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Article information:

To cite this document:

Hong Zhang Kem Z.K. Zhang Matthew K.O. Lee Feng Feng , (2015), "Brand loyalty in enterprise microblogs", Information Technology & People, Vol. 28 Iss 2 pp. 304 - 326

Permanent link to this document:

http://dx.doi.org/10.1108/ITP-03-2014-0047

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Received 4 March 2014 Revised 10 November 2014 Accepted 6 December 2014

Brand loyalty in enterprise microblogs

Influence of community commitment, IT habit, and participation

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Abstract

Purpose – With the prevailing microblogging phenomenon, many marketers have created their microblog accounts to promote products, advertise brands, and attract consumers. The purpose of this paper is to examine the effects of consumers' community commitment, information technology (IT) habit, and participation on their brand loyalty in the context of enterprise microblogs.

Design/methodology/approach – A total of 364 valid data were collected from fans or followers of enterprise microblogs through a survey on Weibo.com. The data were analyzed with smart partial least squares.

Findings – Community commitment and IT habit directly lead to brand loyalty and indirectly affect brand loyalty through the mediating influence of participation. Information quality, perceived expertise, and social interaction are antecedents of community commitment. Satisfaction, importance, and social interaction positively affect IT habit.

Research limitations/implications – To enhance the generalizability of the study, future studies may examine findings in other platforms (e.g. Twitter) with a large sample size.

Practical implications – Practitioners can increase consumers' brand loyalty through enterprise microblogs. Considerable attention should be directed to facilitating members' community commitment and IT habit. In addition, the study points out significant antecedents of community commitment and IT habit for researchers, managers, and companies.

Originality/value – To uncover the marketing potential of microblogging technology, the authors highlight the need for investigating how enterprise microblogs generate promising marketing outcomes. The present study examines key determinants of brand loyalty. The model empirically shows the significant effects of community commitment, IT habit, and participation.

Keywords Social networking, User participation, Virtual community, Brands, Habits, E-marketing **Paper type** Research paper



Information Technology & People Vol. 28 No. 2, 2015 pp. 304-326 © Emerald Group Publishing Limited

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DOI 10.1108/ITP-03-2014-0047

The work described in this study was supported by grants from National Natural Science Foundation of China (No. 71201149).

Microblogs have become a popular and influential social platform on the internet. An increasing number of users are gathering on this platform. For instance, the number of users of Twitter, the most popular microblogging site, increased from 94,000 in 2007 to 200 million in 2010 and further to 517 million before July 1, 2012 (Semiocast, 2012). Twitter users post one billion messages in merely one week (Damak et al., 2011). This microblogging phenomenon is attracting a growing number of enterprises (Rui and Yongsheng, 2010). Many enterprises (or brands) have created microblog accounts to promote their products, advertise their brands, retain old consumers, and attract new consumers. For instance, Dell, GM, Starbucks, Kodak, and Comcast have adopted microblogging sites as an important approach to marketing and managing public relations (Zhang, 2011). Herring et al. (2005) characterized blogs as socially interactive and community-like. Thus, enterprise microblogs may also function as virtual communities, where enterprises/brands can interact with their followers. For marketers, establishing virtual communities (i.e. enterprise microblogs) in microblogging sites can be a form of online branding practice that provides great marketing benefits. Consumers can receive updated information about products and brands and interact with marketers and brand owners. Although the business value of microblogs becomes increasingly significant, few empirical studies have addressed the marketing potential of enterprise microblogs. Given this research gap, the current study investigates how enterprise microblogs generate promising marketing outcomes.

The marketing outcome of interest in this study is consumers' brand loyalty. Attracting new consumers is more difficult and costly than retaining old consumers (Chiu *et al.*, 2012; Frederick and Schefter, 2000). Brand loyalty is therefore recognized as one of the most important concerns in marketing literature (Casalo *et al.*, 2007; Lin and Wang, 2006). In the context of enterprise microblogs, we expect that brand loyalty should be elucidated because it is closely related to marketers' capability to develop successful long-term relationships with consumers. Thus, the present study examines consumers' brand loyalty when they follow enterprise microblogs. We investigate what drives consumers to develop brand loyalty in this context.

Community commitment is one of the most important factors for the development and sustainability of virtual communities (Doney and Cannon, 1997; Gundlach *et al.*, 1995; Macintosh and Lockshin, 1997). If the members of a virtual brand community have strong community commitment, that is, deep emotional involvement or attachment to the community, then they develop strong loyalty toward the preferred brand (Cheung and Lee, 2009). Increasing empirical studies have shown a positive relationship between community commitment and brand loyalty (e.g. Jang *et al.*, 2008; Shang *et al.*, 2006). Following this line of research, the current study expects that community commitment is also an important determinant of consumers' brand loyalty in enterprise microblogs because these microblogs are virtual brand communities.

Other important determinants of brand loyalty may exist in the present research context. One major difference between microblogs and traditional virtual communities is that microblogs have greater user participation than such communities. Lang (2010) found that consumers spend almost one-third of their time on microblogs and other online social platforms. Many users habitually use microblogs, which are even more addictive than alcohol or cigarettes (Meikle, 2012). In the context of enterprise microblogs, a habitual user or follower is likely to receive information from these microblogs, interact with enterprises, and establish emotional attachments to their brands. Habitual and active followers may considerably rely on enterprise microblogs

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because they receive the most updated information on promotions and products that they are interested in. Thus, this study proposes that information technology (IT) habit and participation may be two other important determinants of brand loyalty.

