Why do people stick to Facebook website? A value theory-based view

Introduction

Due to the continuous and rapid development of information technology, the Internet has become an important tool for people to communicate online and continue to receive more services and functions. In addition, owing to the rise of the Web 2.0 model, social network services have become a simple and universal concept in the Internet environment. There had been widespread concerns over the social network sites (SNS). Boyd and Ellison (2007) stipulate that SNS must allow users to construct public or semi-public profiles within a bounded system, generate lists of individuals with whom they share a connection, and navigate these connections and those made by other users. Sites such as Facebook and My-Space etc. possess these attributes. According to the latest data from Socialbakers (2013), Facebook has more than 964 million registered users in worldwide; and according to eBizMBA Rank (eBizMBA, 2013), it is the number one social networking site as of June 2013 with 750 million visitors per month, ahead of Twitter (250 million visitors per month). Linkedin (110 million visitors per month), and MySpace (70.5million visitors per month). Therefore, Facebook was chosen for investigation in this study.

In recent years, the academic field has had increasing concern for social network service related issues (Yang and Lai, 2011; Mital and Sarkar, 2011; Merchant, 2012). There are a number of previous studies focused on the social function aspect of Facebook. For example, Lakshminarasimha and Ajay (2008) investigated the value chain relationships among Facebook members. Bateman et al. (2010) and Park et al. (2011) explored the intention to self-disclosures and the impacts of self-disclosures on Facebook on the relationships among

community members. Lin and Lu (2011a) investigated the intention to continue using Facebook fan pages from the perspective of social capital theory. On the other hand, the current Facebook not only provides the traditional social network functions, but also offers many entertainment-oriented application services through its platform. There have been also some studies (e.g., Shin and Shin, 2011; Xu et al. 2012) focused on its hedonic values. Since diverse functionalities have been provided by Facebook, some researchers (e.g., Cheung, et. al., 2011; Nadkarni and Hofmann, 2012; Al-Debei, et al. 2013) tried to understand the underlying reasons why people use Facebook. However, relatively little attention has been given to community members' perceived value of use through Facebook. This study would consider the determinants of Facebook stickiness (i.e., not only usage, but also long stay) from the pure perspective of perceived values.

On the other hand, it was found from past researches that Internet users would have greater risks than the risks involved in the physical environment, and had no high trust on websites (Hoffman et al., 1999). It was asserted that the success of an online service, whether it is commercial or not, depends not only the benefits which brings to the users but also on the level of trust which users have during the system's usage (Beldad et al., 2010; Wu, et al, 2011). Therefore, trust for websites would be an important moderator variable while exploring the antecedent factors for Facebook usages. Based on the above discussion, the research problems in this study are as follows. (1) What value factors would affect users' stickiness to Facebook? (2) How the role of trust plays in the Facebook platform environment?

Literature review and hypotheses development

Stickiness

Zott et al. (2000) proposed stickiness as "the ability of websites to draw and retain customers". Thorbjornsen and Supphellen (2004) indicated that there are two kinds of browsing behaviour in a website: frequency of visits and duration of each visit. Lin (2007) also defined as the user's willingness to return to and prolong her duration of stay in a website. Besides, stickiness had been applied in many fields, for example, e-Commerce shopping (Zott et al., 2000), online purchasing behaviour (Lin, 2007), online game behaviour (Wu et al., 2011), blog stickiness (Johnson et al. 2003; Lu and Lee, 2010). Based on previous literature definitions, stickiness is defined as willingness to return to and prolong the duration of stay on the Facebook website.

Perceived values

The perceived value is defined as "consumers view the overall evaluation of the practicality of the product" (Zeithalm, 1988). In other words, from the cost-benefit paradigm (Johnson and Payne, 1985), the perceived value is a trade-off between cognitive net benefits and cognitive costs. Actually, the value identification is an evaluation procedure (Zeithalm, 1988). Furthermore, uses and gratifications paradigm (Katz, 1959) from mass communications research is another relevant paradigm in this context. It asserts that users are goal-directed in their behaviors; i.e., they perform certain behaviors to achieve a certain goal related to fulfilling a need (i.e., capturing value) on the platform of Facebook, which is a new form of computer-mediated communication technologies.

