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# The impacts of unique service resources and habit on e-service loyalty in a highly competitive market

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## Abstract

**Purpose** – The purpose of this study is to seek to quantify how unique service resources and consumer habit affect e-service loyalty (e-loyalty) in a highly competitive market. This study is grounded on Chinese social networking service (SNS) industry. A resource-based view is introduced as an alternative perspective to understand building consumer loyalty in e-service contexts.

**Design/methodology/approach** – A research framework is developed by reviewing prior literature. An online survey is conducted to collect research data. Based on 221 valid responses, the research model is tested by using partial least squares path modeling technique.

**Findings** – The features of market environments affects the loyalty of consumers to e-service providers. Consumers become mercenary in highly competitive and low differentiation e-service markets like Chinese SNS industry. The interaction of satisfaction and switching cost affects loyalty. Satisfied consumers can be either loyal or not loyal to a service provider depending on their level of switching cost, but unsatisfied consumers will have no loyalty. In addition, users are loyal to a SNS partly because it is their habit to use the service. Our study suggests that relying on consumer satisfaction to build e-loyalty may be problematic and risky.

**Originality/value** – The study represents an attempt to introduce the resource-based view to e-loyalty research. The research highlights the importance of habit in building consumers' e-service satisfaction and loyalty and contributes to new insights on the importance of industry environment in



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determining e-service satisfaction–loyalty relationship based on studying consumers in a highly competitive market.

**Keywords** Social networking, Service loyalty, Habit, Critical mass, Switching costs, Satisfaction

**Paper type** Research paper

## 1. Introduction

Even though the results of customer satisfaction surveys are an important indicator of the health of the business, relying solely on them can be fatal (Jones and Sasser, 1995, p. 4).

Loyal customers are vital to the long-term success of enterprises, because acquiring a new customer is more expensive than retaining an existing customer (Madhavan Parthasarathy, 1998). Thus, building customer loyalty has been widely regarded as an important part of business or the “business back-bone” (Gremler and Brown, 1996). In current increasingly service-based economies (Dai *et al.*, 2011), there is a growing interest on building consumer loyalty in an *e-service* or *Internet* environment. In this regard, improving customer satisfaction has been widely considered to be the key tool for Internet enterprises to enhance their customer loyalty in information systems research (IS).

A multitude of e-service loyalty (e-loyalty) studies have been conducted in the recent years (Ding *et al.*, 2011; Eid, 2011; Nadeem *et al.*, 2015). Many studies suggest that, as a product of perceived satisfaction, e-loyalty is established mainly through better service quality (Ding *et al.*, 2011; Eid, 2011). However, in contrast to most *e-service* studies, a few studies on *tangible service* reported that the impact of satisfaction on consumer loyalty differs substantially, depending on the features of industry environments (Jones and Sasser, 1995). This set of knowledge is not well used in the context of e-services research. Little is known on how consumer e-loyalty is evolved in response to the change in competitive environment, such as how to build e-loyalty when the market becomes highly competitive with several competent service providers.

Furthermore, the advance in information and communication technology (ICT) brings a rapid advance of tools in Web site development. It becomes increasingly easy to develop or even “duplicate” Web site functionality or applications. In other words, a well-working service Web site is somewhat insufficient for e-service providers to gain advantages in competition, in particular when competitors start to “learn” fast from each other. In an Internet environment, competition may be only one click away (Yang and Peterson, 2004). Therefore, a widespread challenge for e-service providers today is how to make their service distinguishing, that is, by obtaining unique service resources.

Grounded on a highly competitive service market – the social networking service (SNS) market in China, the study aims to explore how unique e-service resources, habit, consumer satisfaction and switching costs affect consumer loyalty. In China, several competent SNS suppliers coexist in the market competing for consumers. Along with the development of the industry, their service Web sites exhibit similar Web functionalities and presentation, but it is unclear how user loyalty could be built in this industry environment. In this regard, two unique service resources of SNS, including critical mass and supplemental entertainment, are investigated, while their impacts on consumer habit, satisfaction and switching costs are quantified.

The remainder of the paper is structured as follows. The next section presents the theoretical background of the research. After that, research framework and relevant

hypotheses are proposed. Section 4 presents the research methodology. Section 5 discusses the results and their implications, while Section 6 concludes the paper. Limitations of the research and future research avenues are discussed in Section 7.

