Study on Influences of Channel Relationship Quality to New Product Diffusion Performance

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Abstract: The paper chose channel relationship behaviors as the intermediary variable, constructed structure equation model of how the channel relationship quality influences the performance of new product diffusion, verified how the channel relationship quality (especially trust, commitment, conflict and personal relationship) influences the performance of new product diffusion gropingly. The research shows that trust and commitment have significant positive correlation and effect on channel relationship behaviors, conflict in channel has significant negative correlation and effect on channel relationship behaviors, personal relationship has no significant negative correlation and effect on channel relationship behaviors, channel relationship behaviors have significant positive correlation and effect on the performance of the performance of new product diffusion.

Keywords: Channel relationship quality; Channel relationship behaviors; Performance; New product diffusion

1 Introduction

Rogers(1983) considered that the key success factors of new product diffusion were product, consumer, environment and spread channels etc^[1]. But marketing factors, especially marketing channel factors as supporters of new product diffusion played an very important role in the process of new product diffusion^{[2][3]}. The channel relationship quality as an important index which reflects the stand or fall of channel relationship would have affected the stability of whole channel and furthermore influenced the performance of new product diffusion.

More and more signs manifest that the power of marketing channel system is transferring from manufacturers to retailers because of the change of market pattern. Retailers gradually hold the balance of power. The attitude and relationship which retailers to manufacturers were crucial for manufacturers^[4]. Retailers are in the forefront of the channel which can access to target customers and affect them easily. They can be the "gatekeeper" when new products enter into the market. So we can believe that the good relationship quality between manufacturers and retailers can help to improve the performance of new product diffusion.

2 Model Building and Hypothesis Statements

2.1 Theoretic mode building

Based on the study of the theory and references above, this paper proposes a preliminary structure model(Figure 1) to describe the relationship quality between manufacturers and retailers, relationship between relationship behaviors and the performance of new product diffusion intuitively.

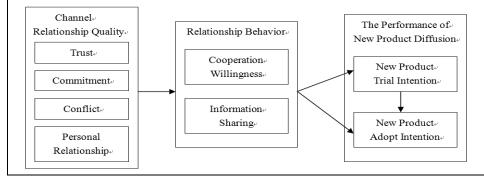


Figure 1 Theory Structure Model

2.2 The basis of model building and hypothesis offered

- 2.2.1 The channel relationship quality and relationship behaviors
 - (1) Trust and channel relationship behaviors. Moorman, Deshpande and Zaltman(1992) defined trust

as dependent intention that individuals or organizations produce from their confidential partners, and they considered that uncertainty is the key prerequisite to produce trust^[5]. Anderson and Narus (1990) thought cooperation led to trust and trust would lead to greater cooperation. Furthermore, good cooperation would lead to higher levels of trust. Namely, trust had positive function on cooperation^[6]. Trust could reduce the complexity, uncertainty and the vulnerability of partner behaviors. Only in this way, your client would have confidence to their suppliers. Mohr and Kevin(1990) considered that trust and information sharing were mutually reinforcing, more information sharing produced more trust and more trust consolidated more information sharing^[7]. Trust would be the key factors to share information among partners. When partners trust each other, they would have much more willing to go on the knowledge sharing and information exchange^[8].

With the combination of the research results above, manufacturers and retailers trust each other will affect the sustainability of their relationships, promote future cooperation willingness of relationship partners and information sharing. Based on long-term cooperation and trust, the chance that retailers are willing to try new products by manufacturers is relatively increase. Therefore, it puts forward the following hypothesis:

H1: The trust between manufacturers and retailers has a positive effect on their cooperation willingness.

H2: The trust between manufacturers and retailers has a positive effect on their information sharing willingness.

