

# Why Users Leave? Discussion about Users' Switching Behaviors in Social Network Sites

Y. L. Wu, Y. H. Tao, C. M. Chung and C. P. Li

**Abstract**—This study uses the switching pattern analysis to understand the switching behaviors of SNSs (social network sites) users. Users of major SNSs filled out an online questionnaire, which yielded 343 valid samples. The results show that both service quality and switching cost indirectly influence the switching intention of users through satisfaction and switching barrier, respectively. Convenience and peer pressure are the top reasons for switching SNS platforms, whereas mobile capabilities and real-time access are the top motivations for switching to mobile SNSs.

**Index Terms**—social network sites, service quality, switching cost, switching intention

## I. INTRODUCTION

WHILE the rise of mobile SNS, the market become more competitive, some users began to find the new SNS platform that fit their needs and switch to it, so recent studies have about why users want to switch from former one to another SNS or online service platform and how service providers to retain their users [1], [2], [3], [4], [5]. Moreover, some papers have brought the switching cost theory into social and mobile domain to explain such situation [2], [3], [4], [6].

In SNS literature, no formal research has discussed the switching behavior between SNSs and corresponding devices, which are critical and practical issues that must be considered by SNS providers to enable them to succeed in future market competition and share change. Therefore, this paper addresses the general switching issues on both the SNSs and devices to gain basic knowledge and insights into consumer perceptions and behavior. Background literature is reviewed, and an empirical study is conducted to provide useful discussion and interpretation in the remaining part of the article. Literature Review

### A. Social Network Sites

Numerous SNSs are available at present, and the most popular ones are Facebook, Plurk, and Twitter. According to the April 2012 survey of InsightXplorer, the overall SNSs flow in Taiwan has reached second place, ranking only after

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the portals. In addition, the phenomenon of using mobile Internet to browse SNSs has shown a rising trend along with the expansion of wireless network construction. As global mobile Internet users connect to SNSs through mobile devices, Facebook, MySpace and Twitter remain the most widely used and the most frequently visited SNSs by mobile Internet users in the U.S., which is estimated to reach 5.62 million in 2013 [7].

The rapid development of SNSs has also triggered research on the intentions or motivations of SNSs users [8], [9], [10], [11]. The culture factor has also been discussed in these studies to determine whether or not different cultural traits influence various user aspects [9], [11], [12].

Understanding user satisfaction with mobile SNSs and their willingness to switch is also a key point that the current study aims to examine. Most of the users have been attracted by the benefit of using SNSs, such as establishing relationships with people and searching for entertaining or amusing contents in SNSs, but are displeased with issues related to the invasion of their privacy. Thus, SNS providers should consider how these factors influence user perception when they offer such functions or services.

### B. E-Service Quality (E-SQ)

[13] combined various concepts of online service quality [14], [15], [16], and proposed the most comprehensive work on e-service quality. They used an empirical test and a multiple-item scale (E-S-QUAL) to assess the service quality of online shopping providers. Their study divided service quality into two categories, namely, core web service quality (E-S-QUAL) and the E-Recovery Service Quality (E-RecS-QUAL). In comparison, previous studies have only provided important theoretical framework and research instruments.

Majority of recent studies on website e-SQ have touched on commercial behavior, which is fundamentally different from the nature of SNSs. The retail-oriented studies mentioned earlier have good measurement scales, but are not appropriate or adequate for directly measuring the quality of SNSs services. To fill this gap, constructing a dedicated measurement scale for SNS service quality seems a reasonable endeavor, because of the popularity of SNSs. Therefore, careful investigation of SNS service quality is desirable.

### C. Switching Cost

[17] defined the switching cost as the increase of time, money, and effort. When a switch occurs, [18] referred to switching cost as the increase of time, money, and psychological costs. However, from the perspective of

perceived risk, this switch refers to any possible loss of operators when the customer perception switches, which include the financial and performance losses as well as reduced social, psychological, and security levels [19].

The recent researches had provided more evidence about why users want to switch from former one to another SNS or online service platform [1], [2], [3], [5]. The above studies believe that the increase of switching cost reduces the switching behavior of consumers. Lam [20] stressed that switching cost has a positive impact on customers. However, the constructs of switching costs are generally used as indicators for measuring customer loyalty. One implication of this literature leads to a practical observation that various switching costs in different service industries have different constructs.