## 2. Theoretical background

### 2.1 *Determinants of e-loyalty: service quality and satisfaction*

Customer loyalty has long been a popular topic in both business and marketing research. Along with the advance of ICTs, the past decades have also seen a paradigm shift from tangible products (i.e. brand loyalty) to human-mediated services (i.e. hotel and restaurant) and to computer-mediated services (or e-service). In this process, the framework of service quality – satisfaction – consumer loyalty or its extension has been widely used in the contexts of both tangible and intangible services (Bloemer *et al.*, 1999; Gremler and Brown, 1996). For instance, the SERVQUAL framework (Parasuraman *et al.*, 1991) has been widely applied to study loyalty, in which satisfaction is considered to be the key mediator. In a similar way, e-loyalty studies largely regarded loyalty as an outcome of satisfaction, which is in turn determined by different dimensions of service quality. In this regard, a framework of e-service quality (E-S-QUAL) was proposed (Parasuraman *et al.*, 2005), which has been widely cited and utilized by the community as well.

However, recent studies on e-service switching behavior seem to offer a different picture:

New IT choices are only a click away on the Internet, and switching to a competing IT is almost as easy as downloading and installing it, or completing an online registration form to sign up for a different service (Bhattacharjee *et al.*, 2012, p. 327).

Thus, switching to a different service provider is becoming increasingly easier in an online environment (Yang and Peterson, 2004). For certain e-service market like online gaming, it is very difficult to establish customer loyalty, because even satisfied consumers may switch to other service providers (Fiske and Maddi, 1961; Herrnstein and Prelec, 1992; Raju, 1980). A recent study found that for customers of massively multi-player online role playing games (MMORPGs), high attractiveness of alternatives and low switching costs substantially contribute to game players' switching intention (Hou *et al.*, 2011). Steenkamp and Baumgartner (1992) noted that because customers may want to try something novel or different for fun or thrill, satisfied customers may switch. Satisfied customers may switch to alternatives due to a desire for novelty or curiosity or because they are getting bored and are fed up for repetitively doing the same thing (Fiske and Maddi, 1961; Herrnstein and Prelec, 1992; Raju, 1980). Balabanis *et al.* (2006) reported that satisfaction is an effective determinant of e-loyalty only for the consumers with a low level of satisfaction. In the work of Bhattacharjee *et al.* (2012), satisfaction with prior IT is found to have a weak influence on switching behavior.

### 2.2 *Competitive environment and consumer categories*

The inconsistency in the findings between e-loyalty and switching behavior research may partly be caused by the difference of the competitive environments that were investigated (Jones and Sasser, 1995). By studying different products and services, Jones and Sasser (1995) argued that the impact of customer satisfaction on loyalty varies in response to different industry environments. Unsatisfied consumers may be loyal to a specific service due to high switching cost and a lack of alternatives, while

consumers with a high level of satisfaction may betray a service provider as well (Jones and Sasser, 1995). Grounded on the interaction patterns between satisfaction and loyalty, Jones and Sasser (1995, p. 11) proposed that “consumers behave in one of four basic ways: as loyalists, as defectors, as mercenaries, or as hostages”.

The work of Jones and Sasser (1995) suggested that in a highly competitive and low differentiation market, consumers tend to exhibit low loyalty despite a high level of satisfaction, thus becoming mercenary. In this regard, we argued that considering the increased competition and decreased differentiation in e-service markets, consumers tend to become mercenary. For instance, Hsiao and Yang (2011) noted that a critical issue in online retailing research is how to identify, attract and retain customers, as online shoppers are typically regarded as less loyal.

### 2.3 A resource-based view of e-loyal building

From a resource-based perspective, an enterprise's performance is founded on a collection of tangible or intangible assets and capabilities that facilitate its competition with other firms (Penrose, 1959; Vinekar, 2006). Different industries may prefer different kinds of resources. Barney (1991, p. 101) refers to resources as:

[...] all assets, capabilities, organizational processes, firm attributes, information, knowledge, etc. controlled by a firm that enable the firm to conceive of and implement strategies that improve its efficiency and effectiveness.

