

THE INFLUENCES OF THE BIG FIVE PERSONALITY TRAITS, VIRTUAL BRAND COMMUNITY MOTIVES AND VIRTUAL BRAND COMMUNITY USES ON VIRTUAL BRAND COMMUNITY ENGAGEMENT

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แบรนด์คคอมมูนิตีหรือชุมชนคนรักตราสินค้าใดสินค้าหนึ่ง ได้เป็นหัวข้อวิจัยที่นักวิจัยได้ให้ความสนใจเป็นอย่างมากในช่วงเวลาสิบปีที่ผ่านมา อย่างไรก็ตาม ผลงานวิจัยที่ผ่านมาของการศึกษาแบรนด์คคอมมูนิตีและออนไลน์แบรนด์คคอมมูนิตีได้ถูกจำกัดแค่เพียงการศึกษาถึงลักษณะเฉพาะของแบรนด์คคอมมูนิตี โดยไม่ได้เจาะจงในการศึกษาปัจจัยในการการสร้างความผูกพันอันแน่นแฟ้นของออนไลน์แบรนด์คคอมมูนิตี ดังนั้นการวิจัยนี้จึงได้ทำการศึกษาถึงผลกระทบของบุคลิกภาพ แรงจูงใจในการเข้าใช้ออนไลน์แบรนด์คคอมมูนิตี ความถี่ ปริมาณ ประเภท การใช้ออนไลน์แบรนด์คคอมมูนิตีที่ใช้และระยะเวลาการเน้นสมาชิกต่อความผูกพันของออนไลน์แบรนด์คคอมมูนิตี โดยใช้ทฤษฎี Uses and Gratifications Theory เป็นแนวคิดในการทำวิจัยใช้แบบสอบถามออนไลน์ในการเก็บข้อมูล จำนวนของกลุ่มตัวอย่างคือ 230 คน ผลของการวิจัยระบุว่าสมาชิกที่มีบุคลิกแบบนักไตร่ตรองและเก็บตัว จะมีความผูกพันในออนไลน์แบรนด์คคอมมูนิตีของตนเองสูง ส่วนในด้านแรงจูงใจในการเข้าใช้ออนไลน์แบรนด์คคอมมูนิตี คือผู้ที่ต้องการหาเพื่อนใหม่ ชอบความสะดวก รักตราสินค้า รวมทั้งได้รับแรงจูงใจมาจากเพื่อน จะมีความผูกพันในออนไลน์แบรนด์คคอมมูนิตีสูง นอกจากนี้แรงจูงใจในการเข้าใช้ออนไลน์แบรนด์คคอมมูนิตีต่าง ๆ มีความสำคัญต่อความผูกพันที่แน่นแฟ้นของออนไลน์แบรนด์คคอมมูนิตีมากกว่าปัจจัยทางด้านบุคลิกภาพและปัจจัยการใช้ออนไลน์แบรนด์คคอมมูนิตี ระดับของความผูกพันต่อออนไลน์แบรนด์คคอมมูนิตีขึ้นอยู่กับบุคลิกภาพที่แตกต่างของสมาชิกและแรงจูงใจในการเข้าใช้ออนไลน์แบรนด์คคอมมูนิตี ดังนั้นนักการตลาดควรทำความเข้าใจความแตกต่างระหว่างบุคคลในการใช้แบรนด์คคอมมูนิตี รวมทั้งควรเน้นกลยุทธ์ทางการตลาดในการจูงใจให้สมาชิกได้พบปะพูดคุยกับสมาชิกใหม่ ๆ ได้มากขึ้น และควรเน้นการสร้างความสัมพันธ์บนเวปไซต์ และระหว่างตราสินค้าและสมาชิกให้แน่นแฟ้นมากยิ่งขึ้น