Learning theorists define habits as learned actions that have become automatic and as goal-directed responses to certain cues (Verplanken, 2006). People develop habits for convenience and for saving cognitive effort and time (Wood and Neal, 2009). As an important concept in the information system (IS) literature, IT habit develops as the person automatically uses an IT artifact on the basis of former learning (Lankton et al., 2010; Limayem and Hirt, 2003; Limayem et al., 2007; Pahnila and Siponen, 2010). IT habit significantly affects individuals' continued usage of an IT (Lankton et al., 2010). From this perspective, IT habit is closely related to user participation. Habitual users more actively interact with IT than non-habitual users. In this study, we define IT habit as the extent to which a microblog user automatically follows an enterprise microblog. Participation refers to the extent to which the microblog user participates in the enterprise microblog. Considering both IT habit and participation will contribute to our understanding regarding the key determinants of brand loyalty in enterprise microblogs. Compared with community commitment, which emphasizes the affective or attitudinal aspect, IT habit, and participation highlight the significance of users' behavioral attributes. In addition, marketers will be able to easily identify habitual and active followers in their microblogs. They will also significantly benefit if they understand whether and how these followers can be developed into loyal consumers. In summary, this study investigates the following research questions:

- RQ1. Do followers' community commitment, IT habit, and participation affect brand loyalty in enterprise microblogs?
- RQ2. What are the factors that drive followers' community commitment, IT habit, and participation in enterprise microblogs?

The remainder of this paper is organized as follows. First, we discuss the theoretical background by reviewing literature on enterprise microblogs, brand loyalty, community commitment, IT habit, and participation. We then develop our research model and hypotheses. Next, we empirically test the model through survey data from a sample of users of a Chinese microblogging site. Finally, the paper concludes with an interpretation of findings and a discussion of implications, limitations, and research opportunities.

Theoretical background

Virtual brand communities and enterprise microblogs

Muniz and O'Guinn (2001) referred to brand community as "a specialized, non-geographically bound community, based on a structured set of social relations among admirers of a brand" (p. 412). In this respect, virtual brand communities are brand communities that operate online and take full advantage of internet technologies and the increased capability for bidirectional communication (Andersen, 2005; Weman, 2011). Armstrong and Hagel (1996) argued that virtual brand communities are important communication platforms for both companies and consumers. These virtual communities help marketers obtain valuable information, develop successful long-term relationships with consumers, and enhance consumers' brand loyalty (Adjei *et al.*, 2010; Algesheimer *et al.*, 2005; Casalo *et al.*, 2007).

Along with the prevalence of Web 2.0 technologies, microblogs are becoming increasingly popular because of their ubiquitous features that enable users to use web sites, instant messengers, and mobile devices to post information and follow others' microblogs anytime and anywhere (Java et al., 2007). To harness the power of microblogs, marketers are creating enterprise microblogs to establish a form of virtual brand communities (Rui and Yongsheng, 2010). Enterprise microblogs have several key advantages, including a low information-release threshold, convenient channels of information transmission, an instant-affinity communication model, and low cost of information retrieval (Li and Wang, 2014). Consumers can voluntarily follow and receive messages from enterprise microblogs. They are free to discuss and communicate with enterprises and other followers about brands of interest. However, enterprise microblogs have rarely been studied. Only few studies have investigated advertising value (Johnson, 2009), electronic word-of-mouth (Jansen et al., 2009), and marketing strategies (Zhang, 2011) in relation to these microblogs.

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Brand loyalty

Brand lovalty is great trust originating from a strong commitment to consistently repurchase or repatronize a preferred product or service (Oliver, 1999). Despite situational influences, people with strong brand loyalty repetitively purchase the same brand or brand-related products rather than switch to other brands. Hallowell (1996) argued that consumer loyalty develops as the value gained from the preferred seller exceeds the value from alternatives. Brand loyalty is a key strategic factor for obtaining and maintaining competitive advantage in marketing research. Enhancing consumers' brand loyalty is an ongoing concern for many marketers (Andreassen, 1999). If consumers are strongly loyal to a specific company, then it gains important competitive advantages, which include reduced marketing and transactional costs, an increased cross-selling rate, positive word-of-mouth, and reduced cost of failure (Griffin, 1996). By contrast, disloyal consumers search for alternative products (Tyebiee, 1979).

Brand loyalty has been defined from two perspectives: attitudinal loyalty and behavioral loyalty (Bloemer and De Ruyter, 1998; Hallowell, 1996; Jacoby and Kyner, 1973). Attitudinal loyalty emphasizes a psychological state in which consumers are committed to the unique values of a brand (Shang et al., 2006). Behavioral loyalty demonstrates that consumers repeatedly purchase products of the same brand (Casalo et al., 2007). Given that the psychological aspects of loyalty are difficult to measure (Oppermann et al., 1999), behavioral loyalty is often used in many studies (Nilsson and Olsen, 1995).

Community commitment

Commitment is "an enduring desire" between parties to maintain a valued and crucial relationship (Moorman et al., 1992). The functional and affective benefits of maintaining such a relationship exceed those of ending it (Geyskens et al., 1996). Commitment is an important concept in literature on relationship marketing (Doney and Cannon, 1997; Gundlach et al., 1995; Macintosh and Lockshin, 1997).

