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Determinants of Multichannel Consumer Switching Behavior: A Comparative Analysis of Search and Experience Products

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Determinants of Multichannel Consumer Switching Behavior:

A Comparative Analysis of Search and Experience Products

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Abstract: In the present competitive retailing environment, retailers are confronted with consumers who are prone to switch between online and physical retail channels as well as across retailers. This research attempts to understand the factors that influence multichannel consumer attitude to engage in switching. We propose a model based on the push-pull-mooring theory to study the impact of various determinants on attitude to switch between different multichannel retailers in the context of two types of products. Results suggest that exploratory consumer behavior has positive effects on switching attitude across both types of products. Further, there are numerous interesting findings that differ across search and experience products. We provide managerial insights for multichannel retailers and discuss the implications for future research on consumer switching behavior in a multichannel environment.

Keywords: Multichannel retailing, Consumer switching behavior, Search products, Experience products

1. INTRODUCTION

Traditional retailers are cognizant of the fact that merely expanding the number of their physical store and relying on low-price strategy can no longer ensure their sustained development. Instead, the ability to reach out to consumers across multiple retail channels is becoming an imperative for all retailers nowadays. Recent anecdotal evidence has revealed that multichannel retailers enjoy better financial performance and better customer loyalty. Major U.S. retailers such as Macy's have been offering consumers with flexible transaction options and seamless shopping experiences across multiple channels to immense success [1]. However, tech-savvy multichannel consumers are hard to please. They have the tendency to switch between the online and offline channel freely over the pre-purchase, purchase and post-purchase stages. Although numerous studies have suggested that multichannel consumers tend to spend more than single channel consumers, these consumers were also characterized as having lower loyalty to retailers.

The problem of multichannel consumers switching behavior gained prominence recently with a surge of consumers engaging in "showrooming". A typical shopping scenario these days is as follows: consumers will visit the physical store to inspect the products; next, they will scan the barcode of the product with their cellphones to compare prices online. If the online prices are lower, they will switch to complete their purchase from another retailer online. Showrooming effect has detrimental effects particularly to single-channel retailers. It was found that less than 7% of the transactions were fulfilled in the original channel [2]. Thus, how to provide cross-channel services or integrate the different channels to retain the customers are critical problems facing all retailers.

Although some recent research has examined switching costs, product characteristics, cross-channel shopping behavior and different consumers' purchase characteristics [3] [4], there is a lack of studies integrating these determinants in a multichannel retailing context. Furthermore, little is known about multichannel consumer behaviors with regards to different types of product. Therefore, there is a need to understand how the

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integration of above all determinants to influence the consumers switching behavior. To address these issues, we use the Push-Pull-Mooring Theory to propose and empirically test hypotheses about the impact of retailer characteristics, consumer characteristics, and external environment influence on consumers' switching attitude toward multichannel. Next, we further preformed a comparative analysis between search and experience products. Specifically, we provide answers to the following research questions: i) What are the determinants of multichannel consumer switching behavior in terms of the influence of retailer characteristics, consumer characteristics, and external environment? ii) Are there differences between search and experience products in how these factors affect multichannel consumer switching?

