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Relational Model of Market Knowledge Transfer, Attitudinal Commitment and Trust

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Abstract: This study attempts to explain how a manufacturer's attitudinal commitment and a distributor's two dimensions of trust have an impact on the transferring of market knowledge from the distributor in a channel relationship. Using data from 225 paired distributors and manufacturers in the Chinese household appliances entity, six of our eight research hypotheses were supported. Results of the study show that both a manufacture's loyalty commitment and a distributor's goodwill trust directly promote market knowledge transfer. Furthermore, calculative commitment is negatively related to the distributor's goodwill and competence trust; loyalty commitment is positively related to the distributor=s goodwill and competence trust. The study thus points out the distinct roles of attitudinal commitment and trust in market knowledge transfer and the insightful impacts of calculative and loyalty commitment on goodwill and competence trust. These findings provide new theoretical thinking about channel relationship management and the business practices of manufacturers.

Key words: Attitudinal commitment, trust, market knowledge transfer

INTRODUCTION

Knowledge is the key productive resource of the firm in terms of contribution to establish and sustain competitive advantage. The relational view suggests that competitive advantage derives not solely from firm-level resources but also from resources that exist in dyadic and network relationships (Dyer and Singh, 1998). Thus, it is increasing important issue, which accepted by researchers, how a manufacturer acquires valuable market knowledge from its distributor in a channel relationship.

Extant literature has examined critical factors which influencing inter-firm knowledge transfer mostly in the context of strategic alliances and international joint ventures (Dhanaraj *et al*., 2004). Among them, trust focused by scholars has emerged as a key factor in explaining successful knowledge transfer (Morgan and Hunt, 1994). Yet, some key unanswered questions remain: Firstly, does a distributor's trust produce such dramatic effects on market knowledge transfer to a manufacturer? Secondly, trust includes both goodwill trust and competence trust (Das and Teng, 2001), different dimensions of trust have distinct definitions and connotations, so do the goodwill trust and competence trust have different impacts on transfer of market knowledge by a distributor? Finally, the extant literature generally accepts that "commitment is central to relationship marketing" and key to achieving valuable outcomes"(Morgan and Hunt, 1994), then does the commitment by a manufacturer have directly or indirectly impact on the market knowledge transfer by a distributor in a dyadic channel relationship? Unfortunately, extant literature has neglected to investigate the relationships among these constructs and therefore we have little knowledge about the implications of the different dimensions of trust by a distributor and the attitudinal commitment by a manufacturer on the distributor=s market knowledge transfer, as well as about relationship between these different dimensions of trust and these different dimensions of attitudinal commitment.

To address these significant gaps, this study investigates how a manufacturer's attitudinal commitment impacts a distributor's trust and subsequent transfer of market knowledge in a dyadic relationship. The contributions of this study elaborated in the following sections are:

- This research explores how a distributor's trust motivates the transfer of market knowledge by itself to a manufacturer, in doing so; trust is specified as a multi-component construct both goodwill trust and competence trust
- By revealing the impacts of a manufacturer's calculative and loyalty commitments on a distributor's market knowledge transfer, we show that the nature of commitment is a key factor in vertical marketing channels
- We identify the different impacts of a manufacturer's calculative and loyalty commitments on a distributor's good- will trust and competence trust

CONCEPTUAL MODEL AND HYPOTHESES

In vertical marketing channel, a distributor is closer to the terminal market than a manufacturer is, so it may possess tremendous market knowledge about competitors, consumer and other aspects, which is wanted exactly by the manufacturer. Here, market knowledge describes organized and structured in formation regarding markets, customers, competitors and trends (Tsai and Shih, 2004). It includes not only information on consumers and competitors (Tzokas and Saren, 2004), but also includes market and product knowledge collected systematically by a distributor (Andreasen *et al*., 2005).

Trust is defined as its belief and expectation that its needs will be fulfilled in the future by actions undertaken by the manufacturer (Wetzels *et al*., 1998). And a distributor's belief and expectation based on its perception and evaluation regarding the manufacturer=s and competence, so trust consists of two essential elements, trust in the partner's goodwill and trust in the partner's competence. Competence trust refers to the expectation of technically competent role performance; other terms that have been used to denote this competence include the manufacture's ability and expertise. Goodwill trust refers to the distributor's expectation that the manufacturer in vertical marketing relationships has moral obligations and responsibility to demonstrate a special concern for the partner's interests above its own'.

