

The Influence of Customer Satisfaction and Switching Costs on Customer Retention: Retail Internet Banking Services

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The objective of this study was to develop a research model that examines direct effects of customer satisfaction and switching costs on customer retention as well as the moderating effect of switching costs on the relationship between customer satisfaction and customer retention on basic and advanced retail Internet banking users in Hong Kong. An online questionnaire was employed as the means of data collection. This study confirms the significant positive effects of customer satisfaction and switching costs on customer retention in both segments of basic and advanced retail Internet banking users. It is interesting that switching costs play a significant moderating effect on customer satisfaction-retention link only for the basic Internet banking users. For advanced Internet banking users, the moderating effect of switching costs does not significantly affect the satisfaction-retention link.

Field of Research: Customer Retention, Customer Satisfaction, Switching Costs, Moderating Effect, Internet Banking

1. Introduction

Banking industry has traditionally operated in a relatively stable environment for decades. However, with the advent of Internet banking, the industry is characterized by dramatically aggressive competition. The shift from traditional branch banking to Internet banking has meant that new strategies to attract new customers and retain existing ones have become critical (Wong, 2005). Reichheld (1996) found that a five percent increase in customer loyalty produces an eighty-five percent increase in profitability in the banking industry. Viewed in this light, it is postulated that managing effective customer retention strategies can be regarded as a vitally important issue in the banking industry.

Utilization of Internet banking services continues to show healthy growth in Hong Kong. There were 4.9 million personal and 307,000 business Internet banking accounts at the end of 2007, compared with 3.8 million and 234,000 in 2006 (Hong Kong Monetary Authority, 2008). Internet banking allows customers to access banking services 24 hours a day, 7 days a week. Like ATMs, Internet banking empowers customers to choose when and where they conduct their banking transactions.

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In spite of the rapid adoption of Internet banking and the importance of customer retention to the banking industry, little empirical investigation has been reported in extant literature; real understanding of factors that cause retention of Internet banking consumers has not been presented adequately in the literature. In the past, the key to understanding the power of a corporation to retain customers was thought to lie in measurement of customer satisfaction. Ranaweera and Prabhu (2003) argued that ideally, firms should aim at a combined strategy that makes switching costs act as a complement to customer satisfaction. While customer satisfaction may be one important driver of customer retention, switching costs are also likely to influence customer retention, both independently and in tandem with customer satisfaction (Lee et al., 2001; Ranaweera and Prabhu, 2003). For example, the presence of switching costs can mean that some retained customers that are apparently satisfied are actually dissatisfied but do not switch banks because of high switching costs. Thus the level of switching costs may have a moderating effect on the relationship between customer satisfaction and customer retention.

Previous studies on self-service technologies and technology adoption cycles have emphasized the importance of understanding the issue of consumer heterogeneity in determining their behaviors in technology settings (Dabholkar and Bagozzi, 2002; Meuter et al., 2003). Blattberg and Deighton (1991) suggested that firms should partition their customers based on behaviorally and attitudinally homogeneous groups that spend at different levels and then estimate the retention characteristics for each group.

In the context of this study, banks offer a variety of Internet services to retail customers. Customers choose services appropriate for their banking needs. Hence, respondents of this study were divided into two generic segments, namely, basic and advanced Internet banking users, according to the sophistication levels of Internet banking service(s) used. Basic Internet banking segment comprised users who use Internet banking facilities only for monitoring their accounts, while advanced Internet banking segment comprised users who use their main Internet banks to pay bills, transfer funds and/or securities trading, in addition to account monitoring. A main bank was defined as the bank that respondents use for most of their transactions. This was deemed necessary to ensure valid responses from respondents as they were likely to have a stronger impression of their main bank compared to a bank they did little business with. Analyzing the data by segments provided additional information about the moderating effect of switching costs on the customer satisfaction-retention link across the two user segments. Specific objectives of this study are to:

- i. examine direct effects of each of the two independent variables (customer satisfaction and switching costs) on customer retention, and the simultaneous influence of customer satisfaction and switching costs on customer retention on basic and advanced Internet banking users separately;
- ii. examine the moderating effect of switching costs on the customer satisfaction-retention link for basic and advanced Internet banking users.

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The remainder of this paper is organized as follows. Section 2 reviews findings of previous studies relating to the influence of customer satisfaction and switching costs on customer retention. Section 3 discusses the research methodology, showing how various considerations shaped the research methodology adopted in this study. Section 4 presents the findings of this study. The final section presents conclusions of the study with regard to discussions of findings, limitations and suggestions for future research.

