

The Influence of Relationship Characters on Switching Cost: The Moderating Role of Customer Characters*

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Abstract

With the competitive environment intense, the leader of the market gradually becomes buyers market. For the enterprise, to maintain and retain existing customers, which is to reduce the customer switch to the competition as low as possible, is particularly important. Therefore, how to effectively seize the minds of consumers and understand their behavior trends is the crux for enterprise to win. This study developed a model of the influence of relationship characteristics on switching costs, and we set customer characteristics as a regulated variable which was always set to a leading factor in the previous study. We used smart-phone users as our research object, through the method of questionnaire and established an equation model to analyze data. The results showed that: (1) in general, the relationship characteristics between consumers and businesses (including the length of time and the kind of purchase) respectively played a positive role on the switching costs (including procedural switching costs, relational switching costs and lost benefits costs), (2) the moderating effects of customer characteristics (including involvement and switching tendency) in the relationship between relationship characteristics and switching costs (including the procedural switching costs, relational switching costs and lost benefits costs) are respectively significant. This article verifies the regulated effect of customer characteristics and enriches the antecedent influencing factors of switching costs. So it is of great significance for enterprises to better manage switching costs and effectively retain customers.

Keywords

Switching Costs, Relationship Characteristics, Customer Characteristics, Customer Retention

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1. Introduction

With the development of the economy by leaps and bounds, the growing economic strength of consumers and increasing consumer demand, it is more and more obvious that consumer is in the leading position of market. At the same time, the competition and the pressure among the enterprises are gradually increasing. How to retain customers has become a very important task. Because of the more and more choices that consumers are facing, companies often hope to set up some barriers when consumers turn to other competitive enterprises, which can make consumers calculate their own interests gain and loss and then make a selection of remaining loyal to existing suppliers, obviously, these obstacles are switching costs. The higher the switching costs, the smaller the likelihood of customers turning to other suppliers. Therefore, how to manage the conversion cost becomes an important strategic decision, and in the study of customer retention, switching costs has received an extensive attention of scholars.

Research on switching costs has conducted by a large amount of economics, management and marketing researchers. Switching costs research in the field of economics is mainly discussed around the inelastic pricing [1], and market barriers to entry [2]. Management and marketing field studies the relationship among switching costs and product forecast [3], technology development strategy [4], technology loyalty and customer loyalty [5], repeat purchase behavior [6], etc.

Consumers having high or low switching costs are associated with the length of time and the number of kinds that they purchase an enterprise's products or enjoy an enterprise's service as well as their accumulated integral and interpersonal relationship in this enterprise. That is, the relationship between consumers and businesses will affect the high or low of switching costs. However, each customer has different consumption and the value proposition, and the trait of consumers will affect their perception of switching costs. Therefore, in addition to the study of switching costs itself, the study of the antecedent factors which may influence the switching costs is also very important. At the same time, according to the different characteristics of consumers, finding the boundary condition which the influence of switching cost affects the switching costs will more enrich the study on switching costs. This study will explore the effect of relationship characteristics on switching costs, specifically, we study from two aspects: first, to explore the influence of relationship on switching costs; second, to study the regulatory role of customer characteristics in the process of relationship characteristics influencing switching costs. This study improved the research of leading influence elements on switching costs and it is of important guiding significance for enterprises to better manage the switching costs so as to realize customer retention.

2. Literature Review

2.1. Switching Costs

The concept of switching costs started from economics. Porter (1980) was the first who introduces the concept into marketing field. He illustrated that switching costs is one-time transaction costs generated by consumers from a product on service provider to another provider [7]. From the definition, the switching costs include subjective (habits changing, psychological risk and emotional cost, etc.) and objective (such as the loss of time, energy and money, etc.) aspects. With the deepening research on switching costs, Jackson (1985) firstly divided switching costs into two categories, which are investment behavior and switching risk [8]. Klemperer (1987) argued that switching costs includes transaction costs, learning costs and contract costs [9]. More representative classification is that Jones *et al.* (2002) argued the switching costs should be divided into six types, which are respectively the opportunity costs, risk costs, assessment costs, cognitive costs, sunk cost and organization costs [10]. Burnham (2003) divided the complex variables into procedural switching costs, financial switching costs and relational switching costs. On this basis, Jones, *et al.* (2007) integrated previous classification method and suggested that the switching costs are made up of procedural switching costs, relational switching costs [11] and lost benefits costs [12]. Specifically, the procedural switching costs refer to the customer in the process of switching products or services expectations of the time, energy, or may encounter obstacles. The relational switching costs refer to the customers with existing suppliers and other consumers, while the networks built may have suffered. The lost benefits costs refer to the potential loss of specific interests when customer shifted one product or services to another product or services. This kind of classification method combined all the advantages of various segmentation methods of switching costs. It makes the concept and classification clearer so that many scholars adopt it. This study will be based on this kind of classification method.