The channels literature has advanced two major components of a manufacturer's attitudinal commitment to a distributor: a sentiment of allegiance and faithfulness a rational, economic calculation (calculative commitment) and an emotional, social sentiment (loyalty commitment). Calculative commitment is the state of attachment to a partner cognitively experienced as a realization of the benefits sacrificed and losses incurred if the relationship were to end. Loyalty commitment is the state of attachment to a partner experienced as a feeling of allegiance and faithfulness.

In our framework (Fig. 1), we propose a different orientation for studying the relationship between attitudinal commitment, trust and market knowledge transfer. Since trust is based on positive expectations regarding goodwill and competence, it improves market knowledge transferred in distributor-manufacturer relationship. Additional, because a manufacturer's attitudinal commitment is based on either economic calculation or emotional loyalty, it maybe present as a set of distinct relationships between specific dimensions of

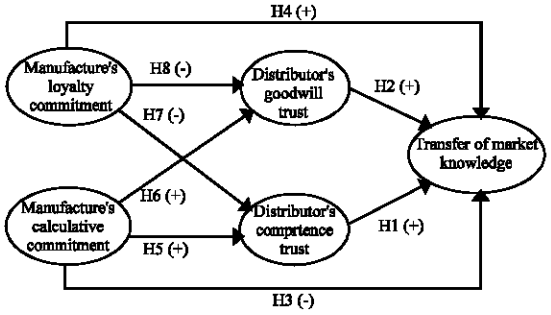

Fig. 1: Concentration framework

attitudinal commitment and market knowledge transfer. As the same reason, a manufacturer's calculative commitment and loyalty commitment are hypothesized to have different impacts on the distributor's goodwill trust and competence trust. Below, we present our rationale for these particular relationships.

Distributor's trust and the transfer of market knowledge: Madhavan and Grover (Madhavan and Grover, 1998) pointed out that competence trust is a gradual accumulation generating from successful experience and positive feedback of past large and small cooperation projects between partners. Based on previous exchange experience, a manufacturer gives a distributor a sense of confidence that the partner is capable of accomplishing given tasks in the relationship, because it has enough resources including capital, human resources, physical properties, technology and others. In this sense, these resources and capabilities motivate distributor to transfer market knowledge to the manufacturer.

High level of goodwill trust suggests the manufacture's good intentions and motivation to make the vertical marketing relationship work. Hence, goodwill trust reduces the level of opportunism perceived by the distributor and increases it's willingness to devote more knowledge in the relationship. Goodwill trust means the manufacturer will not leaked market knowledge and not to third parties or the knowledge pursue own outcome at the expense of the partner's benefit, so the distributor the distributor are more willing to transfer valuable market knowledge to the manufacturer with detailed explanation. As a result of these analyses, we offer the following hypotheses:

- **Hypothesis 1:** The greater a distributor's competence trust with a relationship, the greater the market knowledge the distributor will transfer to a manufacturer

- **Hypothesis 2:** The greater a distributor's goodwill trust with a relationship, the greater the market knowledge the distributor will transfer to a manufacturer

Manufacturer's attitudinal commitment and the transfer of market knowledge: When the manufacturer maintains exchange relationship based on calculative attitude, this will be perceived by the distributor easily. Such calculative bond reduces the distributor's expectations of reciprocity, which make the distributor not believe that its payout will be returned reasonably, so the distributor will not be willingness to transfer market knowledge to the manufacturer (Kachra, 2002). The manufacturer's loyalty commitment will reinforce the willingness and initiative to maintain manufacturer-distributor relationship (Wetzels *et al*., 1998), then the manufacturer may sacrifice short-term benefits in exchange for long-term interests and keeps more closely relation with the distributor, such emotional bonds enforce the willingness of the distributor to reciprocate and encourage it to openly exchange market knowledge with the manufacturer (Kachra, 2002).
Therefore:

- **Hypothesis 3:** The greater a manufacturer's calculative commitment with a relationship, the lower the market knowledge a distributor will transfer to the manufacturer
- **Hypothesis 4:** The greater a manufacturer's loyalty commitment with a relationship, the greater the market knowledge a distributor will transfer to the manufacturer