For a firm, a good resource should be valuable, heterogeneous, immobile, costly to imitate and non-substitutable, thus leading to sustainable competitive advantage of the firm (Mata *et al.*, 1995). Previous studies implied that particular service features may contribute to important service quality dimensions, which in turn improve consumer satisfaction and loyalty (Butcher *et al.*, 2001; Tsauro *et al.*, 2002). Good resources can be external in nature, such as good location and convenient transportation of a hotel (Knutson, 1988; Tsauro *et al.*, 2002), or internal, such as good personal friendship to customers and rich route availability for online flight booking services (Butcher *et al.*, 2001). We argued that this perspective should also be applicable to the contexts of e-service. In other words, developing and obtaining unique service resources should also be important for e-service providers to distinguish their services with their competitors to gain competitive advantages. Note that prior studies have reported a number of unique service characteristics influencing service acceptance (Kim *et al.*, 2009; Srinivasan *et al.*, 2002), many of which could be actually considered as a kind of e-service resources in our understanding.

Note that the theory of dynamic capabilities has been later introduced as an extension of the theory of resource-based view. Dynamic capabilities focus on a “firm's ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments” (Teece *et al.*, 1997, p. 516). In this study, we sought to understand e-loyalty based on a static “snapshot” of the market through a questionnaire survey. Thus, as a theoretical lens, a resource-based view is more appropriate in the context of the current study.

### 2.4 Highly competitive e-service market: new challenges to loyalty research

As one of the most successful applications in China, Tencent QQ (QQ) is a free instant messaging computer program. As of September 2011, there were about 711.7 million active QQ user accounts, while its peak concurrent users hit 145.4 million (Tencent,

2011). Note that China has 513 million Internet users in 2011 (CNNIC, 2012)[1]. Even though QQ is originally developed for Internet-based instant messaging (QQ IM) like MSN messenger, a diversity of value-added services have later been integrated into the QQ IM in an attempt to create a “one stop for all” application. Lots of different Internet services are added to the simple interface of QQ IM (or QQ). Through the simple interface of QQ, users could actually access almost all the popular Internet services that are available in the market, such as email, online music, games, Web TV, online shopping, cloud storage, SNS and many others. One stop for all application strategy brings about unique advantages to QQ in comparison to other service providers. For instance, by using QQ to access other value-added services, users do not need to initiate additional registration and to create and remember new account ID and password for individual services, because all these services will actually be under the same account. For instance, for QQ’s SNS service, friends list of instant messaging service can be easily migrated to SNS. This could reduce QQ users’ efforts to establish a new network for SNS. In addition, being an integrated application, updates from SNS (i.e. comments, new posts) can be directly exhibited to users through the integrated interface of QQ. Considering various advantages of using SNS at QQ, it seems to be not difficult to convert loyal QQ IM users to be loyal SNS users.

However, in spite of being one of the earliest SNS providers, QQ’s SNS (or Qzone) found its market share being eaten away by more recent entrants. Many users switch to other SNS providers, even though remaining loyal to QQ IM. Specially, many users are willing to adopt other SNS providers, even though this demands them the efforts of opening a Web browser, filling in and remembering account and password information as well as probably searching people for reconstructing their new network. At present, Chinese SNS market is dominated by several companies that provide similar Web services, like Qzone, Renren.com and Kaixin001.com. Recent report shows that there are about 190 million active SNS users for Qzone, 96 million for Renren.com and 40.1 million for Kaixin001.com (TechRice, 2012). After their competition for several years, SNS suppliers in China share considerable similarities with regard to their Web site presentation and functionalities in spite of some limited differences. In this light, from a user’s perspective, an investigation on what are unique service features (or resources) distinguishing a SNS supplier to others would potentially offer interesting insights to both business and research communities.

### 3. Research framework and hypotheses development

In this section, a research framework is constructed, including nine hypotheses. Five hypothesized determinants of loyalty are proposed, which are habit, satisfaction, switching costs, supplementary entertainments and critical mass.

