The Impact of the Customer Satisfaction, Switching Costs and Trust on Customer Relationship Commitment

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Abstract—In recent years, many enterprises establish and maintain long-term relationship with customer and retain valuable customers, which are considered as a strategic weapon. They would like to take to drive customer acquisition and non-buying behavior to realize the goal of maximizing the customer equity. Based on these, the article study the customer satisfaction, switching costs and trust on the impact of customer relationship commitment from the point of establishing and maintaining customer relationships, and build a theoretical model of this study. In order to verify the model, undergraduate students act as the survey questionnaires to collect data in this paper. The paper use correlation analysis and multiple regressions analysis to analysis the data and revealed that: customer satisfaction, switching costs and trust are positive impact on customer relationship commitment.

Keywords-customer relationship; commitment; customer satisfaction; switching costs; trust

I. INTRODUCTION

Relationship commitment is an important criterion for measuring whether long-term relationship is maintained between consumers and businesses as well as a key factor for consumer loyalty. Relationship commitment shows the general attitude of the consumers that they guarantee to maintain a long-term relationship. With relationship commitment in place between consumers and businesses or enterprises, the current relationship will be more stable and lead to a series of behaviors, such as repeat purchases and positive word-of-mouth publicity, which is the very goal for enterprise CRM. Therefore, indentifying how the key factors for customer relationship commitment - customer satisfaction, switching costs and trust - act simultaneously on relationship commitment in local context and their specific impact is of great significance for the substantial and lasting development of businesses and enterprises.

II. LITERATURE REVIEW

Scholars represented by Dwyer (1987) were the first to define relationship from an ethological perspective as "guaranty for explicit or implicit ongoing relationship between trading partners" [1]. Kumar (1996) investigated the positive correlation exists between interdependence and emotional commitment using empirical study [2]. Hsieh et al (2005) discussed the impact that relationship ties strategy has on customer's relationship commitment in internet environment and concluded: economic, social and structural ties will all bring positive influence on customer's relationship commitment [3]. The results derived from the research on online service marketing relationship conducted by Eastlick et al (2006) revealed a very positive impact that customer commitment has on customer shopping tendencies in the future apart from the positive impact that customer trust has on customer commitment [4]. Cho (2006) selected two scenarios in internet environment (sales of books and clothes), around which Cho conducted a study on the influence that customers' trust or distrust on customer commitment intentions. The results revealed very different influencing mechanisms for trust and distrust on customer's relationship commitment intentions [5]. Mukherjee and Nath (2007) verified commitment-trust theory in online direct marketing scenario. The results show that online customers' commitment has positive effects on customers' shopping tendencies. The study conducted by Seo et al (2007) indicated that relationship commitment positively affects customer's attitude towards shopping sites and their tendency to continue to use the site [6].

Wu Qiangjun (2004) theoretically summarized four elements that affect customer relationship commitment, namely criteria of value, quality of service, interdependence and relationship ties [7]. Shao Bingjia and Meng Xianqiang (2005) discovered through empirical studies of B2C that website privacy protection, security control measures, policies, and size and brands of enterprises are important factors that influence the relationship commitment of online customers, while the individual characters of customers and usability of enterprise website have little effect on trust.

III. HYPOTHESES

Neeru Sharma et al (2000) based their research in the context of personal financing planning services and revealed a positive influence of satisfaction with services have on relationship commitment. [8] While the study against the backdrop of service industry conducted by Bansal et al drew a conclusion through empirical studies of customers' commitment to service providers that the hypothesis of positive relationship between satisfaction with services and relationship commitment is supported. Liang Wei (2008)

derived from empirical studies of coffee shops that satisfaction with service quality has a significant direct impact on continuance commitment. Wang Congsheng (2009) based his study around online gaming industry, and drew a conclusion through empirical study that satisfaction of players with the quality of online games services has positive effect on both trust and commitment of players. Hence the above mentioned literatures lead us to propose Hypothesis 1.

H1: Customer satisfaction has positive impact on their relationship commitment.

The empirical study conducted by Morgan and Hunt (1994) proved the positive correlation between relationship termination costs and relationship commitment. Relationship termination costs refer to the expected costs associated with termination of relationship, including potential loss of partners, expenses for break of ties and switch costs. These termination costs will lead to enhancement of the importance of existing relationship. Apart from monetary costs, switching costs also includes the costs for time, attention and energy. High switching costs will enable consumers to maintain existing relationship commitment, making existing relationship stronger and more stable. High switching costs also result in insufficiency to compensate customer with the added value brought to customers, so that customers give up the purchase of products and services from other enterprises. Hence we would like to put forward Hypothesis 2.

H2: Switching costs has positive impact on customer relationship commitment.

