Understanding customer satisfaction and loyalty: An empirical study of mobile instant messages in China

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ABSTRACT

With the rapid development of mobile technology and large usage rates of mobile phones, mobile instant message (MIM) services have been widely adopted in China. Although previous studies on the adoption of mobile services are quite extensive, few focus on customer satisfaction and loyalty to MIM in China. In this study, we examine the determinants of customer satisfaction and loyalty. The findings confirm that trust, perceived service quality, perceived customer value, including functional value and emotional value, contribute to generating customer satisfaction with MIM. The results also show that trust, customer satisfaction and switching cost directly enhance customer loyalty. Additionally, this study finds that age, gender, and usage time have moderating effects. Finally, implications for the marketing of MIM are discussed.

1. Introduction

With the development of wireless telecommunication technologies, many customer services that are used in the computer-based Internet have also appeared in mobile phones (Barnes, 2002; Xu, 2003); mobile instant message (MIM) is a typical example. MIM enables consumers, whether sitting at the computer or on the road, to connect instant message (IM) with existing communities and across the mobile Internet. MIM brings tremendous conveniences for customers, and is widely adopted by young people. Short message service (SMS) is another popular handheld-based communication tool. The differences between these two message services used on mobile handsets are that MIM provides more user-friendly features, such as various user portraits, emoticons (pictures expressing emotions, such as ☺ for happy), and convenient voice and video chatting, while SMS only offers simple text message (Gibbs, 2008). Further, the presence information of MIM allows users to know the status of their friends, whether they are online or offline, free or busy, which helps them to conduct real-time conversation, thus stimulating communication. However, users can send a much greater number of messages using SMS. According to the survey results of TNS Global (2008), 8% of mobile phone users worldwide have adopted MIM. While SMS is used by 55% of mobile phone users daily, MIM is used by 61% of them. More widely used than SMS, MIM is becoming the "primary non-voice method of interacting – with potentially dramatic consequences for service and network providers' revenue" (TNS Global, 2008).

With a large number of mobile phone users, 624 million (MIIT, 2008), as well as high adoption rates of desktop IM users (CNNIC, 2009), China's MIM has gained great opportunity. According to a report by iResearch (2008a), MIM usage has the biggest percent of mobile phone users at 72%. There are various MIM products in China. The biggest IM service provider, Tencent, offers mobile QQ, which is extended from desktop to mobile phone. Because of the huge loyal IM user base, mobile QQ makes Tencent the top MIM service provider in China (iResearch, 2008b). China Mobile, a main MNO (mobile network operator) in China, also enters the MIM market with Fetion. There are other MIM services, such as Microsoft's mobile MSN, Pica, China Unicom's UMS, China Netcom's MXIM, etc. For an MNO, deploying MIM can consolidate a firm's position in the mobile commerce value chain with increasing ARPU (average revenue per user). For an IM service provider, developing MIM undoubtedly expands the channels of desktop IM. In such a competitive MIM market, MIM service providers are all making efforts to attract more users and gain more market shares. Thus, the ability to provide a high degree of customer satisfaction services is crucial to providers in differentiating themselves from their competitors. Specifically, in increasingly competitive markets, building strong relationships with customers, that is, developing the loyalty of consumers is seen as the key factor in winning market share and developing a sustainable competitive advantage (Luarn & Lin, 2003; Nasir, 2005). Loyal customers are crucial to business survival (Semejin, Van Riel Allard, Van Birgelen,

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& Streukens, 2005) because attracting new customers is considerably more expensive than retaining old customers (Reichheld & Schefter, 2000). Therefore, enterprises strive to increase their market share by maximizing customer retention (Tsoukatos & Rand, 2006). "[T]he potential and opportunity value of customers gained over a long period of time" is another advantage to maintaining existing customers (Seo, Ranganathan, & Babad, 2008). Further, with the aid of information technology, customers are becoming more and more open to understanding the brand; thus, satisfaction alone may not be adequate to retain a long-term relationship (Kassim & Abdullah, 2008). Accordingly, it is important for MIM service marketers to understand what factors impact these users' satisfaction and loyalty, and then to take measures to retain their customers.

Several studies have been conducted to attempt to understand customer satisfaction or loyalty of mobile services customers (for example, Gerpott, Rams, & Schindler, 2001; Kim, Park, & Jeong, 2004; Lai, 2004; Lin & Wang, 2006; Turel & Serenko, 2006; Wang & Liao, 2007). Most of these studies emphasize that customer loyalty and analysis of factors affecting it are important for the success of mobile services firms. Furthermore, they agree that customer satisfaction is the main important mediate goal for mobile service providers on their way to obtaining economic success. Nevertheless, the aforementioned studies were conducted in countries other than China, and studied mobile services other than MIM. There is a dearth of literature on China's MIM context. Since foreign markets have different levels of market development and distinct consumer behavior, those previous studies may provide limited application to China's MIM market. As a big developing country, China's mobile market has some uniqueness (Lu, Dong, & Wang, 2007; Xu, 2003). For example, MNO plays a dominant role in the mobile commerce value chain, and mobile phone users depend much on MNO. In the early phase of mobile commerce, government regulations on MNO are few; even if the service quality is low, customers have to bear it. Moreover, the MIM users are mainly young people, especially college students, who are usually early adopters of new technologies. Thus, a user's perception of satisfaction and loyalty in China may differ from that found in other studies. Therefore, there is a need to develop a model to explore factors influencing customer satisfaction and loyalty of MIM in China.