Satisfaction refers to a personal’s feeling of pleasure or disappointment resulting from comparing a service’s perceived performance (or outcome) in relation to his or her expectations (Kotler, 2003). As mentioned above, satisfaction has been widely regarded as a general antecedent of customer loyalty (Ding *et al.*, 2011; Eid, 2011). We assume that this relationship would be applicable in the context of SNS alike. Hence, we hypothesized:

*H1.* Satisfaction positively relates to consumer loyalty.



Switching costs can be defined as a consumer's perceived difficulty in switching to a new service supplier, which virtually covers anything that makes it more difficult or costly for consumer to change providers (Chang and Chen, 2007). Switching costs can be economic in nature, but can also be emotional or psychological, like interpersonal relationships and special treatment (Chang and Chen, 2007; Yang and Peterson, 2004). A number of prior studies suggested that switching costs is a determinant of service loyalty and argued that a high switching cost makes consumers difficult to switch, thus making them more likely to stay with the service supplier (Amin *et al.*, 2012; Chang and Chen, 2007; Wang *et al.*, 2011; Yang and Peterson, 2004). In this light, we hypothesized:

*H2.* Switching costs positively relate to consumer loyalty.

Jones and Sasser (1995) noted that different service sectors tend to have different level of switching costs, and this difference may alter the relationship between satisfaction and service loyalty. A study of Balabanis *et al.* (2006) divided satisfaction to be high, moderate and low levels. The study further hypothesized that the low level of satisfaction is associated with a greater impact of perceived switching barriers on e-store loyalty. Yang and Peterson (2004) separated e-service users to unsatisfied and satisfied users. In satisfied user group, their study found a significant effect of interaction of switching costs and satisfaction on customer loyalty (Yang and Peterson, 2004). Based on studying mobile phone service loyalty, Lee *et al.* (2001) found a positive effect of interaction of switching costs and satisfaction on loyalty as well. Jones and Sasser (1995) suggested that consumers tend to be mercenary with a low commitment in a high competitive and low differentiation market. Thus, it is important to build switching costs to retain customers. Accordingly, we hypothesized:

*H3.* Interaction effects between satisfaction and switching costs positively relate to consumer loyalty.

Habit refers to the "learned sequences of acts that become automatic responses to specific situations, which may be functional in obtaining certain goals or end states" (Verplanken *et al.*, 1997, p. 540). Habit has been widely studied across many disciplines, such as social psychology, health sciences, marketing/consumer behavior, IT user behavior and organizational behavior (Chou *et al.*, 2013). It is argued that frequently performed behaviors tend to become habitual over time (Ouellette and Wood, 1998). Habitual behavior or habit is difficult to resist. Substantial conscious efforts are required if an individual wants to change his/her habits. In this light, changing consumers' habit to switch to another service brand would demand substantial mental efforts, resulting in a sort of switching cost. On the other hands, consumers may express their loyalty due to the impact of habit. For instance, some consumers may be "lazy" to make a change or they feel difficult to change their habit of being "loyal" to the existent service provider. Thus, the following hypothesis is made:

*H4a.* Habit positively relates to switching cost.

*H4b.* Habit positively relates to loyalty.

From a resource-based perspective, unique service capability helps differentiate a service provider from the competition. Unique resources can be internal, accumulated with times and co-created with customers, that is personal relationship or friendship between the staff of a hotel and the customers (Butcher *et al.*, 2001). For SNS,

supplementary entertainments may represent a kind of internal resources. Explicitly, it refers to the entertainments/games offered by SNS; these entertainments/games are not particularly developed for the purpose of information sharing or communication, but for offering entertainment to user such that they can entertain themselves by, for example, competing with peers in a game even when peers are offline. Today, providing supplementary entertainments appears to be a common practice across different SNS providers. For instance, “Happy Farm” is one of the most popular social networking games in China. At the peak of its popularity, about 23 million active users logged in to the game on a daily basis[2]. The adoption of supplementary entertainments is expected to bring more pleasure to SNS customers during their usage. Therefore, it is reasonable to assume that supplementary entertainments would make the users more satisfied toward the services. Therefore, it is proposed:

*H5a.* Supplementary entertainments positively relate to satisfaction.

As mentioned above, as consumers are motivated to use supplementary entertainments frequently (e.g. on a daily basis), it is very likely for the activity to become habitual. In other words, supplementary entertainments may contribute to the habit of using SNS. Thus, it is proposed:

*H5b.* Supplementary entertainments positively relate to habit.

