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Multichannel Service Providers' Strategy：Understanding the Customers' Switching and Free-riding Behavior

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Abstract

Since the advent of the Web, multichannel customer management has become an issue for serious discussion. How a retailer integrates the Internet into its retailing process, and how it coordinates offline and online strategic decisions, can impact its performance in a service multichannel.

Therefore, the objective of this study is to explore the applicability of a theoretical framework, push-pull-mooring (PPM), for understanding customers' switching behaviors, and concern the issue of constraint factors avoided customer switching. Survey data from 530 Taiwanese customers (response rate of 94%) were used to consult the Web sites of the retailers before purchasing. The results of this study are twofold. Firstly, online channel perceived risk, online channel switching barrier have significant directly impacts on cross-channel free riding; company perceived risk, company switching barrier and another company attractiveness have significant impacts on switch. Secondly, company switching barrier have strongly negative moderate impact on the relationship between company perceived risks/another company attractive and switching. On the other hand, even if the current company perceived risks or another company attractive are strong, a customer may not switch if there are company factors mooring him or her to the current service provider. Above results further showed us the importance of understanding the company mooring variables. Managerial implications and further directions were then discussed.

Key words: Multichannel customer management, Cross-channel free riding, Switching, Switching barrier

Introduction

Since the advent of the Web, multichannel customer management has become an issue for serious discussion in the areas of customer and marketing research (Stone, Hobbs and Khaleeli, 2002; Teerling and Huizingh 2004; Berger, Lee and Weinberg, 2006; Zang et al, 2010). Nowadays, customers often search for product information online but purchase in a retail store. Moreover, they may become free riders who search product information by online channel of A-retailer but purchase by offline channel of B-retailer. In this customer switching situation, the retailer may lose the customers and increase more difficulty to retain them. Therefore, the understandings of purchase and switch intention of up-to-date consumers have become the emergent challenge for marketers and retailers.

With the development of information technology, more and more people use the Internet to conduct transactions which changes the traditional trading patterns (Du et al., 2009). Many retailers have evolved into multichannel retailers and dominated the

Internet retailing space by using Internet channels to compliment their store and other channels (catalog, mobile, call centers, and direct marketing). Multichannel retailers are firms that "sell merchandise or services through more than one channel" as opposed to using multiple channels to communicate with customers (Levy and Weitz 2009). About 40% of retailers sold through three or more channels, while another 42% sold through two channels (The DMA 2005).

In fact, consumers have displayed complex shopping behaviors in this emerging multichannel environment. (Alba et al., 1997; Peterson, Balasubramanian, & Bronnenberg, 1997; Balasubramanian et al., 2005), and their purchase behavior is affected by perceptions of traditional outlets and virtual storefronts (Verhagen and Dolen, 2009). In other words, customers' cross-channel behavior may takes place in different purchasing stages. We must notice that the research shopper phenomenon is a present threat. When consumers become free riders or switch to another service provider, they may hurt the retailer which they did not contribute. The presence of the multichannel customer has presented several challenges for retailers (Christopher, 2002; Stone, Hobbs, & Khaleeli, 2002).The most important one is that the retailer may lose the customer in the course of the shopping process (Nunes & Cespedes, 2003). Thus, multichannel customer management has become more and more important for service providers to integrate effect multichannel. However, previous research only discussed the benefit and importance of creating and managing multichannel, but less discussed how to improve multichannel form customer's aspect. The aim of this study is trying to find customer's needs and realize under what circumstances is customer switching likely. In addition to above, we explored mooring effects from their switch behavior, and provide multichannel retailer strategies to create a complete multichannel for retaining customers, and avoid them become free riders.

We proposed and empirically analyzed a conceptual framework that considers perceived risk, switching barriers and attractiveness as the drivers of customer switching, and their antecedents across retailers' channels context. According to the Baal and Dach's (2005) study, we used "Do customers use the same channel from searching to purchasing?" and "Do customers contact with the same firm from searching to purchasing?" as two dimensions to construct a consumer behavior matrix which includes switch, cross-channel free-riding, retention, and cross-channel retention (Figure 1).

In the past, consumer attained all their needs from a single integrated channel at different stage of their decision making. "Switch" and "Retention" are signal-channel consumer behavior like this (Baal & Dach, 2005). But now, the recent pressure to add an online presence has driven more and more retailers and cataloguers to become multi-channel entities who offer products through one or more channels to customers

(Amire, 2000; Cruz, 2000; Schoenbachler & Gordon, 2002). In this way, multi-channel consumer behaviors, "Cross-channel free-riding" and "switch", have begun to discuss by some researchers. Even though, today's typical metrics of this issue still can't tell how susceptible a company's customers change their spending patterns. Therefore, now the multi-channel marketer's challenge is to understand what drives customers to make the goal of retention from migration, so we focus on cross-channel free riding and switch of multi-channel consumer behavior in this study. And then try to find out what factors can make customers decrease their switching intention.