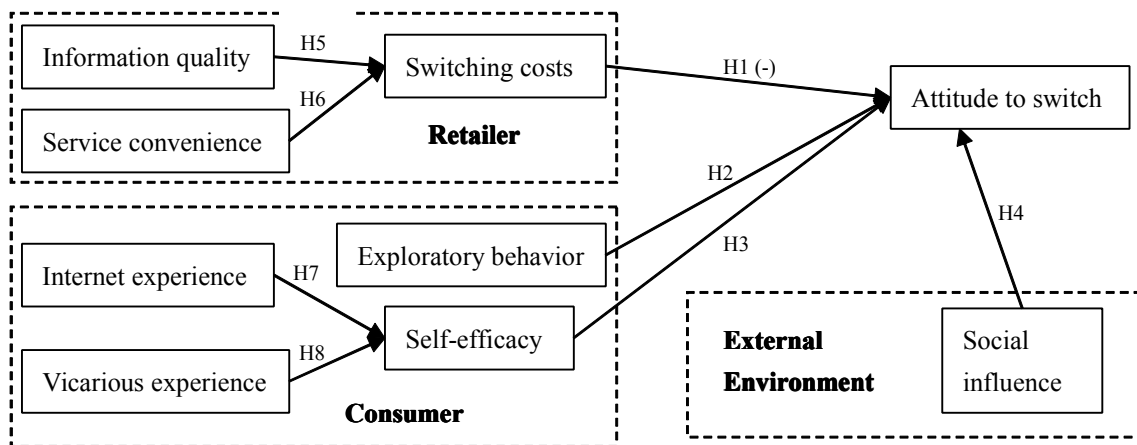## 2.   THEORETICAL MODEL AND RESEARCH HYPOTHESES

Fig.1. Research model

Push-Pull-Mooring (PPM) theory defines and categorizes the push, pull and mooring factors involved in migration [5]. According to PPM, push factors, pull factors and individual mooring factors will be interactive and strike to reach a balance at a certain level. Fig.1. shows the research model that examines the effects of four determinants of the attitude of consumer switching between different multichannel retailers. Further, we propose that service convenience and information quality provided by the incumbent retailer will increase consumers' switching costs. We also propose that Internet experience and vicarious experience will influence consumer switching confidence in terms of self-efficacy to engage in multichannel shopping. Finally, we categorize the determinants that influence consumer switching attitude into three categories: retailer-related pull factors, consumer-related push factors, and mooring factors due to social influence.

2.1 Determinants of the attitude to switch

Attitude toward channel migration is defined as the consumer's evaluation of the desirability of using a given channel to purchase products [6]. Attitude towards online and offline channel can influence consumers' channel migration behavior [7]. Furthermore, a segmentation study of multichannel consumers also found that positive attitude towards channels influences their purchase intentions [8]. Thus, it can be stated that favorable attitude towards channel migration is likely to encourage consumers to switch channels and retailers [6].

2.1.1 Switching costs

Switching costs are the expenses that customers associate with the process of switching from one provider to another [9]. When the perceived costs of an activity increase, the likelihood that consumers engage in switching behavior diminishes [3]. Switching costs can therefore influence propensity to search and switch to alternative options, such that high switching costs enhance customer loyalty [10]. When consumers perceive high switching costs, they should experience greater within-firm lock-in and be more inclined to stay with the

incumbent provider [11].

Hypothesis 1 (H1). A higher level of switching costs will weaken the attitude to switch to another multichannel retailer.

2.1.2 Exploratory behavior

Exploratory consumer behavior has been categorized as curiosity-motivated behaviors, variety seeking, and risk taking [12]. Exploratory behavior "appears to be an end in itself" and "introduces stimuli that can be said to be rewarding in themselves, regardless of any instrumental activity that they may evoke" [13]. Exploratory consumers are more willing to take risk and try new products, service or retailers to maximize their utility. Therefore, consumers who have a higher level of exploratory behavior will likely to have a higher probability to switch retailers.

Hypothesis 2 (H2). A higher level of exploratory behavior will enhance the attitude to switch to another multichannel retailer.

2.1.3 Multichannel Self-efficacy

Self-efficacy refers to "people's judgments of their capabilities to organize and execute courses of action required to attain designed types of performance" [14]. Multichannel self-efficacy refers to the ability and confidence of consumers to employ multiple channels to finish a transaction, starting with information search and ending in purchase [3]. People with high multichannel self-efficacy perceptions think of themselves as experts in selecting the best service provider in different consumption stages [3]. Therefore, the more a consumer believes that he or she is capable of handling various problems in different channels, the greater is the possibility of switching between different retailers.

Hypothesis 3 (H3). A higher level of multichannel self-efficacy will enhance the attitude to switch to another multichannel retailer.

2.1.4 Social influence

Consumers' selection of channels is influenced by the belief that people important to them use that channel [15]. Subjective norms suggest that behavior is determined by one's desire to act as others do, or as they think one should, and hence will reflect consumer perceptions of whether channel-migration behavior is accepted, encouraged, and implemented by the consumer's circle of influence [16]. This emotion or consideration can be crystallized into social influence, which has a closely relationship with consumer' switching attitude.

Hypothesis 4 (H4). The social influence will enhance the attitude to switch to another multichannel retailer.

2.2 Factors influencing switching costs

2.2.1 Information quality and switching costs

Information quality is the customer's perception of the quality of the information provided by the retailer in terms of relevance, accuracy, and completeness [17]. The level of information quality perceived by consumers is determined by the richness of the information collected about transactions and the ability to use the information to improve purchase processes that match customers' needs [18]. It is likely to augment consumers' satisfaction and further increase consumers' switching costs when retailers provide higher quality information.

Hypothesis 5 (H5). A higher level of information quality from the incumbent retailer will increase the level of switching costs.

2.2.2 Service convenience and switching costs

Service convenience refers to the consumer's perception of the time and effort required to complete a service or conduct a transaction. It can be assessed in terms of whether the service provides decision, access, transaction, benefit, and post-benefit conveniences [19]. The relative service convenience levels have direct effects on the attractiveness of competitors and will determine the difficulty of consumer's level of switching

costs.

Hypothesis 6 (H6). A higher level of service convenience from the incumbent retailer will increase the level of switching costs.