2. Literature Review

Jones and Sasser (1995) classified customers into four different groups (Figure 1). "Apostles" (high satisfaction - high loyalty) are those who are not only loyal, but so satisfied that they recommend the product or service to others. "Hostages" (low satisfaction - high loyalty) are strongly dissatisfied, but have few or no alternatives. "Mercenaries" (high satisfaction - low loyalty) are those who want to change supplier in order to obtain lower prices although they experience high customer satisfaction. "Terrorists" (low satisfaction - low loyalty) have used alternative suppliers, and do not miss an opportunity to express their dissatisfaction with their former supplier.

High Loyalty	Hostages	Apostles
Low Loyalty	Terrorists	Mercenaries
	Low Satisfaction	High Satisfaction

Figure 1: Impact of Competitive Environment on Customer Satisfaction-loyalty Relationship

Source: Adapted from Jones and Sasser (1995)

The impact of switching costs on the relationship between customer satisfaction and customer loyalty is affected by market structure. If the market has a single or supplier or a supplier having an overwhelmingly large market share (for example, a monopoly provider of electricity service in Hong Kong), there should be little effect of switching costs on the relationship between customer satisfaction and customer loyalty since neither a dissatisfied customer with high switching costs not a dissatisfied customer with low switching costs will switch since there is no alternative. Switching costs become important when there are at least a few viable alternative providers of the service in a market. If this criterion is met, switching costs will affect the

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existence of the off-diagonal groups in the Jones and Sasser (1995) matrix. Thus, if switching costs are low, we should find very few false loyalists (hostages), since dissatisfaction should result in changing providers. But we are likely to find many mercenary customers who are satisfied but disloyal because low switching costs make switching easy. In contrast, if switching costs are high, we are likely to see many false loyal customers; though they are dissatisfied, switching costs make them less likely to switch. But we are unlikely to see mercenaries since high switching costs make them less likely to change providers when they are satisfied. Figure 2 illustrates the relationship between customer satisfaction and customer loyalty adapted from Jones and Sasser (1995) with the inclusion of switching costs.

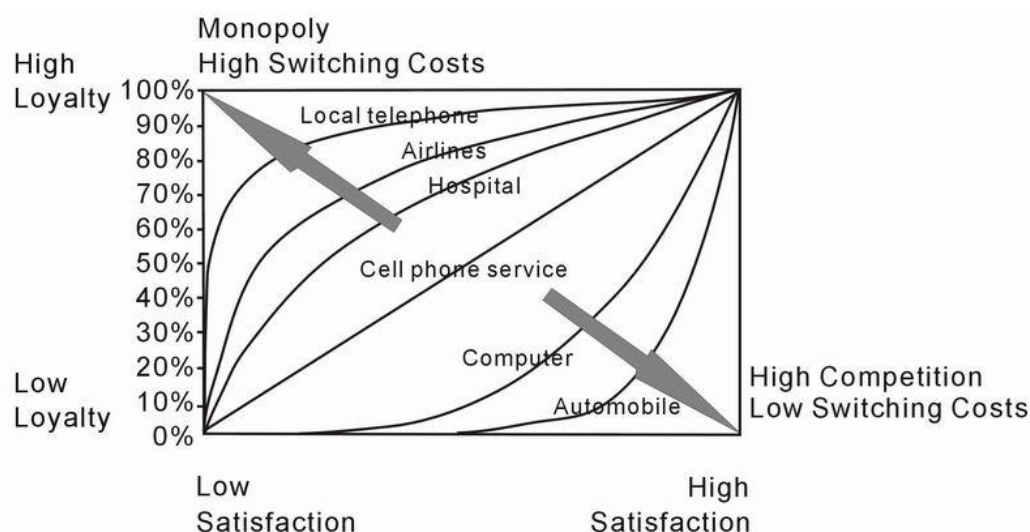


Figure 2: Satisfaction-loyalty Link related to Market Competition and Switching Costs

Source: Adapted from Jones and Sasser (1995)

Since research on factors associated with customer retention of retail Internet banking services has been relatively sparse, past research on direct effects of customer satisfaction and switching costs on customer retention, as well as the moderating effect of switching costs on the relationship between customer satisfaction and customer retention, in non-Internet banking settings were used to derive the research model of this study (Lee et al., 2001; Ranaweera and Prabhu, 2003). In other words, it is assumed that prior studies on the effects of customer satisfaction and switching costs on customer retention in non-Internet banking settings can perhaps be applied to customer retention in the Internet banking setting. Based on a review of extant literature (Lee et al., 2001; Ranaweera and Prabhu, 2003), a research model which links customer satisfaction and switching costs and customer retention was developed (Figure 3).