Manufacturer's attitudinal commitment and distributor's trust: Competence trust refers to a distributor's confidence that the manufacture has outstanding expertise and will use the expertise to fulfill the distributor's demands. So, the distributor will not be confident on the manufacture's competence, when it's expectation cannot be meted in the transaction, because the manufacture always calculates the economic benefit and tries it's best to control resource investment in the relationship (Gilliland and Bello, 2002). The manufacturer with calculative commitment may try their best to expand benefits, reduce costs and establish as few favorable policies as possible concerning price, payment and discount with their distributors (Kumar *et al*., 1995), under this condition, the distributor will perceive that the manufacturer only concentrates on achievement of its own goals rather than both interests, so it will reduces goodwill trust:

- **Hypothesis 5:** A greater level of calculative commitment on the part of a manufacturer fosters a lower level of competence trust on the part of a distributor
- **Hypothesis 6:** A greater level of calculative commitment on the part of a manufacturer fosters a lower level of goodwill trust on the part of a distributor

The manufacturer with high loyalty commitment will work more closely to achieve not just individual but also joint goals and provide high quality sales support (Anderson and Weitz, 1992). When the policy changes, loyalty holds exit at bay and activates voice, through voice, it motivates the manufacturer to work out problems rather than leave (Gilliland and Bello, 2002). Because a manufacturer committed to loyalty will steadfastly support its partner through difficult times and volatile conditions and is expected to fulfill their responsibilities and obligations, Such behaviors will enhance the distributor's competence trust.

When faced with a choice, a manufacturer with high loyalty commitment favors the target of loyalty to the preclusion of its other distributors, because loyalty involves willingness, at least on occasion and to some extent, to subordinate one's interests to those of the object of loyalty (Gilliland and Bello, 2002). This describes why, on occasion, economic rationality is overridden by allegiance to a partnering firm. This is evidenced by the willingness of highly relational partners to forgo short-term gains in anticipation of equitable treatment in the long term Ring and (van de Ven, 1994). Once the distributor finds that the manufacturer's actions bring on positive outcomes, the result for the distributor will be goodwill trust. Considering the analysis above, we offer these hypotheses:

- **Hypothesis 7:** A greater level of loyalty commitment on the part of a manufacturer fosters a grater level of competence trust on the part of a distributor
- **Hypothesis 8:** A greater level of loyalty commitment on the part of a manufacturer fosters a greater level of goodwill trust on the part of a distributor

MATERIALS AND METHODS

Sampling and data collection: The sampling frame was a manufacture list from a leading publisher and Chinese Economic and Trade Commission. A systematic selection method produced a sub-sample of 800 manufactures from electronic information and household appliances

industries from the list. Each manufacture was telephoned and asked whether they were willing to participate in our questionnaire survey or not. At last, 427 manufactures decided to participate and each told us the name and contact information of one his distributor and then the final 427 manufacture-distributor dyadic sample was produced.

Our key informants were sales executives of the manufactures and purchasing managers of the distributors. Furthermore, to ensure integrity, pretest respondents were administered a test to assess their level of competency with the survey questions (Kumar *et al*., 1995). Pre-test results indicated that the items used in the final test instrument were reliable. On completion of the pretest, 427 survey packets were mailed out, including: a formal questionnaire; a letter about the research purpose and requests to fill questionnaire; and an envelope with stamp and our address. The specific survey time was from October 2009 to June 2010 and finally 220 usable dyadic questionnaires were returned, for a response rate of 51.5%. A comparison of early and late respondents yielded no significant differences relevant to the study, which suggests non-response bias is not a problem.

Non-response bias was assessed in two ways. First, on the basis of Armstrong and Overton, 1977 procedure, no significant differences were found ($p>0.10$) between the early respondent group and the late respondent group for any of the constructs in the model. In addition, the response group was compared with the non-response group of manufacture and distributor separately on demographic characteristics such as sales volume and relationship duration, no significant differences were found for either the range of sales volume or relationship duration. Thus, non-response bias did not appear to be a problem.

Measures: All measures made use of seven-point Likert scales and were adapted from extant literature. In order to accurately reflect the attitudes of manufacturers and distributors, the data on attitudinal commitment and transfer of market knowledge were collected from manufacturers and the data on trust were collected from distributors.

Calculative commitment: Relying on measures devised by Geyskens *et al*. (1996) concerning calculative commitment, we used three items to measure the extent to which a manufacturer's motivation to continue a relationship.

Loyalty commitment: Our research relied on the study of Kumar *et al*., 1995 to reflect the degree to which a manufacturer is motivated to continue a relationship out of affective and obligatory reasons.

