

The Impact of Trust and Relationship Commitment on 3PL Integration and Performance: A User Perspective

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Abstract: Though the integration between third-party logistics users and providers (3PL integration) has received increasing attention from academicians and practitioners in recent years, little was known about the factors influencing 3PL integration and their impacts on performance. This study investigates the impact of trust and relationship commitment on 3PL integration and performance. We propose and empirically test a model using data collected from 361 third-party logistics users in Mainland China, Hong Kong and Taiwan. The findings from this study reveal the existence of positive relationship between trust and relationship commitment, relationship commitment and 3PL integration as well as 3PL integration and performance. Our results also indicate that relationship management and 3PL integration are helpful to the performance of both 3PL providers and users.

Keywords: Trust, Relationship commitment, Logistics integration, 3PL

I. Introduction

In recent year, third-party logistics (3PL) has attracted considerable attention with more and more companies focus on their core business and outsource their logistics business to 3PL providers. Companies have outsourced not only traditional distribution activities, such as warehousing and transportation operations, but also managerial activities related to the flow of goods, as well as certain production activities to 3PL providers. Simultaneously, the 3PL providers have developed their capabilities both in terms of broader service offerings and in terms of providing solutions adapted to specific customers or customer segments (Fabbe-Costes et al., 2009). Hence, 3PL providers are playing more and more important role in their user's supply chain. However, the 3PL literature has focused primarily on the benefits and outcomes of the relationship building efforts between 3PL providers and their users. To date, a conceptual

model that explains partnering behavior once the logistics outsourcing relationship has been established is still lacking (Hofer et al., 2009). Marasco (2008) recognized the need for this type of research by calling for studies to identify and explain the processes that bond partners and strengthen relationships (Marasco, 2008).

As an advanced stage of the cooperation, 3PL integration has received increasing attention both in academic and business world. However, current literature dealing with 3PL integration is still exploratory and lack of theoretical perspective. An extensive literature review revealed that little was known about the nature of 3PL integration and the factors enabling 3PL integration.

Although marketing researchers have studied factors that influence inter-firm relationships from the perspective of trust and relationship commitment (Morgan and Hunt, 1994), this perspective has not been applied in a 3PL context. China provides a unique research opportunity to this area owing to its rapid economic development and strong national culture. Therefore, an integration of commitment-trust theory into the study of 3PL integration under the context of Chinese culture is of significant importance. In an effort to add to empirical literature on 3PL integration from the perspective of relationship management, this study addresses the following main research questions:

- (1) How trust and relationship commitment effect 3PL integration?
- (2) What are the impacts of 3PL integration on performance?
- (3) What are the impacts of 3PL providers' performance on their users' performance?

II. Conceptual Framework and Research Hypothesis

Based on multi-disciplinary literature related to trust, relationship commitment and 3PL integration, we develop the conceptual model as shown in Fig.1.

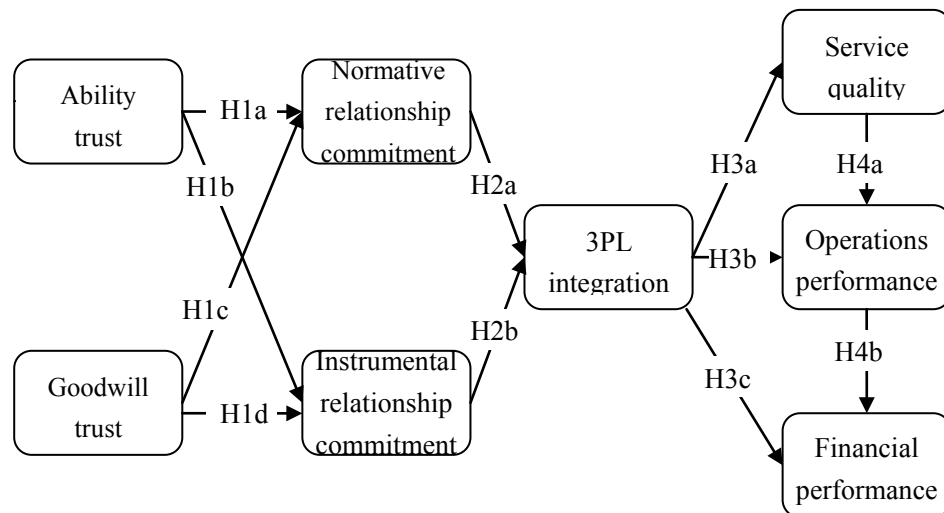


Figure 1 Conceptual model

In this model, trust is classified into two dimensions: good will trust and ability trust. Goodwill trust is about one's good faith, good intentions, and integrity. It refers to confidence that the partner firms will cooperate in good faith, rather than behave opportunistically (Das and Teng, 2001). Ability trust refers to confidence in trading partner's competence to carry out a specific task (Sako, 1992). Relationship commitment is classified as normative and instrumental commitment. Normative relationship commitment is a mutual, ongoing relationship over an extended period of time which is based on mutual commitment and sharing of norms and values (Zhao et al., 2008). Instrumental relationship commitment is based on compliance, which occurs when one party accepts the influence of another in hopes of receiving favorable reactions from the other party (Brown et al., 1995; Zhao et al., 2008). 3PL integration is defined as the degree to which a firm can strategically collaborate with its 3PL providers to structure intra- and inter-organizational logistics strategies, practices, procedures, and behaviors into collaborative, synchronized, and manageable logistics processes to fulfill their customers' requirements (Adapted from Zhao et al., 2008). Logistics service quality refers to perceived measure of how well the service delivered by the 3PL providers matches the expectations of their users. Based on multi-disciplined literature review, we propose four groups of hypothesis as follows.