In the context of virtual brand communities, community commitment is often used as an attitudinal factor and refers to community members' attitude toward the community (Hur et al., 2011; Kim et al., 2008; Mowday et al., 1979; Jang et al., 2008; Mogbel et al., 2013). Strong community commitment suggests that community members are psychologically attached to the community (Bettencourt, 1997; Morgan

and Hunt, 1994). Community commitment is an important determinant of consumers' behavioral intention and brand loyalty (Garbarino and Johnson, 1999; Morgan and Hunt, 1994; Pritchard *et al.*, 1999). Committed community members perceive positive brand identification and show strong attachment to brand relationship quality (Algesheimer *et al.*, 2005).

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IT habit

In contrast to frequent past behavior, habit is a psychological construct (Verplanken and Orbell, 2003). The concept of habit has been used by psychologists to describe goal-directed automatic behavior, which is formed after previous learning and is unconsciously and functionally exhibited to obtain certain goals or end-states (Hull, 1943; James, 1890; Triandis, 1977, 1979; Verplanken *et al.*, 2011; Watson, 1914). The more frequently an individual exhibits a behavior, the more likely the behavior becomes habitual (Verplanken and Orbell, 2003). James (1890) stated the importance of habits in daily life as follows: "we must make automatic and habitual, as early as possible, as many useful actions as we can" (p. 122). Once a habit forms, behavior is guided by an automatic process that involves minimal conscious attention or mental effort (Limayem *et al.*, 2007). Automatic behavior is important because it saves people's energy and time and leads to promising outcomes.

Previous studies have examined habits of many non-business behaviors, such as travel modes and exercise (Bamberg *et al.*, 2003). IS scholars have found that habit predicts behavior in several contexts, such as university internet application (Lankton *et al.*, 2010), computer learning (Vincent *et al.*, 2002), and e-commerce (Liao *et al.*, 2006). Limayem *et al.* (2007) defined IT habit as the extent to which people automatically use a certain IT because of their past learning behavior. A high level of IT habit may be closely related to individuals' behavior or continued usage of the IT. For instance, Lankton *et al.* (2010) found that IT habit increases the continued use of a university internet application. Limayem *et al.* (2007) showed that IT habit has a significant positive effect on the continued usage of the World Wide Web. Lin and Wang (2006) found that IT habit significantly affects consumer behavioral loyalty in the mobile commerce context.

Participation

In literature, participation generally refers to taking part in or contributing to activities. Prior research on virtual communities has measured participation as the extent to which members actively engage in contribution behavior (Barki and Hartwick, 1994; Shang *et al.*, 2006; Vroom and Jago, 1988; Johnston *et al.*, 2013). Aside from such active behavior, researchers have pointed out that participation should be further conceptualized by considering passive activities, such as lurking in communities (Ives and Olson, 1984).

In a virtual community, members participate in various activities to share information and experiences related to mutual interests. Motives for participation include common interests, values, or desires among members to discuss specific issues (Armstrong and Hagel III, 1996; Rheingold, 1993). Participation is a crucial element of the long-term development and sustainability of a community (Casalo *et al.*, 2007; Koh and Kim, 2004). Previous studies have also shown the significant outcomes of participation in virtual brand communities. For instance, McAlexander *et al.* (2002) proposed that participation in events in a virtual brand community increases consumer

identification and loyalty to the brand. Algesheimer et al. (2005) argued that participation in virtual brand communities leads to an intention to purchase and use the brand or product.

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Research model and hypotheses development

To understand whether and how enterprise microblogs enhance consumers' brand loyalty, this study develops a research model based on prior literature on virtual brand communities, brand loyalty, community commitment, IT habit, and participation. We propose that community commitment, IT habit, and participation are three important determinants of brand loyalty (Figure 1). Community commitment is an attitudinal factor that refers to users' attitudinal attachment toward enterprise microblogs. By contrast, IT habit is a behavioral attribute that highlights the extent to which users automatically use a microblogging site to follow an enterprise microblog. We expect that community commitment and IT habit also affect brand loyalty through the influence of participation. Finally, we propose that community commitment is influenced by information quality, perceived expertise, and social interaction. In addition, IT habit is affected by importance, prior behavior, and satisfaction.

Antecedents and consequences of community commitment

Prior research posits that the characteristics of virtual brand communities may play an important role in influencing members' community commitment (Lee, 2009; Lee and Kim, 2005). Following this theoretical lens, Jang et al. (2008) examined four characteristics, namely information quality, system quality, social interaction, and

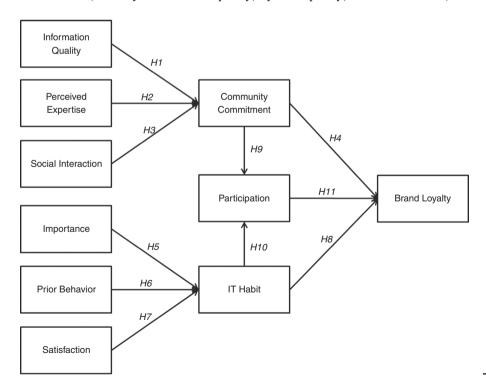


Figure 1. Research model

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reward in virtual brand communities. They proposed that these factors may positively affect individuals' community commitment. In this study, we expect that system quality and reward in enterprise microblogs may not posit important effects on community commitment. On a microblogging site (e.g. Twitter), different enterprise microblogs tend to share the same level of system quality (normally in a high level) as it is mainly determined by the same microblogging site. Compared to traditional virtual communities, enterprise microblogs are also less likely to use rewards to motivate their followers for information contribution. In contrast, enterprises play the dominant role of posting messages and interacting with their followers. Hence, we do not consider system quality and reward as the key characteristics of enterprise microblogs. To highlight the attribute of enterprises, we further incorporate perceived expertise as another important characteristic. In short, we consider three key characteristics of enterprise microblogs in this study: information quality, social interaction, and perceived expertise.

