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THE VALUE OF IT HABIT IN MICROBLOGS ON BRAND LOYALTY

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ABSTRACT

With the prevalence and potential value of microblogs, many marketers have leveraged this technology to build brand community for broadcasting products and attracting consumers. However, from a marketing point of view, few studies address how practitioners can benefit from microblogs in terms of building brand loyalty. This study investigates the effects of IT habit on brand loyalty within microblogs. We develop a research model and empirically test it using data collected from a survey on a Chinese microblog site. The findings suggest that consumers' habit of using microblogs to follow their preferred brands can significantly affect their brand loyalty. Satisfaction, importance, and social interaction are found to be important antecedents of IT habit. Theoretical and practical implications are offered.

Keyword: Microblogs, Virtual Community, Brand Loyalty, IT habit, Satisfaction

1. INTRODUCTION

Web 2.0 technologies, such as online discussion forums, blogs, social networking sites, and microblogs, have greatly enhanced consumers' abilities to share opinions and information about products or interact with other consumers[1]. From a marketing view, it is necessary for companies to pay attention to consumers' loyalty, because the cost of attracting new consumers is much higher than the cost of maintaining former consumers[2]. Therefore, many virtual brand communities are established to provide companies with opportunities for communicating with consumers, obtaining valuable ideas, and maintaining linkages to devoted users[3]. In this respect, how to establish brand loyalty via these brand communities has been an important concern for practitioners[4].

As a new form of blogging, microblogging allows users to instantly post information in a short length. The ubiquitous feature of microblogs enables users to use websites, instant messengers, or mobile phones to post anything of interest without time and space constraints. Twitter is one of the most popular microblog sites on the Internet. Twitter users have increased from 94,000 in 2007 to 500 million in March 2012[5]; it takes only one week for them to post one billion messages[6]. A recent report from CNNIC indicates that 48.7% of the 250 million Chinese online users use microblogs[7].

Researchers suggest that microblogs can be an influential electronic word-of-mouth (eWOM) communication tool, and the business value of microblogs has been recognized[8]. Many marketers have leveraged this technology to broadcast products and attract consumers. In this case, consumers can follow any microblogger, which are hosted by marketers in microblogs. Adidas Originals, for example, it is a microblog focusing on the Adidas brand. This brand microblog has over 246,000 followers[1]. Consumers can receive products updates and interact with microbloggers. From this perspective, microblogs have become a new form of virtual brand communities that may provide great benefits for practitioners. However, little research illustrates how practitioners can benefit from microblogs in terms of building brand loyalty. Considering the fact that user participation level in microblogs is increasing sharply, this research attempts to investigate the role of IT habit in microblogs.

As learning theorists indicate, habit refers to learned actions that have become an automatic and goal-directed response to certain cues[9]. Automatic behavior can occur without a person's consciousness[9]. Studies in different contexts have found that habitual behavior can result in repeating the same behavior[10]. For instance, recent Information Systems (IS) researchers have begun to investigate how habit develops when people use Information Technology (IT) automatically as a result of former learning. Researchers suggest that habitual behaviors are more important and personally relevant, more goal-directed, and more self-identifying than non-habitual behavior[11].

Prior research on virtual brand communities has shed light on brand loyalty determinants, which include community characteristics, community identity, social influence, and user participation[2, 12, 13, 14]. Although much work has been done in this area, it is still unclear how consumers' habitual usage of microblog technology is related to brand loyalty. In this respect, we aim to explore whether IT habit can produce a significant impact on brand loyalty in the context of microblogs and further examine habit antecedents.

The rest of this paper is organized as follows. We first review the literature on virtual brand community, brand loyalty, and IT habit. Next, we propose the research model and develop several hypotheses. We then empirically test the model in a Chinese microblog site, Sina Microblog (www.weibo.com), followed by the data analysis. Finally, we summarize this research with discussions on implications for both researchers and practitioners.

2. LITERATURE REVIEW

2.1 Virtual Brand Communities

Similar to traditional communities, virtual communities are important communication platforms for both companies and consumers. Researchers indicate that virtual communities can satisfy four types of needs: sharing resources, establishing relationships, trading, and living fantasies[2, 15]. In addition, unlike traditional communities, virtual communities can take full advantages of Internet technologies[13]. Thus, companies can build their own brand communities on the Internet and interact with a large amount of consumers without geographical and time constraints[3]. Muniz and O'Guinn[16] define a virtual brand community as "a specialized, non-geographically bound community, based on a structured set of social relations among admirers of a brand" (p. 412). With the recent prevalence of Web 2.0 technologies, virtual brand communities have appeared in many online discussion forums, social networking sites, as well as microblogs.

