An Empirical Study: Effects of Information Sharing between Channel Members on Relationship Quality

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Abstract: Nowadays, as the trend of establishing strategic allied relationship between channel members has reinforced, information sharing has became an important method of upholding relationship of channel members and improving relationship quality. This paper selects some distributors of Haier as the research object, applies structural equation model to the research of relationship among information sharing, and relationship trust, relationship satisfactory, relationship commitment which are dimensions of relationship quality. The results show that information sharing takes a direct and positive effect on relationship trust and relationship commitment; relationship satisfaction influences relationship trust and relationship commitment directly and positively and relationship trust has a direct and positive effect on relationship commitment.

Keywords: information sharing; relationship quality; relationship trust; relationship commitment

I. Introduction

Recent years, while market competition is more and more intense, the competition manner among enterprises has been diversify increasingly, the marketing channel has became a strategic assets of enterprises and a critical factor which determines whether the competition can success or not. As an important factor of channel management, "information" is a principal content of upholding relationship between channel members (Liu & Zhang, 2009) [1].

The current articles about information sharing among channel members mainly focus on followed three aspects: First, the research of influence from information sharing to channel performance (Cheng, 2006; Lamming & Caldwell, 2005) [2] [3]; second, the research of influence factors of channel information sharing (Zhao & Leung, 2002; Li & Lin, 2006; Kelle & Akbulut, 2005) [4] [5] [6]; third, the research of information sharing motivation in channel (Guo, et al, 2006; Liu & Zhang, 2009) [1][7]. The studies above mainly focus on the important effect and antecedents of information sharing. but neglect the effects of information sharing on relationship between members in channel, thus results the lack of empirical studies of information sharing from the sight of channel relationship, especially the research about the promote influence from information sharing to the whole channel relationship quality and the mutual influence among dimensions of channel relationship quality. So it is necessary

to investigate the influencing mechanism from information sharing to channel relationship quality in channel relationship management and research the mutual relationship among the dimensions of channel relationship quality. This paper will take an empirical study on part of Haier's distributors to find out how information sharing take effect on channel relationship quality through structural equation model.

II. Review of the Relevant Studies and Hypotheses

The conceptual framework and hypotheses for the present study is shown in Figure 1. The major theme is to investigate the inter-relationships among information sharing, relationship trust, relationship satisfaction and relationship commitment.

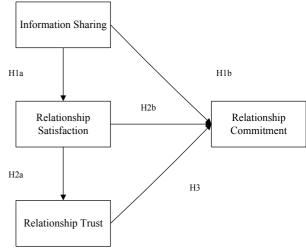


Figure 1. Research Framework

Relationship Quality

The concept of "relationship quality" is proposed by Crosby on 1987. It based on the principle of research paradigm of interpersonal relationship, studied the degree to which meet demands of both sides between consumer and enterprise, and evaluated the relationship effects. Gummesson(1987) [8] pointed out that relationship quality is the quality of which the interaction between enterprise and customer, and is a part of customer's perceived quality. Besides, there is not a unitary understanding of the relationship quality's dimensions in academic circles, but most of the researchers

supported the dimensions of relationship quality should be composed of relationship trust, relationship satisfaction and relationship commitment (Smith, 1998; Hennig, Gwinner, 2002, et al) [9] [10]. Therefore, this paper will recommend the opinion above.

Relationship among Information Sharing, Relationship Satisfaction and Relationship Commitment

According to the theory of learning-oriented organization, information sharing means that it can urge partner to uphold long-term relationship through information sharing and understanding business of each other, and the symmetry from information help both sides of relationship accomplish work effectively (Mohr & Spekman, 1994) [11]. Channel information sharing means that the information communication and transmission among different enterprises in the process of special transaction and cooperation (Cai & Liang, 2007) [12].

In channel research domain, the degree of relationship satisfaction of channel members meant that the degree to which a member accepts interactive relationship and transactional action in psychology and reward aspects (Seashore & Taber, 1975) [13], and was a emotional condition that was formed after both sides of channel evaluated all matter of each other. Moreover, information sharing can improve the atmosphere among channel members, help resolve dispute, coordinate acknowledge and expectation (Etgar, 1979) [14], thus make one side of relationship understand the other side's confidence and attention to channel relationship, and then upgrade the degree of relationship satisfaction between two sides.