Research on the influencing factors of switching costs, Sengupta *et al.* (1997) argued that customer switching costs would be affected by adaptation of suppliers, the degree of stimulation from supplier to the customer and customer's own investment [13]. Burnham *et al.* (2003) divided the influencing factors into market/industry characteristics (Gatignon and Robertson, 1992), consumer investment (Jackson, 1985), industry experience (Alba and Hutchinson 1987; Klemperer, 1987; Wernerfelt, 1985) [11]. Wei (2006) suggested that research on the antecedent influencing factors should be discussed respectively from the two aspects of game operators and personal players, and put forward influencing factors including the quality of products and services, customer relationship management (CRM), the player's investment as well as the online gaming experience [14]. Above all, most of scholars discussed the influencing factors mainly from the relationship between consumer and supplier (hereinafter referred to as the "relationship characteristics") and the customer characteristics. Therefore, this study will also discuss antecedent influencing factors from the two aspects. In terms of the relationship characteristics, the study will discuss the length of time and the kind of purchase. In terms of consumer characteristics, the customer involvement and switching tendency will be discussed.

2.2. Relationship Characteristics

Among the customer-supplier relationship factors, the first variable that influences switching cost is "length", which refers to the length of time needed by customers to cooperate with suppliers or to purchase products of specific suppliers (Bolton, Lemon, & Verhoef, 2004 [15]; Chiao, Chiu, & Guan, 2008 [16]). In order to avoid the possibility of ambiguity, this paper names the variable as "the length of time" based on the definition. Liu *et al.* (2010) argued that the expectations of customers on suppliers would change with the development of relationship between customers and suppliers [17]. At the initial stage of relationship development, customers may perceive more uncertainties and they may even refuse to make attempts, leading to wrong evaluations of customers on suppliers. The stable relationship between customers and suppliers could be established as time goes on (Carmen *et al.*, 2012 [18]). It could be observed that the nodal point of the society and the property will be more stable if the relationship between customers and suppliers could be maintained longer (Chiu *et al.*, 2003 [19]); meanwhile, the possibility of customer transferring will be lowered.

The second variable that influences the customer-supplier relationship factors is the "width", *i.e.* the number of other products or services provided by the specific suppliers that offer major products or service and used by customers. For the sake of better understanding, the paper defines this variable as the kinds of purchase. Customers seldom give up enjoying a series products or service offered by those suppliers (Keaveney and Parathasarathy, 2001; Sharma, 2003). The kinds of purchase could not only help customers accumulate experience; but also enhance the complexity degree of switching resulted from the complexity degree of products or service. Moreover, the interaction and trust among employees could also be improved.

2.3. Customer Characters

From the perspective of customer factors, involvement and switching tendency exert a great influence on switching costs. Involvement refers to the correlation degree between products/services and those factors originally owned by customers, such as knowledge, experience and value. Higher involvement indicates that customers have a better understanding on products or services; as a result, they will be more loyal to suppliers (Binstock and Stafford, 2006 [20]; Zaichkowsky, 1985). Lower involvement of customers manifest that customers find little value in the products or services offered by the existing enterprises or that customers could not generate any interests in the process to use products or services. Consequently, they will never become loyal customers of enterprises (Kinard and Capella, 2006; Varki and Wong, 2003). In addition, switching tendency also has a significant effect on switching costs. Switching tendency refers to the intention of customers to change the suppliers of products or services (Ganesh *et al.*, 2000). Customers with stronger switching tendency will have more intentions to experience new products or services; as a result, it is not easy to turn them into loyal customers (Raju, 1980). On the contrary, customers will have less curiosity on the products and services offered by other suppliers if their switching tendency is weaker. For those customers, it is much easier to maintain their relationship with the existing suppliers and turn them into loyal customers.