Do customers contact with the same **firm** from searching to purchasing?	Do customers use the same **channel** from searching to purchasing? Yes	Do customers use the same **channel** from searching to purchasing? No
Yes	**Retention**	**Cross-Channel Retention**
	EX: searching online channel of A-firm , then purchasing A-firm online channel	EX: searching online channel of A-firm , then purchasing A-firm offline channel
No	**Switch**	**Cross-Channel Free-Riding**
	EX: searching online channel of A-firm , then purchasing B-firm online channel	EX: searching online channel of A-firm, then purchasing B-firm offline channel

Figure 1 Type of Multi-Channel Customers

Resource: from Baal and Dach (2005)

There is still an issue we take into concern is that customers' cross-channel behavior takes place in different purchasing stages (Burke, 2002; Louvieris, 2003; Baal & Dach, 2005). Nowadays, it is very common that customers browse or inquire in an online retailer will use the information they gained to purchase in traditional stores (Burke, 2002; Christopher, 2002). We could see in different circumstances cross-channel customers going from online to offline or from offline to online. However, on the basis of Baal and Dach's (2005) investigation, 10.4% of the respondents consulted the Web sites of the retailers from whom they purchased, and only 1.8% of customers completed their purchases in the online channels after gathering information in the traditional stores. In other words, the rate of customer switching going from online to offline is higher than going from offline to online. So

this study focuses on the cross-channel free riding and switch going from online searching to offline purchasing. Consequently, this study simplifies the purchase process into only two important purchase processes: searching and purchasing.

Conceptual Framework and Hypothesis Development

Bansal, Taylor, and James (2005) applied a useful model of migration from the human geography literature as a theoretical framework, push-pull-mooring (PPM). It was provided to assist managers in mapping the forces that influence the consumers' switching intention. Based on consumer behavior research and the above research, we developed the conceptual framework. Customer switching decision-making with respect to the particular provider is, according to the literature, guided by: (1) pull-based determinants could be desire-based driver from another supplier, such as attractiveness: customers may switch to another supplier because they want to do so; and (2) mooring-based determinants could be constraint-based driver from the original supplier, such as switching barriers: customers may not switch to another supplier because they need to do so; (3) push-based determinants could be expelling-based driver from the original supplier, such as perceived risk: customers may switch to another supplier because they have to do so (Jones et al., 2000; Wathne et al., 2001; Burnham et al., 2003; Bansal et al., 2005; Lopez et al., 2006). Therefore, we refer to the PPM model to develop our concept structure which is concerned with both channel and company aspects – online channel perceived risks, company perceived risks, online channel switching barriers, company switching barriers, offline channel attractiveness, and another company attractiveness. Subsequently, we focus on the dimensions of these six drivers, and elucidate the roles played by the six drivers in predicting the future retention of the same retailer after online searching.

1. Antecedents of the Six Drivers

1.1 *Online-Channel Perceived Risks and Company Perceived Risks*

When it comes to perceived risks, there are two components included: uncertainty (the likelihood of unfavorable outcomes) and consequences (the importance of a loss) (Bauer, 1960). According to the theory of consumers' perceived risks, consumers perceive risk because they face uncertainty and potentially undesirable consequences as a result of purchases .Therefore, the theory of reasonable action predicts that consumers would be willing to transact if their risk perceptions were low(Lim, 2003 ; Pavlou, 2003). Perceived risks refer to the individual's personal assessment of the risk associated with the purchase, and it varies across methods of shopping. Different types of risk exist, financial, performance, time, physical, psychological, and social risks (Jacoby and Kaplan, 1972; Murray and Schlacter, 1990; Havlena and DeSarbo, 1991). There is a conceptual correspondence between the

construct of perceived risk factors of switching intentions, such as financial risk, performance risk, and psychological risk.

The item financial risk is sometimes called economic risk. It represents the possibility of monetary loss arising from transaction. For example, customers may worry that the goods they buy in online retailers are more expensive than that in traditional stores. On the other hand, customers may worry that the goods they buy in the original retailer are more expensive than another retailer.

The item performance risk is the possibility that the purchased products do not work properly or can be used for only a short period of time (Jacoby and Kaplan, 1972; Simpson and Lakner, 1993). Performance risk may occur when consumers may fear the company that they "know" only through the Internet may misuse their credit cards or the Web sites may capture personal information. In company context, the possibility of the product malfunctioning and not performing as it was designed and therefore failing to deliver the desired benefits (Grewal et al., 1994)

The item psychological risk is the possibility that products are harmful to individuals' health (Jacoby and Kaplan, 1972) or products do not look as good as the individuals expect (Simpson and Lakner, 1993). Psychological risk may occur when consumers purchase a good through the Internet but do not know the entity from which you are buying or do not receive the good that was advertised. On the other hand, customers may worry that the product they buy from the retailer is different with they expect.