(2) Commitment and channel relationship behaviors. Morgan and Hunt (1994) defined commitment as the importance of sustainable relationship which trading partners of both sides recognized ^[9]. Anderson and Weitz (1992) thought that commitment can be understood as the steady relationship that both trading sides desired to develop and were willing to pay for a short-term profit in order to maintain the relationship between the two sides. At the same time, both sides should have confidence to maintain the steady relationship in the future ^{[10].}

The commitment of relationship would improve relationship continuity,customer retention^[11],interactive expected in the future and cooperation intention^[12]. Morgan and Hunt (1994) thought relationship commitment had positive effect on the cooperation behaviors in the relationship and it could also reduce the tendency of willingness to leave their partners. Commitment and obedience had positive effect on the tendency of leaving^[13].

Gruen (2000) considered that the activities of relationship marketing could further affect the relationship members' behaviors of retention, participation, cooperation, production and information sharing by promoting the commitment of relationship members^[14]. Mohr, Fisher et al.(1996) considered that the relationship commitment of enterprises and their information sharing were significant positive correlation^[15]. Enterprises make great efforts to establish and maintain long-term relationship to reduce their misunderstandings and to achieve information sharing. As the market competition is becoming more and more fierce which makes the enterprises have the demand to develop long-term and stable channel relationships. And the commitment of relationship can measure the willingness and attitude to establish long-term cooperation relationship with each other of channel partners.

From the above, the commitment of relationship can add the sustainable relationship between manufacturers and retailers, interaction and cooperation in the future and information sharing. Thus, as manufacturers and retailers have emotional attachment, they can treat each other sincerely. So we can deduce that the higher relationship commitment of retailers, the higher willingness to cooperate with manufacturers and share the information. Therefore we have the following hypothesis:

H3: The commitment between manufacturers and retailers has a positive effect on their cooperation willingness.

H4: The commitment between manufacturers and retailers has a positive effect on their information sharing willingness.

(3) Conflict and channel relationship behaviors. Frazier(1983) put forward that suppliers would take some mandatory means sometimes when contacted with retailers, it could make retailers feel disgusting and lead to conflict. The settlement of conflicts led to cooperation ^[16]. The research of Skinner et al. (1992) showed that conflict and cooperation had negative correlation. Namely, the more serious, more frequently the conflict between channel members, the weaker of their willingness to work together^[17]. Both sides still can maintain business contacts though stand for commercial interests, retailers does not want to share information further.

A part of channel members will be attracted by short-term profit which is harm to the interests of

other channel members in the process of new product diffusion. It can cause channel conflict and affect the distribution efficiency of the whole channel directly. Further more, it can also affect the new product diffusion. Based on the statements above, we have the following hypothesis:

H5: The conflict between manufacturers and retailers has a negative effect on their cooperation willingness.

H6: The conflict between manufacturers and retailers has a negative effect on their information sharing willingness.

(4) Personal relationship and channel relationship behaviors. The personal relationship in this study specific means regular emotional contact, mutual help and support between border personnel of manufacturers and retailers. The study shows that personal relationship in marketing channel of China has direct and significant impact on the marketing channel behavior of enterprises. As the more close private affinity,the less tendency channel members tend to use mandatory power and generate channel conflict. On the other side, personal relationship has indirect positive effect on channel cooperation^[18]. Due to cultural differences in background and the imperfect legal system of our country, people pay more attention to personal relationship when do business in China^[19]. So, personal relationship also has an effect on the willingness and realization of information sharing^[20].

To sum up, personal relationship have functions of credibility assurance, mutual beneficial network, long-term interests and benign interaction etc. These functions all help channel members to strengthen their cooperation and information sharing. Then we put forward the following hypothesis:

H7: Personal relationship between manufacturers and retailers has a positive effect on their cooperation willingness.

H8: Personal relationship between manufacturers and retailers has a positive effect on their information sharing willingness.

2.2.2 The relationship behaviors and the performance of new product diffusion

Douglas & Katrin (1997) considered that the open communication among channel partners could lead to better relationship performance ^[21]. Xian de Zhao (2002) considered that information sharing and cooperation might have significant effect on the performance of supply chain ^[22].

The study of Carolyn (1998) showed that the potential adopters of new products decided whether to adopt a new product depended on three aspects: uncertainty,risk and information^[23]. Information sharing is a key component of the interaction process according to the interactive behavioral theory. Because it reduces the buyer's perceived risk and improve the credibility of the suppliers ^[24]. If the collected information can not reduce the perceived risk, consumers may refuse to purchase^[25].

