

The Moderating Role of Absorptive Capacity and Collaborative Communication in a Buyer-Supplier Learning Collaboration

Zach G. Zacharia
Assistant Professor of Supply Chain Management
College of Business and Economics
Lehigh University
(610/758-4433); zacharia@lehigh.edu

Nancy W. Nix
Associate Professor of Supply Chain Practice
M. J. Neeley School of Business
Texas Christian University
(817/257-7463); n.nix@tcu.edu

Robert F. Lusch
Professor of Marketing
Eller College of Management
University of Arizona
(520/621-7480); rlusch@eller.arizona.edu

Abstract. Buyers and Suppliers collaborate for many reasons such as to pool skills and knowledge, to take advantage of a unique opportunity, to solve a complex problem or to access and deploy resources and capabilities not found in their own firm. However one ancillary benefit of collaboration is the learning that takes place between the firms throughout the collaboration. Two factors that specifically moderate the learning or knowledge gained in a collaboration are the absorptive capacity of the firm, and the collaborative communication between the firms. A research study of 285 collaborations between buyers and their suppliers found the relationship between high levels of collaboration and knowledge gained was moderated by the absorptive capacity of the buying firm and collaborative communication between the firms.

(Keywords – Learning Collaboration, Collaborative Communication, Absorptive Capacity)

Introduction. Collaboration, defined here as the degree to which two or more firms work jointly and share complementary knowledge or skills to solve a problem or explore an opportunity (Mattessich, and Monsey 1992), has become more important in the competitive environment as knowledge and capabilities become dispersed in the supply chain. Knowledge becomes a key strategic resource especially in a turbulent environment (Hult, Cavusgil and Calontone 2003). The resource based view of the firm (Barney 1991, Wernerfelt 1984) views every firm as a bundle of knowledge. Of all the resources a firm may

possess its knowledge base can be a significant source of competitive advantage (Gupta and Govindarajan 2000). A particular benefit of interfirm collaborations is the knowledge sharing and learning that takes place between the collaborating firms (Lane and Lubatkin 1998). Therefore this research examines the relationship between knowledge gained by buyers from suppliers who are in a collaboration and factors that moderate the relationship between the level of collaboration and the knowledge gained.

Collaborations occur between competitor firms to buyer-supplier firms to solve a particular problem or take advantage of a special opportunity. It is interesting to note that buyers that are already involved in a collaboration with a supplier would have very little reason to want to learn from the supplier. Buyers have already outsourced that capability to their supplier, what is the benefit of learning or gaining knowledge back from the supplier? Our goal was to explore the factors that affect the knowledge specifically tacit knowledge that can be used in future collaborations gained by the buyer from the supplier.

To be successful, collaborating firms must be willing to engage intensely in sharing information, generating ideas, and learning from each other to achieve a successful outcome. Firms with the ability to absorb and take advantage of new knowledge (absorptive capacity) and have a collaborative communication process in place are more likely to gain new knowledge and skills as a result of the collaboration. Among the most common form of collaborations are those collaborations that take place between a buyer and a supplier. Suppliers want to understand what the buyers need and seek to learn from their collaboration partner. Buyers are willing to provide knowledge to the buyer to ensure their requirements are met. Interestingly as buyers outsource capabilities and tasks to suppliers, buyers must still be willing to learn from their suppliers, especially the knowledge and skills associated with the outsourced task to manage future relationships. Tacit knowledge exchanged in the collaboration would likely be more important especially in future collaborations with other suppliers. Communication between buyers and suppliers would likely affect both this collaboration and future collaborations.

- H1: The higher the level of collaboration between the buyer and the supplier the greater the knowledge gained by the buyer.
- H2: The higher the ability of the buyer firm to acquire, assimilate, transform and exploit new knowledge (absorptive capacity) the stronger is the positive relationship between collaboration level and knowledge gained.
- H3: The greater the collaborative communication (frequency, bidirectionality, formality and non-coercive content) the stronger is the positive relationship between collaboration level and knowledge gained.

A survey research design following the total design method (Dillman 1978) was used to collect the data and test the three hypotheses. Respondents were pre-

qualified to ensure they had experience with collaboration projects and were asked to focus on a completed collaboration project to ensure responses reflected actual outcomes and not an estimate of the potential outcome of the collaboration. Our primary sources of information about collaborations between buyers and suppliers were supply chain professionals from the Institute of Supply Management.

The hypotheses were tested using hierarchical moderator regression analysis (Cohen and Cohen 1983). Summated scales for the constructs were used for the regression tests based on the strong correlations among the subscales (Carver 1989). The continuous independent variables in the hierarchical moderator regression models were mean centered to reduce multicollinearity between the main and interaction terms (Aiken and West 1991). The interaction variables were entered in the regression model after the main variables to separate the main effect from the interaction terms (Cohen and Cohen 1983).

Hypothesis 1 posited that a higher level of collaboration leads to a higher level of knowledge gained. The standardized coefficient of 0.49 as a main effect in the regression indicates a very strong relationship between intense collaboration and acquiring knowledge. The higher the level of collaboration the greater the levels of commitment between the firms, more decisions are made jointly, more information is shared, there is a freer flow of knowledge and an openness to discover new knowledge and improve joint performance. Knowledge gained as an outcome suggests buyers acquire tacit and explicit knowledge, learn better ways to conduct business, and gain new insights about your supplier.

Hypothesis 2 posits there is a stronger relationship between collaboration level and knowledge gained in the presence of absorptive capacity. The interaction effect of absorptive capacity on collaboration level and knowledge gained was significant. However it has a negative coefficient of - 0.119 which would suggest as collaboration level increases the amount of absorptive capacity in the firm has a lower effect on the knowledge gained. This would suggest at high levels of collaboration knowledge will be gained regardless of the absorptive capacity of the buyer firm.

Hypothesis 3 posits there is a stronger relationship between collaboration level and knowledge gained in the presence of collaborative communication. The interaction effect of collaborative communication on collaboration level and knowledge gained was significant with a positive coefficient of 0.136. At low levels of collaboration, high collaborative communication led to lower knowledge gained which suggests at lower levels of collaboration it might be better to not use collaborative communication. However as collaboration level increases greater knowledge is gained, and the presence of collaborative communication clearly has a greater impact. Therefore the greater the collaborative

communication between the firms, in the presence of a high levels of collaboration the more knowledge the buyer will gain from the supplier.

This research serves to fill a gap in the literature with respect to understanding the role of absorptive capacity, collaborative communication and a high level of collaboration on organizational learning. Firms constantly face a complex problem or opportunity that is beyond their own capabilities to address. In such instances buyers can become dependent on developing a high level of collaboration with their suppliers to complete the project. Firms with the ability to acquire, assimilate, transform and exploit new knowledge and ideas gained through the collaboration (absorptive capacity) are much more likely to learn from the collaboration. Similarly, firms already involved in an intense collaboration that develop a collaborative communication process would likely achieve greater organizational learning. This research provides valuable insights to help practitioners and researchers gain a better understanding of the factors that can enhance the knowledge gained as an outcome of collaboration efforts between buyers and suppliers.

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