Goodwill trust: A five-items goodwill scale derived form Kumar *et al*. (1995) to capture the extent to which the distributor's belief that the supplier considers the distributor's interests or welfare.

Competence trust: Four items, adapted from Das and Teng (2001), to measure the extent to which the distributor's a sense of confidence that the supplier is capable of accomplishing given tasks in the cooperation. Transfer of market knowledge. This measure, composed of seven items derived from Griffith *et al*. (2001), reflects the level of transfer of market knowledge which a manufacturer acquires from a distributor, such as knowledge about products, markets, competitors and marketing. Questions about this construct were answered by manu- factures, because their evaluations reflect the status of transfer of market knowledge more accurately.

ANALYSIS AND RESULTS

We tested our model using statistical software SPSS 10.0 and AMOS 4.0. Structural equation analysis is a combination of factor analysis and path analysis. Our approach to estimating the structural equations model follows the two-stage procedure recommended by Anderson and Gerbing, 1988: (1) estimating the model's reliability and validity using SSPS 10.0, which can assure that the method used in the following analysis is reliable and valid; and (2) testing the theoretical model, using Structural Equation Modeling (SEM) techniques as implemented in AMOS 4.0.

Measurement model: In line with approaches that Fornell and Larcker, 1981 developed for a SEM context, we assessed the adequacy of the measurement model through an examination of individual item reliabilities, convergent validity and discriminant validity. To assess individual item reliability, we inspected the loadings of the items on their corresponding constructs. All factor loadings exceed the 0.70 level that (Hulland, 1999) recommends, we also checked convergent validity using internal consistency measure. The internal consistencies values (Cronbach α) for all constructs appear in Table 1 and exceed 0.70, showing that all construct are reliable.

Structural model: With AMOS, the overall fit of the saturated measurement model is good and the model yielded a chi-square of 117.005 with 183 df. Although, analysis of covariance structure has traditionally relied on a chi-square likelihood ratio test to assess model fit, it is very sensitive to the sample size, number of items and

Table 1: Measurement validity assessments

Factors	Variables	Loading	Cronbach alpha
Manufacture's calculative commitment	Even if we wanted to shift business away from this distributor, we wouldn't because our losses could be significant	0.860	0.803
	We are going to keep relationship with this distributor, because we should input great physical and human resource to establish a new relationship	0.870	
	We need to keep working with this distributor since it's difficult to find such supplier.	0.814	
Manufacture's loyalty commitment	We feel that the supplier views us as being an important Ateam- member@, rather than our being just another dealer	0.807	0.806
	If another distributor made a better offer, I wouldn't switch to them	0.733	
	Our attachment to this distributor is primarily based on the similarity of our operational values	0.853	
	4.We want to keep working with this distributor because we are loyalty to them	0.790	
Distributor's competence trust	We believe the manufacture has enough power to fulfill their promises	0.739	0.693
	The manufacture provides high quality marketing support	0.810	
	The categories of the products provided by the manufacture are richness	0.828	
	The function of the products provided by the manufacture is better	0.891	
Distributor's goodwill trust	Through circumstances change, we believe that the manufacture will be ready and will to offer us assistance and support	0.734	0.857
	When making important decisions, the manufacture is concerned about our welfare	0.858	
	When we share our problems with the manufacture, we know that it will respond with understanding	0.854	
	In the future, we can count on the manufacture to consider how its decisions and actions will affect us	0.791	
	When it comes to things that are important to us, we can depend on the manufacture's support	0.749	
Market knowledge transfer	The distributor provides a great lot of information about complementary products	0.782	0.916
	The distributor provides a great lot of information about the consumer's tastes	0.855	
	The distributor provides a great lot of information about the consumer's behaviors	0.786	
	The distributor provides a great lot of information about the market share of our products	0.846	
	The distributor provides a great lot of information about the compete advantage of our products	0.846	
	The distributor provides a great lot of information about the future potential of our products	0.802	
	The distributor provides a great lot of information about the marketing of our products	0.789	

number of factors in the model. Therefore, other fit indices, including chi-square/df, GFI, NFI and RMSEA, were used to assess overall model fit. The value of chi-square/df was found to be 1.060, which is a good fit because the recommended range for the ratio of chi-square to degrees of freedom is between 1.0 and 2.0. The GFI assesses the correspondence between observed and hypothesized covariance. A good GFI should be 0.90 or higher and a good AGFI should be near 0.90 or higher. In our model, GFI is 0.941 and AGFI is 0.902. The NFI compared to a random model and a value greater than 0.80 is considered indicative of good fit. Our model has an NFI of 0.939 and therefore shows a good fit. The RMSEA value of 0.0016 is well below 0.1, indicating a low discrepancy between the implied covariance in the model and observed covariance in the data.