Research in the field of marketing (e.g., Hirschman & Holbrook, 1982; Sheth et al., 1991; Yen 2012) suggested the perceived hedonic, social and utilitarian value can explain the purchased product/service satisfaction and loyalty. In Web 2.0 websites, Al-Lozi and Al-Debei (2012) suggested that social value, hedonic value, epistemic value, gift value, and

utilitarian value as the values created and exchanged among users. Cheung and Lee (2009) identified that purposive value, self-discovery, entertainment value, social enhancement, and maintaining interpersonal connectivity are the key values (or needs) to determine the use of virtual communities. Facebook is a platform which was originally designed for self-discovery, social enhancement, and maintaining interpersonal connectivity for users. These are main functionalities of SNS and were integrated as social value in this study. On the other hand, currently, Facebook can also provide fun, entertainment and relaxation through playing embedded games or otherwise interacting with others, which is hedonic value. In addition, owing to the Web 2.0 characteristic of Facebook, epistemic value is important for users who can look for novelty experience as well as new knowledge. Therefore, this study synthesized and integrated the above literature adopt three dimensions of perceived value, epistemic, social and hedonic values, to fit the situation of Facebook.

Epistemic value

Epistemic value refers to a consumer's novelty value for a new product (Pihlström and Brush, 2008). Past study results show that novelty affect the consumers' willingness to purchase goods (Cotte et al., 2006). Novelty is generally a positive state of mind, which allows users to create curiosity and interest in the new products and services (Sullivan and Drennan, 2005). It is claimed that the search for novelty is people's search for more hedonic benefits rather than the utilitarian benefits (Raacke and Bonds-Raacke, 2008). The Facebook platform provides users with a space that allows them to establish new links with old/new friends in a fast and easy way. It provided brand-new friend relationship opportunities to users. In addition, Facebook contains plenty of embedded games. Through these embedded games, users' entertainment curiosity can be satisfied, which in turn facilitates a new way for

more frequent exchanges on the social websites. Furthermore, through dynamic news, users can get timely access to or make comments on the daily changes or moods of their friends (Ellison, et al., 2007). Fans can track the footmarks or spy out gossip of their favorite stars, and discuss with other fans. Moreover, the photo/video sharing functions could provide further details or give surprise to satisfy users' curiosity. Owing to the web 2.0 characteristics, new contents would spring up every moment. Thus, users can acquire new information or knowledge to satisfy epistemic value (Al-Lozi and Al-Debei, 2012). Therefore, the epistemic value would never diminish over time. According to the above reasoning, the hypothesis proposed targeting the epistemic value is as follows.

H1: The higher the epistemic value perceived by a Facebook user, the higher the user's stickiness for Facebook would be.

Social value

Social value is defined as the social recognized or strengthened social self-concept generated by service use (Sweeney and Soutar, 2001). Social value expectations would have impacts on the user of entertainment services because the social environment often involves interpersonal interactions (Sullivan and Drennan, 2005). Pihlström and Brush (2008) investigated the mobile service users and found that the user group's use intentions and social value were significantly correlated. Facebook is itself a friend network site. Maintaining interpersonal relationships is the main purpose for most Facebook users (Raacke and Bonds-Raacke, 2008). It can be conjectured that users choose to use Facebook probably because they can gain recognition from the social group, meet the social norms, or display their intrinsic image. Many researchers believed that Facebook is an online platform allowing

people to establish interpersonal networks because it provides users with communication tools (e.g., text, media such as video and photos) so that the users are more capable of interacting and communicating with other users to maintain and expand interpersonal networks, i.e., meet new people as well as connect with old friends (Chang and Zhu, 2011; Lin and Lu, 2011). Besides, through the embedded online game, users can chat/interact with other players; thus their social network relations have been further strengthened (Hsiao and Chiou, 2012). Therefore, Facebook provides a wealth of social values that meet the need for interpersonal interaction and help friends establish long-term relationships on the website. Thus, the hypothesis is as follows.

H2: The higher the social value of Facebook deemed by the social group users, the higher their stickiness for Facebook would be.