Ma Baolong and Li Jinlin (2006) concluded in their research on customer reward programs for relationship marketing that the perceived value of reward programs builds customer trust through customer trust and has an important impact on customer relationship commitment. Through both macro and micro analysis, the study of consumers' trust in online businesses in the case of B2C trading in our country was conducted by Wang Shouzhong (2008). He discussed the factors in trust as well as the maintenance and recall of trust, and came to conclude that trust is an important influencing factor for online consumer behavior. Yan Xingquan and Zhou Tingrui (2008) pointed out in their investigation into long-term customer relationship behavior that customers' trust affects long-term customer behavior by improving the flexibility of customers in service relationships as well as customers' formal control mechanisms. The effect is generated by commitment. Therefore, we would like to put forward Hypothesis 3.

H3: Trust has positive impact on customer relationship commitment.

IV. DATA ANALYSIS

A. Scale and Questionnaire Design

First, on basis of existing theoretical foundation and literature review, the structure and subject of the questionnaire is drafted. Then, seven ordinary consumers are invited to conduct a group interview to discuss and revise the drafted questionnaire. Finally, the questionnaire is finalized through discussion by five teachers from the field of marketing and three corporate marketing staff on each of the dimensions and metrics of scale.

The measurement items for various research variables in the questionnaire were mainly taken from previous related literature, and have been properly adjusted according to the actual situation. With regards to customer satisfaction, measurement scales of customer satisfaction by Lau and Lee (1999) as well as Alonso (2000) were used as reference. Measurement of switching costs is based on the original scale by Burnham et al (2003) and Serken et al (2005), with reference to the scale for measuring switching costs of online consumers by Wang Xuhui (2008). Measurement of trust mainly drew on past studies by McAlsliter (1995), Knawaattnaachai and Yoo (2002). Measurement of customer relationship commitment borrowed from scale designed by Morgan, Hunt and Gwinner (1994), and was adapted with consideration of the characteristics of Chinese consumers and the need for this study.

B. Sample and Data Collection

This study uses the method of convenience sampling. The sample population is a group of students from a university in Inner Mongolia, while the investigation object is the brands of mobile phones used by this group. 300 copies of the questionnaire were distributed, and 285 copies were returned, among which 279 copies were valid questionnaires. Valid questionnaires account for 93% of all questionnaires.

C. Analysis of Reliability and Validity

1) Analysis of reliability

To ensure the soundness and stability of the questionnaire, Cronbach α was used to measure the reliability of the questionnaire. Wherein the values of Cronbach α for customer satisfaction, switching costs, trust and customer relationship commitment are respectively 0.905, 0.661, 0.896 and 0.915. The Cronbach α values for the four variables are greater than 0.65. Therefore, the internal consistency and stability of the study variables are relatively good on the whole, resulting in a high degree of reliability. This indicates a strong correlation between the study variables and corresponding scale, which proves the good reliability of this questionnaire.

2) Analysis of validity

Since every variable in this study was measured with reference to the well-proved scale adopted by domestic and foreign scholars, the scale has a high validity. PCA was then employed in combination with Varilnax varimax. The results for KMO measure and Bartlett's Test of Sphericity were displayed at the same time to confirm whether the data is suitable for factor analysis.

According to foreign scholars, if the KMO value is less than 0.5, factor analysis is not a suitable option. The KMO values for the variables of this study - customer satisfaction, switching costs, trust and customer relationship commitment - are respectively 0.874, 0.705, 0.833 and 0.809, all greater than 0.7, indicating that the questionnaire is designed to meet the requirements. Also, the significance probabilities of

Bartlett's Test of Sphericity were all 0.000, which is in line with the requirements (less than 0.001) proposed by the scholars. In studies around social sciences, as long as factor loadings are greater than 0.4, they are considered valid. Every factor loading in this study is above 0.5, which complies with the standardization of social science research. Therefore, the scales for variables in this study were basically rational, and the study variables are also valid.

D. Hypothesis Testing

1) Correlation analysis

By measuring Pearson correlation coefficient, this study analyzed the pairwise relationship between variables, in order to identify the degree of correlation. Specific results are shown below:

TABLE I. CORRELATION BETWEEN VARIABLES (N=279)

Variable		Customer Satisfaction	Switching Costs	Trust
Customer relationship commitment	Pearson Correlation	0.692**	0.421**	0.837**
	Sig.(2-tailed)	0.000	0.000	0.000

A look at the above table indicates that: the correlation coefficients for customer satisfaction, switching costs and trust with customer relationship commitment are respectively 0.692, 0.421 and 0.837, which means customer satisfaction, switching costs and trust are all positively correlated with customer relationship commitment at the 0.01 level. It follows that H1, H2 and H3 put forward in this study were verified. The hypotheses are true.