Abstract

The brand community has become a popular research topic among research scholars over the past ten years. However, previous studies of the brand community and the virtual brand community mainly focused on the characteristics of the brand communities, but not on how strong virtual brand community engagement can be created. The research objective is to investigate the relationships between the Big Five personality traits, virtual community motives, frequency, amount, types of use, and membership duration and virtual brand community engagement by using the uses and gratifications theory as a theoretical framework. (Online questionnaires were used to collect the data.) 230 respondents participated in this study. The results suggested that individuals with greater conscientiousness and lower openness to experience had a greater depth of virtual brand community engagement. Members that were motivated by new friendship, convenience, brand affection, and social influence exhibited strong virtual brand community engagement. Additionally, virtual brand community motive variables represented a significantly more powerful set of predictors than the set of personality traits and virtual brand community use. The level of virtual brand community engagement depended mainly on the personality of members and their motivation to participate in the communities, rather than virtual

brand community uses. Consequently, marketers need to keep in mind that that individual difference seem to be an important factor that influences how members use virtual brand community sites. Additionally, marketers should also concentrate their strategies on motivating existing members to socialize more on the site and focus their attention on how to create positive brand relationships among brand admirers.

Keywords: Big Five Personality Traits, Brand Community use, Brand Community Motives, Brand Community Engagement

INTRODUCTION

One of the powerful tools in building a strong brand is brand community (McAlexander, Kim, & Roberts, 2003). The concept of brand community was formerly introduced by Muniz and O'Guinn (2001) as "a specialized, non-geographically bound community, based on a structured set of social relationships among admirers of a brand" (p. 412). In this study, virtual brand community refers to a specialized, non-geographically bound community, based on a structured set of social relationships among admirers of a brand that emerge from the discussion about a specific brand in cyber-space (Leimeister, Sidiras, & Krcmar, 2006; Muniz & O'Guinn, 2001).

The size and interconnectedness of the brand communities have shifted power from the marketer to the consumer (Winer et al., 1997). Individual integration in a brand community constitutes a powerful form of customer loyalty, including customer-initiated marketing, repeat purchasing and trading up, receptivity to brand extensions, and higher tolerance for quality lapses (McAlexander, Schouten, & Koenig, 2002). With the progress of online technology, people usually communicate online with the possibility to integrate with other members and perceive a sense of community. The sense of community refers to feelings of belonging, safety, and attachment to the group (Blanchard, 2007). Most virtual communities have few offline activities, so the interactions between members are primarily online (Kim, 2006). Two questions arise: What ties these virtual community members together? and How does media use influence this bonding?

Furthermore, the knowledge pertaining to the influences of personality on online media use has been an issue of interest among scholars (e.g., Amichai-Hamburger, Lamdan, Madiel, & Hayat, 2008; Amichai-Hamburger & Vinitzky, 2010; Orchard &

Fullwood, 2010; Ross et al., 2009). Personality characteristics shape individuals' perceptions of online communication, which may influence their online communication and relationship closeness (Valkenburg & Peter, 2007b). Lounsbury et al. (2003) have suggested that in order to examine the unique and interactive contribution to a psychological sense of community variation, the Big Five model would be an excellent place to begin.

However, there is limited research examining the interrelations between the Big Five personality traits and the motivation to participate in the virtual brand community. Additionally, previous studies of the brand community and the virtual brand community mainly focused on the characteristics of the brand communities (Algesheimer, Dholakia, & Herrmann, 2005; McAlexander et al., 2002; Muniz & O'Guinn, 2001); the antecedents of the virtual community (e.g., Bughin & Zeisser, 2001; Ginsburg & Weisband, 2006; Joon & Young-Gul, 2003; Leimeister et al., 2006); the success factors of the virtual community (Christodoulides, de Chernatony, Furrer, Shiu, & Abimbola, 2006; Thompson & Sinha, 2008), and the effects of virtual communities (e.g., Bughin & Hagel III, 2000; Bughin & Zeisser, 2001; Ginsburg & Weisband, 2006; Joon & Young-Gul, 2003; Leimeister et al., 2006). Thus, it is meaningful for both scholars and practitioners to know how a strong virtual brand community engagement can be created.