First, information quality is a key factor that increases a member's commitment to virtual communities (Anderson and Srinivasan, 2003; Zeithaml et al., 1996). Information content, accuracy, format, and timeliness are often used to evaluate the quality of information (Doll and Torkzadeh, 1988). In the context of microblogs, information quality is an important issue related to users' information-seeking and -sharing behavior. Jansen et al. (2009) found that 80 percent of microblog messages that users are interested in contain brand-related information. In enterprise microblogs, marketers can post useful, timely, and brand-related information for their followers. On the other hand, interested followers receive, comment on, or forward such information that is valuable for them. Excellent information quality increases emotional attachment to the community (Jang et al., 2008; Lee, 2009). In this regard, we propose that information quality in enterprise microblogs affects followers' commitment toward them.

Second, expertise generally refers to the amount of knowledge possessed by a person about a domain (Shen et al., 2010). Opinions from experts are more credible and reliable than those from non-experts (Kelman, 1961; Petty et al., 1981). The information or advice provided by experts is considered credible and contributes to the long-term successful relationship between members and their communities (Bonner et al., 2006). In this respect, the current study expects that if enterprises have great perceived expertise, then their followers maintain relationships with their microblogs and thereby strengthen community commitment.

Third, McWilliam (2000) argued that social interaction is important in increasing consumers' commitment to communication. Users often adopt microblogs as social tools and perceive human connections during interaction with them (Wang et al., 2007). Users more considerably benefit from a microblog with strong social interaction than from another with limited social interaction because they receive valuable information and instant responses from a highly interactive microblog. In this regard, this study examines the relationship between social interaction and community commitment. We propose that if followers perceive that an enterprise microblog has strong social interaction, then they desire to maintain their relationship with the microblog and commit to it. In summary, three hypotheses are proposed:

- H1. Information quality is positively associated with community commitment.
- H2. Perceived expertise is positively associated with community commitment.
- H3. Social interaction is positively associated with community commitment.

We further propose that community commitment is positively related to brand loyalty. Community commitment is an important factor for the development of brand loyalty (Day, 1969; Jacoby and Chestnut, 1978; Jang *et al.*, 2008). Morgan and Hunt (1994) asserted that employees' commitment is negatively related to their propensity to leave their organization. On the basis of these studies, we expect that if followers have a strong community commitment to enterprise microblogs, they maintain their following relationship with the microblogs and develop strong brand loyalty. Therefore, we propose the following hypothesis:

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H4. Community commitment is positively associated with brand loyalty.

Antecedents and consequences of IT habit

Learning theories explain that habit develops based on individuals' prior learning experience and repetitive behavior (Verplanken, 2006). Prior behavior is thus important for the formation of habit (Verplanken and Orbell, 2003). The post-adoption model conceptualized by Jasperson *et al.* (2005) indicates that individuals' IT use behavior may become habitual in the post-adoption stage. In this respect, prior IT use behavior and satisfaction, which is based on prior IT use experience, are important drivers. They also posited that individual attention helps the transition from post-adoptive behavior to habitual behavior. Attention is expected to enhance individuals' learning of IT usage, which assists the formation of IT habit. Drawing upon these theoretical perspectives, Lankton *et al.* (2010) proposed that prior behavior, satisfaction, and attention (i.e. importance and task complexity) are important antecedents of IT habit. Following their work, this study attempts to examine the influence of importance, prior behavior, and satisfaction on IT habit in enterprise microblogs. We do not consider the effect of task complexity given that it is easy (i.e. low task complexity) for individuals to follow and interact with enterprise microblogs.

First, this study refers to importance as the extent to which users perceive that following an enterprise microblog is important, relevant, and of high concern to them. Compared with non-habitual behavior, habitual behavior is important and personally relevant (Aarts and Dijksterhuis, 2000). Novak *et al.* (2000) suggested that importance explains a large proportion of variances in the continued use of web sites. Importance is found to positively affect the formation of IT habit on software applications (Lankton *et al.*, 2010). The importance of a behavior may enhance the development of habit. In the context of this research, if following an enterprise microblog is personally important to users (e.g. users find it important to receive the most recent product updates by following the enterprise microblog), then they automatically follow the microblog in their daily lives and thus develop a high level of IT habit.

Second, past behavior affects the formation of IT habit. For instance, Verplanken and Orbell (2003) argued that IT habit is stronger for high-frequency past behavior than for low-frequency past behavior. Pahnila and Siponen (2010) investigated the effect of prior behavior on IT habit in the context of reading online newspapers. Limayem *et al.* (2007) reported that the frequency of past behavior increases the likelihood that the habit of using IS develops. On the basis of these findings, we propose that if users exhibit high frequency following behavior toward an enterprise microblog, then they develop a habit of following the microblog.