## II. RESEARCH METHOD

### A. Research Model and Hypotheses

Previous research on satisfaction/gratification treats service quality as the antecedent that significantly influences perceived satisfaction of users/consumers. [21], [13], [15] all declared that greater service quality comes with better satisfaction or gratification. We thus propose the following hypothesis based on these empirical studies:

**H1: Greater SNS service quality is associated with higher satisfaction.**

As mentioned in the literature review, some researchers indicated that the switching barrier is positively associated with switching cost [6], [17], that is, the higher the switching cost the customers experience, they'll strongly feel that there seems to be an intangible restriction, and then lesser their intention to switch to other products/services. In other words, customers have certain switching barriers that influence their decision to use opposite products/services. Thus, we assume the following hypothesis:

**H2: Greater switching cost is associated with a higher switching barrier.**

Satisfaction is considered an antecedent of sustained use or switching intention [22], [26] have also mentioned that user will simply switch from former one to another virtual community that can satisfy his needs. Several studies have proven that customers tend to repurchase or continuously use the same product and hold stronger loyalty to the providers when they are satisfied with a product or service [13], [14], [15], [16], [21]. In these cases, behaviors, such as repurchasing or continuously using the product, means that users tend to remain using the same products or services and would not be willing to switch to other alternatives. This finding leads to the following hypothesis:

**H3: Greater satisfaction is associated with a lower intention to switch.**

[17] defined switching barriers as the factors that prevent customers from changing service providers. In contrast, [6] declared that switching barriers positively affect user loyalty in the form of combined favorable attitude of the customer and repurchase behavior. The findings of [23] support the relationship between switching barrier and customer loyalty because they concluded that switching barriers have

significant effects on customer loyalty, which drives them to stay with their current mobile service provider. With switching intention defined as the customer's intention to leave the current provider due to unsatisfactory services, we infer the following hypothesis:

**H4: Greater switching barrier is associated with lower intention to switch.**

As shown in Fig. 1, the conceptual research framework can be integrated based on the established hypotheses (H1 to H4).

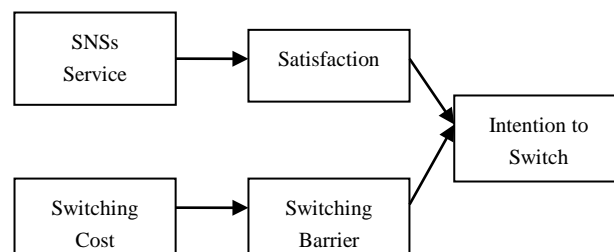


Fig. 1. The Research Model

### B. Measurement Scales and Data Collection

A questionnaire approach was used to validate the research model and the switching pattern analysis presented above. The questionnaire was developed through a series of four stages, including secondary literature review, user interview, expert-user pretest, and formal test. These stages are briefly described below. In the first stage, 18 representative factors and 77 items that affected SNS switching were initially identified in drafting the questionnaire. These factors were obtained by reviewing related literature. To confirm the appropriateness of the identified factors and to acquire additional potentially critical factors, 6 mobile and 10 regular SNS expert users were interviewed for their views on SNS provider and platform switching in the second stage. Their opinions were used to merge and revise the items, which generated a total of 73 items.

The third stage is a small-scale user pretest. Of the 122 SNS users who filled out the paper-based questionnaire, including working professionals and students, 72 valid items were used to further reduce the questionnaire items to 51. The final version of the questionnaire items was divided into four parts, namely, network usage behavior; measurement of factors that influence SNS switching intention, perceived SNS service quality and satisfaction measurement; and respondents' demographics. These items are shown in the Appendices. In this research, "intention to switch" assumed that the users were asked to fill out their intention one year ago, which was an important factor because the switching pattern analysis used the actual switching behavior. The questions in the last two parts applied a seven-point Likert scale, wherein 1 represented "strongly disagree" and 7 represented "strongly agree." The questionnaire was setup in html format on a Web server with a fixed IP address. Using instant message or email, users of major SNSs in Taiwan were invited to fill out the questionnaire. Online questionnaire data were saved in the database server setup for future analysis.

A total of 380 questionnaires were recorded in the database. Reverse questions in the questionnaire were used to filter out invalid questionnaires that were falsely filled. After further removing 37 invalid or nonconforming ones, 343 valid

records were retained for the following analyses.

A brief profile of the subjects is provided here. The male to female ratio was 46.4% to 53.6%, and the 21 to 30 age group accounted for 66.0%, followed by the 31 to 40 age group, which accounted for 26.8%. Students formed the largest group, accounting for 42.5%, followed by the service and technology industries with 17.0% and 11.1%, respectively. The top two groups of times spent on SNSs were almost 10 hrs/week and 20 hr/week, which accounted for 49.7% and 27.5%, respectively.