In the previous studies, both customer characteristics and relationship characteristics were explored as the antecedent factors. However, the customer-supplier relationship is essentially affected by customer characteristics. Hence, this paper takes customer characteristics as the moderating variable, so as to identify the influence

brought by customer characteristics on the effect path of switching cost.

3. Research Hypothesis

3.1. Relationship Characteristics and Switching Costs

If the time length for customers to buy products or services offered by specific suppliers is longer, the established knowledge concerning the products or services accumulated by customers will be more, and the habits will also be much firmer. Since customers are familiar and accustomed to the products or services, they will spend more time and energy to learn and adapt to new products or services while changing the suppliers; as a result, the procedural perceived costs perceived by those customers will be higher. Together with the emergence of customers' long-term purchasing behaviors, the recognition of customers on the suppliers of those products or services, including the attention to the image of suppliers, the recognition of brands and even the satisfaction on the services provided by employees, will supervene. While switching to new suppliers, customers will cut off the relationship with their existing suppliers, leading to relationship switching costs. In addition, while switching to new products or services, customers will lose the investment on previous products or services and may even face extra investments, resulting in higher benefit loss cost, among which the most fundamental one is the benefit loss resulted from price differentiation. Hence, the paper proposes the following hypotheses:

H1: The length of time has a significant positive influence on the customer's switching costs.

H1a: The length of time has a significant positive influence on the customer's procedural switching costs.

H1b: The length of time has a significant positive influence on the customer's relationship switching costs.

H1c: The length of time has a significant positive influence on the customer's lost benefits costs.

The kinds of purchase could enhance the trust between customers and suppliers or the employees of those suppliers. The increase in the complexity of products or services could also enhance the switching cost of customers (Keaveney and Parathasarathy, 2001; Sharma, 2003). Specifically, if the product kinds bought by customers from a specific supplier become more various, it will be more difficult for those customers to change their habits in using those products. Customers have to spend more energy to learn if they want to change one or more products. Additionally, they will face more time cost in selecting and contrasting, *i.e.* higher procedural switching costs will thus emerge. When the products bought by customers from a specific supplier become more various, the contact between customers and employees of suppliers will be more frequent. Once the suppliers are changed, the relation network between customers and suppliers will be cut off, *i.e.* the relationship switching cost will be higher. In addition, while customers change suppliers, the accumulated credits, grades of members and promotion activities offered by the previous suppliers will also be lost. What is more, customers also face the economic risk of choice failure, leading to higher benefit switching costs. Hence, the following hypotheses are put forward:

H2: The kind of purchase has a significant positive influence on the customer's switching costs.

H2a: The kind of purchase has a significant positive influence on the customer's procedural switching costs.

H2b: The kind of purchase has a significant positive influence on the customer's relationship switching costs.

H2c: The kind of purchase has a significant positive influence on the customer's lost benefits costs.

3.2. The Moderating Role of Customer Characters

Involvement refers to the recognition of customers on the value of products or services. Customers who attach more importance to products or services will have a higher involvement. When customers actively purchase the products or services offered by a specific supplier for a long time, they will be more acceptable and familiar to the usage pattern and service mode of products offered by the supplier. As a result, customers will reject to spend time seeking for new products or studying the usage pattern of new products mentally, which will enhance the procedural switching costs of customers. Customers who have a higher involvement in terms of products or services offered by a specific supplier will also have a higher recognition degree on the relationship established between customers themselves and suppliers. Once those customers change their suppliers, they will lose such relationships, leading to the increase in the relationship switching costs. Similarly, higher involvement

of customers will result in more economic cost investments, which will be lost once suppliers are changed. In addition, the new cost loss risk will also be increased, leading to higher benefit loss costs. Based on this, hypotheses are proposed as follows:

H3: The involvement plays a regulatory role in the process of the length of time influencing on the switching costs. The stronger the customer's involvement is: (1) the length of time has a more significant positive influence on the customer's procedural switching costs, (2) the length of time has a more significant positive influence on the customer's relationship switching costs, (3) the length of time has a more significant positive influence on the customer's lost benefits costs.