Heijden et al. (2000) modeled the role of perceived risks as an indirect influence on consumer purchase intention that feeds through consumer attitude, affecting willingness to purchase. Jarvenpaa et al. (1999) suggested that reducing the risk associated with buying from an Internet store would increase the probability of a consumer purchasing from it (Pavlou, 2003). Perceived risk has been shown to negatively influence transaction intentions with retailers (Jarvenpaa et al., 1999; Featherman and Pavlou, 2002; Pavlou, 2003; Du et al., 2009). When it comes to the aspect of channels, it means that customers may easily change from online to offline in their purchase process if they feel more perception of risk. In contrary, if the online channel perceived risk is rise, the probability of switching from online customers is higher. Thus, we propose the following relationship between online-channel perceived risk and cross-channel free riding.

H1. The higher the financial risk, performance risk, and psychological risk of online channel, the higher the likelihood consumers will intend to cross-channel free riding.

When it comes to the aspect of companies, it means that customers may easily

change from the original retailer to another in their purchase process if they feel more perception of risk. On the other hand, if the company risk is rise, customers switch to another retailer more likely. Thus, we propose the following relationship between company perceived risk and switch.

H2. The higher the financial risk, performance risk, and psychological risk of company, the higher the likelihood consumers will intend to switch.

1.2 *Online-Channel Switching Barriers and Company Switching Barriers*

Switching barriers represent any factor which makes it more difficult or costly for consumers to change providers (Jones et al., 2000). Vazquez-Carrasco' and Foxall (2006) also argued that switching barriers have been considered as a relevant factor influencing on customer's intention to remain in the relationship established with a provider. Bansal and Taylor (1999) define perceived switching barriers as the consumer's assessment of the resources and opportunities needed to switch, or alternatively, the constraints that prevent the switching happen. Variables from the service and brand switching literature that fit this conceptualization of mooring effects include switching costs, attitudes toward switching, subjective norms (social influences), past behaviors, and variety-seeking tendencies (Bansal, 2005).

Ajzen (1985), Ajzen and Driver (1992), and Eagly and Chaiken (1993) had stated that a favorable attitude will enhance the motivation to perform a particular behavior when one perceives a high degree of controllability on their part in performing such a behavior. And attitude toward switching has been associated with consumers' switching intentions (Bansal and Taylor 1999b, 2002). When customers have high intention of attitude toward switching, they may switch purchase channel or service provider. Subjective norms refer to a person's perception of the social pressures placed on him or her to engage in a certain behavior (Ajzen and Fishbein 1980). Any person or group served as a reference group could exert a key influence on an individual's beliefs, attitudes, and choices (Moutinho, 1987). And subjective norm consists of concepts or generalizations which guide behaviors (Lam & Hsu, 2006). Recent research suggests that subjective norms influence consumers' attitude toward switching and their switching intentions (Bansal and Taylor 1999b). Likewise, broader cultural norms have been found to moderate the relationship between service quality and service switching (Liu, Furrer, and Sudharshan 2001).

Switching costs is defined as the costs involved in changing from one service provider to another (Porter, 1980). Then Jackson (1985) categorized theses switching costs as psychological, physical and economic in nature. When consumers simplistically state that "it's not worth it" to switch providers, they may perceive

impediments ranging from “search costs, transaction costs, learning costs, loyal customer discounts, customer habit, emotional cost and cognitive effort, coupled with financial, social, and psychological risk on the part of the buyer” (Fornell, 1992). These costs become salient and evident when consumers are faced with a reason to consider switching (Burnham et al., 2003). And service researchers study comparable variables: financial, time, effort, and ability switching costs have been shown to affect the switching decision (Bolton, Kannan, and Bramlett 2000; Jones et al. 2000).

From a list of personal factors studied in a service switching context (Keaveney and Parthasarathy, 2001), and Bansal (2005) pointed out the past behavior and variety seeking as possible mooring variables. So we also draw on the two variables to construct the switching barriers. Individuals’ preferences are in part influenced by their consumption history as well as their propensity for variety seeking(Lattin and McAlister 1985). We could speculate that service provider switching intentions will be positively related to a consumer’s past switching behavior and his or her propensity to seek variety in service experiences. This is consistent with recent research suggesting that consumers’ past switching behaviors influence their subsequent behavioral intentions (Ganesh, Arnold, and Reynolds 2000).