Jansen et al.[8] examined eWOM communication in microblogs, where consumers can share their opinions about specific brands with each other. Over the past decade, many researchers have investigated how practitioners can benefit from hosting virtual brand communities. It is believed that these communities may help practitioners obtain valuable information, develop successful long-term relationships with consumers, and enhance consumers' brand loyalty[12, 17].

2.2 Brand Loyalty

Brand loyalty refers to consumers' sense of attachment to preferred brands or companies. Consumers believe that the benefits received from a special brand are more than from other alternative choices[3, 18]. Brand loyalty highlights consumers' strong faith in repeatedly purchasing products from one brand without evaluating external information[19]. Compared to consumers with high brand loyalty, consumers with low loyalty are likely to search for alternative products[20]. Since loyalty is associated with future purchase intention, it is critical for managers to improve consumers' loyalty[21]. In the virtual brand community literature, previous studies have shown that community characteristics, social influence, and relationship among brand, consumers, and community can greatly affect brand loyalty[3, 13]. In addition, Shang et al.[14] found that consumers' lurking and posting behavior in virtual communities can improve their brand loyalty. Similarly, Casalo et al.[2] posited that trust and community participation can enhance brand loyalty.

2.3 Habit

According to previous studies, habit can be referred as goal-directed automatic behavior[22] or past behavior[23]. Lankton et al.[11] point out that a habit develops when a behavior becomes an automatic response to cues and one or more goals are obtained. In recent years, many researchers have investigated how habit can predict behavior in a number of contexts, such as university Internet application[11], computer learning[24], and e-commerce[25]. Limayem et al.[26] define habit as the extent to which people use IT automatically due to their past learning behavior. Lankton et al.[11] show that continued IT use is influenced by habit, which in turn is affected by satisfaction, prior IT usage, and attention. Lin et al.[4] examined the determinants of consumer loyalty in the context of mobile commerce and found that habit may posit a significant impact. Following this line of studies, this research defines IT habit as the extent to which people use microblogs to automatically follow brand-related microblogers.

3. RESEARCH MODEL AND HYPOTHESES

Building upon prior research on virtual brand communities, brand loyalty, and habit, this study considers the role and determinants of IT habit in microblogs. We focus on consumers' habitual behavior of using microblog technology to follow brand-related microbloggers (e.g., using Twitter to follow someone who posts iPhone or iPad related information). Figure 1 depicts the research model of this study. The relationships among IT habit, its antecedents, and brand loyalty are proposed as follows.

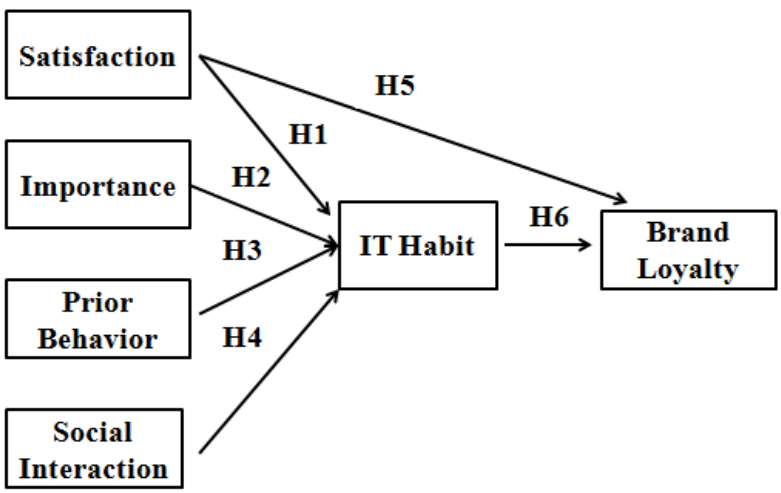

Figure 1. The research model

3.1 Antecedents of IT Habit

Prior research shows that satisfactory experiences can lead to the tendency of repeating the same behavior[10]. Cheung and Limayem[27] found that satisfaction, frequency of past behavior, and comprehensiveness of usage are pivotal to the formation of IT habit. Lankton et al.[11] also contend that satisfaction positively leads to habit. In line with these findings, if consumers are satisfied with their experiences following a brand-related microblogger, then they are more likely to habitually follow without much consciousness. Thus, we propose the first hypothesis:

H1. Satisfaction is positively associated with consumer's IT habit of following a brand-related microblogger.