Higher involvement indicates better understanding of customers on products or services and higher loyalty to suppliers (Bienstock and Stafford, 2006; Zaichkowsky, 1985). If the correlation degree between the information of products or services and the existing knowledge of customers is high, the integrating degree of products or services for customers will also be high. As a result, customers will have stronger intentions to select or continue using those products or services. When the kinds of products subordinated to an enterprise and purchased by customers become more various, the series of those products become more abundant, and customers' sense of identity on the value of products offered by the enterprise is improved in the process, the switching costs of customers will definitely increase. Hence, the following hypotheses are proposed:

H4: The involvement plays a regulatory role in the process of the kind of purchase influencing on the switching costs. The stronger the customer's involvement is: (1) the kind of purchase has a more significant positive influence on the customer's procedural switching costs, (2) the kind of purchase has a more significant positive influence on the customer's relationship switching costs, (3) the kind of purchase has a more significant positive influence on the customer's lost benefits costs.

Switching tendency refers to the intention of customers to initiatively change suppliers and attempt new things. When customers have stronger switching tendency, they will no longer worry about problems like whether they will spend time and energy seeking for new products or service, whether they will give up the existing favorable relationships and even whether they will lose the preferential policies accumulated for a long time and those prepaid products. Strong switching tendency alleviates the importance of long-term efforts in the heart of customers. As a result, the paper puts forward the following hypotheses:

H5: The switching tendency plays a regulatory role in the process of the length of time influencing on the switching costs. The stronger the customer's switching tendency is: (1) the length of time has a weaker significant positive influence on the customer's procedural switching costs, (2) the length of time has a weaker significant positive influence on the customer's relationship switching costs, (3) the length of time has a weaker significant positive influence on the customer's lost benefits costs.

Customers who have stronger switching tendency will have greater intentions to seek for new experience, products and suppliers (Ganesh *et al.*, 2000). Hence, those customers are more likely to wish to cut off their relationship with their existing suppliers. They prefer to attempt new things. For those customers, the switching costs will be lower, and the possibility to become loyal customers will also be reduced. When the switching tendency of customers is relatively strong, the influence brought by the kinds of purchase on switching costs will be reduced due to the desire of customers to initiatively attempt new things. Hence, the paper proposes the following hypotheses:

H6: The switching tendency plays a regulatory role in the process of the kind of purchase influencing on the switching costs. The stronger the customer's switching tendency is: (1) the kind of purchase has a weaker significant positive influence on the customer's procedural switching costs, (2) the kind of purchase has a weaker significant positive influence on the customer's relationship switching costs, (3) the kind of purchase has a weaker significant positive influence on the customer's lost benefits costs.

4. Study Design

4.1. Stimuli and Sample

The stimulus of this study is smart-phones. Our sample doesn't come from students, because students changing mobile phone is often restricted by their economic condition and the degree of differentiation about ages and economic power is not so obvious. In order to avoid getting invalid data of relationship characteristics and customer characteristics, we through the way of online questionnaire and choose the data with a great difference on consumers' personal factors such as ages, economic strength and regional etc.

4.2. Measurement

The measurement scales in the design of questionnaire were adapted some existing scales from the literature and antecedent and modified according to the background of this article actual research (see Appendixes). The measures used are 7-point Likert-type scales with the anchors 1 = completely disagree to 7 = completely agree. After simply presenting research background, we investigated the customer evaluation to the switching costs of various kinds of antecedent influencing factors, including the length of time, the kind of purchase, involvement and switching tendency (1 = “completely disagree” and 7 = “completely agree”). Then, we measured the different types of switching costs perceived by customer when they switched smart-phone from other suppliers.