From the literature suggests variables of switching barriers such as attitudes toward switching, subjective norms, switching costs, past behavior, and variety seeking as possible antecedent variables. Furthermore, the literature of relationship between switching barriers and customer switching, Bansal and Taylor (1999), Lee et al. (2001), Ranaweera and Prabhu (2003), and Tsai et al. (2006) have tested and confirmed the negative effect of switching barriers on customer switching. Obviously, switching barriers may reduce intention of channel or company transfer. Accordingly, we propose the following hypothesis:

H3. The higher the switching costs, attitudes toward switching, subjective norms, past behavior, and variety seeking of online channel, the lower the likelihood consumers will intend to cross-channel free riding.

H4. The higher the switching costs, attitudes toward switching, subjective norms, past behavior, and variety seeking of company channel, the lower the likelihood consumers will intend to switch.

1.3 *The Moderating Role of Mooring Effects*

In migration research, the mooring variables moderate the relationships between the push and pull factors and the actual migration decisions (Lee 1966). By extension, it is thus expected that even if push and pull factors are strong (high financial risk of the original service provider and high attractive alternative of another service provider), a consumer may remain with the original service provider when

mooring variables are strong, because of high switching cost or significant others do not want him or her to switch. In addition to their direct effect on switching intentions, mooring variables thus also moderate the relationship between push factors and switching intentions, and between pull factors and switching intentions (Bansal, 2005).

Although most studies of service-switching focus on direct effects, but recent research point out that moderators can play a role. For instance, Homburg and Giering (2001) stated the variety-seeking could be a moderator of the relationship between service satisfaction and repurchase intentions. And Jones et al. (2000) find the switching barrier is an important moderate role of repurchase intentions in service. Likewise, cultural dimensions moderate the service quality of switching intention relationship (Liu et al. 2001). According to the arguments above, we can hypothesize the following:

Hypothesis 5: The switching costs, attitudes toward switching, subjective norms, past behavior, and variety seeking of online channel moderate the relationship between online channel perceived risks and intention to cross channel free riding. Specifically, the strong the online channel switching barriers, the weaker is the relationship between online channel perceived risks and intention to cross channel free riding.

Hypothesis 6: The switching costs, attitudes toward switching, subjective norms, past behavior, and variety seeking of online channel moderate the relationship between offline company alternative attractiveness and intention to cross channel free riding. Specifically, the strong the online channel switching barriers, the weaker is the relationship between offline company alternative attractiveness and intention to cross channel free riding.

Hypothesis 7: The switching costs, attitudes toward switching, subjective norms, past behavior, and variety seeking of company moderate the relationship between company perceived risks and intention to switch. Specifically, the strong the company switching barriers, the weaker is the relationship between company perceived risks and intention to switch.

Hypothesis 8: The switching costs, attitudes toward switching, subjective norms, past behavior, and variety seeking of company moderate the relationship between another company alternative attractiveness and intention to switch. Specifically, the strong the company switching barriers, the weaker is the relationship between another company alternative attractiveness and intention to switch.

1.4 *Offline-Channel Attractiveness and another Company Attractiveness*

Attractiveness—the positive characteristics of competing service providers—positively influences consumers' intentions to switch (Jones et al., 2000). According to the push-pull paradigm, attractive factors at the destination pull the migrant to this destination. When viable alternatives are lacking, the probability of terminating an existing relationship decreases (Bendapudi and Berry, 1997; Dubc- and Maute, 1998). Empirical evidence across a number of areas including interpersonal relationships and employee turnover (Rusbult, 1980; Farrell and Rusbult, 1981), as well as channels relationships (Ping, 1993) supports this line of reasoning and demonstrates that when viable alternatives are lacking, the probability of terminating an existing relationship decreases. Attractiveness of alternatives refers to customer perceptions regarding the extent to which viable competing alternatives are available in the marketplace (Jones et al., 2000). Bansal et al. (2005) proposed that the higher the alternative attractiveness of competing service providers, the higher the likelihood consumers will intend to switch service providers.

The only existing variable from the service switching literature that conforms to this conceptualization is alternative attractiveness (Bansal et al, 2005).Therefore, we can assume that the attractiveness of the alternative offline channel could affect the consumer's purchase intention and then occur cross-channel free riding. In terms of the aspect of company, if alternative attractiveness is high, may affects customers switch from the original retailer to another retailer. Hence, we posit the following hypothesis:

H9. *The higher the* alternative attractiveness of offline channel, *the higher the likelihood consumers will intend to cross channel free riding.*

H10. *The higher the* alternative attractiveness of another company, *the higher the likelihood consumers will intend to switch.*

According to the introduction and literature reviewing, this study proposes our research framework in Figure 2.

Figure 2 Research Framework

Method

1. Sample and Data Collection

Bansal, Taylor, and James (2005) empirically investigated the scales that would be used to test the push-pull-mooring. However, our study is concerned with both company and channel aspects, and extends the PPM model to six drivers: online channel switching barriers, company switching barriers, online channel perceived risk, company perceived risk, online channel attractiveness, and company attractiveness.