Hypothesis tests: Six out of eight relationships were statistically significant at conventional levels ($p<0.1$). Figure 2 illustrates the hypothesized model with the parameter estimates for the hypothesized relationships.

Distributor's trust and the transfer of market knowledge: We find a positive and significant relationship between a distributor's goodwill trust and market knowledge transfer (0.208, $p<0.05$), in support of H1, but we do not find support for H2 that competence trust enhances the market knowledge transferred ($p>0.1$). These findings suggest that a distributor's goodwill trust is useful to transfer market knowledge.

Manufacturer's attitudinal commitment and Distributor's transfer of market knowledge: There is a non-significant relationship between a manufacturer's calculative commitment and market knowledge transfer ($p>0.1$), thus Hypothesis 3 is not supported. On the other hand, a manufacture's loyalty commitment was found to be positively related the partner's transfer of market

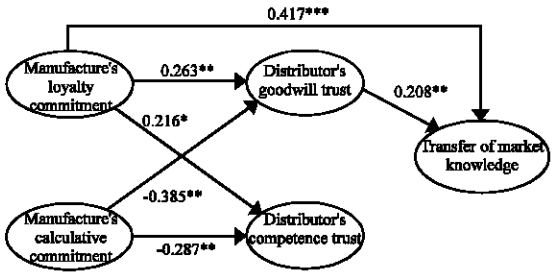

Fig. 2: Final tested model, *p<0.1, **p<0.05, ***p<0.01

knowledge (0.417, p<0.01), providing support for Hypothesis4.. These findings suggest that a manufacture's loyalty commitment is useful to transfer market knowledge.

Manufacturer's attitudinal commitment and distributor's trust .The third set of hypotheses (H5, H6, H7 and H8) predicted the influence of a manufacturer's attitudinal commitment on the distributor's trust. Manufacturer's attitudinal commitment is negatively related to distributor's competence trust (-0.278, p>0.05) and goodwill trust (-0.385, p>0.05); thus, H5 an H6 are supported. On the other hand, Manufacturer's loyalty commitment is positively related to distributor's competence trust (0.216, p>0.1) and goodwill trust (0.263, p>0.05), supporting H7 and H8.

DISCUSSION

This study investigates the relationships among a manufacturer's attitudinal commitment, a distributor's trust and the distributor's transferring of market knowledge in the context of manufacturer-distributor relationships. The findings make new contributions to the literature of channel relationship management.

First, the research finds that a distributor's goodwill trust, not competence trust, is significantly and positively related to the transfer of market knowledge. Previous studies general focus on the relationship between firm trust and knowledge transfer (Chen, 2004; Tsai and Ghoshal, 1998). By investigating the separate impacts of the goodwill trust and competence trust on knowledge transfer, this research not only reveals the complex relationship between calculative commitment and knowledge, but also indicates that market knowledge transfer is driven by goodwill trust, not by competence trust in marketing channel and thereby develops the literature about connections between trust and knowledge.

Second, these results suggest that a manufacture's calculative and loyalty commitments have distinctly separate effects on a distributor's transfer of market knowledge. Loyalty commitment is a predetermining factor and a direct force propelling the distributor's transfer of market knowledge, whereas calculative only has no direct effect on the distributor's transfer of market knowledge. Dwyer *et al.* (1987) find a positive relationship between commitment and formal or informal information sharing and exchange. Unfortunately, from the research of Dwyer *et al.* (1987) it is not possible to know the effect of different attitudinal commitment on knowledge transfer. Our research provides a good explanation of this issue.

Third, this research finds that a manufacturer's calculative and loyalty commitment have separate negatively or positively impact on a distributor's attitudinal commitment. Previous studies have examined the effects of a supplier's unitary commitment on a distributor's overall trust (Miyamoto and Rexha, 2004). By investigating the separate impacts of the manufacturer's calculative and loyalty commitments on the distributor's trust, this research reveals the complex relationship between different commitment dimensions and trust and thereby develops the literature about connections between attitudinal commitment and satisfaction.

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