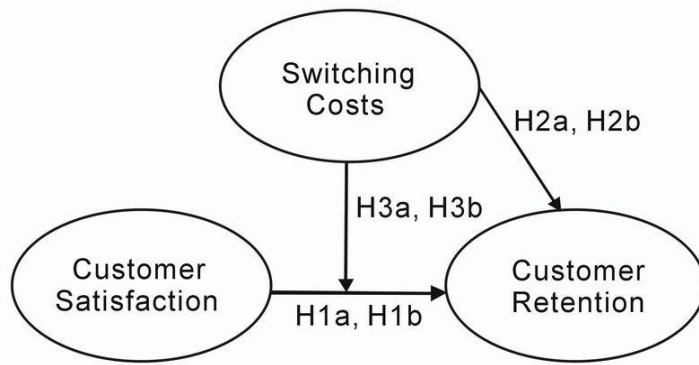


Figure 3: Research Model

2.1 Customer Satisfaction as a Driver of Customer Retention

While the role customer satisfaction plays in retaining customers is now perceived as more complex than initially thought (Mittal and Kamakura, 2001; Oliver, 1999), the literature review discovered that customer satisfaction has traditionally been regarded as a fundamental determinant of long-term customer behavior (Oliver, 1980; Yi, 1990). The more satisfied customers are, the greater is their retention (Anderson and Sullivam, 1993; Fornell, 1992; Lee et al., 2001; Ranaweera and Prabhu, 2003). Cronin and Taylor (1992) and Patterson et al. (1997) found that customer satisfaction has a significant positive effect on repurchase intention in a range of services. Day et al., (1988) stated that client satisfaction is unquestionably the key determinant in retaining current clients in professional services. Kotler (1994) stated that the key to customer retention is customer satisfaction. Using the aforementioned literature, the first hypothesis was formulated:

H1a: For basic Internet banking users, the higher the level of customer satisfaction is, the higher is the level of customer retention.

H1b: For advanced Internet banking users, the higher the level of customer satisfaction is, the higher is the level of customer retention.

2.2 Switching Costs as a Driver of Customer Retention

Ping (1993) found that when customers perceive switching costs to be high (associated with leaving the current relationship and establishing a new one), they tend to be loyal. Jones and Sasser (1995) mentioned switching costs as one factor that determines the competitiveness of market environment, since high switching costs discourage consumers to switch to alternate providers. Lee et al. (2001) and Ranaweera and Prabhu (2003) have tested and confirmed the positive effect of switching costs on customer retention in continued purchasing settings of mobile phone services in France and the fixed line telephone market in the UK, respectively. In line with existing studies, a second hypothesis was formulated:

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H2a: For basic Internet banking users, the higher the level of perceived switching costs is, the higher is the level of customer retention.

H2b: For advanced Internet banking users, the higher the level of perceived switching costs is, the higher is the level of customer retention.

2.3 Moderating Effect of Switching Costs

All other things being equal, both customer satisfaction and switching costs are thought to be key antecedents of customer retention. However, under the conditions of low switching costs, an Internet banking customer would be expected to stay or leave depending upon satisfaction with the relationship. Gronhang and Gilly (1991) argued that a dissatisfied customer may remain loyal because of high switching costs. Lee et al. (2001) stated that customer loyalty may be due to satisfaction or it may be due to dissatisfaction in a product category in which relatively high switching costs make it more difficult for customers to change providers. Similarly, customer disloyalty can be due to dissatisfaction or linked to satisfaction in a market in which low switching costs make it easy for customers to change providers. Lee et al.'s (2001) study of mobile phone service in France and Ranaweera and Prabhu's (2003) study of the fixed telephone line sector in the UK were two of the few studies that found empirical support for the proposition. Nevertheless, where switching costs are sufficiently high, they are likely to act as a significant constraint to switching to alternative providers. This indicates that service providers are more likely to retain dissatisfied customers who perceive high switching costs. During the pilot study, a number of respondents indicated that they did not want to switch to another main Internet bank due to the perceived switching costs, even when their overall satisfaction with their main Internet banks was not very high. As two respondents in this study expressed:

"I only use basic Internet banking service for account monitoring and found that it will cost me a lot of time and effort to change my main Internet bank."