Compared with non-habitual behavior, habitual behavior is more important and personally relevant[22]. Novak et al.[28] suggest that importance can explain a large proportion of variances in the continued use of web sites. Lankton et al.[11] note that importance positively influences habit. It is expected that the importance of a behavior may enhance the development of habit. In the context of microblogs, if consumers believe that following a brand-related micrblogger is personally important (e.g., they will receive the most recent product updates or interact with others of similar interests), then they are likely to develop an IT habit for this behavior. Therefore, we provide the following hypothesis:

H2. Importance is positively associated with consumer's IT habit of following a brand-related microblogger.

Researchers have shown that past behavior affects future behavior[11, 29]. Davis and Venkatesh[30] indicate that the previous experience of users may lead to sustained usage. Cheung et al.[27] find that prior behavior can significantly affect the continued use of Internet-based learning technologies. Pahnila and Siponen[31] examined how prior behavior posits a significant influence on the habit of reading online newspapers. Verplanken and Orbell[32] contend that habit is stronger for high frequency past behavior than low frequency past behavior. Based on these concerns, we propose the following hypothesis

H3. Prior behavior is positively associated with consumer's IT habit of following a brand-related microblogger.

According to Wang et al.[33], consumers can use websites as social tools and perceive human connections. Armstrong and Hagel[34] conclude that virtual brand communities enable consumers to socialize and interact easily by facilitating the exchange of information and experience sharing. In microblogs, many users prefer to interact with others by following or being followed. Therefore, users can receive instant updates from others and then comment or forward these updates. In this research, we examine the influence from social interaction on IT habit. We propose that if consumers have a high level of social interaction following a brand-related micrblogger, then they are more likely to develop related habitual behavior and continue frequent interactions. Thus, the following hypothesis is provided:

H4. Social interaction is positively associated with consumer's IT habit of following a brand-related microblogger.

3.2 Antecedents of Brand Loyalty

Prior research highlights that satisfaction is a key predictor of re-purchase intention[35]. According to the IS success model from DeLone and McLean[36, 37], consumer satisfaction can lead to favorable results, such as net benefits or individual impacts (e.g., loyalty). In this study, we posit that if consumers are satisfied with their experiences of following a brand-related micrblogger, then they are likely to keep performing the behavior, and their brand loyalty will therefore improve. We provide the following hypothesis:

H5. Satisfaction is positively associated with brand loyalty.

Prior research also suggests that consumers' participation in virtual brand communities can lead to a high level of brand loyalty[2, 14]. In the IS literature, habit has been found to predict IS continued behavior[11, 26, 38]. Lin et al.[4] provide empirical evidence regarding the relationship between habit and loyalty in the context of mobile commerce. In this research, we expect that if a consumer forms a habitual participation behavior in a brand-related microblogger, then he or she will be more likely to develop a strong loyalty toward the brand. From this perspective, IT habit may produce an important impact on brand loyalty in microblogs. The following hypothesis will be tested:

H6. IT habit is positively associated with brand loyalty.

4. METHODLOGY

We empirically tested the research model using an online survey among users of Sina Microblog, the most popular microblog site of China. Sina Microblog has been providing microblogging services for Chinese online user since 2009. It has over 300 million registered users; around 27 million are active[39]. With the public popularity of this microblog site, people increasing log in their microblog, search for new updates, and communicate with other users. Through this platform, many users follow brand-related microbloggers, which are hosted and maintained by brand owners. Hence, Sina Microblog appears to be an appropriate research site for testing the proposed hypotheses in this study.

Table 1. List of measures

Construct	Item	Sources
Brand Loyalty (BLOY)	BLOY1: I will recommendation to others about products of the brand. BLOY2: I will purchase products of the brand.	Gronroo[40]
IT Habit (HAB)	HAB1: The use of Sina Microblog for following the microblogger has become a habit for me. HAB2: I am addicted to using Sina Microblog for following the microblogger. HAB3: I must use Sina Microblog for following the microblogger. HAB4: I don't even think twice before using Sina Microblog for following the microblogger. HAB5: Using Sina Microblog for following the microblogger has become natural to me.	Limayem et al.[38]
Importance (IMP)	Using Sina Microblog for following the microblogger IMP1: is unimportant to me/is important to me IMP2: is irrelevant to me/is relevant to me IMP3: means nothing to me/means a lot to me IMP4: doesn't matter to me/matters to me IMP5: is of no concern to me/is of concern to me	Lankton et al.[11]
Prior Behavior (PB)	How often did you use Sina Microblog for following the microblogger in the last 4 weeks? PB1: 1=never, 2=seldom, 3=sometimes, 4=usually, 5=always, 6=almost, 7=every times PB2: 1=none, 2=once, 3=2–3 times, 4=4–5 times, 5=6–10 times, 6=11–20 times, 7=more than 20 times	Davis[41] and Steinfiel[42]
Satisfaction (SAT)	SAT1: Overall, I am satisfied with my experience of using Sina Microblog for following the microblogger. SAT2: I am sure I made the correct decision in using Sina Microblog for following the microblogger. SAT3: I have obtained several benefits derived from my participation in Sina Microblog for following the microblogger.	Casalo, et al.[17]
Social Interaction (SOCI)	SOCI1: Degree of activity in exchanging information and interpersonal exchanges when using Sina Microblog for following the microblogger. SOCI2: Speed of inquiry and response when using Sina Microblog for following the microblogger. SOCI3: Exchanges between the microblogger and its members when using Sina Microblog for following the microblogger.	Jang et al.[3]