We can see that if manufacturers and retailers strengthen cooperation and the related information sharing of new product, retailers can learn the specific market information about new product and reduce the perceived risk. On the same time, manufacturers can also continually optimize their market strategies through the feedback information of retailers to promote the spread of new products. So we can guess that the stronger of cooperation and information sharing willingness between manufacturers and retailers, the higher of new product trial willingness of retailers. So we have the following hypothesis:

H9: The cooperation willingness between manufacturers and retailers has a positive effect on new product trial intention of retailers.

H10: The cooperation willingness between manufacturers and retailers has a positive effect on new product adopt intention of retailers.

H11: The information sharing willingness between manufacturers and retailers has a positive effect on new product trial intention of retailers.

H12: The information sharing willingness between manufacturers and retailers has a positive effect on new product adopt intention of retailers.

2.2.3 The new product trial intention and new product adopt intention

Antil (1988) advocated that suppliers were very hard to persuade customers to accept the new products in a very short time when they firstly contacted to the innovative products. Therefore offered the chance for customers to try the new products could help customers decide if they had intention to adopt the new products. If the trial results was positive, the opportunity that customers adopted new products would increase^[26]. Ndubisi (2005) found that the attitude based on a trial basis could predict the buying behaviors effectively. Customers could have direct trial experience of new product which could have positive effective on the prediction of subsequent behaviors and repurchase actions ^[27]. So we have the following hypothesis:

H13: The new product trial intention of retailers' has a positive effect on their adopt intention.

3 Statistical Analysis

The investigation objects mainly aimed at sales managers, sales executives or sales representatives who has channel operation experience of retailers in the beverage industry (such as Uni-president, Wahaha, Nongfu spring etc.). They have close relations with retailers and understand the situation of channel operation between manufacturers and retailers.

This investigation questionnaire contains 23 questions, the scale mainly from the original questionnaire of domestic and foreign references. The questionnaire adopts Likert seven level measure methods to fill up. SPSSI6.0 packages and AMOS 17.0 are used in the statistical analysis.

The survey regains 186 copies of questionnaires which contain 143 copies of valid questionnaires. The effective rate is 76.95%. In the samples, more than 40% respondents are sales managers or sales executive. The percentage of sales representatives is 58%. Their advices can basically reflect the true channel relationship. Nearly 67% of respondents have more than 2 years' work-life. And above 63 percent of respondents have more than 1 year's cooperation with retailers. So they have profoundly understanding of the channel relationship.

3.1 The analysis of reliability and validity

The alpha coefficients of this research scale variables are above 0.6. It shows that the scale have high reliability.

The scale content of this study is based on the theoretical references of domestic and foreign scholars and the advices of three marketing professional teachers to revise and form. So the scale of this survey should own content validity and standard validity.

The paper analyses the structural validity by the means of factor analysis. The results show that most KMO value of factors in scale are above 0.7. At the some time, the factor loading of variables we choose are significant which are all above 0.6. The explanation degrees of corresponding variables which explain the factor are more than 60%. They show that the factors we extracted can better reflect the information of original data structure. Therefore, the scale of the study have good structural validity. **3.2** Correlation analysis

(1) The correlation between the channel relationship quality and channel relationship behaviors Correlation Analysis showed that the correlation coefficient absolute value of evaluation indexes between the channel relationship quality (trust, commitment and conflict) and channel relationship behaviors are all above 0.3 by Pearson correlation analysis. They all achieve significant level and show that indexes of trust, commitment and conflict etc. which are included in the channel relationship quality have universal relevance with channel relationship behaviors (cooperation and information sharing) except personal relationship. On the side of trust, it shows that trust have significantly positive correlation to channel relationship behaviors and trust has moderate positive correlation to cooperation(r=0.515^{**}) and information sharing($r=0.427^{**}$). So the hypothesis of H1, H2 is established.