### III. DATA ANALYSIS AND RESULTS

The EFA results are presented in Table 1. The factor loading of each variable exceeds 0.5, and the reliability (Cronbach's  $\alpha$ ) of each construct is more than 0.6, which exceeds the acceptable level suggested. Composite reliability (CR) values show that the reliability of each construct is

higher than the suggested value of 0.7, indicating that the proposed model has good construct reliability. Average variation extracted (AVE) values for all constructs are greater than 0.5, which also indicates a model with convergent validity. For the means of items and constructs in Table 1, those with values less than 4, such as privacy, compensation, contact, responsiveness and intention to switch, indicate negative perception, while those higher than 4 indicate positive perception.

The results of the second-order structural model testing are shown in the Table 2. The findings of the hypotheses testing are all significant at  $p < 0.001$ . Thus, all four hypotheses are supported. The final results of the research model are shown in Fig. 2. The loading of each construct in SNS service quality and the switching cost are also displayed.

TABLE I  
RESULTS OF THE MEASUREMENT MODEL

SNS Service Quality						Switching Cost						
Mean	Loading	$\alpha$	AVE	CR	R <sup>2</sup>	Mean	Loading	$\alpha$	AVE	CR	R <sup>2</sup>	
<b>Efficiency (Ef)</b>						<b>Economic Risk (Risk)</b>						
	5.27		0.86	0.78	0.91	4.75		0.82	0.65	0.88	0.80	
Ef1	5.10	0.66				Risk1	4.60	0.71				
Ef2	5.40	0.72				Risk2	4.80	0.68				
Ef3	5.30	0.70				Risk3	4.70	0.76				
<b>Fulfillment (Ful)</b>						<b>Evaluation (Evl)</b>						
	4.48		0.89	0.76	0.93	4.90	0.71					
Ful1	4.00	0.53				Evl1	4.53		0.79	0.70	0.88	
Ful2	4.70	0.67				Evl2	5.00	0.71				
Ful3	4.60	0.71				Evl3	4.20	0.64				
Ful4	4.60	0.69				<b>Learning (Learn)</b>						
<b>Privacy (Priv)</b>						Learn1	4.85		0.69	0.76	0.86	
	3.77		0.92	0.86	0.95	0.69	4.70	0.67			0.56	
Priv1	4.00	0.60				<b>Benefit Loss (BnfL)</b>						
Priv2	3.70	0.56					4.80		0.70	0.63	0.83	
Priv3	3.60	0.57				BnfL1	5.00	0.56				
<b>System Availability (SA)</b>						BnfL2	4.90	0.65				
	4.17		0.66	0.62	0.82	0.46	BnfL3	4.50	0.69			
SA1	5.60	0.50				<b>Brand Relationship Loss (BRL)</b>						
SA2	3.40	0.55					4.77		0.77	0.68	0.87	
SA3	3.50	0.50				BRL1	5.00	0.72				
<b>Compensation (Comp)</b>						BRL2	4.50	0.69				
	3.43		0.92	0.87	0.95	0.65	BRL3	4.80	0.70			
Comp1	3.50	0.61				<b>Personal Relationship Loss (PRL)</b>						
Comp2	3.50	0.60					5.10		0.72	0.77	0.87	
Comp3	3.30	0.58				PRL1	5.00	0.79			0.31	
<b>Contact (Cont)</b>						PRL2	5.20	0.87				
	3.87		0.89	0.82	0.93	0.47	<b>Other Constructs</b>					
Cont1	4.10	0.55				<b>Satisfaction (Sat)</b>						
Cont2	4.00	0.53					4.97		0.94	0.89	0.96	
Cont3	3.50	0.57				Sat1	5.00	0.92				
<b>Responsiveness (Resp)</b>						Sat2	4.90	0.96				
	3.80		0.92	0.81	0.94	0.82	Sat3	5.00	0.93			
Resp1	3.90	0.63				<b>Switching Barrier (SB)</b>						
Resp2	3.80	0.62					4.88		0.82	0.58	0.87	
Resp3	3.70	0.60				SB1	4.90	0.70				
Resp4	3.80	0.62				SB2	5.00	0.77				
<b>Intentions to Switch (SI)</b>						SB3	4.80	0.76				
	3.30		0.97	0.94	0.98	0.29	SB4	4.80	0.83			
SI1	3.30	0.96				SB5	4.90	0.84				
SI2	3.30	0.98				<b>Intentions to Switch (SI)</b>						
SI3	3.30	0.96					3.30		0.97	0.94	0.98	
						SI1	3.30	0.96				
						SI2	3.30	0.98				
						SI3	3.30	0.96				

TABLE II  
RESULTS OF MODEL TESTING

Hypothesis: Path	Estimates	SE	T value	Results
Hypothesis 1: SNS' Service Quality → Satisfaction	0.530	0.05	10.98***	supported
Hypothesis 2: Switching Cost → Switching Barrier	0.311	0.06	5.05***	supported
Hypothesis 3: Satisfaction → Intention to Switch	-0.102	0.05	2.01 *	supported
Hypothesis 4: Switching Barrier → Intention to Switch	-0.504	0.06	8.57***	supported