"I am not satisfied with my main Internet bank. However, I found that it is hard to switch to alternate main Internet bank as I have a house mortgage and personal loan with my main Internet bank."

Therefore, the third hypothesis was formulated:

H3a: For a given level of customer satisfaction, the higher the level of perceived switching costs is, the higher is the level of customer retention in the segment of basic Internet banking users.

H3b: For a given level of customer satisfaction, the higher the level of perceived switching costs is, the higher is the level of customer retention in the segment of advanced Internet banking users.

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The above stated moderating effect of switching costs is schematically represented in Figure 4. For a given level of customer satisfaction (S), customers may perceive two different levels of customer retention, L_1 and L_2 , depending on their perceived level of switching costs. The difference between L_1 and L_2 is due to the moderating effect of switching costs on the customer satisfaction-retention link.

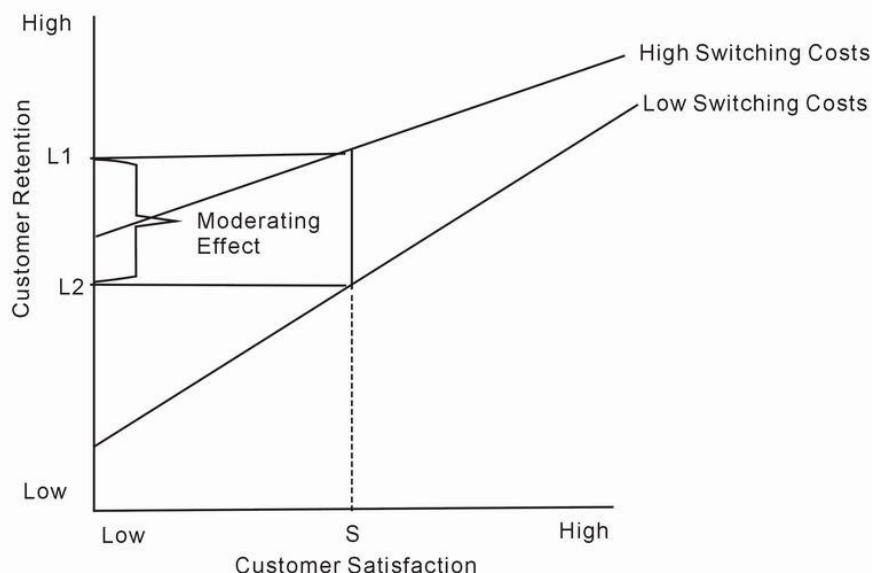


Figure 4: Moderating Effect of Switching Costs on the Customer Satisfaction-retention Link

3. Methodology

3.1 Selection of Industry

This empirical study was conducted within the context of the retail Internet banking industry in Hong Kong. The retail Internet banking setting is regarded as a continuous purchasing setting particularly suited to the objectives of this study since the two main effects of customer satisfaction and switching costs are likely to have a strong impact on customer retention in this setting (Ranaweera and Prabhu, 2003). This setting is qualitatively distinct from discrete purchasing patterns. First, relationships between banks and Internet banking users are generally of a long-term nature, which is a suitable context to study the effects of overall customer satisfaction and perceived switching costs on customer retention. Second, in a continuous purchasing setting, switching the main Internet bank is not as simple as walking to another bank. Due to the presence of switching costs, switching to another main Internet bank requires considerable time and effort. As a result, the switching decision is made only after considerable thought.

3.2 Questionnaire Design

An online questionnaire was employed as the means of data collection. Questionnaire items were first written in English. The Chinese version of the questionnaire was then developed by applying Brislin's (1980) recommendation to minimize the problem of lack of equivalence between English and Chinese versions. Specifically, the English version of the questionnaire was first translated into Chinese by a Chinese translator and was then translated back into English by another Chinese translator to check the translation's accuracy. When a major inconsistency was observed in the translation, a discussion between two translators was conducted to reconcile the differences. The precise wording of the questionnaire was based on the original English language version and was adjusted such that it was smooth and natural sounding, as well as equivalent, in both languages. Pilot testing the final version of the online questionnaire with 15 basic and 15 advanced Internet banking users was also conducted in order to ensure the appropriateness of questions' wording, format and structure. To facilitate response, highly structured questions were used in the design of the questionnaire. Bank customers aged 18 or above constituted the target population of this study. Participation in this study was voluntary. The online questionnaire was placed on a free survey server for one month from 5 January 2010 to 4 February 2010. The questionnaire was also submitted to popular free search engines in Hong Kong to request participation in the survey.