4.1 Measures

The constructs in the research model were measured by multiple items based on the previous literature. The measures of these constructs are listed in Table 1. As shown, all of these items were adapted from prior studies. Minor modifications were made to fit our research context of microblogs.

The items used 7-point Likert scales, from 1=strongly disagree to 7=strongly disagree. Before publishing the online questionnaire, all items of the instrument went through a translation-back-translation process. We translated the instrument from English to Chinese and then back to English. Two English versions were compared, and all inconsistencies were solved to ensure that the Chinese instrument had high translation quality.

4.2 Data Collection

We conducted a pre-test with 25 respondents to check the quality of the online questionnaire. The feedback was used to refine the questionnaire wordings and to identify areas for improvement. Then, we purposely sent invitation messages with the URL to the online questionnaire to many popular brand-related microbloggers. In this case, users who follow these microbloggers were made aware of the survey study. Furthermore, to increase the response rate, incentives of prepaid mobile cards were provided as drawing prizes. In total, 222 valid responses were collected for this study. The demographic profile of the respondents is shown in Table 2.

Table 2. Profile of the respondents (N=222)

Measure	Item	Frequency	Percent
Gender	Male	107	48.2
	Female	115	51.8
Age	<18	25	11.3
	18-24	127	57.2
	25-29	47	21.2
	30-39	19	8.5
	≥40	4	1.8
Experience with Sina-microblog	< 1 month	10	4.5
	1-6 months	46	20.7
	6-12 months	62	27.9
	12-18 months	55	24.8
	>18 months	49	22.1
Ownership of products of the brand	Yes	126	56.8
	No	96	43.2
Education level	High school or below	40	18.0
	Junior college	46	20.7
	College	120	54.1
	Master or above	16	7.2
Income	<1,000 RMB	100	45.0
	1,000-1999 RMB	33	14.9
	2,000-3999 RMB	51	23.0
	4,000-5999 RMB	21	9.5
	> 6,000 RMB	17	7.7

5. DATA ANALYSIS AND RESULTS

Smart Partial Least Squares (PLS) was used to validate the research model. This second-generation multivariate technique[43] is commonly employed to handle both reflective and formative factors[44]. This method ensures that the consequence of structural relationships is drawn from a set of measurement instruments with desirable psychometric properties. Following the guidelines of Hair et al.[45], two-step analytical procedures, the measurement model and the structural model, are presented in this section.

5.1 Measurement Model

Convergent validity indicates that theoretically related items should have high correlations with each other. Composite reliability (CR) and average variance extracted (AVE) are the two indices for convergent validity. It is deemed acceptable if CR>0.70 and AVE>0.50[46]. Table 3 summarizes the factor loadings, CR values, and AVE values of the measures. As shown, the convergent validity of the measures was sufficient in this study.

Table 3. Convergent validity of measures

Construct	CR	AVE	Items	Factor Loadings
Brand Loyalty (BLOY)	0.92	0.85	BLOY1	0.92
			BLOY2	0.93
IT Habit (HAB)	0.90	0.65	HAB1	0.74
			HAB2	0.77
			HAB3	0.86
			HAB4	0.85
			HAB5	0.81
Importance (IMP)	0.92	0.70	IMP1	0.81
			IMP2	0.77
			IMP3	0.88
			IMP4	0.88
			IMP5	0.82
Prior Behavior (PB)	0.83	0.70	PB1	0.95
			PB2	0.72
Satisfaction (SAT)	0.89	0.73	SAT1	0.90
			SAT2	0.89
			SAT3	0.77
Social Interaction (SOCI)	0.91	0.77	SOCI1	0.89
			SOCI2	0.86
			SOCI3	0.88

Discriminant validity reflects the extent to which the items measure the construct in question and are not a reflection of other constructs. It is confirmed if the squared root of AVE for each construct is greater than its correlations with all other constructs[46]. As shown in Table 4, the discriminant validity of this research was acceptable.