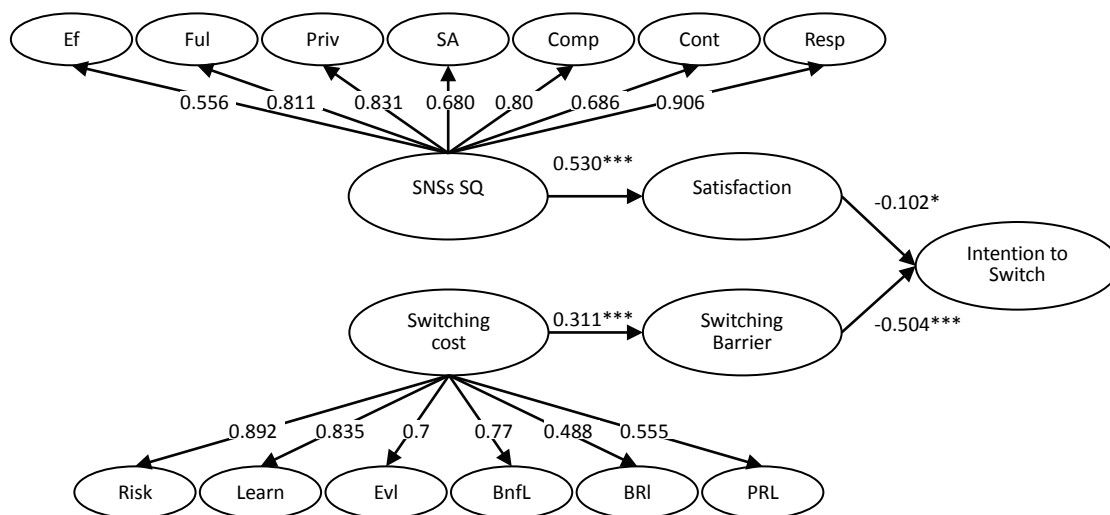


Fig. 2. Results of the Research Model

#### IV. DISCUSSION AND CONCLUSIONS

##### A. Conclusions and Contributions

First, SNS service quality and switching costs indirectly affect the intention to switch by bring satisfaction and switching barrier into the relationship as the mediation role, respectively. These outcomes match those from previous studies on service quality and switching costs, such as the conclusion presented by [13] (i.e., greater service quality results in higher satisfaction) and by [6] (i.e., higher switching costs increase user’s switching barriers). Accordingly, both high satisfaction and more switching barriers in present SNSs decrease the intention of users to switch.

Second, fill the gap between service quality and switching cost to switching intention. Furthermore, extant research results indicate that the higher the switching cost will also increase user’s switching barrier, and then lesser user’s intention to switch to other SNSs [24], [25]. However, the mediating role of switching barriers is rarely reported between switching cost and switching intention. In contrast, the relationship between service quality, satisfaction, and intention to switch can be found in our result that higher service quality will increase customer’s satisfaction [6], and decreases user’s intention to switch [4], [5].

Finally, certain critical factors for switching behavior may be reasonably linked with service quality and switching cost in the dual-factor research model, in which the matching of the top switching reason, “convenience,” with the switching cost, “evaluation cost,” can be reasonably interpreted by convenient functions provided by SNS providers. These functions can, in turn, decrease the users’ evaluation cost and switching barrier, thereby decreasing the probability of switching to a new SNS provider. Meanwhile, “peer pressure” and “friends’ recommendation” matching the “personal relationship loss costs” indicate that SNSs are indeed socialization platforms. Therefore, SNS providers should provide more incentives to users who recruit their friends in using their sites. Similarly, the switching motivations to mobile SNS, namely, “real time access” and “mobile capabilities,” illustrate higher scores in “efficiency” and

“system availability,” thereby implying that an SNS provider should enhance its hardware facilities and software design to suit mobile SNS characteristics.

##### B. Limitations and Future Research

First, this study requested the respondents to indicate the SNSs they used within the year based on their memory, which may not truthfully reflect the actual situation. Therefore, a follow-up research is recommended as part of a longitudinal research to accurately track SNS usage for the switching-across-time analysis.

Second, this research only targeted SNS users in Taiwan. To broaden the coverage of the research model and of the switching pattern analysis, global SNSs can be selected from among top-ranked sites provided by Alexa (2012). Consequently, the factor of cultural differences must be explored in implementing the research model as well as in conducting global switching pattern analyses.

#### ACKNOWLEDGMENT

The authors are grateful to National Science Council of the Republic of China for financially supporting this research under NSC 102-2410-H-214-017-MY2.

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