2) Multiple regression analysis

To clarify how customer satisfaction, switching costs and trust affect the customer relationship commitment in general, SPSS17.0 statistical software was adopted for multiple regression analysis, calculation of regression coefficients for each independent variable with the dependent variable, and the establishment of regression equation. Thereby the degree of influence for each variable on customer relationship commitment can be determined on the whole.

TABLE II. MULTIPLE REGRESSION EQUATION (N=279)

Variable	Unstandardized Conffcents		Standardized Coefficients	t	Sig.
	B	Std.Error	Beta		
Constant	-0.491	0.219		-2.239	0.026
Customer Satisfaction	0.062	0.063	0.053	0.982	0.327
Switching Costs	0.125	0.045	0.098	2.746	0.006
Trust	0.850	0.062	0.755	13.803	0.000

3) Establishment of multiple regression equation

Conduct a multiple linear regression analysis in which customer relationship commitment is the dependent variable, while customer satisfaction, switching costs and trust are independent variables. Establish the following regression equation:

$$Y_1 = \beta_0 + \beta_{11}X_1 + \beta_{12}X_2 + \beta_{13}X_3$$

Hereinto, Y_1 represents customer relationship commitment; X_1 is customer satisfaction; X_2 indicates switching costs; X_3 is trust; β_{1i} represents regression coefficients for each item; β_0 means the constant term.

4) Test of multiple regression equation

Validate the regression model established in this study through test of goodness of fit, test of F value and residual test of standardized regression.

TABLE III. OUTPUT OF MULTIPLE LINEAR REGRESSION ANALYSIS FOR CUSTOMER RELATIONSHIP COMMITMENT

Mode l	R	R²	Adj R²	F	Sig
1	0.842	0.710	0.707	224.127	0.000

Test of goodness of fit is designed to determine the level of representation that regression equation has for sample data. According to the table above, R^2 is 0.710, indicating that customer satisfaction, switching costs and trust can interpret 71% of the customer relationship commitment. The greater R^2 is, the higher is the degree of linear correlation between the dependent variable and independent variables, which means the goodness of fit for this model is optimum. The F value is 224.127, while the significance level is 0.000, indicating that the regression equation makes sense. The greater F value is, the changes of independent variables caused by the dependent variable are more significant than the impact that random factors have on dependent variables.

The output of multiple linear regression analysis for customer relationship commitment shows that: in the three dimensions of customer satisfaction, switching costs and trust, regression coefficients for trust and switching costs are significant since the actual significance probability of F value $p<0.01$; whereas the regression coefficients for customer satisfaction is not significant with the actual significance probability of F value $p>0.01$ (0.01 is the given value for α). The degrees of influence of each variable on customer relationship commitment listed in descending order are trust, switching costs and customer satisfaction. Since the mean of residuals is 0, it can be observed from the trend of regression standardized residuals cumulative probability graph that the standardized residuals of the regression equation in this study basically follow a normal distribution. This indicates that the regression equation is valid. Thus, the following regression equation can be obtained: $Y_1 = -0.491 + 0.062X_1 + 0.125X_2 + 0.850X_3$.

V. CONCLUSION

A. Conclusions of This Study

It can be seen from the regression equation that the regression coefficients for customer satisfaction, switching costs and trust are respectively 0.062, 0.125 and 0.850. This shows that switching costs and trust have significant influence on consumer relationship commitment, while the impact that customer satisfaction has on consumer relationship commitment is not significant. Switching costs and trust are decisive for customer relationship commitment, while customer satisfaction is not decisive. Due to limited number of samples and distinguishing features of the researched group, the regression coefficient of customer satisfaction for customer relationship commitment is rather low.

Based on the above data analysis results, the follow conclusions are drawn: Suppose H1, H2 and H3 are true. Therefore the three hypotheses of this study have been verified. Customer satisfaction, switching costs and trust are positively correlated with customer relationship commitment, with respective correlation coefficients – 0.692, 0.421 and 0.837. Finally, through regression analysis and test of regression equation, we learned that these three independent variables are positive impact for the dependent variable. Thereby the regression equation is derived.

B. Insights of This Study

Customer satisfaction is the prerequisite for lasting relationships between consumers and businesses. If customers are not satisfied, customer loss is inevitable. Let alone the lasting relationship commitment. However, customer satisfaction cannot ensure a solid relationship commitment. The customers may terminate or suspend their relationship commitment to business due to other factors.

From the customers' perspective, switching costs is actually an investment by the consumers, including the investment in time, money and human capital. High switching costs often means more time, energy and money invested in early stages as well as stronger ties between consumers and specific businesses.

Increased trust helps to establish and stabilize customer relationship commitment. The trust not only comes from the enterprises themselves, but also the products, service personnel and brand awareness of customers. If customers trust the enterprises' quality of products and level of services, the level of customer relationship commitment will be further improved.

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