4.3. Data Collection

This study mainly adopts the method of random sampling through questionnaire to collect data. We distributed a total of 350 questionnaires, recycled 315 questionnaire, excluded 37 questionnaires do not conform to the requirements like have missing value. Therefore, the final number of effective questionnaire was 278, and the effective rate was 88.25%. In the 278 samples, male participants accounted for 42%, thus the female participants accounted for 58%. From the age of the structure, participants less than 18 years old accounted for 6.1%, between 18 to 25 years old accounted for 43.9%, 26 to 35 years old accounted for 34.9%, more than 35 years old accounted for 15.1%. From the education of the structure, 68% of the participants were bachelor degree, and 23.7% of subjects were graduate degree.

5. Results

5.1. Reliability and Validity

We use SPSS18.0 to analyze the reliability and validity of the questionnaire, and the result shows that all variables' Cronbach's alpha coefficient is above 0.7, which suggests the internal consistency of the variables is good, and the scales have a high reliability. At the same time, we observe that the composite reliability values are higher than 0.6, suggesting this model is of high quality. In terms of validity, we make a factor analysis of the variables and delete the measurement which the factor loading is less than 0.4 to make the average variance extracted (AVE) reach more than 0.5, and it shows that the convergent validity of each variable meets the requirements. The square root of AVE of the variables is between 0.724 ~ 0.829, and the correlation coefficients between latent variables which have significant relationship is between 0.009 ~ 0.609, and the AVE square root of all variables is greater than the correlation coefficient of the latent variables, which means the scales have a high discriminant validity. Therefore, from the above aspects, the validity of the scale can be guaranteed. Specific indicators are shown in **Table 1**.

5.2. Hypothesis Tests

The base model of this research is to study the variables of relationship characteristics including the length of time and the kind of purchase how to influence the switching costs under the regulatory role of customer

Table 1. Results of the reliability and validity analysis.

	A	B	C	D	E	F	G
A. The length of time	1						
B. The kind of purchase	0.354	1					
C. Involvement	0.218	0.438	1				
D. Switching tendency	-0.009	0.110	-0.191	1			
E. Procedural switching costs	0.020	0.149	0.344	-0.256	1		
F. Relational switching costs	0.204	0.542	0.609	-0.111	0.409	1	
G. Lost benefits costs	0.407	0.496	0.453	0.067	0.119	0.573	1
Cronbach's α	0.732	0.715	0.881	0.815	0.782	0.865	0.932
AVE	0.687	0.543	0.542	0.542	0.614	0.523	0.674
Square root of AVE	0.829	0.737	0.736	0.736	0.784	0.723	0.821

characteristics including involvement and switching tendency. After verifying the base path of this study and analyzing through AMOS 18.0, we adopt the factor score of involvement and switching costs as the packetized basis that the score more than 0 is defined as the high value group and the score less than 0 is defined as the low group. Since the factor score may represent the level of the corresponding data in the overall, we pick the 0 factor score indicating the average level of the data that the score more than 0 indicates above the average and the score less than 0 indicates below the average. We observe the relationship between variables under the different grouping restrictions and obtain the results of hypothesis tests shown in **Table 2**.

Different antecedent influencing factors of switching costs has different affects on the three different types of switching costs. In the influencing factors, the length of time and the kind of purchase both have a significant positive impact on the three types of switching costs. Specifically, when consumers buy products from a supplier for a longtime, he needs to spend more time understanding the products of the company and afford more energy to learn to use the products of the company, at the same time, he may establish a good relationship with the company's service personnel so that he will suffer greater losses if he changes other vendors. Similarly,

Table 2. Results of hypothesis tests.