2.3 Factors influencing multichannel self-efficacy

2.3.1Internet experience and multichannel self-efficacy

Successful previous experience is the most influential factor in promoting a sense of personal self-efficacy [20]. The previous use of related technology increases perceptions of self-confidence and ability; heavy users of related technologies are able to use alternative channels more effectively [21]. Therefore, consumers with more Internet experience will have lower difficulty in learning how to use multiple channels [3]. The higher the frequency of Web-based contacts, the higher is the likelihood that a multichannel consumer to have a higher level of self-efficacy [22].

Hypothesis 7 (H7). A higher level of Internet experience will enhance consumer's multichannel self-efficacy.

2.3.2Vicarious experience and self-efficacy

Although people lack significant prior accomplishments, their efficacy expectations might increase as a result of others' performance, or vicarious experience [3]. Research reveals that when others in the person's reference group use technology more, his or her self-efficacy increases [23]. Hence, if consumers recognize that their reference groups employ multiple channels to complete a transaction successfully, they should be more confident to adopt similar behaviors [3].

Hypothesis 8 (H8). A higher level of vicarious experience will enhance consumer's multichannel self-efficacy.

3. RESEARCH METHODS

3.1 Data collection

We designed two different sets of questionnaire with scenarios that differ in the product category, one for search product (electronics) and the other for experience product (apparel) to examine the influence of product category on the determinants of consumer switching behavior. Data was collected from college students in a large university in Northwestern China. Each respondent received a gift worth about RMB 10. We obtained a final usable sample of 227 (114 for search products scenario, 113 for experience products scenario). The respondent was first asked to assume that they are planning to buy an electronics product/apparel product. Next, they were told that they can choose to purchase from two multichannel retailers, retailer A and retailer B. Retailer A is the retailer that they have been making purchases from and retailer B is an alternative retailer that they can consider switching to. They were then asked to recall their most recent shopping experience with retailer A.

3.2 Measurement of constructs

The measurement items of the questionnaire were adapted from prior research and contextualized for our research context of multichannel retailing. They were all anchored on a 7-point Likert scale. Table 1 shows the operationalization of the constructs (detailed questionnaire items were not listed due to space limitation).

4. DATA ANALYSES AND RESULTS

4.1 Descriptive statistics

Table 1 shows the descriptive and validity statistics of the nine constructs.

Table 1. Operationalization of measured constructs

Construct	Mean	S.D.	Composite Reliability	Cronbach's Alpha	AVE	Source of items
service convenience	5.184	1.080	0.874	0.786	0.698	Three items adapted from Oh & Teo 2010 [24]
information quality	4.596	1.165	0.856	0.857	0.602	Four items adapted from Oh & Teo 2010 [24]
switching costs	5.018	1.207	0.945	0.885	0.897	Two items adapted from Jones 2000 [25]
exploratory behavior	4.825	1.049	0.910	0.885	0.593	Seven items adapted from Steenkamp & Baumgartner 1992 [26]
self-efficacy	4.647	1.045	0.896	0.846	0.683	Four items adapted from Chiu et al. 2011 [3]
internet experience	5.268	1.070	0.875	0.815	0.637	Four items adapted from Chiu et al. 2011 [3]
vicarious experience	5.590	1.014	0.939	0.871	0.885	Two items adapted from Chiu et al. 2011 [3]
social influence	4.639	1.001	0.908	0.866	0.713	Four items adapted from Taylor & Todd 1995 [27]
attitude to switch	4.009	0.898	0.894	0.840	0.680	Four items adapted from Taylor & Todd 1995 [27]

4.2 Measurement model evaluation

The partial least squares modeling (PLS) technique, specifically the software Smart-PLS was used for the data analysis. We first performed a principal components factor analysis using Varimax approach to derive nine constructs. Each item's correlation with its own construct is higher than that with other constructs. All item loadings between an indicator and its posited underlying construct factor were greater than 0.6 while the AVE was above the recommended threshold of 0.5, adequately demonstrating convergent validity (see Table 1). Table 2 reports the test for discriminant validity of the reflective constructs. The diagonal elements are the AVE for each construct, which, for discriminant validity, should be greater than the off-diagonal elements of the square of inter-construct correlations. All constructs fulfilled the requirement of discriminant validity.

Table 2. Discriminant validity of reflective constructs

	1 attitude to switch	2 information quality	3 exploratory behavior	4 vicarious experience	5 internet experience	6 self-efficacy	7 service convenience	8 social influence	9 switching costs
1	**0.824**								
2	0.019	**0.776**							
3	0.366	-0.188	**0.770**						
4	0.050	0.028	0.166	**0.941**					
5	0.049	0.177	0.345	0.315	**0.798**				
6	0.256	0.026	0.445	0.243	0.413	**0.827**			
7	-0.112	0.181	0.025	0.115	0.168	0.079	**0.836**		
8	0.236	-0.066	0.180	0.136	0.049	0.002	-0.021	**0.844**	
9	-0.136	0.135	-0.032	0.020	0.082	-0.013	0.287	-0.004	**0.947**

4.3 Structural model test results

We first estimated the structural models of the two different scenarios separately and obtained two models with different path coefficients and significance. Next, we analyzed and compared the different path coefficients and significance to determine the influence that product category has on consumer switching behavior. Table 3 shows the PLS results. The results included the path coefficients, significance level based on two-tailed t-tests for our hypotheses, and the amount of variance explained (R^2).