To examine the hypotheses, respondents were conveniently drawn from customers in Taiwan with online searching experience before shopping. And before filling out questionnaires, respondents were asked to answer two antecedent questions: "Have you ever searched the information in the online channels, and then purchased in the traditional stores?" and "Have you ever searched the information in the online channels, and then just purchased online?" to make sure their information searching experience are going from online retailers. Therefore, a total of 561 questionnaires were collected. There were 31 invalid questionnaires which respondents ignored the reverse items or didn't complete all items. Therefore, 530 of all questionnaires were deemed useful, which represents a response rate of 94%.

Approximately 47.4 percent of respondents were male, and the majority of respondents were between the ages 20 and 24 (53%). University or college undergraduates composed 56.6 percent of the sample, 2.7 percent of respondents had a diploma below high school or vocational school, and 40.8 percent had a degree higher than postgraduate university. Approximately 70.3 percent of the sample reported yearly household incomes less than NT$300,000. Overall, multichannel customers are 20-30 years old young people, and their current yearly income is generally lower.

2. Measurement

The focal constructs of the model are all measured using multiple items based on validated scales obtained from the literature. All items were assessed via a 7-point interval scale ranging from 1(extremely disagree) to 7(extremely agree).

Online channel perceived risk, company perceived risk, online channel switching barrier, company switching barrier, offline channel attractiveness and another company attractiveness constructs were also assessed with Gupta et al (2004) and Bansal et al, (2005) scales. Finally, Cross-channel free riding and switching were measured using Gupta et al's (2004) scale. We also developed one independent test items: "I am a sensible person" (Suyama et al., 2004). This question is designed to prevent for common method variance (CMV). The results show that nearly all 58

items were not significantly on this non-relevant item (P>0.01). The test of CMV was acceptable.

3. Data Analysis and Results

3.1 *Reliability and Construct Validity*

In order to make sure that the instrument that we develop to measure research construct is accurate, the reliability and construct validity of the measures are established, as described below. To examine the reliability and the factor structure of the all items questionnaire, we computed Cronbach's alphas for the scales. In order to increase the reliability estimates of measurement scales, we deleted two nearly repeat items.The alphas of our results were 0.89, 0.74, 0.82, 0.94, 0.85, 0.91, 0.93, 0.91, 0.73, 0.84, 0.75, 0.95, 0.94, 0.88, 0.86, 0.77, 0.86, 0.92, 0.91, and 0.92 for 18 sub-dimensions and two switch dimensions. Respectively, all of these values were greater than 0.7 and these values showed a high internal consistency in each dimension of perceived risk, switching barrier, attractiveness and switch.

To test construct validity, the LISREL 8.7 maximum likelihood program (Jöreskog and Sörbom, 1993) was used to test the construct validity of each scale. Convergent validity is supported when the average variance extracted (AVE) between the constructs and their measures is greater than .50 (Fornell and Larcker, 1981) and the loading on the hypothesized construct is significant (Hibbard, Kumar, and Stern, 2001). In this study, the AVEs ranged from .49 to .89, and all AVE approached or exceed the level of .50. This study also tested the discriminant validity for higher correlation of pair dimensions to take the way which set correlation of pair dimensions to 1 (Jap and Ganesan 2000). In this study, the original chi-square is 2590.28. When setting correlation of those pairs equal to 1, the least chi-square are 2602.97. The differences of $\chi 2$ were 12.69. However, all of the$\chi 2$ differences were greater than 3.84 and therefore provide evidence of discriminate validity (Jap and Ganesan, 2000).

3.2 *Factor Structure Analysis*

Structural model was assessed using a combination of LISREL 8.7 and Regression (Bensal, Taylor, and James, 2005). A two-step process was followed to assess the PPM model. First, a second-order factor model was analyzed, with financial risk, performance risk, and psychological of the second-order factor labeled *online channel perceived risk*(OCPR); above three risks of a second order construct also labeled *company perceived risk*(CPR); attitude toward switching, subjective norms, switching costs, past switching behavior, variety seeking of the second-order factor labeled *online channel switching barrier*(OCSB); above five mooring effects of

a second order construct labeled *company switching barrier* (CSB). The *offline channel attractiveness* (OCA) and *company attractiveness* (CA) construct were captured by also attractiveness construct alone. Latent variable scores of OCPR, CPR,

OCSB, CSB, OCA and CA, in addition to *cross-channel free riding* (FR) and *switch* (SW), were used for analyses in the next step. Overall fit, predictive power, and path significance were considered. Overall, the fit statistics of the LISREL analysis indicate that the PPM model provides a good fit to the data. These values suggest an adequate fit of the model to the data ($\chi 2/df$ =2.24, RMSEA = .049, NFI = .94, CFI = .97).