External resources refer to the service feature that is not provided by the service supplier directly, but is an integrated part in consumers’ evaluation on the service. For instance, consumers may consider transportation convenience to be an important attribute to choose a hotel, even though transportation itself is not provided by the hotel. In the context of SNS, critical mass may exhibit to be a sort of external resources affecting consumer service experience. Critical mass describes an important group of users that choose to utilize the SNS (Allen, 1988; Oliver *et al.*, 1985). Critical mass has important contribution to the collective action in SNS as well as to later SNS subscribers (Allen, 1988; Oliver *et al.*, 1985). “A new network by its very nature requires a group of subscribers if it is to startup”; the network becomes mature to move beyond the startup after a critical mass has initially assembled (Allen, 1988, p. 257). As a result, new subscribers can join a mature SNS individually instead of as a group (Allen, 1988). For instance, users may subscribe to a SNS, as their friends are there already. In other words, in a mature SNS, users can join already existed circle of their friends, which avoids the cost to establish a new network by their own efforts. This possibility to communicate with important people inside the network should be an important purpose of using SNS, which, at the same time, contributes to a sort of switching costs. To retain their connection to the people who are important to them, like friends or relatives, users have to stay with a specific SNS. Furthermore, as users frequently interact with a SNS to communicate with their friends or relatives, the use of SNS as a communication tool would be more likely to become habitual. Critical mass substantially differs from the concept of social influence. For instance, the concept of social influence may imply that a user’s friends think that he/she should use a SNS, even though the friends themselves are actually not using the SNS. Therefore, we proposed:

*H6a.* Critical mass positively relates to habit.

*H6b.* Critical mass positively relates to switching costs (Figure 1).



## 4. Research methodology

### 4.1 Survey and questionnaires

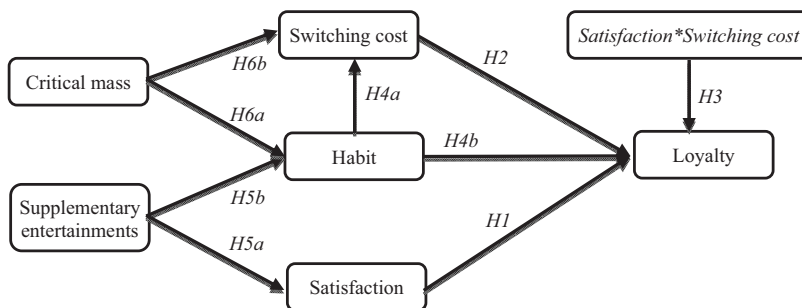
There are a number of SNS suppliers in China. As the biggest SNS provider in China, Qzone is selected as the subject for testing the research framework. A five-point Likert scale ranging from disagree (1) to agree (5) was used to measure each item of latent variables in the framework. An online questionnaire survey was performed. We posted the hyperlink of the survey Web page to different forums. By simply clicking on the hyperlink, potential respondents are directed to the online questionnaire. The measurement for satisfaction, habit and loyalty are adapted from the work of Lee and Wu (2011), Limayem *et al.* (2003) and Kim and Son (2009), respectively. The item measuring critical mass is adapted from the work of Lu *et al.* (2010) on network externalities. As the network externalities values are derived from both strangers and acquaintance, the measurement of critical mass covers only the acquaintance. The scale measuring switching costs is adapted from the work of Kim and Son (2009) and Yang and Peterson (2004). The measurement of supplementary entertainment is self-developed. The measurement items are attached in Appendix 1.

Overall, 228 complete samples were collected. Seven participants indicated a lack of prior use experience and their responses are, thus, omitted from the analysis. The final samples include 99 males (44.8 per cent) and 122 females (55.2 per cent). Most participants are under 25 years ( $n = 175$ ) with a computer usage experience of over 3 years ( $n = 194$ ). 73.3 per cent ( $n = 162$ ) of respondents have used Qzone for over 3 years. 44 respondents (19.9 per cent) have 1-3 years use experience. Only 15 participants (6.8 per cent) have a use experience of less than one year.