Table 4. Correlations between constructs

Construct	BLOY	HAB	IMP	PB	SAT	SOCI
Brand Loyalty (BLOY)	**0.92**					
IT Habit (HAB)	0.44	**0.81**				
Importance (IMP)	0.41	0.47	**0.84**			
Prior Behavior (PB)	0.29	0.31	0.26	**0.84**		
Satisfaction (SAT)	0.50	0.48	0.40	0.27	**0.85**	
Social Interaction (SOCI)	0.51	0.53	0.59	0.29	0.49	**0.88**

Note: Diagonal elements are square roots of the average variance extracted.

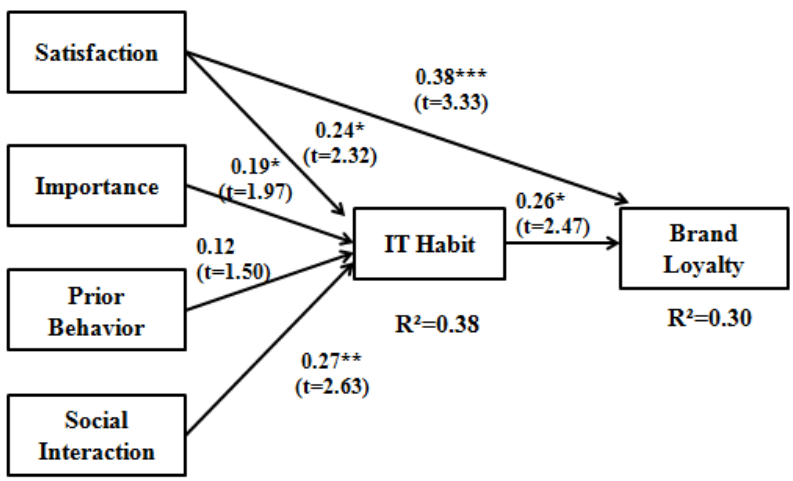

Figure 2. Results of the PLS analysis

5.2 Structural Model

The structural model examines the overall explanatory powers, estimated path coefficients, and associated t-value of paths in the research model. Figure 2 depicts the results of the structural model analysis. The findings demonstrate that satisfaction (β = 0.38, t = 3.33) and IT habit (β = 0.26, t = 2.47) had significant impacts on brand loyalty. Furthermore, satisfaction (β = 0.24, t = 2.32), importance (β = 0.19, t = 1.97), and social interaction (β = 0.27, t = 2.63) were positively associated with IT habit. Prior behavior (β = 0.12, t = 1.50) did not posit a significant impact on IT

habit. Finally, IT habit and brand loyalty were explained by 38% and 30% of variances, respectively.

6. DISCUSSION AND CONCLUSION

This study investigates the relationship between IT habit and brand loyalty as well as the antecedents and determinants of IT habit within the context of brand communities; microblogs. The integration of such perspectives advances our understanding of how consumers can benefit from brand communities in terms of building brand loyalty. Specifically, we first explore the factors influencing IT habit of using microblogs to follow a preferred brand community (i.e. satisfaction, importance, prior behavior and social interaction). Next, the direct effect of IT habit on brand loyalty behaviors is analyzed. We also examine the relative effect of satisfaction on brand loyalty. The theoretical and managerial aspects of the foregoing findings are discussed as follows.

6.1 Theoretical Implications

This study contributes to habit research by analyzing the impact of IT habit on consumers' brand loyalty. Previous studies in different fields have investigated how habit can predict behavior, such as university Internet application[11], computer learning[24], and e-commerce[25]. In prior research, the positive effects of habit on behavioral intention or the continual usage of an existing information system have been the key research priorities. However, few researchers have incorporated the habit construct into the context of brand community within microblogs, which is a new generation of computer-mediated communications. Our study fills this gap and explores the role of IT habit in understanding consumers' brand loyalty via virtual communities. Based on the data analysis, IT habit shows a positive impact on brand loyalty.