3.3 Measures

Customer retention, customer satisfaction and switching costs were all measured using multiple items measured on seven-point Likert-type scales based on validated scales from extant literature. Discussions of each of the three scales used are given below:

- *Customer Retention (CR)*. Customer retention, in this study, was defined as the propensity of an Internet bank customer to stay with his/her main Internet bank in the future. Accordingly, this study measured customer retention by adapting a three-item formative scale, on seven-point Likert-type scale with anchors "1=strongly disagree" and "7=strongly agree". This scale was used to measure "propensity to leave" in a business-to-business relationship (Morgan and Hunt, 1994) and in a business-to-customer relationship (Ranaweera and Prabhu, 2003). The three items used measured the likelihood of the respondents leaving their main Internet banks at three different points of time in the future: three months, six months and one year. The overall score was a summation of the three weighted items. Following Morgan and Hunt's approach, the first item was weighted four times, the second two times, and the third item was left unweighted. The scoring range for customer retention was 1-7.
- *Customer Satisfaction (CS)*. Following Cronin et al., (2000), this study conceptualized customer satisfaction as evaluation of an emotion, reflecting the degree to which Internet bank customers believe their main Internet banks evoke positive feelings. Customer satisfaction was

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measured using a three-item scale, on a seven-point Likert-type scale with anchors "1=strongly disagree" and "7=strongly agree". The items were adapted from the satisfaction measure developed by Cronin et al. (2000). They drew upon the definition of satisfaction used consistently over time as "an evaluation of an emotion" (Hunt, 1977). Rust and Oliver (1994) confirmed this view and suggested that customer satisfaction reflects the degree to which a customer believes that the possession or use of a service evokes positive feelings. Cronin et al. (2000) adopted a multiple item measure of customer satisfaction consisting of two categories of measures. They adapted a set of emotion-based measures from Westbrook and Oliver (1991), built their own evaluative set of measures based on Oliver (1980), and called it a cumulative or overall satisfaction measure. Jones and Suh (2000) and Oliver (1999) suggested that overall customer satisfaction is more fundamental and useful than transaction-specific customer satisfaction in predicting a customer's subsequent behaviors and a firm's past, present and future performance. Consistent with Cronin et al., the overall satisfaction includes three items in this study; one item reflects the emotional category and two items reflect the evaluative category. The score of overall customer satisfaction of each respondent was calculated by adding scores of the three items and then dividing it by three; the range of final scores was 1-7.

- *Switching Costs (SC)*. Following Porter (1980), switching cost, in this study, was conceptualized as the perception of the magnitude of additional costs required for Internet banking customers to terminate the current relationship with their main Internet bank and secure an alternative. Switching or termination cost has been identified as a factor contributing to maintaining a relationship (Morgan and Hunt, 1994). Morgan and Hunt stated that switching cost is of an economic nature only. However, switching costs may comprise psychological and emotional costs. Switching cost was measured using a five-item scale, on a seven-point Likert-type scale with anchors "1=strongly disagree" and "7=strongly agree". The items were adapted from switching cost measures developed by Ping (1993). The score of switching costs of each respondent was calculated by adding scores of the five items and then dividing by five. The scoring range of switching costs was 1-7.

4. Results

4.1 Response Rate

After one month, 704 responses were received. The number of responses was considered to be sufficient for data analysis; as Alreck and Settle (1985) stated, for populations of 10,000 and more, most experienced researchers would probably consider a sample size between 200 and 1,000 respondents. The number of visits to the web page vis-à-vis the number of actual survey responses was not monitored. Though the response rate was acceptable, non-response bias (Armstrong and Overton, 1977) was also tested. Specifically, we divided respondents into two groups, namely, early and late respondents, in order to compare mean values for the three constructs for the two groups. It

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was assumed that late respondents were likely to be similar to non-respondents. The results of this analysis showed no significant differences between the two groups at the 0.05 confidence level for any of the three constructs, confirming the absence of any significant non-response bias.