Hedonic value

Babin et al. (1994) pointed out that hedonic value is the festive, epicurean and entertainment produced from engaging in online shopping. The purpose is to reflect shoppers' potential value for entertainment and emotions rather than pre-determining and completing the ultimate goal. The hedonic process is often accompanied by fantasy, feel, fun, and sign related elements (Hirschman and Holbrook, 1982), or it may involve festive and ludic feelings (Sherry, 1990). The features of the hedonic dimension are also frequently discussed in studies on behaviors (Sherry, 1990; Wang et al., 2007).

In social group environment, Tufekci (2008) found that users used social websites to acquire interesting peer information. On the Facebook platform, users enjoy sharing interesting contents, embedded pictures, text, or images with their friends or peers on their own pages, and they can also browse the contents shared by their friends. While users

browsing a Facebook community page, they are exposed to sensory stimulation through multimedia content, new ideas, and information related to their area of interest (Poyry, et al., 2013). When users feel pleasant, they would provide more diverse interesting contents in return through the website. Thus, people are entertained as a result of communicating with others in Facebook, or reading information about different sources in Facebook.

Moreover, Facebook not only provides social features but also has many embedded browser games (Shin and Shin, 2011). It provides many new embedded game functions that conventional SNS do not have (Lee and Wohn, 2012). Consequently, Yang and Lai (2011) point out that people might join Facebook for playing the embedded games. It is not hard to imagine that the current Facebook is not simply a social platform, but also has a wealth of entertainment. Therefore, based on the above discussion, the hypothesis proposed is as follows.

H3: The higher one's perceived hedonic value is, the higher one's stickiness for Facebook would be.

Trust

Trust refers the willingness of a party to be vulnerable to the actions of another party, with the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party (Ring and Van, 1992). Trust is an important factor in the Internet environment (Lai et al., 2011). The success of operations in computer environments depends on the users' full trust (Coutu, 1998). As mentioned by Beldad (2010), online trust is different from offline trust because in an online context, both the technology and the organization deploying the technology are the objects of trust. Therefore, it is more difficult for Internet web users to maintain high trust for the websites.

Without mutual trust as the basis, long-term relationships between both sides can never be established (Hoffman et al., 1999). From the past researches, it has been confirmed that trust positively affects the consumers' establishment of long-term relationships on the website platforms (Dayal et al., 1999). Therefore, trust has been proven to increase website use intentions and reduce the uncertainty in website use (Gefen et al., 2000; Palvia, 2009). Moreover, Ridings et al. (2002) also proposed that trust is crucial in virtual communities where the absence of workable rules creates reliance on others behaving in a socially acceptable manner; that is, trust is essential for community continuity. Sledgianowski and Kulviwat (2009) claimed that trust is critical aspect of SNS services because some potentially harmful opportunistic behaviors have beleaguered the confidence in these services; they also empirically verified that perceived trust has a significant positive effect on intention to use SNS. Since this study proposed to investigate the Facebook stickiness from the pure perspective of perceived values, we would not include trust as an antecedent factor of stickiness. However, it is conjectured that trust would have some moderator effects. Therefore, this study proposes the hypothesis as follows.

H4: Trust would have moderator effect on the impact of one's perceived epistemic, social, and hedonic values on stickiness for Facebook.

Research model

Based on the discussion above, this study proposed that hedonic value, social value, and epistemic value act as critical antecedents to the Facebook stickiness. Fig. 1 shows the value model developed according to the above literature. In addition, trust was regarded as a potential critical moderator variable influencing the validity of the value model.

It is noted that there are some recent Facebook researches based on widely-mentioned TAM (Technology Acceptance Model), TPB (Theory of Planned Behavior), or UTAUT (Unified Theory Acceptance Use of Technology). As shown in Table 1, "perceived ease of use" and "perceived usefulness" variables are their focus. Their variables cannot fully provide the reasons to explain why people perceive Facebook useful. Though Al-Debei, et al. (2013) mentioned "perceived value", they did not drill down into different value elements. This study is only concerned about how people perceive Facebook valuable, and adopts three major dimensions of perceived value: epistemic, social and hedonic.

Take in Figure 1.

Figure. 1. The Value Model for the Facebook Stickiness

Sample survey

Instrument development

A pilot test was conducted involving three experts and five PhD students to assess its questionnaire consistencies, and ease of understanding. Then, a pilot study with 53 student's users was also conducted to assess the reliability and validity of the instrument.