We examine four antecedents of habit, including satisfaction, importance, prior behavior, and social interaction. These antecedents were developed by merging learning theory and Lankton's[11] model of IT habit. Three of four hypotheses were supported using data collected from an online survey in the Sina microblog. Satisfaction, importance, and social interaction were found to be important antecedents of IT habit within the context of microblog. The results show that three types of people are more likely to form IT habits: consumers who are satisfied with their experiences of following a brand-related micrblogger, consumers who believe that following the brand-related micrblogger is personally important, and

consumers with a high level of social interaction during following the brand-related microblogger.

Our findings shed new light on prior brand community research and research on social media. While numerous virtual communities have appeared in social media and become a powerful socioeconomic phenomenon, few studies have empirically investigated the influence of these online brand communities on brand loyalty. This study constitutes a first step in this discussion; more factors related to brand communities within social media are expected to be considered in the future.

6.2 Practical implications

Our findings have important implications for company managers. Brand loyalty has been viewed as one of the core pursuits of companies as it can lead to repetitive purchase behavior. To develop consumers brand loyalty, companies are investing new resources in building virtual brand communities where consumers can interact with others, exchange product information, and share shopping experiences[2, 15]. Based on the findings of this research, brand-related microblogs, as a new form of virtual brand community, positively impact on consumers' brand loyalty. This implies that managers can leverage microblogs, which have become one of the most popular social platforms for online users, to foster consumers' brand loyalty. Managers can create accounts in microblogs and run brand-related microblogs as a special form of brand community. As brand-related microbloggers, they can continuously publish brand-related contents and set up a brand community with many interested consumers.

Moreover, IT habit can significantly affect brand loyalty in microblogs. Therefore, a key strategy for achieving loyalty consumers is to improve consumers' habitual participation in microblogs. As suggested by our proposed model, satisfaction, importance, and social interaction are key factors in the formation of IT habit; therefore, management should focus more on the development of such internal processes. It is expected that the greater the IT habit, the more likely that consumers will increase their brand loyalty to companies. Accordingly, in order to develop customers' habitual usage of microblogs to follow their preferred brand, it is important for mangers to build their account as a 'satisfying brand-related microblog. Besides, managers, as microbloggers, should aim to improve consumers' perceived importance by providing consumers with the most recent product updates or increasing users' personal relevance. In addition, managers must continuously work to enhance their web sites by providing functions that promote member social interaction.

6.3 Study Limitations and Future Research Directions

This work collected data from a microblog platform in China. Hence, the findings may be subject to the characteristics of the platform and the cultural background of respondents. To improve the generalizability of our research model, future studies should examine the findings on other platforms (e.g., Twitter) with a larger sample size. Surprisingly, we did not find a significant influence of prior behavior on IT habit. A possible explanation is that Sina Microblog has only become popular in China in the past two years, and 48.6% of the respondents have used this site for less than one year. Thus, the impact of prior behavior on users' habitual usage may not be significant and may not be suitable in capturing the usage differences among respondents. Hence, researchers should be careful to observe the effect of prior behavior on IT habit with the growth of microblogs in future studies. Finally, this study focuses on the influence of IT habit on brand loyalty in microblogs. It is possible that there may be other important antecedents for brand loyalty in this context. We hope that the findings of this research can entice other researchers to pursue additional factors that can improve consumers' brand loyalty in microblogs.

7. REFERENCES

[1] R.V. Kozinets, The field behind the screen: Using netnography for marketing research in online communities. *Journal of Marketing Research*, 39(1), p61-72, 2002. http://dx.doi.org/10.1509/jmkr.39.1.61.18935.

[2] L. Casalo, C. Flavian, and M. Guinaliu, The impact of participation in virtual brand communities on consumer trust and loyalty: The case of free software. *Online Information Review*, 31(6), p775-792, 2007. http://dx.doi.org/10.1108/14684520710841766.

[3] H. Jang, L. Olfman, I. Ko, J. Koh, and K. Kim, The influence of on-line brand community characteristics on community commitment and brand loyalty. *International Journal of Electronic Commerce*, 12(3), p57-80, 2008. http://dx.doi.org/10.2753/JEC1086-4415120304.

[4] H.H. Lin, and Y.S. Wang, An examination of the determinants of customer loyalty in mobile commerce contexts. *Information & Management*, 43(3), p271-282, 2006. http://dx.doi.org/10.1016/j.im.2005.08.001.

[5] Sina, *Registered Twitter users has overed 500 million*. Retrieved on April 16, 2013, from http://tech.sina.com.cn/i/2012-02-24/17546766478.shtml.

[6] F. Damak, L.B. Jabeur, G. Cabanac, K. Pinel-Sauvagnat, L. Tamine, and M. Boughanem, IRIT at TREC Microblog 2011. *Paper presented*

at the Twentieth Text Retrieval Conference, Gaithersburg, November 15-18, 2011.