Dwyer, Schurr & Oh (1987) [15] regarded the relationship commitment as a promise. They considered that commitment was a direct or indirect continuous promise that both sides of the transaction made. Formal and informal information sharing plays an important role on forming emotional commitment in relationship commitment (Qi & Wang, 2005) [16]. Therefore, this paper sought to verify the propositions as follow:

H1a. Information sharing between channel members has a direct positive effect on relationship satisfaction.

H1b. Information sharing between channel members has a direct positive effect on relationship commitment.

Relationship among Relationship Trust, Relationship Satisfaction and Relationship Commitment

Morgan and Hunt (1994) [17] defined the relationship trust as the degree to which relationship member's confidence to transactional partner's reliability and honesty. After researched domestic manufacturing industry through empirical study, Tadayuki Miyamoto & Nexhmi Rexha (2004) [18] found that relationship satisfaction had a positive effect on relationship trust. If one channel member had a high degree of satisfaction to the other channel member, it would be easy to make a positive evaluation to the channel function of the latter, and that would enhance the level of

trust to the other side (Selnes, 1998) [19].

Moorman, Morgan and Hunt (1994) [17] found out trust had a significant positive effect on relationship commitment. The studies of Garbarino and Johnson (1999) [20] shown that establishing trusty relationship would contribute to the continuance of the future relationship commitment.

Some studies indicated that relationship satisfaction might correlate positively with the possibility of the future cooperation which is also the future commitment (Frazier, 1983) [21]. Caceres & Paparoidamis (2005) [22] proposed a theoretical model of mutual relationship among service quality, relationship satisfaction and loyalty, and found that relationship satisfaction played a direct positive influence on trust and commitment through empirical study. Therefore, this paper sought to verify the propositions as follow: H2a. Relationship satisfaction between channel members

has a direct positive effect on relationship trust. H2b. Relationship satisfaction between channel members has a direct positive effect on relationship commitment. H3. Relationship trust between channel members has a direct positive effect on relationship commitment.

III. Methodology

Sample and Procedure

According to abundance relevant literature, we designed a questionnaire of this study. The questionnaire was applied to evaluate the clarity and appropriateness of the items, and which finally constructed through amending several times. The study respondents are some of Haier's distributors who had a long-standing relationship with Haier. The respondents unit is the individual and we dispensed questionnaires to Haier's distributors through random sampling. The investigation lasted from June, 2009 to August, 2009. After dispensed 800 electronic questionnaires to those distributors through random sampling, 608 survey questionnaires were collected, while the number of the valid questionnaires was 398, with the responses rate 76% and the efficient rate reached 49. 8%. Analyzing the data with SPSS 15.0, we can know that 67.8% of the samples are small-medium enterprises whose business nature is retailing and distribution.

Measures

Besides demographic variables, the research variables of this study include information sharing, relationship trust, relationship satisfaction and relationship commitment. All latent variables were measured with a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree) to identify the extent of agreement with each item.

In this paper, information sharing was measured by 7 items adopted from Selnes & Sallis(2003) [23]. The sample items used to measure information experience were "Our company exchanges information on successful and unsuccessful experiences with our household appliance suppliers," "Our company exchanges information related to changes in end-

user needs, preferences, and behavior with our household appliance suppliers", "Our company exchanges information related to changes in market structure, such as mergers, acquisitions, or partnering with our household appliance suppliers", "Our company exchanges information related to changes in the technology of the focal products with our household appliance suppliers", "Our company exchanges information with our household appliance suppliers as soon as possible of any unexpected problems", "Our company exchanges information with our household appliance suppliers on changes related to our two organization's strategies and policies", and "Our company exchanges information with our household appliance suppliers that is sensitive for both parties, such as financial performance and company know-how".(Selnes & Sallis, 2003) [23]. The Alpha coefficient was 0.856 for the present study.

Six items were used to measure relationship trust (Hewett et. al., 2002) [24]. Sample items included, "Our household appliance suppliers keep promises it makes to our business", "We believe the information that our household appliance suppliers provide us", "Our household appliance suppliers are genuinely concerned that our business succeeds", "When making important decisions, our household appliance suppliers consider our welfare as well as their own", "We trust our household appliance suppliers keep our best interests in mind", and "Our household appliance suppliers are trustworthy". The Alpha coefficient was 0.906 for the present study.