Table 1 Results of Path Analysis

Path			Standardized Coefficient	Conclusion
Online channel perceived risk(OCPR)	→	Cross Channel Free-riding(FR)	0.24***	Support
Company perceived risk(CPR)	→	Switch (SW)	0.22***	Support
Online channel switching barrier(OCSB)	→	Cross Channel Free-riding(FR)	-0.33**	Support
A Company switching barrier(CSB)	→	Switch (SW)	-0.20***	Support
Off line channel attractiveness(OCA)	→	Cross Channel Free-riding(FR)	0.05	Not Support
B Company attractiveness(CA)	→	Switch (SW)	0.20***	Support

***Significant at p < 0.01; **Significant at p < 0.05; *Significant at p < 0. 1

3.3 *Hypotheses Testing*

Secondly, the REGRESSION procedure in SPSS 16 was used to analyze the relationship between six factors and two switch intentions, and the interactions between mooring factors and push and pull factors. We calculated composite scores for each six driving factors, cross-channel free riding and switch by summing its items. In order to examine the moderation effects, we refer to the method of Aydin and Ö zer (2005). Four conditions for moderation were examined which including completely model and limited model. According to the hypotheses of this study, we developed following four relation models:

We used Model 1 and Model 2 to examine the "*online channel switching barrier* (OCSB)" moderation effect to the relationship between OCPR, OCA, and Cross-Channel Free Riding. We also used Model 3 and Model 4 to examine the "*company switching barrier* (CSB)" moderation effect to the relationship between CPR, CA, and Switch.

We estimated model 1 and model 3with only direct paths—a Direct Model. All direct paths (except for the direct path from OCA to the dependent variable) were

significant (P<.1). Table 2 showed that the effects of OCPR*OCSB and OCA*OCSB to cross-channel free riding were not significant. It expressed that there was no moderation effect to the relationship between OCPR, OCA, and Cross-Channel Free Riding. On the contrary, the effects of CPR*CSB and CA*CSB to switch were significant (Table 2), so "*company switching barrier* (CSB)" moderated the relationship between CPR, CA, and Switch. Moreover, the effects between CPR, CA , and Switch were significantly decreasing

Table 2 Results of moderation effects to Cross-Channel Free Riding and Switch

Cross-Channel Free Riding								
	Model 1		**Model 2**			**Model 3**		**Model 4**	
	Beta	t-value	Beta	Beta		Beta	t-value	Beta	t-value
Intercept		12.069***		11.879***	**Intercept**		8.213***		-2.044**
OCPR	.245	6.127***	0.244	6.094***	**CPR**	.219	5.149***	1.079	5.161***
OCSB	-.330	-8.268***	-.333	-8.091***	**CSB**	-.199	-4.844***	.639	3.157***
OCA	.047	1.179	.048	1.191	**CA**	.104	4.766***	.607	2.887***
OCPR*OCSB			-.014	-.338	**CPR*CSB**			-.970	-4.204***
OCA*OCSB			.016	.410	**CA*CSB**			-.547	-1.999**
R square	0.190		0.191		**R square**	0.155		0.188	
F	41.249***		24.734***		**F**	32.153***		24.279***	

***Significant at p < 0.01; **Significant at p < 0.05; *Significant at p < 0. 1

A structural model was estimated to assess path and explained variance estimated. The results of this study were showed in figure 3. As our expectations, most path coefficients are as hypothesized.

The paths from three channel factors (online channel perceived risk, online channel switching barriers, and offline channel attractiveness) directly to *cross-channel free riding* are not all in support. Tests comparing path coefficients (Schenker and Gentleman, 2001) leading to intention indicate that the path from online channel receive risk (H1) and online channel switching barrier (H3) to *cross-channel free riding* has the strong effect (p < .01). Furthermore, the moderation of online channel mooring effects were all not significant. For the overall sample, which indicates H1, and H3 were supported in this study, whereas H5, H6 and H9

were not.

However, the paths from another three company factors (company perceived risk, company switching barriers, and another company attractiveness) to *switch* are all in support. The company perceived risk (H2), company switching barriers (H4) and another company attractiveness (H10) had significantly impacts on the switch ($p < .1$). The moderation of company mooring effects were all negative significantly. It means that the switching costs, attitudes toward switching, subjective norms, past behavior, and variety seeking of company moderate the relationship between company perceived risks/ another company alternative and intention to switch. Specifically, the strong the *company switching barriers*, the weaker is the relationship between company perceived risks/ another company alternative and intention to switch. For the overall sample, which indicates H2, H4, H7, H8 and H10 were all supported in this study

4. Discussion and Managerial implications

This study produces two important findings that deserve considerable attention from retailers seeking to build Internet customer relationships, including a roughly comprehensive theoretical framework of the drivers to make the goal of multichannel customer switch with a particular e-retailer or with going from online to offline.