4.2 Construct Validity and Reliability Tests

Customer retention, customer satisfaction and switching costs were all measured using multiple items, on seven-point Likert-type scales with anchors "1=strongly disagree" and "7=strongly agree", based on validated scales from extant literature. Following Ruyter and Bloemer (1999), exploratory factor analysis was employed to confirm the underlying structure of the measures. A common factor analysis with varimax rotation was undertaken for the 11 items of customer satisfaction, switching costs and customer retention. Evaluation of eigenvalues and the scree plot indicated a three-factor solution. The rotated factor matrix is shown in Table 1. This matrix shows factor loadings which are the correlations between each of the variables and the factors for a varimax rotation. The criteria used to identify and interpret factors were: each item should load 0.50 or greater on one factor and 0.35 or below on the other two factors (Igbaria et al., 1995). The factors are interpreted by the size of the loadings. As shown in Table 1, three variables, CS1, CS2 and CS3, are associated with the first factor, i.e. customer satisfaction. Five variables, SC1, SC2, SC3, SC4 and SC5, are related to the second factor, i.e. switching cost. Finally, the remaining three factors, CR1 and CR2 and CR3, are associated with the third factor, i.e. customer retention. The results confirmed that the three constructs, which were previously validated in non-Internet settings (Morgan and Hunt, 1994; Ping, 1993; Ranawera and Prabhu, 2003), are uni-dimensional, factually distinct and applicable in Internet banking setting. The proportion of variance accounted for by each of the rotated factors is frequently reported in literature, indicating the relative importance of each factor. As reported in Table 1, the first, second and third variables accounted for 36.397%, 23.070% and 21.308% of the total variance of the eleven items. In total, the three factors accounted for 80.775% of variance of the variables.

Cronbach's alpha was used to examine the reliability of the three scales of customer retention, customer satisfaction and switching costs. As reported in Table 1, the lowest estimate of reliability was reported for the customer retention scale ($\alpha=0.8615$). Estimates for customer satisfaction and switching costs scales are 0.9044 and 0.9377, respectively. Since the Cronbach's alpha of each scale is above the acceptable values of 0.700 (Nunnally, 1978), all three scales were considered to be reliable.

Table 1: Construct Validity and Reliability Tests

Scale Items	Factor Loadings
<i>Customer Satisfaction(CS)</i> (<i>eigenvalue=4.554, variance=36.397, alpha=0.9044</i>)	
CS1 I think I did the right thing when I chose my main Internet bank.	0.908
CS2 Overall, I am happy with my main Internet bank.	0.889
CS3 My main Internet bank meets my expectation.	0.882
<i>Switching Costs(SC)</i> (<i>eigenvalue=3.109, variance=23.070, alpha=0.8615</i>)	
SC1 It is risky to change my main Internet bank as the new provider may not give good services.	0.904
SC2 I would feel frustrated if I terminated my current relationship with my main Internet bank.	0.897
SC3 It would cost me a lot of time to change my main Internet bank.	0.882
SC4 Considering everything the cost to stop using my main Internet bank and start up with a new main Internet bank would be high.	0.879
SC5 It would cost me a lot of effort to change my main Internet bank.	0.877
<i>Customer Retention(CR)</i> (<i>eigenvalue=1.222, variance=21.308, alpha=0.9377</i>)	
What do you think are the chances of switching to an alternate main Internet bank	
CR1 within the next six months?	0.877
CR2 within the next one year?	0.847
CR3 within the next three months?	0.815

4.3 Hypotheses Testing

Multiple regression analysis was used to test the three hypotheses of this study for both basic and advanced Internet banking segments. The regression analysis (Table 2) shows that there are significant positive relationships between customer satisfaction and customer retention and between switching costs and customer retention in both segments of basic and advanced Internet banking users. Hence, hypotheses H1a, H1b, H2a and H2b are supported. However, switching costs play a significant moderating effect on the customer satisfaction-retention link only for basic Internet banking users ($p < 0.01$). For advanced Internet banking users, switching costs do not play a significant moderating effect on the customer satisfaction-retention link ($p > 0.05$). Hence, H3a is supported and H3b is rejected. The overall results of segment analysis indicate that the moderating effect of switching costs on the relationship between customer satisfaction and customer retention varies in different Internet banking customer segments. The negative sign of H3a ($\beta = -0.372$) indicates that switching costs act as a constraint, restraining those who are less than satisfied from leaving their main Internet banks. This indicates that switching costs, where appropriate, can be an effective, alternative means of strengthening customer retention.

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Table 2: Results of Regression Analysis

	Basic Internet Banking Segment	Advanced Internet Banking Segment
Customer Satisfaction (CS)	0.680* (0.000)	0.647* (0.000)
Switching Costs (SC)	0.626* (0.000)	0.326* (0.000)
CS × SC	-0.372* (0.007)	-0.280 (0.066)
Segment Size	361	343
R^2	0.362	0.239
Adjusted R^2	0.356	0.232
F	67.440*	35.417*

Dependent variable: Customer retention

Notes: *Correlation is significant at 0.01 level.