Table 3. PLS results

	H1	**H2**	**H3**	**H4**	**H5**	**H6**	**H7**	**H8**	R^2
search products	-0.191*	0.201*	0.204*	0.140	0.119	0.248**	0.378***	0.212*	0.182
experience products	-0.099	0.319***	0.111	0.250**	0.204	0.276**	0.388***	0.052	0.260

*significant at p<0.05; **significant at p<0.01; ***significant at p<0.001

5. DISCUSSION AND IMPLICATIONS

Our findings are generally consistent with the prior research [3] [6] about switching costs, self-efficacy, and social influence. Since our study has examined the differential effects of the switching behavior determinants in the context of search and experience products, we are able to obtain some interesting findings and offer richer insights. First, the effects of exploratory behavior that we have added to predict multichannel consumer switching behavior was significant in both search and experience products context. This suggests that higher level of exploratory consumer tendency will result in a higher probability for consumers to change their shopping habit or scheme to pursue new products or service and finally could result in a switch from one retailer to another. Research in multichannel retailing has found that information quality and service convenience are both key drivers of consumer value [24]. However, the present study offers some surprising findings in that for both types of products. We found that information quality provided by the incumbent retailer does not significantly increase switching costs directly. We reckon that although consumers generally value quality information, but in the context of switching to another retailer, if product information is freely accessible on the Internet, this factor would not be a crucial one that will prevent switching. Instead, when it comes to switching retailers, service convenience plays a more influential role because it is a significant determinant of switching costs for both types of product.

Next, we found that the effects of switching costs and vicarious experience are significant for search products but not for experience products. This contrasting set of findings can be explained as follows. The quality of the experience products such as apparel cannot be ascertained before consumption. When buying experience products, because such products are non-standardized, their quality can vary from one retailer to another. Consumers need to experience the product by themselves and therefore, switching costs are relatively less salient. Moreover, for such products, the effects of vicarious experience will also not have much effect on the switching attitude because the post-consumption experience of others might not be applicable.

Finally, we found some differential influence of social influence. The effect of social influence on consumer switching attitude is not significant for the search products context but significant for the experience products context (b=0.250, p<0.01). This suggests that the subjective norm or social trends is more powerful when people buy experience and culture/value-related products, and this can influence switching attitude. On the other hand, the pressure of social influence to switch retailer is not as strong when people buy the search products such as electronics and books.

Overall, the findings provide substantial empirical support for the consideration of consumer switching

attitude in a multichannel environment. When the consumers plan to purchase search products, the effects of higher level exploratory behavior and multichannel self-efficacy will push them to switch to another retailer to maximize the utility and that internet experience and vicarious experience can enhance their self-efficacy level. Conversely, the higher level of switching costs based on the high quality of service provided by the incumbent retailer will pull the consumer back to remain with the incumbent retailer. By contrast, we found some difference. When the consumers plan to purchase experience products, the push factors of higher level self-efficacy is no longer significant, but the push factors of exploratory behavior is still strong. At the same time, the pull factors of switching costs become weakened. However, for experience products, social influence has positive effects on the attitude to switch retailer unlike the insignificant effect for search products.

Before interpreting the findings, some limitations need to be acknowledged. First, the dataset comprises only college students that tend to be similar in shopping behaviors. Future research should be performed on other samples to better understand multichannel consumer switching behavior. Second, even though the items used to measure the determinants of switching attitude has undergone extensive literature review and rigorous validity tests, we do not claim to have fully captured the complete domain of the research phenomenon. Further research should incorporate other relevant determinants.

The study provides some valuable practical implications. First, retailers should improve their service convenience because this has been found to be vital to increase switching costs and to retain existing customers. Second, retailers should strive to introduce more innovative cross-channel services because such services are highly likely to attract consumers who have high exploratory tendency.

Theoretically, the findings from this research make four significant contributions. First, we identified a comprehensive set of determinants based on the push-pull-mooring theory and categorized them as retailer characteristics, consumer characteristics, and external environment factor. Second, we examined the role of consumers' exploratory behavior, which we believe to be an important personal trait of multichannel consumers that has received scant attention in multichannel retailing research. Third, we have investigated the combined impact of information quality and service convenience on switching costs and found some evidence of the diminished importance of information quality in the context of multichannel retailer switching. Lastly, our attempt to conduct a comparative analysis of the determinants of consumers' multichannel retailer switching for two different product categories revealed some interesting results that should be useful for future research.

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