Firstly, we understand the key factors of cross-channel free riding and switch, and their antecedents in the multi-channel customer behavior. Referring to the total effects of drivers on cross-channel free riding as shown in Figure 3, online channel perceived risk and online channel switching barrier have directly influence on cross-channel free riding intentions. Moreover, we also find the three company drivers, company perceived risk and company switching barrier and another company attractiveness, significantly influence switchung. The most contribution is that company mooring effect could strongly decrease customers' switch behavior. These findings conform with and extend previous research (e.g., Chiou, 2004; Harris & Goode, 2004; Pavlou & Gefen, 2004; Bansal et al, 2005; Tsai et al, 2006) and provide multi-channel businesses with guidelines for effectively managing online customer switch.

Furthermore, in terms of the previous online customer switch research, most of them have focused predominantly on desire-based drivers of customer switch. Our study has indeed demonstrated that desire-based drivers are significant only to alternative another company not to online switch. However, with regard to both intention, cross-channel free riding and switch, constraint-based and expelling-based drivers are highly significant. This finding has implications for both theory and practice. Our results suggest the need to extend existing theories of cross-channel

customer swtiching to incorporate constraint-based drivers such as switching costs, attitudes toward switching, subjective norms, past behavior, and variety seeking of another company.

Secondly, company switching barrier have strongly negative moderate impact on the relationship between company perceived risks/another company attractive and switching. Current company push and another company pull effects have a positive relationship with switching intentions—one is more likely to switch if pushed or pulled away. However, even with strong push and pull effects, a consumer may not switch. This is because there is a set of company mooring effects that may constrain the switching decision, acting as a moderator of the push-pull relationship with switching intentions. Mooring effects also have a direct, negative relationship with switching intentions—the more a consumer feels "moored" to the service provider, the less likely he or she is to switch (Bansal, Taylor, and James, 2005). On the other hand, even if the current company perceived risks or another company attractive are strong, a customer may not switch if there are company factors mooring him or her to the current service provider. Above results further showed us the importance of understanding the company mooring variables.

4.1 *Managerial implications*

This finding has important practical implications: a multichannel customer management must attempt to factor in strategies and tactics for decreasing perceived risks and for creating switching barriers highly relationship-oriented customers. When the relationship is characterized by trust, outcome expectations can be reliably predicted and this makes online customers feel secure in their interactions (Psychological risk). Furthermore, by removing online security threats or eradicating the potential for unauthorized transactions (performance risk), online customers will develop a high level of trust in the e-retailer (Yousafzai et al., 2005). Besides, e-retailers should increase the price transparency in online shopping environment to help customers find out the real price before purchasing (financial risk).

In push effect, attractiveness of another company has positive effect on switching intention. The factors of pull effect, alternative attractiveness from another company have direct effect with switching. After searching product information on online channel, consumers don't make an order immediately, but purchase to another company that has online channel. Because customers can get more information, lower price, higher value, higher satisfaction, and reduce risk of the company. So service provider should decrease own perceived risk and increase switching barrier to avoid customer switch to competitive company.

Switching barrier plays a very important role of multichannel service

environment, service provider should make the switching barrier strategy by increasing customers' perception of attitude toward switching, subjective norms, switching cost, past switching behavior, and variety-seeking in their shopping process to make the goal. In regard attitude toward switching and subjective norms of switching barrier, Service providers can influence customers' purchase intention. For example, providers institute different promotional plans against target customers, customers' family and social circle, thus encouraging the development of brand communities that reinforce the social basis of customers' attachment to the brand (McAlexander, Schouten, and Koenig 2002). In aspect of past switching s behavior and variety-seeking, Service providers may build consumer database, track consumption aptitude to recognize and analyze their habit. On the other hand, service supplier can provide customized services or products for customers. Thus, service providers erect these switching barriers will help to increase customers' loyalty and decrease customer switching situation. The same results with these studies of Bansal and Taylor (1999), Lee et al. (2001), Ranaweera and Prabhu (2003), and Tsai et al. (2006) showed that switching barriers have the positive effect on customer retention.

Managers of service providers could integrate multichannel to satisfy customer's need. A well-integrated channel can also lead to greater impact, higher gross margins, lower marketing expenses (Moriarty, 1994; Duncan and Moriarty, 1998; Barsh et al., 2000), and encourage desirable customer behaviors (Montoya-Weiss, Voss, and Grewal, 2003; Bendoly and colleagues, 2005). For example, well-integrated multichannel allows customers to order online and pick up their order from the nearest store and to return products purchased from the Web at the local outlet.

