCHING
- FABULOUS
- FACILE
- FAIR
- FANTABULOUS
- FASCINATING
- FEMALE
- FEMININE
- FETCHING
- FIRST-CLASS
- FIRST-RATE
- FLOSSY
- FLUENT
- FRAGILE
- FRAGRANT
- FULGID
- GENTEEL
- GENTLE
- GENTLEMANLIKE
- GENTLEMANLY
- GENTLEWOMAN
- GILDED
- GIRLISH
- GLAMOROUS
- GLAMOUR
- GLAMOUROUS
- GLIB
- GLIB-TONGUED
- GLITTERING
- GLOSSY
- GOOD-LOOKING
- GORGEOUS
- GRACEFUL
- HANDSOME
- HAUTE_COTOURE
- HIGH-BORN
- HIGH-BROW
- HIGH-CLASS
- HIGH-PROFILE
- HIGH-STATUS

- HIGHBROWED
- HUNKY
- INDULGENT
- INFATUATING
- INGRATIATING
- INTRICACY
- INVITING
- INVOLUTION
- IN_STYLE
- IRRESISTIBLE
- LADY
- LADYLIKE
- LIKABLE
- LOOKER
- LOOKING_LIKE_A_MILLION
- LORD
- LOVABLE
- LOVELY
- LURING
- LUSTROUS
- LUXURIOUS
- MAGNANIMOUSNESS
- MAGNETIC
- MAGNETIZING
- MAGNIFICENT
- MATURE
- MELLIFLUOUS
- MELLISONANT
- MELLOW
- MESMERIC
- MESMERIZE
- MESMERIZING
- MILD
- MODERN
- NICE
- NICE-LOOKING
- NIFTY
- NOBILITY
- NOBLE
- NOBLE-MINDED
- NOBLEMAN
- NOBLENESS
- NOBLESSE
- NOBLEWOMAN
- PATRICIAN
- PERSUASIVE
- PHOTOGENIC
- PICTURESQUE
- PLEASING
- POISED
- POLISHED
- POLITE
- POSH
- PRECIOUS
- PREEMINENCE
- PREPOSSESSING
- PRESTIGIOUS
- PRETTY
- PRINCELY
- PROFLIGATE
- PROMINENT

- QUEENLIKE
- QUEENLY
- RAPTUROUS
- RAVISHING
- REFINED
- RENOWNED
- ROMANTIC
- ROYAL
- SATIN
- SATINY
- SCINTILLANT
- SCINTILLATING
- SEDUCING
- SEDUCTIVE
- SERAPHIC
- SHINING
- SHINY
- SILK
- SILKY
- SILVER-TONGUED
- SLICK
- SMARMY
- SMOOTH
- SNOBBISH
- SOPHISTICATE
- SOPHISTICATED
- SOPHISTICATION
- SPECTACULAR
- SPLENDID
- STAGY
- STRIKING
- STUDIED
- STUNNING
- STYLISH
- SUAVE
- SUGARINESS
- SUPERFINE
- SVELTE
- SWEET
- TAKING
- TANTALIZE
- TANTALIZING
- TEASING
- TEMPTING
- TOP-NOTCH
- UNCTUOUS
- UPMARKET
- UPPERCLASSES
- UPPER_CLASS
- UPTOWN
- URBANE
- VELVET
- VELVETY
- VOLUPTUARY
- VOLUPTUOUS
- WINNING
- WOMANISH
- WOMANLIKE
- WOMANLY
- WELL-BRED

국문요약

브랜드 개성 효과: 트위터 상의 브랜드 개성 전달이 온라인 커뮤니티 참여에 미치는 영향

루스 안젤리 크루즈* · 이홍주**

새로운 기술의 활용은 고객과의 관계를 맺기위한 기업들의 마케팅 전략을 변모시켜왔다. 새로운 기술 중에서 소셜 미디어는 기업들이 온라인 고객들에게 다가가기 위한 도구이며, 유명한 소셜 미디어 사이트 중의 하나는 마이크로 블로깅 플랫폼인 트위터이다. 매일 5억건이상의 트윗이 발생하기때문에 연구자들에게는 풍부한 데이터의 원천이며, 기업들에겐 매력적인 마케팅 채널이다. 그럼에도 불구하고 효과적인 트위터 활용전략을 수립하는 것이 어려우며, 이는 적절한 트위터 활용에 대한 이론적인 또는 실증적인 검증이 이루어지지 않았기 때문이다. 본 연구는 기업들이 마케팅 채널로서의 트위터를 어떻게 효과적으로 활용할 수 있는지에 대한 실증적인 근거를 브랜드 개성과 브랜드 관여를 중심으로 연구하여 제공하고자 한다.

본 연구는 Aaker의 브랜드 개성에 대한 연구에서 제시한 브랜드 개성 척도를 활용하여 트위터 메시지가 브랜드 개성을 띄고 있는지와 이에 따른 고객들의 참여와 반응을 분석하고자 한다. 또한, 제품의 관여도에 따라서 조절효과가 존재하는지도 분석하였다. 23개 브랜드의 8주간의 트위터 계정의 포스팅을 수집하였으며, 오피니언 마이닝을 통하여 연구 가설을 검증하였다. 구체적인 본 연구의 목적은 첫째로 마케팅 연구에서 제시된 브랜드 개성의 개념이 소셜 미디어인 트위터에도 적용이 가능한지 분석하는 것이다. 둘째는 오프라인 브랜드 개성과 온라인 브랜드 개성간의 일치여부와 소셜 미디어 브랜드 커뮤니티의 활성화간의 관계를 밝히고자 한다. 마지막으로, 제품의 관여도에 따라 온라인/오프라인 브랜드 개성의 일치도가 조절효과를 갖는지를 분석하고자 한다.

주제어 : 브랜드 개성, 소셜 미디어, 오피니언 마이닝

  * 가톨릭대학교 경영학부
** 교신저자 : 이홍주
  가톨릭대학교 경영학부
  43 Jibongro, Wonmi, Bucheon,143-743, Republic of Korea
  Tel: +82-2-2164-4009, Fax: +82-2-2164-4280, E-mail: hongjoo@catholic.ac.kr

저 자 소 개

Ruth Angelie B. Cruz
She earned her degree in Master's in Business Administration from The Catholic University of Korea majoring in Management Information Systems. She graduated from De La Salle University in the Philippines. She had worked in diverse companies focused on social media and e-business. Her research interest is regarding the utilization of social media as a marketing channel of business organizations.

이 홍 주
현재 가톨릭대학교 경영학전공 교수로 재직 중이다. KAIST 산업경영학과를 졸업하고 KAIST 테크노경영대학원에서 석사 및 박사학위를 취득하였다. 주요 관심분야는 데이터 분석, 지능형 정보시스템, 온라인 사용자들의 상호작용등이다.