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Factors influencing strategic alliance outcomes in a manufacturing supply chain: Role of alliance motives, interdependence, asset specificity and relational capital

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ABSTRACT

Integration of various theories is essential to completely understand and explain strategic alliances in a supply chain. The purpose of this paper is to develop a framework by integrating the features of transaction cost theory, resource-based theory, contingency theory, social exchange theory, and Kelley's personal relationship theory and test the framework through empirical research. The present study addresses the impact of strategic alliance motives, environment, asset specificity, perception of opportunistic behavior, interdependence between supply chain partners, and relational capital on strategic alliance outcomes. Besides, the study has also tested the role of relational capital as a central mediating construct. A sample of 2156 companies representing different industries in manufacturing in Malaysia was selected for the distribution of questionnaire. We tested the structural model using structural equation modeling (SEM). Based on the results, we conclude the following significant relationships: (1) strategic alliance motives and perception of opportunistic behavior on interdependence and relational capital, (2) interdependence on relational capital, (3) environment on strategic alliance motives, (4) relational capital on strategic alliance outcomes, and (4) the mediating role of relational capital. The current study adds significantly to the body of knowledge on strategic alliances and can help managers identify factors that influence the success of strategic alliances and provide a proper direction to develop robust and effective collaborative relationships between supply chain partners.

1. Introduction

Over the past two decades, inter-organizational cooperative arrangements have become an increasingly attractive way of improving a firm's competitiveness. Forming strategic alliances with suppliers and customers allow manufacturers to focus on core activities of providing quality products and services (Kannan and Tan, 2004). Closer buyer–supplier relationships offer numerous technical, financial, and strategic advantages (Mohr and Spekman, 1994). Although the rate of alliance formation has increased, these arrangements are frequently accompanied by problems of instability, poor performance and premature termination (Parkhe, 1993). Many researchers have projected that more than 50% of the strategic alliances fail (Dyer et al., 2001; Park and Ungson, 2001; Young-Ybarra and Wiersema, 1999). Overcoming high failure rates of strategic alliances require a better understanding of the factors involved in their establishment and maintenance.

According to Kale and Singh (2009), strategic alliance is a "…..purposive relationship between two or more independent firms that involves the exchange, sharing, or co-development of resources or capabilities to achieve mutually relevant benefits." (p. 46). Due to benefits resulting from collaborative arrangements, scholars have recognized strategic alliances as an important area for research (Das et al., 2003; Elmuti and Kathawala, 2001; Monczka et al., 1998; Parkhe, 1993; Townsend, 2003; Varadarajan and Cunningham, 1995; Wong et al., 2005; Zineldin and Bredenlow, 2003). A range of conceptual definitions and frameworks have emerged from different perspectives (Das and Teng, 2003; Parkhe, 1993). Various theories such as transaction cost theory, resource-based theory, contingency theory and game theory have been used by these researchers to explain, develop

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constructs, and describe strategic alliances. Due to the distinctive nature and richness of alliance stuctures, we believe that there is no single theory that can fully elucidate strategic alliances. According to Tsang (1998), complete behavior of alliances cannot be adequately captured by a few theories.

The contributions of this study are threefold. First, the study proposes a model by combining the features of transaction cost theory, contingency theory, resource-based theory, social exchange theory, and personal relationship theory. We argue that combining the features of these theories is essential to adequately understand and explain strategic alliances. Our intention here is not to develop an eclectic theory that can capture all the nuances of strategic alliances. Park and Ungson (2001) have argued that the study of inter-organizational cooperation should adopt a multi-disciplinary perspective, including economics, organization sciences and business strategies. Such an approach can help generate a more complete knowledge about relevant issues. Previous researchers such as Parkhe (1993), Young-Ybarra and Wiersema (1999) and Yasuda (2005) have attempted to use two theories to study strategic alliances. Second, we empirically test the framework and explicitly address the role of relational capital as a central mediating construct in a strategic alliance framework. This construct is critical in the effective formation and maintenance of strategic alliances between supply chain partners. Third, the results of the study can help managers identify factors that influence the success of strategic alliances and provide a proper direction to develop robust and effective collaborative relationships between supply chain partners. These relationships can help reduce the failure rate of strategic alliances. This research has been carried out from the manufacturers' perspective and addresses the impact of strategic alliance motives, environment, asset specificity, perception of opportunistic behavior, interdependence between supply chain partners, and relational capital on strategic alliance outcomes.