Third, in addition to the influence of importance and prior behavior, this study investigates the effect of users' satisfaction with their experience of following enterprise microblogs. A satisfactory experience increases the tendency of repeating the same behavior (Aarts *et al.*, 1998). Satisfaction is vital to the formation of IT habit

(Lankton *et al.*, 2010; Cheung and Limayem, 2005). Similarly, we argue that if users are satisfied with their experience of following an enterprise microblog, they become habitual followers. In summary, three hypotheses are proposed:

- H5. Importance is positively associated with IT habit.
- H6. Prior behavior is positively associated with IT habit.
- H7. Satisfaction is positively associated with IT habit.

This study further proposes that IT habit is positively related to brand loyalty. Beatty and Smith (1987) posited that around 40-60 percent of customers repeatedly purchase from the same store through force of habit. Lin and Wang (2006) found a positive relationship between IT habit and consumers' behavioral loyalty to mobile commerce web sites. In the current study, the IT habit of users develops as they learn and recognize the value of brands associated with enterprise microblogs. In addition, a habitual follower of such microblogs is significantly influenced by them. Therefore, we expect that users who automatically follow an enterprise microblog develop stronger brand loyalty than users who do not. We propose the following hypothesis:

H8. IT habit is positively associated with brand loyalty.

Participation

In this study, we further propose that community commitment and IT habit also indirectly affect followers' brand loyalty through the influence of participation. Community commitment considerably affects community members' participation behavior (Jang *et al.*, 2008). From this perspective, if users have deep emotional involvement or attachment to enterprises, then the users participate in their microblogs. Similarly, IT habit predicts future behavior (Bamberg *et al.*, 2003). IT habit also predicts IS continued behavior (Lankton *et al.*, 2010; Limayem and Hirt, 2003; Limayem *et al.*, 2007). On the basis of these observations, the current study argues that users with a high level of IT habit keep following an enterprise microblog and increase participation. We therefore propose the following two hypotheses:

- H9. Community commitment is positively associated with participation.
- H10. IT habit is positively associated with participation.

Finally, a few prior researchers have explained the value of participation in virtual communities. For instance, Casalo *et al.* (2007) found that participation in a virtual community develops consumer trust and loyalty to the mutual interests of the community. The longer the time consumers spend in virtual brand communities, the more loyal they are to the brands (Shang *et al.*, 2006). Similarly, participation in these communities increases consumers' intention to purchase and use the brands or products (Algesheimer *et al.*, 2005). On the basis of these observations, we propose that users' participation in enterprise microblogs increases brand loyalty. The following hypothesis is proposed:

H11. Participation is positively associated with brand loyalty.

Research design

Research site

To empirically test the research model, we administrated an online survey on the most popular microblogging site of China: Weibo.com. The platform has been providing microblogging service for Chinese online user since 2009. It had over 300 million

registered users, and around 27 million were active (Eastmoney, 2012). Many users have been using this platform to follow brands in enterprise microblogs. Therefore, we believe that Weibo.com is an appropriate research site for testing the proposed hypotheses in this study.

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Sample

We first conducted a pre-test with 25 respondents to ensure the quality of our online questionnaire. The feedback was used to refine the questionnaire wordings and to identify areas for improvement. Then, we sent invitation messages, with the URL to the online questionnaire, to fans/followers of many popular enterprise microblogs, such as Apple, Lenovo, NBA, and Samsung. Respondents were asked to complete the questionnaire regarding an enterprise microblog that they follow most frequently. To increase response rate, incentives of prepaid mobile recharge cards were provided as lucky draw prizes. Finally, 364 valid responses were collected for this study. Table I depicts the demographic profile of the respondents. As shown in Table I, 45.6 percent of the respondents were males, while 54.5 percent were females. In total, 80.5 percent of the respondents aged from 18 to 29. More than 65 percent of them had university or above degrees. The demographic characteristics of our sample were a similar to the recent survey report of Weibo.com users (Sina, 2013), which showed that there was similar amount of male and female users on the web site, and a majority of them were young adults with bachelor or above degrees. To examine possible non-response bias in our sample, we compared the demographics of the first 50 and late 50 responses. The results showed that no significant differences were found, suggesting that this bias might not be a serious concern in this study.

Measure	Item	Frequency	%
Gender	Male	166	45.6
	Female	198	54.4
Age	< 18	40	11
	18-24	217	59.6
	25-29	76	20.9
	≥30	31	8.5
Experience with Weibo.com	< 6 months	18	5
	1-6 months	78	21.4
	6-12 months	101	27.7
	12-18 months	80	22
	> 18 months	87	23.9
Product possession of the brand	Yes	222	61
	No	142	39
Education level	High school or below	65	17.9
	Junior college	59	16.2
	University	204	56
	Master or above	36	9.9
Income (RMB)	< 2,000	212	58.2
	2,000-3,999	79	21.7
	4,000-5,999	33	9.1
	> 6,000	40	11
Note: $n = 364$			

Table I. Profile of the respondents

Measures of constructs in the research model are listed in Table II. As shown in Table II. all items were adapted from prior studies. Minor modifications were made to fit our research context. The items used seven-point Likert scales, from 1 = strongly disagree to 7 = strongly agree. Because this study was conducted in China, the survey instrument was translated into Chinese. The items went through a translation-backtranslation 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 translation had high quality.