Social value was measured using a scale modified from Turel et al. (2010) and Sweeney and Soutar (2001). The measurement of hedonic value was adapted from Babin et al. (1994) and Wang et al. (2007). The items measuring epistemic value were adapted from Donthu and Garcia (1999); Pihlström and Brush (2008); Wang et al. (2007) and Moon and Kim (2001). Measures of stickiness were adapted from Lin (2007). Trust was measured using items adapted from Gefen (2000) and Pavlou and Gefen (2005). The definitions of these variables are shown in the following Table 2.

Table 2. Research operationalization definition

Take in Table 2.

Lastly, all items were measured along a seven point Likert-type scale, ranging from 1 for "strongly disagree," to 7 for "strongly agree." Since the items were first translated into Chinese by an IS professor and then translated back into English by another translator with special training in English-Chinese translation. Because the questionnaires were for distribution in Taiwan, the translation into Chinese allowed the respondents to read the items with no difficulty. The two-way translation also ensured that no loss of information occurred during the translation process.

Common variance bias

In addition, this research has taken procedural remedies to mitigate possible common method biases. The suggestions of Tourangeau et al. (2000) were applied to construct the

questionnaire items to reduce method biases. The expert review described earlier also served

to assist this purpose. Reminding respondents to answer questions as honestly as possible by

assuring them there were no right or wrong answers would also help reducing common

method biases (Podsakoff et al., 2003).

Data collection

The formal survey was carried out after the pilot test. An online mode of data collection

was selected because of its advantages in expediency in data collection, ease of data

tabulation, and the ability to reach a wide population of users (Bhattacherjee, 2002). Because

of the difficulty of reaching all Facebook users, online questionnaires were distributed to

randomly chosen Facebook users. Meanwhile, an invitation message with the URL to the

online questionnaire was posted on a number of online social groups and fans pages of

Facebook and telnet://ppt.cc, the most popular bulletin board systems (BBS) in Taiwan. To

increase the number of survey participants, those who completed the questionnaire were

entitled to enter a lottery. In order to avoid duplicate registrations and to identify attempts at

opportunism, the IP address of each respondent was recorded.

A total of 365 responses were collected, among which 20 were discarded because of

incomplete response or lack of experiences with Facebook. That is, 345 valid responses were

collected, yielding a response rate of 94.52 percent. Table 3 shows the demographic

information of the respondents.

Table 3. Demographic Information of Respondents

Take in Table 3.

Results

Measurement model

A confirmatory factor analysis was performed to examine the measurement model. The PLS (Partial Least Squares) method was chosen because it presumes no distributional form for measured variables, nor does it posits strong requirement on large sample sizes (Chin, 1998; Chin et al., 2003). Internal consistency can be assured by examining the composite reliability of the constructs (Fornell and Larcker, 1981). As shown in Table 3, all composite reliability values were greater than 0.7 (Fornell and Larcker, 1981). Convergent validity refers to the degree to which multiple items measure one construct.

Convergent validity can be evaluated by checking whether (1) the average variance extracted (AVE) values are larger than 0.5 (Fornell and Larcker, 1981), and (2) the factor loadings of the all items are significant and higher than 0.7 (Nunnally, 1978). As shown in Table 4, all these conditions were met, indicating acceptable convergent validity of the measurement.

Table 4. Composite Reliability, Factor Loading, AVE, and Cronbach Alpha of Constructs

Take in Table 4.

Discriminant validity requires whether the measures of constructs are different from each other. Discriminant validity can be assessed by examining whether the square root of AVE of each construct is larger than the correlation between constructs (Chin, 1998; Fornell and

Larcker, 1981). As shown in Table 5, since the smallest value of the square root of AVE of the constructs was 0.716 (for epistemic value) and the largest correlation between constructs was 0.6298 (for hedonic value), discriminant validity was confirmed. In summary, the measurement model of this study demonstrated adequate reliability, convergent validity, and discriminant validity.

Table 5. Square Root of AVE and Correlation Between Constructs

Take in Table 5.