REVIEW OF LITERATURE

According to Uses and Gratifications Theory, individuals are influenced by various social and psychological factors, such as personality traits, when selecting and using media (Rubin, 2002). In this study, Uses and Gratifications Theory is used as an analytical lens to examine why people use the virtual brand

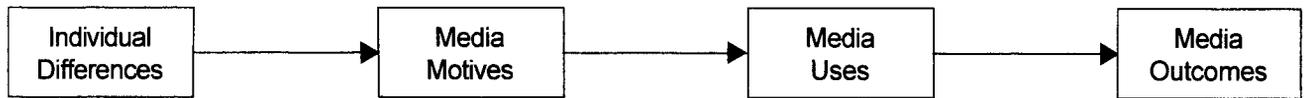


Figure 1: Theoretical Framework of Uses and Gratifications Theory

Adapted from Katz, E., Blumler, J. G., & Gurevitch, M. (1973).

community differently and to study how strong virtual brand engagement can be created. Uses and Gratifications Theory has been used to explain the psychological needs that shape why and how people use the media and the outcomes of using the media (Katz, Blumler, & Gurevitch, 1973; Rubin, 1993).

Figure 1 presents a graphic depiction of the theoretical framework of Uses and Gratifications Theory. The theoretical framework was developed from Katz et al. (1973) and Rubin (2002) and presents the basic premises of the Uses and Gratifications Theory. Each variable in Uses and Gratifications Theory will be explained below.

There are four reasons for selecting Uses and Gratifications Theory as a theoretical framework for this study. First, to know more about the characteristics of virtual brand community members, the Uses and Gratifications Theory theoretical framework is an appropriate framework to provide more understanding of how personality traits influence virtual brand community motives. Second, the Uses and Gratifications Theory fits well with the exploration of the motivational perspective in the study related to Internet technology (Stafford, Stafford, & Schkade, 2004). Third, Uses and Gratifications Theory is a good guide for this study in terms of understanding how members use their virtual brand communities. Fourth, Uses and Gratifications Theory is an appropriate framework for explaining media outcomes. Virtual brand community engagement is concerned with attitudinal outcome, in which members create feelings of membership, influence, identity, belonging, attachment, and immersion toward a virtual community (Blanchard, 2007).

The Big Five personality traits

The Big Five personality trait dimensions are: a) Extraversion (warmth, gregariousness, assertiveness, activeness, excitement seeking, and positive affect); b) Openness to Experience (experience seeking, education, reading widely, memory); c) Agreeableness (trustingness, straightforwardness, altruism, compli-

ance, modesty, tender-mindedness); d) Emotional Stability (durability, poise, self-reliance, callousness, candor); and e) Conscientiousness (competence, order, dutifulness, achievement striving, self-discipline, deliberateness) (Goldberg, 1993). There are two main reasons for selecting the Big Five personality traits as one of the main variables in the study. First, these traits are found to be related to the Internet use (e.g., Amichai-Hamburger & Furnham, 2007; Amichai-Hamburger et al., 2008; Guadagno, Okdie, & Eno, 2008) and community membership and experiences (Lounsbury et al., 2003). Second, the Big Five personality traits were found to be one of the individual difference factors in U&G theory that influence the motivation to use media (Rubin, 1993).

The Big Five personality traits have been found to be factors that influence the use of online media (e.g., Amichai-Hamburger, 2002; Amichai-Hamburger & Vinitzky, 2010; Amiel & Sargent, 2004; Kokkonen & Pulkkinen, 2001). Extraverts were positively related to social motive, the information searching motive, and the information sharing motive (e.g., Hung-Chang, Yi-Ching, Ya-Hui, & Lee, 2007; Peter, Valkenburg, & Schouten, 2005; Tidwell & Sias, 2005), including the motive to engage virtual communities and brand communities (e.g., Kavanaugh, Reese, Carroll, & Rosson, 2005; Kraut et al., 2002; Wan-yih & Sukoco, 2010). Previous studies also revealed that extraverts were negatively correlated with the Internet use motive (e.g., Amiel & Sargent, 2004; Ebeling-Witte, Frank, & Lester, 2007). Thus, extraverts are considered as one of the Big Five personality traits that may influence the motivation to engage in the virtual brand community to some extent.