Data analysis and results

We used smart partial least squares, a popular structural equation modeling technique. to analyze the data. Following the guidelines of Hair et al. (1998), the analysis included two stages: the measurement model and the structural model. The basic idea of this method is to ensure that the consequence of structural relationships is drawn from a set of measurement instruments with desirable psychometric properties.

Measurement model

To examine measurement model, we tested convergent validity and discriminant validity of the construct measures. Convergent validity indicates that items of a construct should be highly correlated as they are under the same conceptual domain. Composite reliability (CR) and average variance extracted (AVE) are the two indicators for testing convergent validity. It is deemed acceptable if CR > 0.70 and AVE > 0.50(Fornell and Larcker, 1987). Table III summarizes the factor loadings, t-values, CR values, and AVE values of the measures. As shown from this table, all CR and AVE values meet the recommended thresholds. Thus, convergent validity was sufficient for this study.

Discriminant validity reflects the extent to which items measure the construct in question rather than other constructs. Discriminant validity was verified if the squared root of AVE for each construct exceeds the correlations between this construct and other constructs (Fornell and Larcker, 1987). As shown in Table IV, discriminant validity of this research was also acceptable.

Structural model

Before testing the structural model, we considered the influence of possible control variables on brand loyalty. These control variables initially included demographic factors, such as gender, age, education, income, product possession, and experience with Weibo.com. We found that only age $(\beta = 0.14, t = 2.17)$ and product possession $(\beta = -0.39, t = 8.54)$ had significant impacts on brand loyalty. Thus, age and product possession were included as the control variable in the following structural model analysis. 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 bootstrap resampling procedure was employed to test the significance of all paths. As shown in Figure 2, information quality $(\beta = 0.25, t = 4.54)$, perceived expertise $(\beta = 0.22, t = 4.32)$, and social interaction $(\beta = 0.44, t = 10.42)$ posited significant impacts on community commitment. Hence, H1-H3 were supported. Importance ($\beta = 0.35$, t = 6.83), prior behavior ($\beta = 0.18$, t = 3.73), and satisfaction ($\beta = 0.21$, t = 3.75) positively influenced IT habit, providing support for H5-H7. In addition, we found that community commitment ($\beta = 0.29$,

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Construct	Item	Sources	Brand loyalty in enterprise
Community commitment (COM)	COM1: I am very attached to the enterprise microblog COM2: other followers and I share the same	Algesheimer et al. (2005)	microblogs
	objectives COM3: the friendships I have with other followers		315
	of this enterprise microblog mean a lot to me COM4: if followers of this enterprise microblog planned something, I would think of as something		
	"we" would do rather than something "they" would		
	do COM5: I see myself as a part of the enterprise		
Information	microblog The quality of information provided by the	Doll and Torkzadeh, (1988),	
quality (INFQ)	enterprise microblog is	Hallowell (1996), Muniz and	
	INFQ1: excellence INFQ2: affluence	O'Guinn (2001)	
	INFQ3: newness		
	INFQ4: credibility INFQ5: timely		
Perceived	EXP1: the enterprise is very knowledgeable about	Ohanian (1990)	
expertise (EXP)	its brand and products EXP2: the enterprise is an expert on products of its		
	brand		
	EXP3: the enterprise is highly familiar with products of its brand		
	EXP4: messages posted by the enterprise contain		
	lots of information and knowledge regarding its brand		
Social interaction	SOCI1: there is a high degree of activity in exchanging information and interpersonal	Jang et al. (2008)	
(SOCI)	exchanges in the enterprise microblog		
	SOCI2: the speed of inquiry and response in the enterprise microblog is high		
	SOCI3: exchanges between the enterprise		
IT habit (HAB)	microblog and its followers are frequent HAB1: following the enterprise microblog has	Limayem and Hirt (2003)	
11 114511 (1112)	become a habit for me	Zimay em ana rime (2000)	
	HAB2: I am addicted to following the enterprise microblog		
	HAB3: I must follow the enterprise microblog		
	HAB4: I do not even think twice before following the enterprise microblog		
	HAB5: following the enterprise microblog has		
Importance	become natural to me Following the enterprise microblog	Lankton et al. (2010)	
(IMP)	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: does not matter to me/matters to me IMP5: is of no concern to me/is of concern to me		
	and a solution to mean of concern to me	(continued)	Table II. List of measures

28,2	Construct	Item	Sources
20,2	Prior behavior (PB)	How often did you follow the enterprise microblog in the last 4 weeks? PB1: 1 = never, 2 = seldom, 3 = sometimes,	Steinfield (1985), Davis, (1989)
316	_	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	
	Satisfaction (SAT)	SAT1: overall, I am satisfied with my experience of following the enterprise microblog SAT2: I am sure I made the correct decision in following the enterprise microblog SAT3: I have obtained several benefits derived from my participation in following the enterprise microblog	Casalo et al. (2010)
	Participation (PAR)	PAR1: in general, I am very motivated to participate in activities of the enterprise microblog PAR2: in general, I use to stimulate the enterprise microblog PAR3: in general, I post messages and responses in the enterprise microblog with a great excitement	Casalo et al. (2010)
Table II.	Brand loyalty (BLOY)	and frequency BLOY1: I will recommend to others about products of the brand BLOY2: I will purchase products of the brand	Jang et al. (2008)

t=4.50) and IT habit ($\beta=0.13$, t=2.40) had significant impacts on brand loyalty, thus supporting H4 and H8. Finally, community commitment ($\beta=0.51$, t=11.59) and IT habit ($\beta=0.32$, t=6.71) produced positive impacts on participation. Participation ($\beta=0.13$, t=2.02) had a significant effect on brand loyalty. Therefore, H9-H11 were also supported. Overall, the findings provide support to all of our proposed hypotheses. In total 49.9, 32.7, 51.6, and 35.1 percent of the variances were explained in community commitment, IT habit, participation, and brand loyalty, respectively.