The mean comparison and test

Before testing the overall model, we first checked the means of the constructs. As shown in Table 6, the results showed that the epistemic value had the highest mean (4.91), followed by hedonic value (4.85), social value (4.71), and stickiness (4.56). However, it is worth mentioning that the mean of trust (3.93) is smaller than the median 4 (with scale 1-7), though not significant. It implies that in general the respondents did not have strong trust. Thus, for further comparison, with the mean of trust (3.93) as the criterion, respondents could be divided into two groups: high trust (defined as those perceived trust higher than 3.93) and low trust (defined as those perceived trust lower than 3.93). There are 184 and 161 respondents, respectively.

Table 6. The Means of the Constructs

Take in Table 6.

Table 7 compares the constructs of the high trust and low trust group. It can be found that significant differences existed between all constructs (epistemic value, hedonic value, social value, stickiness, trust) of these two groups. Therefore, it deserves to consider these differences on model testing.

Table 7. Construct Comparison of the High and Low Trust Groups

Take in Table 7.

Structural equation modeling

The model test for the all respondents is shown as Figure 2(a). The model explained 50.3 percent of the variances in stickiness to adopt Facebook. The path coefficients epistemic value (H1) to stickiness were found to be positive but no significant, with coefficients of 0.061 (t-value=1.084). Second, social value (H2, β =0.091, t=1.427) had no significantly effect on stickiness. Finally, the effect of hedonic value on stickiness (H3, β =0.420, t=6.468) was significant at the p<0.05 level. In addition, the trust moderator effects (H4) are not significant.

Without considering the moderator effect, the test of the value model is shown as Figure 2(b). The model explained 42.3 percent of the variances in stickiness to adopt Facebook. The path coefficients epistemic value (H1) to stickiness were found to be positive but no significant, with coefficients of 0.065 (t-value=1.084). Second, social value (H2, β =0.114,

t=1.662) had no significantly effect on stickiness. Finally, the effect of hedonic value on stickiness (H3) was significant at the p<0.05 level.

Take in Figure 2.

Figure. 2. Structural Model Analysis for Research Model and Value Model (without Trust Variable)

It is conjectured that though trust has no moderator effect, in fact, high-trust and low-trust groups might have different models. Further, we test the high-trust group. As shown in Figure 3(a), social value (β =0.219, t=5.070) and hedonic value (β =0.439, t=10.157) produced significant impacts on stickiness, but no significant impact was produced for epistemic value (β =0.082, t=1.544).

Figure 3(b) reports the test for the low-trust group. The statistical results show that epistemic value (β =0.108, t=2.080) and hedonic value (β =0.488, t=11.554) had impacts on the stickiness for Facebook website use, but in terms of the social value aspect, (β =0.020, t=0.384) no significant impact was produced for stickiness.

To avoid group split bias, this study also tried two other different ways to divide high vs. low trust groups with the median 4 of trust as the criterion: (1) high trust (defined as those perceived trust higher than 4) and low trust (defined as those perceived trust equal to or lower than 4). There are 177 and 168 respondents, respectively. (2) high trust (defined as those perceived trust higher than 4) and low trust (defined as those perceived trust equal to 4).

There are 177 and 161 respondents, respectively. In either of two cases, their significance results are similar to Figure 3 except for slightly different coefficients.

Take in Figure 3.

Figure. 3. The Value Model for High-trust and Low-trust Groups

Discussions and conclusions

This study explored the impacts of community users' stickiness to Facebook. The samples were collected through the online questionnaire survey on the platform of Taiwan Facebook. This study proposed that hedonic value, social value, and epistemic value act as critical antecedents to the Facebook stickiness. The overall statistical results are discussed as follows.

First, the model test for all respondents indicates that hedonic value (H3) produced a positive impact on the stickiness for Facebook. This finding coincides with the results in the study conducted by Sweeney and Soutar (2001). Probably, Facebook's active effort in popularizing applications and the widely played embedded games have contributed to this outcome. Meanwhile, the diversity of embedded games has provided more fun to attracting member stickiness to Facebook. In addition, people are also entertained as a result of usually communicating with others in Facebook, or reading important information about different sources in Facebook.

On the contrary, social value (H2) did not produce any impact on stickiness, and this finding coincides with the results of the study conducted by Pihlström and Brush (2008). It is conjectured that Facebook itself has been just an alternative type of platform for social interaction, and most of the community members have established long-term and interactive relationships. To most of the Facebook community members, the relationships among them have already become a deep rooted and they have many alternative communication channels. Therefore, perceived social value might not cause them to stick to Facebook.