Openness to Experience is related to the entertainment motive (Tuten & Bosnjak, 2001), the information sharing motive (e.g., Dwyer, 2007; Hung-Chang et al., 2007), and the adventure motive. Openness to Experience is also related to the sense of belonging to the brand community (Lounsbury et al., 2003). Thus, Openness to Experience seems to be one of the Big Five personality traits that may influ-

ence the motivation to participate in the virtual brand community.

Previous studies have revealed that agreeableness is related with leisure motive (Jia-Jeng, Hill Hung-Jen, & Ming-Feng, 2007; Swickert, Hittner, Harris, & Herring, 2002), the social motive (e.g., Amichai-Hamburger & Vinitzky, 2010; Vandenberghe, St-Onge, & Robineau, 2008) and the relationship maintenance motive (Digman, 1997; Sukoco & Wann-Yih, 2008; Vandenberghe et al., 2008) in using the Internet and participating in communities. Agreeableness is related more positively with the sense of belonging to the brand community (Lounsbury et al., 2003). Thus, agreeableness is also considered as one of the Big Five personality traits which may influence the motivation to participate in the virtual brand community.

Emotional Stability was one of the Big Five personality traits that influence the motives for participating in the virtual brand community. Emotionally unstable individuals were found to be related with information (Amiel & Sargent, 2004; Orchard & Fullwood, 2010; Swickert et al., 2002), entertainment, and interpersonal communication motives (Wolfradt & Doll, 2001). Thus, emotional stability has been found to be an important personality trait that may influence virtual brand community motives.

The literature review also showed that Conscientiousness is related to the learning motivation (Major, Turner, & Fletcher, 2006), the information seeking motivation (Tidwell & Sias, 2005), the convenience motivation (Jen-Hung & Yi-Chun, 2010), the interpersonal communication motivation (Asendorpf, 1998), and the leisure motivation (Yang, Hou, & Tu, 2008). Moreover, Conscientiousness was found to have a relationship with sense of community (Lounsbury et al., 2003). Therefore, conscientiousness was considered as one of the Big Five personality traits which may influence the motivation to participate in the virtual brand community.

Motives, frequency, amount of use, types of use, and membership duration

In this study, motives mean why people become involved in the virtual brand community. There are two main reasons for selecting virtual brand community motives as one of the main variables in the study. First, there are a limited number of studies that have

investigated the motivation to participate in the virtual brand community. Second, motives are a significant variable in Uses and Gratifications Theory (Rubin, 2002). One of the main objectives of Uses and Gratifications Theory is to understand the motives for media use (Katz et al., 1973). Previous studies also found relationships among Internet motives, frequency of Internet use, and membership duration. For example, Korgaonkar and Wolin (1999) found that information, interactive control, socialization, and economic motives correlated positively with the number of hours spent on the Internet. Ross et al. (2009) suggested that motives were an important factor affecting the amount of time spent online. Pornsakulvanich and Dumrongsiri (2010) found that new friendships and the passing time motive significantly predicted the length and duration of using blogs in Thailand.

Frequency, amount, and types of use reflect the media use in this study. In this study, frequency means the number of times that members in the community participate in the virtual brand community during a week. Amount of use refers to the length of time (i.e., minute) that members in the community participate per day. Type of use in this study refers to the virtual brand community functions such as discussion boards, chat rooms, and personal messages. Membership duration refers to the length of the relationship (i.e., month) that a member has with the virtual brand community. These variables are significant to the study because frequency, amount, types of use, and membership duration can indicate how people use the virtual brand community.

Virtual brand community engagement

The meaning of virtual brand community engagement in this study adopts the concept of the “sense of virtual community” of Blanchard (2007). The sense of the virtual community includes members’ feelings of membership, identity, belonging, and attachment to the group which interacts primarily through electronic communication (Blanchard, 2007). In this study, virtual brand community engagement is the media outcome of virtual brand community use. The sense of a virtual community is a principal construct in virtual community research (Joon & Young-Gul, 2003). A strong engagement with the community is created when members in the virtual brand community have

the feelings of membership, belonging, and having strong attachment with other members in the virtual brand community (Algesheimer et al., 2005; Blanchard, 2007; Muniz & O'Guinn, 2001).