Discussion and conclusion

In this study, we attempt to understand whether and how enterprise microblogs enhance their consumers' brand loyalty. Following prior research on virtual brand communities, we posit that community commitment is an important determinant of brand loyalty. Moreover, we argue that the behavioral attributes of IT habit and participation significantly affect the present research context. Our findings provide strong empirical support to all the proposed hypotheses. First, community commitment, IT habit, and participation are shown as key determinants of brand loyalty. In addition, community commitment and IT habit indirectly affect brand loyalty through participation. These results suggest that if users are committed to an enterprise microblog, develop a habit of following the microblog, and actively participate in the microblog, then they become loyal to the brand of the enterprise. Second, we find that the three key characteristics of enterprise microblogs, namely information quality, perceived expertise, and social interaction, positively affect community commitment. It indicates that users will be more committed to an enterprise

Construct	Items	Factor loadings	<i>t</i> -Value	Mean	SD	Brand loyalty in enterprise
Community commitment (COM)	COM1	0.72	24.03	5.00	1.23	microblogs
CR = 0.90, AVE = 0.65	COM2	0.78	31.98	4.89	1.22	microbiogs
010 0100, 11, 12 0100	COM3	0.86	53.68	4.83	1.32	
	COM4	0.85	45.97	4.71	1.36	
	COM5	0.79	37.86	4.54	1.39	217
Information quality (INFQ)	INFQ1	0.88	70.20	5.02	1.18	317
CR = 0.91, AVE = 0.68	INFQ2	0.85	54.78	5.28	1.12	
,	INFQ3	0.83	29.76	5.25	1.15	
	INFQ4	0.79	27.59	5.17	1.20	
	INFQ5	0.77	26.59	5.40	1.22	
Perceived expertise (EXP)	EXP1	0.86	46.70	5.12	1.31	
CR = 0.93, AVE = 0.77	EXP2	0.92	79.58	5.03	1.36	
	EXP3	0.89	45.12	5.01	1.20	
	EXP4	0.84	38.78	5.15	1.32	
Social interaction (SOCI)	SOCI1	0.87	53.09	4.04	1.46	
CR = 0.91, $AVE = 0.77$	SOCI2	0.85	36.04	4.08	1.50	
011 0101,111,12 0111	SOCI3	0.91	76.00	3.86	1.45	
IT habit (HAB)	HAB1	0.75	29.29	4.90	1.55	
CR = 0.90, $AVE = 0.65$	HAB2	0.78	29.49	3.57	1.66	
010 0100, 11, 12 0100	HAB3	0.83	43.78	3.68	1.68	
	HAB4	0.86	62.93	4.31	1.60	
	HAB5	0.80	33.04	4.77	1.54	
Importance (IMP)	IMP1	0.83	42.11	4.13	1.45	
CR = 0.92, $AVE = 0.69$	IMP2	0.70	19.36	4.82	1.36	
CR = 0.32, TIVE = 0.03	IMP3	0.88	57.00	3.98	1.46	
	IMP4	0.88	46.69	3.87	1.42	
	IMP5	0.86	44.78	4.21	1.54	
Prior behavior (PB)	PB1	0.94	46.50	4.57	1.28	
CR = 0.83, $AVE = 0.71$	PB2	0.74	12.14	3.13	1.48	
Satisfaction (SAT)	SAT1	0.87	45.03	4.91	1.20	
CR = 0.89, AVE = 0.73	SAT2	0.88	53.16	4.97	1.17	
CR = 0.05, RVL = 0.75	SAT3	0.82	29.25	4.73	1.37	
Participation (PAR)	PAR1	0.86	52.66	4.73	1.55	
CR = 0.89, AVE = 0.73	PAR2	0.85	49.03	4.41	1.40	
OR = 0.03, AVE = 0.13	PAR3	0.86	49.03	4.41	1.40	Table III.
Brand loyalty (BLOY)	BLOY1	0.88	49.55 100.10	4.29 4.71	1.47	Convergent validity
CR = 0.92, $AVE = 0.86$	BLOY2	0.93	80.46	4.71	1.33	of measures
,	DEC 12	0.00	00.10	1.00	1,22	555 di 65

microblog if they find that the enterprise is knowledgeable, and its microblog has high levels of information quality and social interaction. Finally, IT habit is influenced by importance, prior behavior, and satisfaction. It implies that users can develop a habit of following an enterprise microblog when they believe it is important to follow the microblog, they have been following it frequently in the past, and they are satisfied with the overall experience of following it. The theoretical and managerial implications of these findings are discussed as follows.