All changes in R^2 values had a significant F statistic (*p<0.01)

The results of segment analysis indicate that the model of the basic Internet banking segment explains a higher proportion of variance in the dependent factor of customer retention than in the model of the advanced Internet banking segment. The model of the basic Internet banking segment is comparatively the better model derived from this study (Adjusted $R^2_{\text{Basic Internet banking segment}} = 0.356 > \text{Adjusted } R^2_{\text{Advanced Internet banking segment}} = 0.232$). These results also indicate that customer satisfaction in the basic Internet banking segment is a slightly stronger driver of customer retention than in the advanced Internet banking segment ($\beta_{\text{customer satisfaction of basic Internet banking segment}} = 0.680 > \beta_{\text{customer satisfaction of advanced Internet banking segment}} = 0.647$). However, it is interesting to note that switching costs of basic Internet banking segment are a much stronger driver of customer retention than advanced Internet banking segment ($\beta_{\text{switching costs of basic Internet banking segment}} = 0.626 > \beta_{\text{switching costs of advanced Internet banking segment}} = 0.326$).

4.4 Additional Analysis for Moderating Effect of Switching Costs

To shed further light on the specific nature of moderating effects (H3a and H3b), factorial ANOVA was conducted (Aiken and West, 1991). Three types of results were examined: descriptive results, statistical results, and visual output. First, means of scores for the two independent variables were computed for basic and advanced Internet banking users. Second, for each segment of basic and advanced Internet banking users, the entire sample was split into groups of respondents who were either above or below the mean value on the two independent variables and then mean values of customer retention rates of these groups were compared. Finally, mean values were plotted to test whether they were statistically different.

Basic Internet Banking Segment

Figure 5 illustrates that the consistency of higher mean scores on customer retention for high switching costs group than low switching costs group at each level of customer satisfaction provides additional support for H3a.

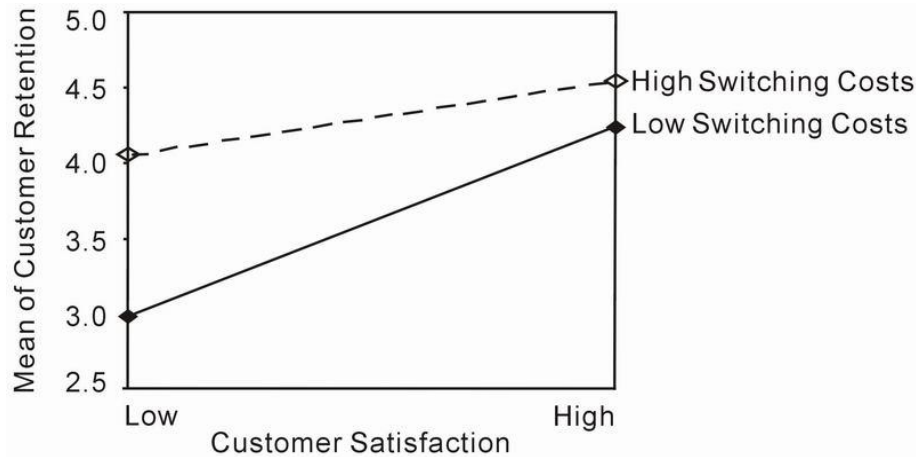


Figure 5: Mean Customer Retention across Different Levels of Customer Satisfaction and Switching Costs for Basic Internet Banking Customers

Table 3 shows that for low customer satisfaction group, the mean of customer retention of the low switching costs group and the high switching costs group are quite different (2.980 against 4.050). However, for the high customer satisfaction group, the mean of customer retention of the low switching costs group and the high switching costs group are quite similar (4.235 against 4.547). Overall, for a given level of customer satisfaction, the higher the level of perceived switching costs is, the higher is the level of customer retention in the segment of basic Internet banking users ($p < 0.01$).

Table 3: Descriptive Results of Basic Internet Banking Customers

Customer Satisfaction	Switching Costs	Mean of Customer Retention	Standard Deviation	N
Low	Low	2.980	1.238	112
	High	4.050	1.530	75
High	Low	4.235	1.191	82
	High	4.547	1.127	92

Advanced Internet Banking Customers

Figure 6 illustrates that the moderating effect of switching costs on the relationship between customer satisfaction and customer retention is different at various levels of customer satisfaction. When plotted, lines representing group performance will not be parallel when interaction effect is present.