Relationship satisfaction was assessed by 3 items (Walter et. al, 2003) [25]. Sample items were, "Compared to our ideal, we are very satisfied with the performance of our household appliance suppliers", "All in all, we are very satisfied with our household appliance suppliers", "With reference to our expectations, we are very satisfied with our household appliance suppliers". The Alpha coefficient was 0.664 for the present study.

Six items were drawn from Hewett et al. (2002) [24] to measure relationship commitment. Sample items were, "The relationship that my business has with our household appliance suppliers is of little significance to us and is something we are very committed to", "The relationship that my business has with our household appliance suppliers is something my business intends to maintain indefinitely", "The relationship that my business has with our household appliance suppliers is very important to my business", "The relationship that my business has with our household appliance suppliers is very much like being family", "The relationship that my business has with our household appliance suppliers is something my business really cares about", "The relationship that my business has with our household appliance suppliers deserves our business's maximum effort to maintain". The Alpha coefficient was 0.86 for the present study.

IV Results

Structural Equation Modeling (SEM) was used to test this research model which included four latent variables and analyze the relationship among these variables. The structural model of this paper can be seen in Figure 2. The latent variable is represented by ellipse and the observed variable is represented by rectangle.

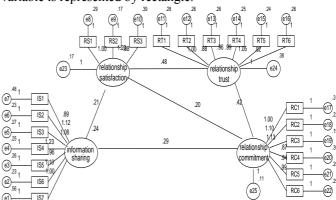


Figure 2. Theoretical Model and Parameter Structure

The Test of Overall Conceptual Model

The examination of the overall model fit was to test the hypothesized causal relationships in a research model. Model fit determined the degree to which the structural equation model fits the sample data. Model fit criteria commonly used are Chi-square (χ 2), Chi-Square (χ 2/df), Goodness of Fit (GFI), Adjusted Goodness of Fit (AGFI), Norm Fit Index (NFI), Comparative Fit Index (CFI), Root Mean Square Residual (RMR), and Root Mean Square Error of Approximation (RMSEA). The test results of model fitness can be seen in Table 1.

Test results of preliminary fit criteria. All the factor loading value of latent variable reached the standardized level between 0.5 and 0.9, and all of them had reached the significant level. So, the conceptual model of this paper was fit for the basic fitting standards.

Test results of overall model fit. The measurement of fitness as follows: $\chi 2=573.693$, d.f=195, values of GFI (0.890), AGFI (0.857), RFI (0.850), NFI (0.874), CFI (0.912) were larger than 0.80, RMR (0.087) was lower than 0.09, RMSEA (0.070) was lower than 0.08, values of PNFI (0.738) and PCFI (0.770) were larger than 0.5, and $\chi 2/d$.f (2.942) was between 2 and 3, all of which indicated that all indicators reached the accepted level and demonstrated the theoretical model of this paper had a good overall model fit.

Test results of internal structural model fit. The combinative reliability of information sharing, relationship trust, relationship satisfaction and relationship commitment were 0.856, 0.906, 0.664 and 0.86, and their corresponding factors cumulative were 55%, 68%, 60% and 60%. All of them had passed the lowest accepted level which was 0.5. Therefore, the theoretical model of this paper had a good internal structural model fit.

Therefore, the constructed model of this paper was suitable and could conduct the corresponding test of hypothesis.

Table I. Test Result of Conceptual Model

Variables	Factor loading	Combinative Reliability	Factor cumulative %	
Informati	on Sharing	Kenabinty		
IS1	0.607***			
(X1)				
ĪS2	0.782***			
(X2)				
IS3	0.668***			
(X3)				
IS4	0.748***	0.856	0.55	
(X4)	0.500444			
IS5	0.733***			
(X5)	0.746***			
IS6 (X6)	0.746			
IS7	0.528***			
(X7)	0.328			
Relationship Trust				
RT1				
(X8)	0.778***			
RT2	0.761***			
(X9)	0.761***			
RT3	0.765***			
(X10)	0.703	0.906	0.68	
RT4	0.813***			
(X11)				
RT5	0.836***			
(X12) RT6				
(X13)	0.752***			
Relationship Satisfaction				
RS1	0.615***			
(X14)	0.012			
RS2	0.805***	0.664	0.60	
(X15)				
RS3	0.509***			
(X16)				
	ionship			
	nitment			
RC1	0.746***			
(X17)	0.7.0444	0.75	0.67	
RC2	0.769***			
(X18)	0.772***			
RC3 (X19)	0.773***			
RC4	0.526***			
(X20)	0.520			
RC5	0.768***			
(X21)	0.700	0.860	0.60	
RC6	0.719***	1		
(X22)				
	2=573.693 ,	d.f=195 ,	GFI=0.890 ,	
		=0.070 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		