Trust and relationship commitment

- H1a. Ability trust is positively related to normative relationship commitment.*
H1b. Ability trust is positively related to instrumental relationship commitment.
H1c. Goodwill trust is positively related to normative relationship commitment.
H1d. Goodwill trust is positively related to instrumental relationship commitment.

Relationship commitment and 3PL integration

- H2a. Normative relationship commitment is positively related to 3PL integration.*
H2b. Instrumental relationship commitment is positively related to 3PL integration.
H2c. Normative relationship commitment will have a stronger impact on 3PL integration than instrumental relationship commitment.

3PL integration and performance

- H3a. 3PL integration is positively related to the perceived 3PL provider's service quality.*
H3b. 3PL integration is positively related to operations performance.
H3c. 3PL integration is positively related to financial performance.

3PL users' performance and 3PL providers' performance

- H4a. Perceived 3PL provider's service quality is positively related to the 3PL user's operations performance.*
H4b. Operations performance is positively related to its financial performance.

III. Research Methodology

Sampling and data collection

The research was conducted under the context of Chinese culture. The hypotheses were tested with data gathered from third party logistics users in Mainland China, Hong Kong and Taiwan. Since the logistics industry in Mainland China, Hong Kong and Taiwan are at different development stages, the sampling frame provided geographic and development diversity.

The target companies to be sampled were mainly manufacturing and retail companies that use third party logistics services. The questionnaires were sent by mail to the respondents, along with a cover letter highlighting the

study's objectives. Follow-up calls were made to improve the response rate.

Questionnaire design

All of the questionnaire items were developed based on a review of literatures. We undertook an intensive study of the literature to identify existing measures for related constructs. For constructs which had not been well documented and tested in the literature, we developed new items based on our understanding of the constructs and interviews with practitioners. Company visits in Mainland China and pre-test interviews with top-level executives who were in charge of logistics functions in these companies were undertaken to refine the questionnaire.

IV. Research Findings

Except H1d and H3c, all the other nine proposed hypotheses were supported. The results show that different types of trust have different effects on relationship commitment. Different types of relationship commitment influence the logistics integration and performance in different ways. Ability trust has a positive impact on both normative and instrumental relationship commitment, while goodwill trust only has a positive influence on normative relationship commitment. Goodwill trust has a higher total effect on 3PL integration though it has no significant impact on 3PL integration through instrumental relationship commitment. Normative relationship commitment is more important than instrumental relationship commitment in improving 3PL integration, which leads to 3PL providers' service quality. 3PL integration improves operational performance directly and indirectly through 3PL providers' service quality. Financial performance can be enhanced by operational performance, but cannot be improved by 3PL integration or 3PL providers' service quality.

V. Conclusions and Limitations

This study makes a significant contribution to the 3PL literature by systematically examining the impact of trust and relationship commitment on 3PL integration. The results show that appropriate use of trust can significantly enhance relationship commitment. Improvements in relationship commitment, especially normative relationship commitment, improve 3PL integration and ultimately enhance the performance. This study demonstrates that trust and relationship commitment are especially important for 3PL integration. This is especially true under the context of Chinese culture due to Chinese collective culture and the existence of guanxi networks in interorganizational relationship. These findings also provide guidelines for managers concerning how to gain competitive advantages through effective relationship management and 3PL integration.

The findings reveal that the integration between 3PL users and their 3PL providers significantly influences the performances of both sides, which implies that firms should promote integration with their 3PL partners to improve their performance. The positive relationship between commitment and 3PL integration advocates a shifting from traditional arms-length attitude between 3PL users and their providers to a partnership perspective that fosters trust and commitment.

There are several limitations in this study. The first limitation is the cross-sectional design employed. The model developed and tested here would benefit from being tested in a longitudinal study. Secondly, a 3PL provider perspective will be helpful. Data collection on both sides of the user-provider dyad would alleviate concern about biased assessments of the constructs by merely 3PL users. Thirdly, in this study all constructs were measured by perceptual scales. Ideally objective measures should be utilized to match the perceptual measures, especially those that are related to operational activities (Hofer et al., 2009).

Appendices and References Available Upon Requests

Acknowledgement

The authors would like to acknowledge the financial support provided by the Center for Supply Chain Management & Logistics, Li & Fung Institute of Supply Chain Management & Logistics, The Chinese University of Hong Kong.