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Figure 6: Mean Customer Retention across Different Levels of Customer Satisfaction and Switching Costs for Advanced Internet Banking Customers

Table 4 shows descriptive results of analysis of advanced Internet banking customers. For low customer satisfaction group, the mean of customer retention of the low switching costs group and the high switching costs group are quite different (3.573 against 4.072). However, for the high customer satisfaction group, the mean of customer retention of the high switching costs group is higher than low switching costs group (5.063 against 4.917). Overall, the result shows that there is no significant moderating effect of switching costs on the relationship between customer satisfaction and customer retention at various levels of customer satisfaction. This result provides additional support for rejecting H3b.

Table 4: Descriptive Results of Advanced Internet Banking Customers

Customer Satisfaction	Switching Costs	Mean of Customer Retention	Standard Deviation	N
Low	Low	3.573	1.560	89
	High	4.072	1.516	71
High	Low	5.063	1.208	88
	High	4.917	1.193	95

5. Conclusions

5.1 Discussions of Findings

Consistent with previous studies, this study confirms the significant positive relationship between customer satisfaction and customer retention and between switching costs and customer retention in both segments, basic and advanced Internet users. Also this study found that switching costs play a significant moderating effect on the customer satisfaction-retention link only for the segment of basic Internet banking users (Figure 3). For the segment of advanced Internet banking users, the moderating effect of switching costs does not significantly affect satisfaction-retention link (Figure 4). This means that

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dissatisfied advanced users will switch to alternative main Internet banks even in the presence of high switching costs. This result indicates the moderating effect of switching costs is not an effective strategy to retain customers as more and more customers become advanced Internet banking users in the future. Long-term customer retention in competitive Internet banking markets in the future may require a bank to go beyond mere basic customer satisfaction and switching costs and to look for other ways of establishing ties for retaining customers. It is recommended that banks should develop different customer retention programs for basic and advanced Internet banking segments. For the basic Internet banking segment, banks should implement a reward program in order to encourage basic Internet banking users to use one or more advanced Internet banking services. At the same time, banks should also implement a customer relationship program so as to increase customer satisfaction. Once a satisfied basic Internet banking user starts to use and eventually adopts advanced Internet banking services, their switching to another bank will be more difficult and it should become easier for the bank to retain them.

For the advanced Internet banking segment, the attention of banks should be on maintaining both high satisfaction and high switching costs. There are two possible ways to achieve these objectives. First, banks should segment all advanced Internet banking users into segments with similar customer characteristics (e.g., segments using bills payment, funds transfer and securities trading) and regularly promote the benefits of using these services in order to increase customers' perceived satisfaction of using each individual advanced Internet banking service. Second, banks should encourage existing advanced Internet banking users to consume more advanced Internet banking services. As more banking services are used, advanced Internet banking users will perceive higher switching costs, making it more difficult for them to switch.

5.2 Limitations

The limitations of this study can be classified into three main categories. Firstly, research investigating actual retention, rather than intention to continue using the Internet banking service, is encouraged. Although previous studies have always used intention to stay as a surrogate for actual retention (Garbarino and Johnson, 1999; Morgan and Hunt, 1994; Rust and Zahorik, 1993; Shemwell et al., 1994; Sirohi et al., 1998), intention to continue with the main Internet bank may not accurately represent actual retention. Secondly, this empirical study was based on the survey of Internet banking industry. Naturally, the findings of this study are most likely to hold for other similar low customer contact and mass service contexts with continuous purchasing patterns (Ranaweera and Prabhu, 2003). This study needs to be replicated for other Internet-based services to further validate the research model of this study. Finally, respondents of this study were divided into two segments, namely, basic Internet banking users and advanced Internet banking users, according to the sophistication level of Internet banking services used. As advanced Internet banking users were defined as those who used Internet banking to pay bills, transfer funds and/or trade in securities, this definition might be considered too generic.

5.3 Future Research

Although this study has served to reveal certain aspects of retention of customers in the context of Internet banking in Hong Kong, there is still room for further research to ascertain and enrich the findings of this study. Firstly, since Internet banking relies heavily on maintaining relationships with customers (Barnes, 1997), the theoretical model of this study should be tested in other kinds of e-commerce industries, such as Internet retailing and Internet travel agencies, in order to strengthen the generalizability of the findings. Second, the results of segment analysis indicate that the influence of customer satisfaction and switching costs on customer retention varies in different customer segments. Future research should examine heterogeneity of the customer satisfaction-retention link among different advanced banking segments (i.e. bills payment, funds transfer and security trading).

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