Additionally, previous studies have revealed that frequency of using community websites had positive relationships with the feeling of attachment to the communities (e.g., Okleshen & Grossbart, 1998; Peter et al., 2005; Thorsten Hennig-Thurau, Gwinner, Walsh, & Gremler, 2004). The more frequent the interactions, the more extensive are the relationships that members contribute to influencing online friendship formation (Peter et al., 2005) and having a greater sense of belonging to the community (Lounsbury et al., 2003).

The amount of use had a positive relationship with the feelings of membership and attachment in the virtual community (e.g., Kavanaugh et al., 2005; Pornsakulvanich & Dumrongsiri, 2010; Valkenburg & Peter, 2007b). For example, Kavanaugh, Reese, Carroll, and Rosson (2005) found that a heavy Internet user (i.e. a user that used it more than one and a half hours per day) had higher social engagement and greater use of the Internet for social purposes, and attended more local meetings and events than light users (i.e., a user that used the Internet less than one and a half hours per day). Pornsakulvanich and Dumrongsiri (2010) found that people tended to use blogs for a longer time when they wanted to maintain existing relationships and to build new relationship with others. Lee and Kuo (2002) found that the amount of the time spent on the Internet increased their time interacting with friends. Similarly, Valkenburg and Peter (2007a) found that Internet use, particularly online communication, enhanced the quality of friendships directly and indirectly through increased time with friends.

Membership duration in virtual communities was found to be related to virtual community engagement. de Valck, Langerak, Verhoef, and Verlegh (2007) found that membership duration strengthens the effect of member interactions in virtual communities. Rothaermela and Sugiyama (2001) found that a longer membership duration leads to high levels of visit frequency. Kretschmer, Klimis, and Choi (1999) found that visit frequency increased when members' involvement in the virtual community rises beyond a certain level. Lev-On (2010) found that frequency of visiting

a site was positively related to feelings of membership in the virtual community. He further found that the more individuals used the site for social updating, the stronger they felt embedded in the virtual community.

Overall, the review of the literature suggests that virtual brand community engagement may be explained by virtual brand community use, virtual brand community motives, and the Big Five personality traits. Nevertheless, previous studies showed the research gap that need to be filled. The overall associations among the Big Five personality traits, virtual brand community motives, virtual brand community use, and virtual brand community engagement should be further investigated. This will also expand the knowledge of the influential role of the Big Five personality traits on motivation, including all associations among the variables, in order to obtain a greater understanding of the virtual brand community usage pattern.

RESEARCH OBJECTIVE

The objective of this research was to investigate the influences of individual differences (i.e., the Big Five personality traits), motives, uses (i.e., frequency, amount, types of use, and membership duration) on the outcomes (i.e., virtual brand community engagement) using the uses and gratifications (U&G) as a theoretical framework.

RESEARCH QUESTION

From the literature review, virtual brand community engagement may be explained by virtual brand community use, motives, and the Big Five personality traits. However, the specific details of the relationships among those variables still need further investigation. Therefore, the research question is:

RQ: How do the Big Five personality traits (i.e., Extraversion, Openness to Experience, Emotional Stability, Agreeableness and Conscientiousness), virtual brand community motives, frequency, and amount, types of use and membership duration predict virtual brand community engagement?

RESEARCH METHODOLOGY

The data collection consisted of judgment sampling and snowball sampling techniques. The target respondents in this study were members of virtual brand communities that had participated in virtual brand communities for at least three months. The sample size for this study was at 230 respondents. The online questionnaire was used to collect the data.

Thus, the respondents for this study were selected from the members that had participated in virtual brand community websites. Additionally, the snowball sampling was used to find additional respondents obtained from information provided by the initial respondents (Zikmund, 2000). The core members in virtual brand communities were selected and requested to help in recommending the names of other members. The virtual brand community means online community websites, which are brand-related websites.