4.2 *Limitation and Future Research*

Although our findings support the generalizability of previous studies (Jones et al., 2000; Bansal, 2005), there are still some limitations to this study. The most critical is that there are too many elements to be concerned in this study: firms switch, channels switch, and purchase stage change. Then, one of the premise in this study is restricted customer purchase processes to only two stages: searching and purchasing. However, customers have more and more complex shopping behaviors in reality. The last one is the sampling method for this study was a convenience sampling that was not scientifically designed. Therefore, significant efforts should be devoted to detecting any potential biases in these nonrandom samples.

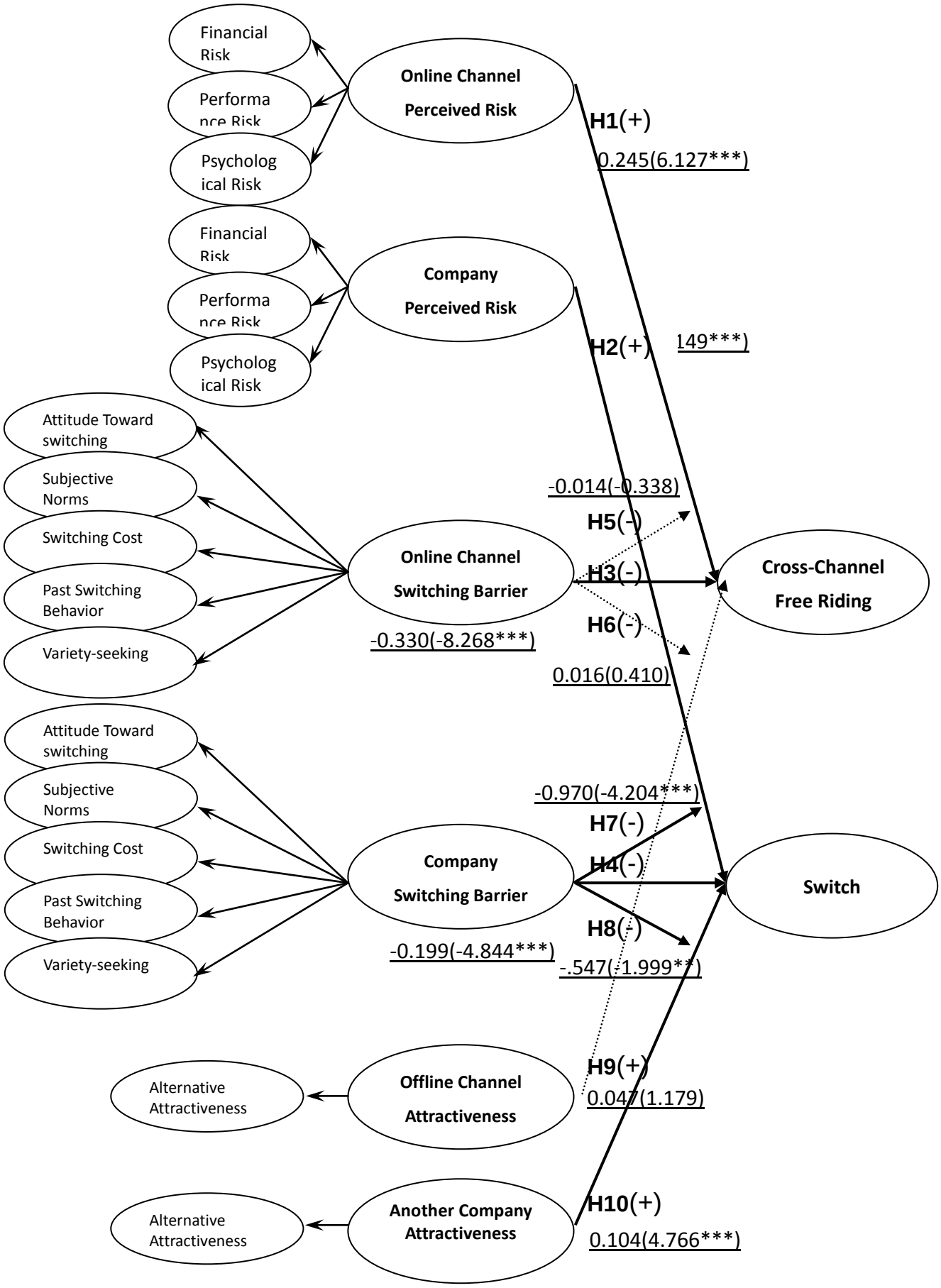

Figure 3 Results of Hypothesized Model

* : P<.1 (t>1.645)

** : P<.05 (t>1.96)

*** : P<.01 (t>2.58)

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Note: References are available upon request from the authors.