Hypothesis Contents	Hypothesis	R ²	T-value	P
The length of time → Procedural switching costs	H1a	0.417	3.863	0.003
The length of time → Relational switching costs	H1b	0.372	4.916	***
The length of time → Lost benefits costs	H1c	0.342	3.897	0.003
The kind of purchase → Procedural switching costs	H2a	0.217	2.672	0.011
The kind of purchase → Relational switching costs	H2b	0.351	5.215	***
The kind of purchase → Lost benefits costs	H2c	0.311	3.793	0.003
The length of time → Procedural switching costs	High Involvement	0.212	5.170	***
	Low Involvement	0.187	3.076	0.011
The length of time → Relational switching costs	High Involvement	0.349	4.119	***
	Low Involvement	0.221	2.924	0.042
The length of time → Lost benefits costs	High Involvement	0.410	5.156	0.014
	Low Involvement	0.326	4.115	0.028
The kind of purchase → Procedural switching costs	High Involvement	0.123	2.508	0.046
	Low Involvement	0.119	2.671	0.039
The kind of purchase → Relational switching costs	High Involvement	0.334	4.151	0.003
	Low Involvement	0.200	2.677	0.013
The kind of purchase → Lost benefits costs	High Involvement	0.599	4.259	***
	Low Involvement	0.194	3.655	0.046
The length of time → Procedural switching costs	High Switching Tendency	0.117	3.577	0.004
	Low Switching Tendency	0.315	3.672	0.004
The length of time → Relational switching costs	High Switching Tendency	0.138	2.987	0.031
	Low Switching Tendency	0.376	4.452	0.013
The length of time → Lost benefits costs	High Switching Tendency	0.037	1.811	0.037
	Low Switching Tendency	0.344	3.081	0.026
The kind of purchase → Procedural switching costs	High Switching Tendency	0.149	2.372	0.035
	Low Switching Tendency	0.392	3.297	0.008
The kind of purchase → Relational switching costs	High Switching Tendency	0.238	2.706	0.031
	Low Switching Tendency	0.301	1.652	0.046
The kind of purchase → Lost benefits costs	High Switching Tendency	0.127	3.211	0.008
	Low Switching Tendency	0.275	3.190	0.008

Note: ***The level of significance is less than 0.001 (P < 0.001).

when consumers buy more species of the company's products or service, the procedural switching costs, the relational switching costs and the lost benefits costs will become larger.

With regard to the regulatory role of customer characteristics, according to the results of data, first of all, customer involvement can effectively moderate the length to time influencing the three switching costs. Specifically, when consumers buy products from a supplier for a longtime, the higher the involvement, the greater the switching costs. Secondly, the regulatory role of customer involvement is not significant in the process of the kind of purchase influencing the procedural switching costs, while the regulatory role is very significant to the relationship switching costs and lost benefits costs. The reason for this result may be that when consumers buy more of the product categories from a supplier, they naturally increase knowledge associated with the products and gradually improve the procedural switching costs, thus, the regulatory of their involvement will no longer evident. However, when they buy more types of products or service, the relationship they establish with the supplier will be firmer. That is, the greater the relationship switching costs, relatively, the greater the lost benefits costs.

Similarly, regarding the regulatory role of switching tendency, the data results show that, when the customer switching tendency gradually increase, the procedural switching costs, the relationship switching costs and the lost benefits costs customer perceived will decelerate and reduce over the length of time. With the switching tendency enhancing, the impact of the kind of purchase on the switching costs is gradually weakening. Specifically, when consumers have a strong switching tendency, the kind of purchase impacting on the switching costs is weak. When consumers' switching tendency decreases, the kind of purchase impacting on switching costs is more significant.

6. Discussions

This paper studies the impact of relationship characteristics between consumer and supplier as the antecedent influencing factors on the switching costs, and the regulatory role of customer characteristics in this process. By revealing the relationship between the relationship characteristics and the customer characteristics, we can better understand the consumer behavior and provide guidance recommends for enterprises on marketing strategy.

6.1. Theoretical Contribution

First, this study enriches the theory of the antecedent influencing factors of switching costs. Existing researches confirmed that the antecedent influencing factors of switching cost mainly include professional knowledge, market characteristic and customer investment [11]. On the basis of previous studies, this study verifies the significant impact of relationship characteristics between consumer and supplier on the switching costs from the length of time and the kind of purchase. This study not only enriches the existing research about the antecedent influencing factors of switching costs, but also lays a theoretical foundation for understanding the sources of consumer perceived switching costs.

Second, this study explores the regulatory role of customer characteristics on the switching costs. Any consumer behavior is inseparable from the consumer subject, and knowing the characteristics of customers in consumer behaviors is very important to retain customers. This study found that consumer involvement and switching tendency had a significant regulatory role during the process of the length of time influencing the switching costs, but the regulatory role of the consumer involvement was not significant in the process of the kind of purchase influencing the procedural switching costs while was very significant in the process of the kind of purchase influencing the relationship switching costs and the lost benefits costs. The switching tendency of consumer had a significant moderating effect in the kind of purchase influencing switching costs.