MEASUREMENT

Virtual brand community motives were explored in this research. Six virtual brand community motives were generated: new friendship (Cronbach $\alpha = .85$), passing time (Cronbach $\alpha = .81$), convenience (Cronbach $\alpha = .83$), brand affection (Cronbach $\alpha = .88$), social influence (Cronbach $\alpha = .70$), and product exchange (Cronbach $\alpha = .69$). There were 26 final items for the virtual brand community motives.

The Big Five personality traits scale was adopted from the International Personality Item Pool (IPIP) scale (Goldberg, 1999). Goldberg et al. (2006) suggested that the IPIP scale had been increasing in popularity because it could be obtained via the Internet without cost. Cronbach's Alpha of the Big Five personality traits ranging from .69-.79: Extraversion (.79), Conscientiousness (.78), Openness to Experience (.70), Agreeableness (.69) and Emotional Stability (.79).

Frequency was measured by asking the respondents to report the number of times within a week that they visited their brand community website. Amount and type of use were measured by asking the respondents about the number of minutes that they used the virtual brand community website within one week. Membership duration was measured by ask-

ing the respondents to report the number of months that they were members.

Virtual brand community engagement was measured by adapting the sense of virtual community scale (SOVC) from Blanchard (2007). The virtual brand community engagement scale reflects how people's feelings of membership, identity, belonging, and attachment to the group interact primarily through electronic communications (Blanchard, 2007). There are eighteen items in virtual brand community engagement scale. The Cronbach's Alpha was .92.

RESULTS OF THE STUDY

RQ investigated how the Big Five personality traits, virtual brand community motives, frequency, amount, and types of use predicted virtual brand community engagement. The hierarchical multiple regression method was used to investigate these relationships. Three sets of variables were entered into the hierarchical multiple regression. The first set was the set of the Big Five personality trait variables. The second set was the set of virtual brand community motives variables. The third step, membership duration, frequency, amount, and three types of virtual brand community uses (i.e., discussion board, chat room, personal message, overall use) were entered into the regression. However, the entry of the set of virtual brand community uses (i.e., membership duration, frequency, discussion boards, chat room, personal message, and overall use) did not significantly increase the explained variance in the subjects' virtual brand community engagement (see Table 4). New friendship ($\beta = .42, p < .001$), convenience ($\beta = .22, p < .001$), brand affection ($\beta = .28, p < .001$), social influence ($\beta = .09, p < .05$), Conscientiousness ($\beta = .14, p < .05$) and Openness to Experience ($\beta = -.15, p < .001$) retained their significance in this step.

Overall, the results suggested that individuals with greater conscientiousness and lower openness to experience were associated with a greater depth of virtual brand community engagement. On the other hand, members that were motivated by new friendship, convenience, brand affection, and social influence exhibited strong virtual brand community engagement. Additionally, virtual brand community motive variables

represented a significantly more powerful set of predictors than the set of personality traits and virtual brand community use. However, virtual brand community uses (membership duration, frequency, amount,

and types of uses) were no longer significant predictors of virtual brand community engagement when compared with personality traits and virtual brand community motives. This means that the level of

Table 1: Hierarchical Regression Analysis for the Big Five Personality Traits, Virtual Brand Community Motives, Frequency, Amount, Types of Use and Membership Duration Predicting Virtual Brand Community Engagement (N = 230)