### 4.2 Reliability and validity of measurement

The data analysis is performed through the use of SmartPLS 2.0. Convergent validity implies the extent to which the measurement items of a construct that are assumed to be theoretically associated are related in reality as well. As shown in Tables I and II, all values of Cronbach's alpha, factor loadings and CR are over their thresholds of 0.7, 0.5 and 0.7, respectively.

Discriminant validity measures whether the measurements reflect the construct in question or other related variables. For each latent variable, if the value of its average variance extracted (AVE) is greater than any squared correlation between this variable and any other variable, then the discriminant validity is supported (Fornell and Larcker, 1981).



**Figure 1.**  
Conceptual  
framework

4.3 Data analysis and model assessment

The distribution of consumer loyalty versus consumer satisfaction is plotted. As shown in Figure 2, most satisfaction and loyalty values fall into the right bottom corner in the graph. In line with our expectation, this suggests that in this highly competitive SNS market, satisfied users are not necessarily the loyal users. No values are located at the top left corner, indicating that it is not possible to have consumer loyalty if they are dissatisfied.

The results of model testing are depicted in Figure 3. Both satisfaction and switching costs alone are found to have no significant effect on loyalty. However, the interaction of satisfaction and switching costs significantly affects loyalty. Moreover, habit has substantial and significant impacts on both loyalty and switching cost. Critical mass is a significant predictor for habit, but not for switching cost. Supplementary entertainments significantly and positively influence both habit and satisfaction. Mediated by habit, indirect influences from critical mass and supplemental materials on switching costs are found. The model explains 36.3 per cent of variance of habit, 35.6 per cent of switching cost, 24.9 per cent of satisfaction and 72 per cent of loyalty.

5. Discussion and implications

Consistent with our expectation, consumers are found to be mercenary in the competitive SNS market. As shown in Table II, consumers tend to have a higher level of satisfaction (mean = 3.26) over their loyalty (mean = 2.45). It is worth noting that by summarizing the mean values of satisfaction and loyalty of prior e-service studies in the Table III, we show that mercenary consumers are somewhat prevalent in current e-service business environment.

In addition, the results show that users' satisfaction on a SNS provider does not guarantee their loyalty toward the SNS provider. Even though satisfaction is a

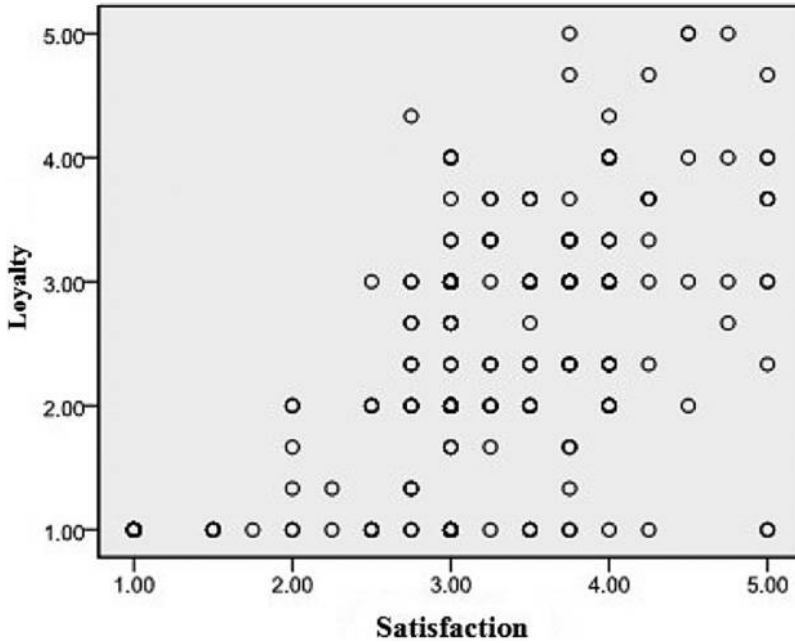
Table I. Reliability and convergent validity statistics

Construct	$\alpha$	CR	Minimum factor loading
Satisfaction	0.941	0.957	0.907
Switching costs	0.871	0.912	0.817
Supplementary entertainments	0.820	0.917	0.917
Critical mass	0.883	0.944	0.944
Habit	0.969	0.980	0.961
Loyalty	0.923	0.951	0.904