6.2. Marketing Implication

In the fierce competitive environment, how to manage the switching costs and effectively retain customers is essential for the enterprise. The marketing implication of our study is mainly manifested in the following three aspects.

First, the enterprise should pay attention to the management of the customer perceived switching costs. Previous researches suggest that the procedural switching costs, the relationship switching costs and the lost benefits costs play positive role on customer retention. The relationship between consumers and suppliers can affect the switching costs directly and generate a more effective role in the regulation of customer characteristics. For

the enterprises, focusing on their own product quality while need to strengthen the relationship between consumers and companies and facilitate consumers to long-term purchasing their products or services, and this is necessary to increase the switching costs.

Second, companies should pay attention to improve the value of their product or service and improve the consumer involvement and reduce the consumer switching costs. We found that, when the value of the products or services to customer was high, the consumer involvement would be strong, and then the impact of relationship characteristics on the switching costs would be more significant. That is, the consumer switching costs would be greater which is conducive to customer retention.

6.3. Limitations and Directions for Further Research

Although this study conducts an empirical research on the relationship characteristics and switching costs, and puts forward suggestions for the enterprise's marketing strategy, but it still has defects and shortcoming for some aspects. This study selects the smart-phones as a research object, but the majority of participants use the Apple phone, and it will affect the explanatory power of the model and the universality of this study. Meanwhile, the source of sample still has certain restrictions on regional and ages, which makes the representative of the entire sample decline. In addition, the classification of the switching costs in this study is relatively simple, so the action scope of its antecedent influencing factors cannot be estimated fullest. Further research can explore other antecedent influencing factors of switching costs from the enterprise level, market impacting and social factors perspectives.

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Appendixes

Code	Items
DR	The length of time (Carmen Barroso, Araceli Picón, 2012)
DR1	When I use the mobile phone for a long time, I can enjoy preferential treatment in the company.
DR2	When I use the mobile phone for a long time, I will get with more professional and advanced services.
DR3	When I use the mobile phone for a long time, I can get a VIP treatment.
BR	The kind of purchase (Carmen Barroso, Araceli Picón, 2012)
BR1	When I use a variety of products or services, my knowledge will be gradually enriched.
BR2	When I use a variety of products or services, my experience of using the products will be increased.
BR3	When I use the company's products or services, I think this series is more simple and practical.
IC	Involvement (Carmen Barroso, Araceli Picón, 2012)
IC1	The company's product or service is necessary for me.
IC2	The company's product or service is of great significance for me.
IC3	The company's product or service is valuable for me.
IC4	The company's product or service is very interesting.
PC	Switching Tendency (Carmen Barroso, Araceli Picón, 2012)
PC1	I am willing to buy the phone of other companies after comparing.
PC2	I am willing to buy the phone of other companies for the different experience.
PC3	I think it's boring only using the phone from just one company.
PSC	Procedural switching costs (Burnham, 2003; Jones, 2007)
PSC1	If I buy the mobile phone of other companies, I may face the hidden costs or fees.
PSC2	If I buy the mobile phone of other companies, I may have a disadvantage on the price.
PSC3	Buying the mobile phone of other companies may face some unpredictable difficult.
PSC4	I worry about the quality and service may be not as good as expected if I buy other company's cell phone.
PSC5	It costs much time to learn and use the operating system and the operating mode of other mobile phone.
RSC	Relational switching costs (Burnham, 2003; Jones, 2007)
RSC1	When I accept another company's service, I often think of the staff of the former company.
RSC2	Compared with the new mobile phone supplier, I feel more comfortable to interact with the existing company staff.
RSC3	I like to communicate with existing mobile phone supplier's service personnel.
RSC4	I care about the supplier name or trademark of the mobile phone I am using.
BLC	Lost benefits costs (Burnham, 2003; Jones, 2007)
BLC1	If I buy another phone, I may lose the accumulated integral, credit and service level.
BLC2	If I buy another phone, I will lose the benefit getting as a loyal customer.
BLC3	If I buy another phone, I will loss the money I have paid (e.g., the software I have bought, etc.).