Neither did epistemic value (H1) produce any impact on stickiness. This finding coincides with past researches Chen et al. (2008) and Lin et al. (2010). It seems that in general, perceived fashion or novelty on the platform could not cause members to indulge themselves in Facebook.

However, one should note that trust plays a role in this scenario. Although trust has no moderator effect on the original model, people with different degree of trust indeed has different value models. In both high and low trust groups, hedonic value had significant impact on stickiness. But in high-trust group, social value had significant impact; in low-trust group, epistemic value was significant. We can conjecture that for those people, who had high trust to Facebook, are more comfortably on the platform to disclose them and also watch the footsteps of their friends or peers in using the platform. For them, social value becomes an important factor to stickiness. To the contrast, it would be unlikely for those low-trust people to adopt Facebook it as the valuable social communication channel. In this case, when people have little trust for social platform websites, the core of the website operation lies in how to propose fun and novelty applications to attract web users and produce long-term use results.

As mentioned before, from the cost-benefit paradigm and uses and gratifications paradigm, and other empirical studies about Facebook, these three value constructs should be significant to stickiness. However, our findings reported different results and the further analyses indicated the trust role is very important for perceived values. As discussed by Beldad et al. (2010), the success of an online service depends not only on the perceived benefits it brings but also on the level of trust users have on the service, the technology used for service delivery, and the party behind the service. Although Facebook has been naturally deemed as social interaction tool, such perception would not exist for low-trust people. Without trust as the basis, social interaction would be fragile and cannot be lasted for long-term. Social interaction has higher risk than social game. Chang and Fang (2013) claimed that online distrust would significantly decrease high-risk Internet behaviors. The above arguments possibly could explain the different value model of low-trust and high-trust people. The Facebook platform operator and fan page manager should be careful to increase and maintain the users' trust. The marketing campaign might be also differently designed for people who have not had high trust on Facebook.

This study had also some limitations. The respondents were mainly the subjects that belonged to the young age group in Taiwan. Therefore, it should be cautious to generalize the conclusions to other areas or the elder. There might be some potential for conducting a cross-culture study. In addition, probably some other environmental factors were not considered. Further research may explore other moderator variables, e.g., perceived risk, user involvement difference.

Finally, one should note that Facebook provides a myriad of services, including chats, posts, games, commerce, info streams, sponsored links, picture sharing, video sharing, etc.

This study did not request questionnaire respondents to review each of service. That is,

respondents might treat Facebook as a monolithic concept to answer the questionnaire. As discussed in the preceding sections, although some function might be originally designed for satisfying one value (e.g., game for hedonic value), it might give other values to users at the same time. The focus of this study is the value that users perceived by their experience in Facebook. According to different circumstances or scenarios, users have different value perception even for the same service. Future research may examine each service in details.

Acknowledgements

The authors would thank the National Science Council, Taiwan, for financially supporting this research under contract NSC 99-2410-H-004-102-MY2.

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Table 1. Some recent Facebook research based on TAM or TPB

Table 1. Some recent racebook research based on TAW of TFB			
Literature	Variables		
Kwon and Wen	social identity, altruism, telepresence,		
(2010)	perceived usefulness, perceived ease of use,		
	perceived encouragement, actual use		
Shin and Shin	perceived usefulness, perceived enjoyment,		
(2011)	perceived playfulness, perceived security,		
	flow, attitude, intention, behavior		
Lin and Lu	number of members, number of peers,		
(2011b)	perceived complementarity, usefulness,		
	enjoyment, continuance, intention to use		
Lee et al. (2012)	perceived usefulness, perceived enjoyment,		
	perceived ease of use, arousal, valence,		
	attitude toward using Facebook, intention to		
	go to the event		
Bruan (2013)	perceived usefulness, trust, and frequency of		
	internet use, perceived ease of use, social		
	pressures, intention to use		
Al-Debei, et al.	attitude, subjective norms, perceived		
(2013)	behavioral control, perceived value,		
	continuance participation Intention,		
	continuance participation behavior		