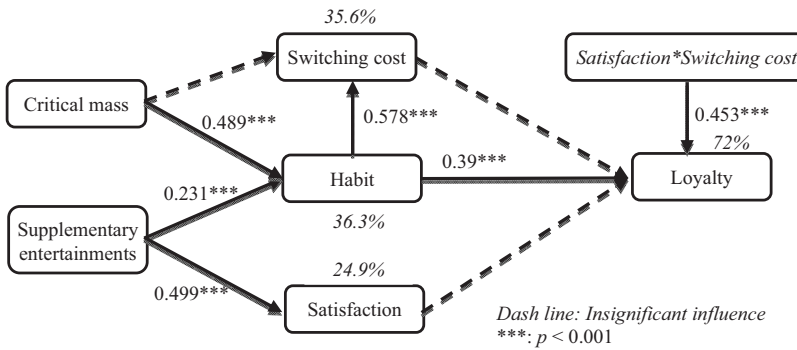
Table II. Discriminant validity

Construct	Mean	Sa	Sc	Se	Cm	Ha	Lo
Satisfaction (Sa)	3.26	0.850					
Switching costs (Sc)	2.60	0.149	0.722				
Supplementary entertainments (Se)	3.19	0.247	0.199	0.847			
Critical mass (Cm)	3.45	0.168	0.127	0.098	0.895		
Habit (Ha)	2.96	0.319	0.355	0.147	0.314	0.942	
Loyalty (Lo)	2.45	0.304	0.544	0.165	0.202	0.562	0.868

Notes: The bold diagonals are the AVEs of the individual constructs; off diagonal values are the squared correlations between constructs



**Figure 2.** Scatter plot graph for satisfaction-loyalty relationship



**Figure 3.** Results

Studies	Satisfaction	Loyalty	Sample size	Likert scale
Yang and Peterson (2004)	3.76 (0.54)	3.59 (0.8)	235	5 point
Semeijn <i>et al.</i> (2005)	5.46 (0.8)	5.19 (1.08)	150	7 point
Shankar <i>et al.</i> (2003)	Data set 1: 5.32 (1.25) Data set 2: 5.78 (1.46)	Data set 1: 3.03 (1.96) Data set 2: 5.73 (2.23)	Data set 1: 144 Data set 2: 190	7 point
Anderson and Srinivasan (2003)	6.19 (1.12)	4.82 (1.48)	1211	7 point
Kim and Son (2009)	5.22 (1.35)	4.24 (1.49)	529	7 point
Ribbink <i>et al.</i> (2004)	5.60 (0.88)	5.85 (0.89)	184	7 point

**Table III.** Mean and standard deviation of satisfaction and loyalty in prior studies

precondition of loyalty, satisfaction alone cannot bring about loyalty. In line with the work of Jones and Sasser (1995), our study suggests that consumer satisfaction is not necessarily a reliable indicator of e-loyalty, especially when the market becomes more competitive with less differentiation. Consumer loyalty is formulated differently in response to different industry environments. In other words, the change of industry environment alone might be sufficient to change the way the consumers are loyal to a company, that is mercenary versus hostage consumers. In the study, we observed a strong effect of interaction of satisfaction and switching costs on SNS loyalty. This implies that establishing user loyalty in SNS market is a very challenging task: only when consumers are both i) satisfied with service and ii) feeling difficult to switch, they become loyal. Therefore, satisfaction in nature is a necessary condition of service loyalty. Satisfied consumers can be either loyal or not loyal to a service provider depending on their level of switching cost, but unsatisfied consumers will have no loyalty. Habit is a strong determinant on SNS loyalty. This suggests that consumer loyalty toward SNS is somewhat like a kind of habitual behavior. Meanwhile, this result indicates that there is a high risk of user switching in SNS, if they are motivated to change their habit, for example, by their peers (critical mass).

Furthermore, we found that critical mass and supplementary entertainments are important service resources facilitating the building of consumer habit, satisfaction and switching costs on SNS. Thus, if a SNS is able to maintain the people who are important to an individual, then he/she is less possible to switch. On the other hand, the availability of supplementary entertainments like social networking games makes consumers more satisfied toward SNS provider. Also, supplementary entertainments motivate users to interact with SNS frequently, thus making the activity to be habitual.