2. Review of relevant literature

Various theories have been used to explain strategic alliances. Some important theories considered in this research for identifying the relevant constructs and explaining the relationships between them are: transaction cost theory (TCT), resource-based theory (RBT), contingency theory (CT), social exchange theory (SET), and personal relationship theory (PRT). Many researchers have used these theories to explain different aspects of a strategic alliance. For example, Parkhe (1993) has used TCT to study the factors that strengthens the ties among alliance partners; Das and Teng (2003) have studied alliances from the perspective of RBT; Flyn Huo and Zhao (2010) have studied CT, within a strategic alliance, to explain the role of external environments in determining the content as well as the process of various strategic actions; Narasimhan et al. (2009) have used SET to analyze buyer–supplier relationships under lock-in situations in supply chains. There are not many studies that use PRT to explain the relationships within strategic alliances. SET is used predominantly by researchers to explain relationships between supply chain partners. Zafirovski (2005) argues that SET rests on the backs of utilatarian economics and psychological behaviorism. The maintenance of strategic alliances goes beyond the utilitarian economics. We argue that Kelley's PRT along with SET can better explain continuation and maintenance of strategic alliances.

According to researchers, relationships between people and relationships between organizations have a lot in common. They begin, grow, develop, succeed or fail in a similar manner. Spekman et al. (1996) emphasize the need for personal relations in order to define strategic objectives, to facilitate necessary communication between partners, and to strengthen ties between companies. They have argued that it is justifiable to relate theory of personal relationships to study inter-organizational collaborative agreements. Several concepts identified by Kelley (1979) are relevant for understanding relationships within strategic alliances. We suggest that the outcome of an alliance depends not only on what each of the partner does individually, but also on the joint decision and action of the alliance partners. Table 1 specifies the various theories used in explaining the strategic alliances. The next section outlines the development of a theoretical framework to explain formation and maintenance of strategic alliances.

3. A rationale for the theoretical framework

In order to explain the development of a theoretical framework, we use the strategic alliance cycle framework proposed by Kale and Singh (2009). Wagner (2011) has studied the development of suppliers through buyer–supplier relationship life cycle and argues that this approach gives a better explanatory power. We used Kale and Singh's framework since it captures all phases in an alliance cycle. According to them, alliance cycle consists of three distinct phases: (1) alliance formation and partner selection, (2) alliance governance and design, and (3) post-formation alliance management. A typical strategic alliance goes through all these phases. The key factors to be considered in the alliance formation phase are: partner complementarity, partner compatibility, and partner commitment. Partner complementarity deals with the contribution of non-overlapping resources by partners (RBT) and interdependence between alliance partners (PRT).

Table 1
Various theories (and their themes) used in explaining strategic alliances.

Theory	Strategic alliance motive	Governing and managing strategic alliance
Resource dependency	Acquisition of resources (Pfeffer and Salancik, 1978)	
Resource-based view	Acquisition of resources, building competitive advantage (Tsang, 1998; Das and Teng, 2003; Yasuda, 2005)	
Knowledge-based view	Acquisition of knowledge, organizational learning, building competitive advantage (Van Gils and Zwart, 2004)	
Contingency	Risk and uncertainty reduction (Ranganathan and Lertpittayapoom, 2002)	
Game	Building competitive advantage (Parkhe, 1993; Song and Panayides, 2002)	
Transaction cost	Cost advantages risk and uncertainty reduction (Williamson, 1985)	Asset specificity, perception of opportunistic behaviour (Williamson, 1985; Young-Ybarra and Wiersema, 1999; Yasuda, 2005)
Social exchange		Communication, trust and commitment (Morgan and Hunt, 1994; Dyer et al., 2001; Young-Ybarra and Wiersema, 1999)
Personal relationship		Interdependence (Rusbult and Van Lange, 2003)