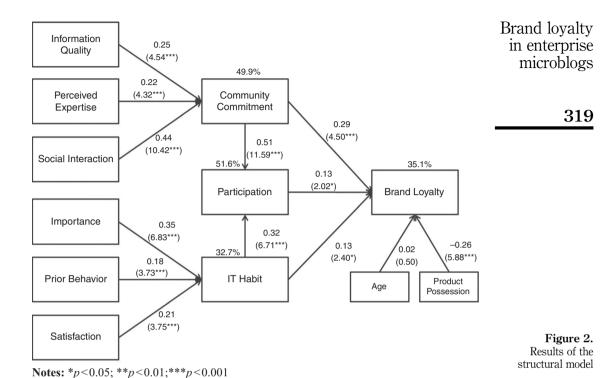
Implications

This study provides several important implications to literature. First, this study contributes to the understanding of the marketing potential of social media. Specifically, we observe that marketers are establishing virtual brand communities

Γ	T)
28	3,2	2

Construct	COM	INFQ	EXP	SOCI	HBT	IMP	PB	SAT	PAR	BLOY
COM	0.81									
INFQ	0.54	0.82								
EXP	0.48	0.59	0.88							
SOCI	0.59	0.35	0.27	0.88						
HAB	0.45	0.44	0.35	0.43	0.81					
IMP	0.51	0.37	0.28	0.59	0.50	0.83				
PB	0.44	0.40	0.34	0.37	0.39	0.39	0.84			
SAT	0.56	0.54	0.48	0.36	0.41	0.41	0.36	0.85		
PAR	99.0	0.51	0.42	0.67	0.55	0.53	0.47	0.50	0.85	
BLOY	0.49	0.54	0.47	0.44	0.39	0.34	0.33	0.46	0.45	0.93
Note: Diagona	iagonal elements are	e square roots of the average variance extract	f the average v	rariance extrac	ted					

Table IV.Correlations between constructs



whether and to what extent marketers benefit from these online practices. In the current study, we address this gap and point out that consumers' brand loyalty can be developed. Second, we extend prior research on virtual brand communities, which generally refers to community commitment, an attitudinal factor, as the key determinant of consumers' brand loyalty (Garbarino and Johnson, 1999; Morgan and Hunt, 1994; Pritchard et al., 1999). We suggest that, in addition to community commitment, behavioral attributes, including IT habit and participation, also significantly affect consumers' brand loyalty. Participation can be further enhanced by community commitment and IT habit. These are important findings because they suggest that encouraging following behavior toward enterprise microblogs promotes the development of consumers' brand loyalty. Marketers benefit from this online practice because behavioral attributes (e.g. IT habit and participation) are easier to monitor and promote than attitudinal factors (e.g. community commitment). Third, we add to existing studies on habit by showing that the IT habit of following an enterprise microblog enhances consumers' brand loyalty. Studies have investigated how IT habit predicts IT-related behavior in different contexts, including university internet application (Lankton et al., 2010), computer learning (Vincent et al., 2002), and e-commerce settings (Liao et al., 2006). By contrast, whether IT habit produces promising marketing or business outcomes remains unclear. The findings of this study

provide empirical and positive support to this research gap. Finally, we examine the antecedents of community commitment and IT habit in the context of this study. Information quality, perceived expertise, and social interaction positively affect

within their enterprise microblogs. However, few empirical studies have examined

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community commitment, whereas importance, prior behavior, and satisfaction positively influence IT habit. These findings are consistent with several previous studies (e.g. Jang et al., 2008; Lankton et al., 2010; Lee, 2009; McWilliam, 2000). In theory, exploring the important antecedents of community commitment and IT habit facilitates the improvement of the nomological completeness of the research model.

Noteworthy managerial implications can also be drawn from the findings of this study. First, this study provides strong empirical support for the observation that marketers can harness the power of enterprise microblogs to improve consumers' brand loyalty. Marketers should pay special attention to the significance of community commitment, IT habit, and participation in their enterprise microblogs. Second, our findings show that three key characteristics of these microblogs, namely, information quality, perceived expertise, and social interaction, are essential to increasing consumers' community commitment. The messages posted by marketers should have high information quality. Marketers should demonstrate considerable expertise in their enterprise microblogs. For instance, marketers can post information on the awards or certificates they have received in their microblogs. Further, social interaction should be increased, suggesting that marketers should frequently post messages and interact with their followers. Finally, importance, prior behavior, and satisfaction positively affect IT habit. To increase consumers' perceived importance of enterprise microblogs, marketers should turn them into valuable sources of information. In this respect, consumers may find following these microblogs important because they provide the most updated, relevant, and helpful product information and attractive promotion information or coupons. Further, marketers should keep promoting consumers' following behavior. A high level of prior behavior is expected to develop consumers' IT habit. Marketers should also pay attention to complaints and comments from followers to increase consumer satisfaction.

Limitations and future research

This study has limitations and opportunities for future research. One limitation is that this study collects data from a microblogging site in China. The findings of this research may be subject to the characteristics of the web site and the cultural background of the respondents. To improve the generalizability of our research model, future studies may examine the findings in other microblogging sites (e.g. Twitter) with a large sample size. Another limitation is that the amount of variance explained in brand loyalty is relatively small, suggesting that other important factors are missing in the research model. Future research should therefore use other theoretical perspectives and bring new insights by considering more factors in the model. We hope that the findings of the current study attract the interest of many scholars so that they can understand the marketing potential of enterprise microblogs and other social media sites.

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