Table 2. Research variable definition

Tuble 2: Research variable definition				
Variable	Definitions			
Social value	the utility acquired from using the Facebook			
	to improve the impression, identification and			
	intimacy of relatives and friends and			
	enhance social self-concept			
Epistemic Value	derived from the Facebook capacity to			
	provide novelty, arouse curiosity, and/or			
	satisfy knowledge-seeking aspirations			
Hedonic Value	the extent to which participation in			
	Facebook is perceived to be pleasurable,			
	exciting, enjoyable, and fun			
Trust	the tendency to believe in others and in their			
	posted articles on the Facebook website			
Stickiness	willingness to return to and prolong the			
	duration of stay on the Facebook website			

Table 3. Demographic Information of Respondents

Table 3. Demographic information of Respondents							
Measure	Items	Freq.	Percent	Measure	Items	Freq.	Percent
C 1	Male	187	54.2		< 1 day	44	12.8
Gender	Female	158	45.8	Frequency	2-3 day	42	12.2
	Below 20	33	9.6	of using Facebook	3-5 day	59	17.1
A ~~	20 to 30	280	81.2		5-7 day	200	57.9
Age	Over 30	32	9.2		Most friends	122	35.4
					have used		
	Student	163	42.3		Keep in touch	108	31.3
Job Occupation	Not student	182	57.7	Reason of	Looking for old friends and classmates	12	3.5
Facebook using experience	<1 year	72	20.9	Facebook using	Make friends	8	2.3
	1 to 2 year	169	49.0		Entertainment purposes	65	18.8
	2 to 3 year	86	24.9		Looking for internet information	19	5.5
	>3 year	28	8.2		Others	11	3.2

Table 4. Composite Reliability, Factor Loading, AVE, and Cronbach Alpha of Constructs

Construct	Item	Factor Loading	Composite Reliability	AVE	Cronbach Alpha
E :	Epist1: I used Facebook service out of curiosity	0.76	•		
value	Epist2: Interacting with Facebook site made me curious.	0.78	0.842	0.512	0.768
	Epist3: Browsing on Facebook site aroused my imagination.				
	Social1: The Facebook use helps me feel acceptable.	0.84			
Social	Social2: The Facebook use improves the way I am perceived	0.87	0.914	0.726	0.875
value	Social3: The fact I use Facebook makes a good impression on other people	0.86	0.714	0.720	
	Social4: The Facebook use gives me social approval	0.84			
Hedonic	Hedonic1: Compared to other things I could have done, the time spent shopping online at Facebook site was truly enjoyable	0.80			
value	Hedonic2: I enjoyed being immersed in exciting new information on Facebook site	0.86	0.835	0.562	0.738
	Hedonic3: During the navigating Facebook process, I felt the excitement of the hunt	0.72			
	Trust1: People on Facebook are trustworthy	0.7682			
	Trust2: I trust Facebook's information to be true	0.835			
	Trust3: I usually trust Facebook unless it gives me a reason not to trust it	0.8356			
Trust	Trust4: Overall, Facebook is trustworthy	0.7586	0.908	0.623	0.879
	Trust5: Facebook does respect and would not abuse my privacy information and browsing log history	0.7899			
	Trust6: The security guard and mechanism of Facebook is trustworthy	0.744			
Stickiness	Stick1: I would stay a longer time on Facebook than other websites	0.81			
	Stick2: I intend to prolong my staying on Facebook website	0.83	0.898	0.688	0.849
	Stick3: I would visit Facebook website as often as I can	0.86	0.070	0.000	0.0 1 7
	Stick4: I intend to link to Facebook website every time I am online	0.83			

Table 5. Square Root of AVE and Correlation between Constructs

	Epistemic	Hedonic	Social	Stickiness	Trust
Epistemic	0.716				
Hedonic	0.5616	0.852			
Social	0.4286	0.5121	0.750		
Stickiness	0.4692	0.6298	0.4368	0.829	
Trust	0.3456	0.5164	0.4093	0.4842	0.789

Note: The values in the diagonal are square roots of AVE.

Table 6. Means of the Constructs

Construct	Mean	Sig. (2-tailed)		
Epistemic value	4.91	.000*		
Hedonic value	4.85	.000*		
Social value	4.71	.000*		
Trust	3.93	.190		
Stickiness	4.56	.000*		
* Significant at 0.05 level; the means were tested with the median 4.				