Dependent Variable	Predictors	B	SE	β
Virtual Brand Community Engagement	Step 1		$R^2 = .11^{***}$	
	Extraversion	.00	.01	.03
	Conscientiousness	.02	.01	.16*
	Agreeableness	.04	.01	.25**
	Openness to Experience	-.02	.01	-.16*
	Emotional Stability	-.00	.01	-.04
	Step 2		$\Delta R^2 = .68^{***}$	
	Extraversion	-.00	.01	-.03
	Conscientiousness	.01	.01	.15**
	Agreeableness	.00	.01	.03
	Openness to Experience	-.02	.01	-.15**
	Emotional Stability	-.01	.01	-.07
	Motive 1: New Friendship	.36	.04	.44***
	Motive 2: Passing Time	-.04	.03	-.06
	Motive 3: Convenience	.23	.05	.21***
	Motive 4: Brand Affection	.26	.04	.30***
	Motive 5: Social Influence	.07	.03	.10*
	Motive 6: Product Exchange	.02	.03	.03
	Step 3		$\Delta R^2 = .69^{***}$	
	Extraversion	-.01	.01	-.03
	Conscientiousness	.02	.01	.14 *
	Agreeableness	.01	.01	.06
	Openness to Experience	-.02	.01	-.15***
	Emotional Stability	-.01	.01	-.07
	Motive 1: New Friendship	.34	.04	.42***
	Motive 2: Passing Time	-.05	.03	-.07
	Motive 3: Convenience	.24	.05	.22***
	Motive 4: Brand Affection	.24	.04	.28***
Motive 5: Social Influence	.06	.03	.09*	
Motive 6: Product Exchange	.02	.03	.02	
Membership duration	.00	.00	.03	
Frequency	-.00	.00	-.01	
Discussion Boards	.00	.00	.07	
Chat Room	.00	.00	.02	
Personal Message	.00	.00	.08	
Overall Use	.00	.00	-.02	

Note: * $p < .05$, ** $p < .01$, *** $p < .001$.

virtual brand community engagement depends mainly on the personality of members and their motivation to participate in the communities, rather than virtual brand community uses.

DISCUSSION

The results of this study suggested that personality traits were found to be powerful factors on virtual brand community engagement. This relationship implies that individual difference has an impact on the feelings of attachment to the virtual brand community. Due to the limited number of studies, this finding also contributes to the knowledge of the online community in that personality traits should be considered as one of the antecedents that influence virtual brand community engagement.

Nevertheless, Openness to Experience is the most relevant personality trait for understanding Web usage (Tuten & Bosnjak, 2001). Furthermore, the results of the study imply that a particular trait, low openness to experience, contributes to the body of the knowledge in the area of virtual brand community use. Virtual brand community refers to interest-oriented community type (Spaulding, 2009). Interest-oriented communities consist of members that have the same interest. With this specific interest in a particular brand, lower on openness to experience individuals may join this type of community more often to communicate with other members who show similar interest. Personality characteristics shape adolescents' perceptions of online communication, which subsequently influence their tendency to turn to online communication as well as their closeness to friends (Valkenburg & Peter, 2007).

The generated virtual brand community motives in this study were also found to be a significantly more powerful set of predictors for virtual brand community engagement compared to personality traits and virtual brand community use. These results are supported by Bagozzi, Dholakia, and Pearo (2007), who found that members that had high motivation and participated actively by more frequently visiting the virtual brand community site tended to have strong brand community engagement. Those motives were new friendship, convenience, brand affection, and social influence. This implies that a specific motivation cre-

ates greater depth of feelings of attachment to the virtual brand community. This means that virtual brand community attachment can also be strengthened by different Internet motivation to participate in online community.

The results indicated that the length of membership duration did not significantly influence members to have strong feelings of attachment to the virtual brand community. One possible explanation is that even members who have participated in the virtual brand community for long period of time, but without a high frequency of using virtual brand community websites, seem not to have strong feelings of attachment to their communities.

One possible explanation is that strong ties among the members may be developed according to the similarity of the members in the community itself. When members are involved in the community for a short period of time, they can get along well with other members when they discuss similar brand issues. Thus, it does not depend on the length of the membership but rather on the similarity of the interests of the members, which is the main characteristic of the virtual brand community. Additionally, the depth of the discussion relating to the brand issues in the community may be another factor that enhances engagement in the community. This was supported by the results of the study, which indicated that the brand relationship was one of the significant motives among all virtual brand community motives. This means that it does not matter how long members participate in the community; the depth of discussion about the brand, may enhance their feelings of attachment to the community.