[7] CNNIC, 29th statistic report for China Internet network development. Retrieved on April 16, 2013, from http://www.cnnic.net.cn/research/bgxz/tjbg/201201/t20120116_23668.html.

[8] B.J. Jansen, M. Zhang, K. Sobel, and A. Chowdury, Twitter power: Tweets as electronic word of mouth. *Journal of the American Society for Information Science and Technology*, 60(11), p2169-2188, 2009. http://dx.doi.org/10.1002/asi.21149.

[9] B. Verplanken, Beyond frequency: Habit as mental construct. *British Journal of Social Psychology*, 45(3), p639-656, 2006. http://dx.doi.org/10.1348/014466605X49122.

[10] H. Aarts, B. Verplanken, and A. Knippenberg, Predicting behavior from actions in the past: Repeated decision making or a matter of habit? *Journal of Applied Social Psychology*, 28(15), p1355-1374, 1998. http://dx.doi.org/10.1111/j.1559-1816.1998.tb01681.x.

[11] N.K. Lankton, E.V. Wilson, and E. Mao, Antecedents and determinants of information technology habit. *Information & Management*, 47(5-6), p300-307, 2010. http://dx.doi.org/10.1016/j.im.2010.06.004.

[12] R. Algesheimer, U.M. Dholakia, and A. Herrmann, The social influence of brand community: Evidence from European car clubs. *Journal of marketing*, 69(3), p19-34, 2005. http://dx.doi.org/10.1509/jmkg.69.3.19.66363.

[13] P.H. Andersen, Relationship marketing and brand involvement of professionals through web-enhanced brand communities: the case of Coloplast. *Industrial Marketing Management*, 34(1), p39-51, 2005. http://dx.doi.org/10.1016/j.indmarman.2004.07.002.

[14] R.A. Shang, Y.C. Chen, and H.J. Liao, The value of participation in virtual consumer communities on brand loyalty. *Internet Research*, 16(4), p398-418, 2006. http://dx.doi.org/10.1108/10662240610690025.

[15] J. Hagel, and A. Armstrong, *Net gain: Expanding markets through virtual communities*. Boston: Harvard Business Press, 1997.

[16] A.M. Muniz Jr, and T.C. O'Guinn, Brand community. *Journal of consumer research*, 27(4), p412-432, 2001. http://dx.doi.org/10.1086/319618.

[17] L.V. Casalo, C. Flavian, and M. Guinaliu, Relationship quality, community promotion and brand loyalty in virtual communities: Evidence from free software communities. *International Journal of Information Management*, 30(4), p357-367, 2010. http://dx.doi.org/10.1016/j.ijinfomgt.2010.01.004.

[18] R. Hallowell, The relationships of customer satisfaction, customer loyalty, and profitability: An empirical study. *International Journal of*

Service Industry Management, 7(4), p27-42, 1996. http://dx.doi.org/10.1108/09564239610129931.

[19] R.L. Oliver, Whence consumer loyalty? T*he Journal of Marketing*, 63(Speical Issue), p33-44, 1999. http://dx.doi.org/10.2307/1252099.

[20] T.T. Tyebjee, Refinement of the involvement concept: An advertising planning point of view. *Paper presented at the Eighth Annual Attitude Research Conference of American Marketing Association*, Chicago, American Marketing Association, 1977.

[21] T.W. Andreassen, What drives customer loyalty with complaint resolution? *Journal of Service Research*, 1(4), p324-332, 1999. http://dx.doi.org/10.1177/109467059914004.

[22] H. Aarts, and A. Dijksterhuis, Habits as knowledge structures: Automaticity in goal-directed behavior. *Journal of Personality and Social Psychology*, 78(1), p53-63, 2000. http://dx.doi.org/10.1037//0022-3514.78.1.53.

[23] I. Ajzen, The theory of planned behavior. *Organizational behavior and human decision processes*, 50(2), p179-211, 1991. http://dx.doi.org/10.1016/0749-5978(91)90020-T.

[24] A. Vincent, M.A. Meche, and D.R. Ross, Computer learning behavior: strategies for learning and behavior improvement. *Journal of Information Systems Education*, 13(4), p331-342, 2002.

[25] C. Liao, P. Palvia, and H.N. Lin, The roles of habit and web site quality in e-commerce. *International Journal of Information Management*, 26(6), p469-483, 2006. http://dx.doi.org/10.1016/j.ijinfomgt.2006.09.001.