RMSEA=0.070 ,

RMR=0.087 ,

RFI=0.850 , NFI=0.874 , CFI=0.912 , PNFI=0.738 , PCFI=0.770, $\chi 2/d.f.=2.942$, *Significant at P<0.05 ; ** Significant at P<0.01 ; *** Significant at P<0.001.

Test Result of Hypothesis

The 5 hypotheses of the study were tested by structural equation model. The test results of hypothesis can be seen in Table 2. In this paper, hypotheses 1a, hypotheses 1b, hypotheses 2a, hypotheses 2b and hypotheses3 were all supported effectively. In other words, information sharing had direct positive effect on relationship satisfaction (P<0.001); information sharing had direct positive effect on relationship commitment (P<0.001); relationship satisfaction had direct positive effect on relationship satisfaction had direct positive effect on relationship commitment (P<0.005); and relationship trust had direct positive effect on relationship commitment (P<0.001).

Table II. Hypothesis Test Results

Paths	Estimate	P-	Hypothesis	Results
		value		
Information	0.212***			
sharing→	0.212		***	
Relationship		0.000	H1a	Support
satisfaction				
Information	0.287***			
sharing→	0.287			
Relationship		0.000	H1b	Support
commitment				
Relationship	0.482***			
$satisfaction \rightarrow$	0.462			_
Relationship		0.000	H2a	Support
trust				
Relationship	0.197**			
$satisfaction \rightarrow$	0.197			_
Relationship		0.002	H2b	Support
commitment				
Relationship	0.419***			
trust→	0.419			
Relationship		0.000	Н3	Support
commitment				

V Conclusions and Discussion

This paper constructed conceptual model through literary review to study the relationship among information sharing, relationship trust, relationship commitment and relationship satisfaction with 398 distributors of Haier. Important implications for theory of channel relationship quality and information sharing or related theory process in the Chinese market were found.

First of all, although the information sharing had a direct impact on relationship commitment, and also had an indirect impact through relationship satisfaction, the direct influence from information sharing to relationship commitment (0.287 ***) was higher than the indirect influence through

AGFI=0.857 ,

relationship satisfaction (0.042 ***). Higher the level of the information sharing was, the more mutual satisfaction among enterprises would be enhanced and the effect of information sharing was better, the more relationship commitment could be improved. Through routine communication among enterprises, the distributors can intake good point of the other side, help them correct shortcoming and induce them make a promise which uphold and develop mutual relationship. Nevertheless, the effect of achieving long-term commitment to one another through developing satisfaction which by means intercommunicating operating status and demands is worse than the effect of making channel members get a psychological promise only through sharing operation information. It shows that channel members tend to get a relationship commitment through information sharing directly. Meantime, although the relationship satisfaction had a direct impact on relationship commitment, and also had an indirect impact through relationship trust, the indirect influence from relationship satisfaction to relationship commitment through relationship trust (0.202 ***) was higher than the direct influence from relationship satisfaction to relationship commitment (0.197 ***). This finding shows that channel members tend to develop mutual trust in order to uphold stability relationship and make a further promise about two sides' relationship. So, enterprises should pay more attention to trust of each other rather than only satisfaction.

Second, relationship trust had a direct impact on relationship commitment (0.419 ***), and there was a direct influence from relationship satisfaction to relationship commitment (0.197 ***). When channel members establish trust with partner, they will tend to make a positive evaluation to partner, and if there is a high relationship satisfaction between partners, they will prefer to maintain relationship of each other instead of changing existing suppliers or distributors.

Finally, although information sharing will attain profit through reducing operating costs in a short time, this profit will generate instability results due to lack of relationship's effect. Information sharing between channel members can cultivate a harmonious atmosphere so as to get the good relationship quality which is helpful to develop a long-term collaborative cooperation at strategic level. In the era which advocates collaborative development, it is necessary to seek a long-term promotion mechanism of channel value through group cooperation relationship in channel.

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