Furthermore, this result also implies that people have prior brand relationships before joining the online brand community. Consequently, after they join their online brand communities they might develop stronger brand relationships. They might also create feelings of attachment with the communities because the continuity of the discussion about the brand ties them together. The results of the present study also indicated that people that were motivated by brand affection were more likely to have feelings of attachment towards their community. This is supported by Wann-Yih et al. (2008), who found that members in the brand community had a positive attitude and high intention to participate in brand community activities

when they were highly attached to the brand. Thus, in order to maintain brand relationships, the virtual brand community seems to be one type of Internet use that helps brand lovers to express their affection and to continue having good relationships with the brand that they love.

IMPLICATIONS AND RECOMMENDATIONS

The results of the study revealed that the Big Five personality traits, virtual brand community motives influenced virtual brand community engagement. The results suggested that among the six virtual brand community motives that were found, the new friendship motive was the strongest. Thus, marketers should be concerned about the strategies regarding motivating new members to join the community. Additionally, marketers should also concentrate their strategies on motivating existing members to socialize more on the site. Marketers may promote the virtual brand community site on social networking sites, where the interests of the users are specified and categorized, and send invitations to them to join the communities.

Second, the results suggested that the brand affection motive was a specific motive for virtual brand community use. The brand affection motive was found to have positive relationships with virtual brand community engagement, overall use, including types of use. Thus, marketers should concentrate more on the brand affection motive if they want to motivate people to join the community. The brand affection motive means that members join the virtual brand community because they have prior relationships with the brand. Thus, in order to motivate more members to join the virtual brand community, marketers should focus their attention on how to create positive brand relationships among brand admirers.

Third, marketing practitioners should understand the role of personality traits in virtual brand community use. The results of the study suggested that individual difference seemed to be an important factor that influences how members use virtual brand community sites. Individual differences affect how people communicate in various interpersonal settings (Daly, 2002). The results of the study also indicated that the depth of virtual brand community engagement also

depended on personality traits. If marketing practitioners know the dominant personality profile of members, they will be able to focus on their needs (Amichai-Hamburger, 2002). Marketers should also create different activities to persuade these individuals with different personality traits. For example, the results indicated that highly conscientious individuals and lower openness to experience individuals exhibited greater depth of virtual brand community engagement. Highly conscientious individuals were found to have more engagement in the community. Conscientiousness was found to be related with information-seeking tasks and these individuals tended to ask for product information from experts (Tidwell & Sias, 2005).

Thus, in order to maintain strong ties in the community, marketers should provide not only product information but also expert comments available on the discussion boards. The results of the study suggested that Openness to Experience has relationships with engagement in the virtual brand community. Low openness to experience individuals feel that virtual brand community websites are special for them, and this is the reason that they participate in them more often and with greater depth. Therefore, webmasters and marketers may design virtual community sites with unique designs, with the embedded cultures and values of the community. This can make members feel that they are special persons in the community and make them proud to be a part it.

LIMITATIONS AND FUTURE RESEARCH

First, one limitation of the study concerns the uncontrollable responses regarding different product categories. The results showed that the majority of the responses came from a particular product category, such as cars, telecommunication services, or collectibles. This may be related to the nature of the product, which is low involvement product. Members may have less active participation than as seen with high-involvement products. Therefore, future research should concern the use of more appropriate research methodology, such as setting up a response quota for each community.

Second, another limitation of the study is that the results of the study are not adapted for any specific

types of virtual brand community. Previous research found that different types of virtual brand communities might create different impacts on brand relationship. For example, Ishii and Ogasahara (2007) discussed the idea that the effects of online community use were expected to be moderated by the type of online communities. They categorized online community into a real group-based community (online and offline) and a virtual network-based community (online only).

Thus, the impact on virtual brand community engagement may be different according to the different types of online community and this may be investigated in future research.

Third, the sample in the study was based on Thai members and virtual brand community websites in Thailand only. However, different cultures may have a different impact on virtual brand community engagement. For example, Ishii and Ogasahara (2007) found that culture had effects on the use of online communities in Japan and Korea-Japanese users preferred more virtual, network-based online communities, while Korean counterparts preferred real, group-based online communities. Thus, further research is needed to validate and generalize the findings across different country settings.

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