Table 7. Construct Comparison of the High and Low Trust Groups

Construct	Mean of High Trust	Mean of Low	Mean	t-test	Sig.
	Group	Trust Group	Difference		
Epistemic value	5.40	4.86	0.54	5.115	0.000*
Hedonic value	5.17	4.30	0.87	7.213	0.000*
Social value	4.93	4.27	0.66	6.935	0.000*
Stickiness	4.93	4.07	0.86	7.881	0.000*
Trust	4.73	3.02	1.71	28.543	0.000*
* Significant at 0.05	level				

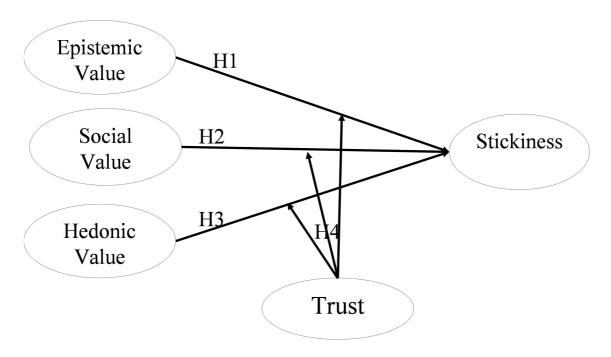


Figure 1. The Value Model for the Facebook Stickiness

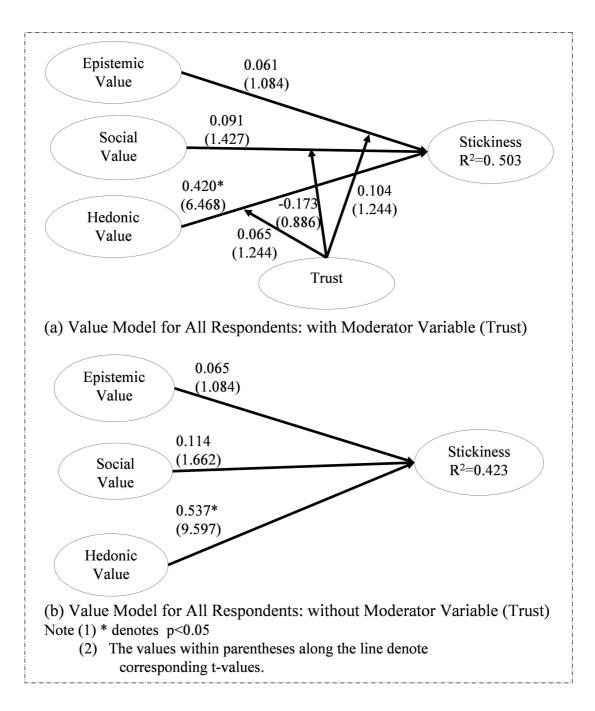


Figure 2. Test of the Value Model for All Respondents: with vs. without Moderator Variable (Trust)

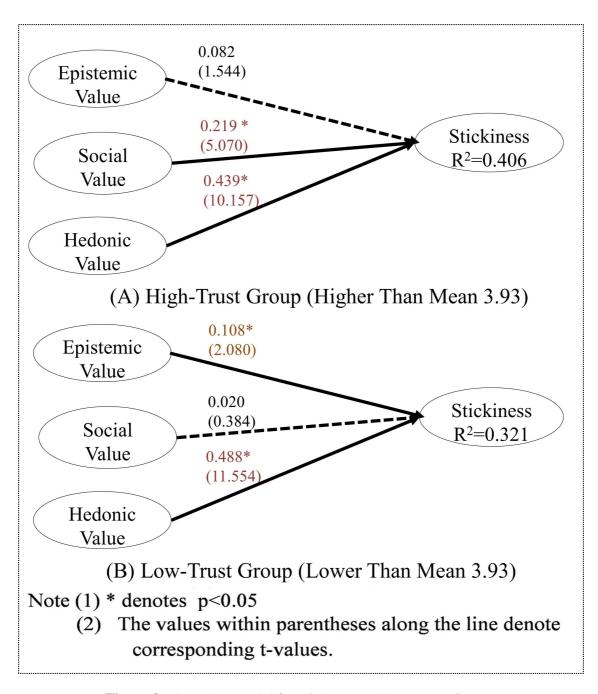


Figure 3. The Value Model for High-trust and Low-trust Groups