## 6. Conclusion

The study contributed in three ways to current literature on e-loyalty. First, in this study, we attempted to introduce a resource-based perspective into the field of e-service research through quantifying the importance of unique service resources in building consumer satisfaction and switching costs. Note that the resource-based view has been mainly applied in studying the competitiveness of companies or organizations; this approach is thus novel to the community of e-service research. Grounded on the findings of the study, we argued that establishing unique service capabilities is vital for e-service providers to offer distinguishing services and to achieve competitiveness. It is important to note that defining unique service resources of a particular e-service depends on the unique features of the e-service in question. In this study, we assumed that critical mass and supplemental entertainment are two important resources for SNS. However, these two resources may not be relevant for other e-services, such as online flight ticket booking.

Second, the study incorporated the concept of competitive environment to study the effect of interaction of switching cost and satisfaction on loyalty. While prior works have been focused on examining traditional services or tangible products to explore the difference of industry settings in affecting satisfaction–loyalty relationship, our study focused on an intangible service of SNS in a highly competitive market. Different from prior studies that assume a direct impact of satisfaction on loyalty, the study found that satisfaction alone cannot predict loyalty in the highly competitive Chinese SNS market. In this market, the effect of interaction of switching cost and satisfaction is a significant antecedent of customer loyalty.

Third, the study reports that habit is an important factor to understand e-loyalty. On the one hand, particular service feature may facilitate the formation of e-service usage habit, such as supplementary entertainment in the context of SNS. On the other hand, habit not only contributes to be a kind of switching cost preventing consumer from switching, but also has a direct impact to enhance loyalty.

The study offers a number of managerial insights. First, the results indicate that in Chinese SNS market, in spite of a high-level user satisfaction, consumers seem to be not loyal toward SNS providers if they have no switching costs. In other words, an exclusive consideration to build e-loyalty on satisfaction is problematic and risky for business partners, in particular if industry environment and switching costs become a matter of importance. In an online environment, while the choice of Web sites is already huge and increasing, e-service providers should focus more on increasing switching costs than eliminating alternatives.

Second, the results highlight that a resource-based view may contribute to a useful perspective that facilitates e-service providers to gain competitiveness in the market. From this perspective, e-service managers should pay attention to develop and obtain unique service resources. Based on our study, these resources may not only help build consumer switching cost and usage habit, but also enhance switching cost.

## 7. Limitations and future research

The study has a number of limitations. First, the research is based on surveying Chinese online users. Therefore, the generalization of the results to consumers from other cultural and demographic backgrounds needs cautiousness. Second, many interesting factors on consumer loyalty like trust are not considered in the present study. These factors may contribute to possible avenues for future research. Third, two possible service resources for SNS are tested in the current study. However, there may be other types of services resources for SNS that we failed to point out. Also, different e-service may have different unique service resources.

## Notes

1. Some Internet user may actively use two or more QQ accounts.
2. See. [http://game.dayoo.com/200911/20/68602\\_100420554.htm](http://game.dayoo.com/200911/20/68602_100420554.htm)

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### Appendix 1. Measurement items

#### *Satisfaction*

Overall, I am satisfied with my decision to use Qzone.

In general, I am satisfied with the services provided by Qzone.

Based on all of my previous experience of using Qzone, I feel very satisfied.

My overall evaluation of the services provided by Qzone is very good.

#### *Switching cost*

In general, it would be a hassle switching to another SNS site.

It takes me a great deal of time and effort to get used to a new SNS site.

If I stop using Qzone, then I will waste a lot of effort that I have already made in this site.

It is a complex thing for me to switch to another SNS site.

#### *Supplementary entertainment*

A wide range of interesting applications is available on Qzone.

A wide range of funny entertainment is available on Qzone (i.e. games).

#### *Habit*

It is a habit of mine to visit Qzone.

Visiting Qzone has become an automatic act to me.

Visiting Qzone has become a habit for me.

#### *Critical mass*

People around me use Qzone frequently.

Many of my friends and relatives frequently use Qzone.

#### *Loyalty*

I consider myself to be highly loyal to Qzone.

I feel loyal toward the use of Qzone.

It means a lot to me to use the Qzone.

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