[26] M. Limayem, S.G. Hirt, and C.M.K. Cheung, How habit limits the predictive power of intention: The case of information systems continuance. *Management Information Systems Quarterly*, 31(4), p705-737, 2007.

[27] C. Cheung, and M. Limayem, Understanding Continuance of advanced Internet-based learning technologies: The role of satisfaction, prior behavior, and habit. *Paper Presented at the Pacific Asia Conference on Information Systems*, Bangkok, Thailand, July 7-10, 2005.

[28] T.P. Novak, D.L. Hoffman, and Y.F. Yung, Measuring the customer experience in online environments: A structural modeling approach. *Marketing Science*, 19(1), p22-42, 2000. http://dx.doi.org/10.1287/mksc.19.1.22.15184.

[29] J. Rise, M. Thompson, and B. Verplanken, Measuring implementation intentions in the context of the theory of planned behavior. *Scandinavian Journal of Psychology*, 44(2), p87-95, 2003. http://dx.doi.org/10.1111/1467-9450.00325.

[30] F.D. Davis, and V. Venkatesh, Toward preprototype user acceptance testing of new information systems: Implications for software project

management. *IEEE Transactions on Engineering Management*, 51(1), p31-46, 2004. http://dx.doi.org/10.1109/TEM.2003.822468.

[31] S. Pahnila, and M. Siponen, Implementation intentions explain how a behavior becomes habitual: The use of online newspapers. In Jr. Ralph H. Sprague (Ed.), *Proceedings of Hawaii International Conference on System Sciences (HICSS)*(p1-11). Koloa, Kauai, Hawaii: IEEE Computer Society, 2010. http://dx.doi.org/10.1109/HICSS.2010.222.

[32] B. Verplanken, and S. Orbell, Reflections on past behavior: A self-report index of habit strength. *Journal of Applied Social Psychology*, 33(6), p1313-1330, 2003. http://dx.doi.org/10.1111/j.1559-1816.2003.tb01951.x.

[33] L.C. Wang, J. Baker, J.A. Wagner, and K. Wakefield, Can a retail web site be social? *Journal of marketing*, 71(3), p143-157, 2007. http://dx.doi.org/10.1509/jmkg.71.3.143.

[34] A. Armstrong, and J. Hagel III, The real value of on-line communities. *Harvard business review*, 74(3), p134-141, 1996.

[35] Y.S. Wang, T. Tang, and J.E. Tang, An instrument for measuring customer satisfaction toward web sites that market digital products and services. *Journal of Electronic Commerce Research*, 2(3), p89-102, 2001.

[36] W.H. DeLone, and E.R. McLean, Information systems success: The quest for the dependent variable. *Information systems research*, 3(1), p60-95, 1992. http://dx.doi.org/10.1287/isre.3.1.60.

[37] W.H. DeLone, and E.R. McLean, The DeLone and McLean model of information systems success: A ten-year update. *Journal of management information systems*, 19(4), p9-30, 2003.

[38] M. Limayem, and S.G. Hirt, Force of habit and information systems usage: Theory and initial validation. *Journal of the Association for Information Systems*, 4(1), p65-97, 2003.

[39] Eastmoney, Sina microblogging has 300 million users, among which 9% are active users. Retrieved on March 5, 2013, from http://finance.eastmoney.com/news/1373,20120229193948547.html.

[40] C. Gronroos, Relationship approach to marketing in service contexts: The marketing and organizational behavior interface. *Journal of Business Research*, 20(1), p3-11, 1990. http://dx.doi.org/10.1016/0148-2963(90)90037-E.

[41] F.D. Davis, Perceived usefulness, perceived ease of use, and user acceptance of information technology. *Mis Quarterly*, 13(3), p319-340, 1989. http://dx.doi.org/10.2307/249008.

[42] C.W. Steinfield, Dimensions of electronic mail use in an organizational setting. *Paper Presented at the Academy of Management*, San Diego, CA, August 1, 1985. http://dx.doi.org/10.5465/AMBPP.1985.4979313.

[43] H. Wold, *Introduction to the second generation of multivariate*

analysis. California: Paragon House, 1989.
[44] W.W. Chin, Commentary: Issues and opinion on structural equation modeling. *Mis Quarterly*, 22(1), pvii-xvi, 1998.
[45] J.F. Hair, R.E. Anderson, R.L. Tatham, and W.C. Black, *Multivariate analysis*. Englewood: Prentice Hall International, 1998.
[46] C. Fornell, and D.F. Larcker, Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), p39-50, 1981. http://dx.doi.org/10.2307/3151312.