As for commitment, we can see that commitment has moderate positive correlation to cooperation and information sharing $(r=0.599^{**})$. So the hypothesis of H3, H4 is established. As for conflict, we can see that conflict has moderate negative correlation to $cooperation(r=-0.360^*)$ and information sharing($r=-0.362^*$). So the hypothesis of H5, H6 is established.

But personal relationship does not have correlation to cooperation and information sharing. So the hypothesis of H7, H8 is unestablished.

(2) The correlation between channel relationship behaviors and the performance of new product diffusion

Correlation Analysis showed that the correlation coefficient absolute value of evaluation indexes between channel relationship behaviors (commitment and information sharing) and the performance of new product diffusion are all above 0.3 by Pearson correlation analysis. They all achieve significant level which shows that the indexes of the performance of new product diffusion have universal relevance with channel relationship behaviors. So the hypothesis of H9, H10, H11 and H12 is established.

(3) The correlation among the performance of new product diffusion indexes

Correlation Analysis also showed that the two correlation coefficient of new product diffusion performance which is new product trial intention and new product adopt intention are 0.597**by Pearson correlation analysis and they achieve significant level. So new product trial of retailers has certain effect on new product adoption.

3.3 AMOS analysis

This research chooses three variables which are channel relationship quality, relationship behaviors and the performance of new product diffusion as potential variables. Their respective indexes are used as latent variables identify. The structure equation model method combined with the data from our investigation questionnaires are used to solve the relationship among the three variables. We get table1 by using AMOS model method.

From table1, we can find $x^2 / DF = 1.672$. It illustrates that the comparative fit index of our model basically reach the ideal requirement. Other comparative fit indexes such as CFI=0.747, GFI=0.656, IFI=0.755 show that the relationship model fitting degree of channel relationship quality and the performance of new product diffusion is generally good. In addition, the value of RMSEA is required below 0.06 according to the requirement of structural equation. RMSEA = 0.053 < 0.06 refer to table 4 which further demonstrates this structure model is relatively ideal.

Table 1 The Evaluation Indexes List of Structure Model						
Fit Index	chi-square test (df)	CFI	GFI	IFI	RMSEA	x ² / DF
Results	624.148(243)	0.747	0.656	0.755	0.053	1.672

4 Conclusion

This study finds that the trust and commitment between manufacturers and retailers have positive effect on their cooperation and information sharing. Conflict has negative effect on their cooperation and information sharing have positive effect on new product trial and adopt intention. These illustrate that channel relationship quality can influence the performance of new product diffusion by effecting channel relationship behaviors. But personal relationship fails to influence relationship behaviors in this empirical study. So we can see that the personal relationship between retailers and manufacturers fails to effect on their cooperation and information sharing essentially. The reasons may be shown below:

(1) This study selected some famous enterprises in beverage industry and due to their brand awareness and certain market share, they have certain bargaining ability in the process of negotiating with retailers. Their consciousness to establish personal relationship with retailers is relatively weak. As the legal system gradually improved, the function of personal relationship will be weakened.

(2) The retailers of this research are defined as large retail chains, their management is relatively standard for these retailers. They will work out some mandatory index provisions when new products circulate into the market. The personal relationship of channel boundary staff can't control the behaviors of cooperation and information sharing among organizations.

How manufacturers can improve the relationship with retailers so as to improve the performance of new product diffusion? There's some advice:

(1) Strengthening communication and enhancing mutual trust. Manufacturers and retailers should establish multi-channel and efficient communication mechanism between both sides.

(2) Reducing the opportunities of conflict, weakening and reducing the level of conflict, preventing and defusing conflict. Manufacturers can resolve conflict ably by using some strategies. For instance, by using new product to offset admission fee not only can help to promote the sales of new product, but also can decrease the admission fee indirectly(New products have high gross margin) and cash payment.

(3) Improving relationship commitment. When new products launch to the market, manufacturers should offer the commitment of free terminal support for retailers to reduce their perceived risk of new product, improve the cooperation intention of each other and eliminate misunderstandings.

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