Perceived service quality and customer value are supported as drivers of customer satisfaction (Lim, Widdows, & Park, 2006). We perceive that the relationships may also be significant in China's MIM context. Moreover, MIM users often select the providers they trust to transact with, which develops their satisfaction. Trust can also be seen as a critical factor for customers to build and maintain relationships with providers (Semejin et al., 2005). Satisfaction has always been viewed as the main input for customer loyalty. However, satisfied users may switch to another brand for the low switching costs (Lam, Shankar, Erramilli, & Murthy, 2004), such as lower provider costs or ease in notifying other friends and adapting to another new MIM tool. As a result, we suggest customer satisfaction and switching cost are important predictors of customer loyalty of MIM. Other influences may depend on the moderating effects of customer characteristics, such as age, gender, and usage time. Understanding the moderating effects of customer characteristics, providers can tailor MIM to preferences in segments, thus increasing the likelihood that the service will be satisfactory and continually used. Thus, we also view age, gender, and usage experience as moderators. Considering several major factors which affect the perceptions of MIM users, this research builds a customer satisfaction and loyalty model. The model is then applied to a population of MIM users in China. Using a structural equation modeling method (SEM), we get some results. It is believed that the results can provide recommendations for practitioners and offer valuable insights for future mobile services research.

Section 2 provides the study's theoretical background and hypothesis development. In Section 3, we present the methodology and offer the results, explain our research model and develop the research hypothesis. Section 4 then provides the discussion. Section 5 summarizes the implications of our study for both research and practice. Finally we give conclusions and limitations of this research.

2. Theoretical backgrounds and hypothesis development

In this section, we first discuss the roles of the three main predictors of customer satisfaction from the literature. This is followed by a description of how customer satisfaction, trust and switching cost affect customer loyalty.

2.1. Customer satisfaction and loyalty

Customer satisfaction, which refers to "the summary psychological state resulting when the emotion surrounding disconfirmed expectations is coupled with the consumer's prior feelings about the consumption experience" (Oliver, 1981), is often considered as an important determinant of repurchase intention (Liao, Palvia, & Chen, 2009) and customer loyalty (Eggert & Ulaga, 2002). It is a most important research topic in the information system area (Au, Ngai, & Cheng, 2008). If the customer has good experiences of using MIM over time, then he will have cumulative customer satisfaction. Previous literature theorized that customer satisfaction can be classified into two types: transaction-specific satisfaction and general overall satisfaction (Yi, 1991). Transaction-specific customer satisfaction refers to the assessment customers make after a specific purchase experience, and overall satisfaction means the customers' rating of the brand based on their experiences (Johnson & Fornell, 1991). From these descriptions, we can view overall satisfaction as a combination of all previous transaction-specific satisfactions (Jones & Suh, 2000). As MIM is a communication tool, it may involve non-transactional satisfaction. Fournier and Mick (1999) argued that only transaction-specific research of satisfaction will narrow the conceptual boundaries, and they called for the research on non-transactional satisfaction, as well as other researchers (Anderson, Fornell, & Lehmann, 1994). Since customer satisfaction reflects the degree of a customer's positive feeling for a service provider in a mobile commerce context, it is important for service providers to understand the customer's vision of their services. On the other hand, a high level of customer satisfaction may have a positive impact on customer loyalty (Mittal, Ross, & Baldasare, 1998).

Brand loyalty is defined as "a deeply held commitment to rebuy or repatronize a preferred product/service consistently in the future, thereby causing repetitive same-brand or same brand-set purchasing, despite situational influences and marketing efforts having the potential to cause switching behavior" (Oliver, 1999). According to Sivadass and Baker-Prewitt (2000), customer loyalty is the ultimate objective of customer satisfaction measurement. It is found to be a key determinant of a brand's long-term viability (Krishnamurthi & Raj, 1991). Moreover, compared with loyal customers, non-loyal customers are much more influenced by negative information about the products or services (Donio, Massari, & Passiante, 2006). Therefore, retaining existing customers and strengthening customer loyalty appear to be very crucial for mobile service providers to gain competitive advantage. In this study, we measure customer loyalty as customers' behavioral intention to continuously use mobile instant messages with their present service providers, as well as their inclinations to recommend this MIM tool to other persons.

Satisfied users will have a higher usage level of MIM service than those who are not satisfied, and they are more likely to possess a