Review of Supply Chain Partnership Process in Joint Ventures Example as Chinese Automotive Industry

Weixi Han

Abstract
Under the environment of economic globalization, there has seen a global transfer of manufacturing into China and China’s automotive industry engage in global trade. China faces unprecedented opportunities for development, although there are many challenges it must face. It has become a strategic choice for all automotive enterprises to implement supply chain management in order to achieve competitive advantages. At present, most researches on supply chain partnerships have been carried out based on enterprises in developed countries. Very few theoretical and empirical studies have been based on developing countries, and in particular, only a few scholars have examined supply chain partnerships in China. Based on the joint ventures, this paper is a review of partner theories and process of partner relationship. With respect to the supply chain partnership strategy and process and partners’ capability literature, there is limited research on the special background such as joint ventures or Chinese automotive industry. Some literature on partners’ capabilities is based in favor of the operational aspects.

Keywords
Partnerships, joint ventures, supply chain, partnership

At present, China has the largest automotive production and marketing in the world. The automotive industry has all the characteristics of a manufacturing industry and can therefore be a representative of the manufacturing industry (Singh, Smith, and Sohal 2005). It is one of the industries with a strong longitudinal correlation effect across all the departments of a typical manufacturing industry. The manufacturing of one car involves the processing and manufacturing of thousands of components, and as a consequence, the resulting complicated features of the supply chain will lead to the supply chain in the automotive industry becoming much more complicated than that for other products.

Based on literature searching, there is no empirical study on the supply chain partnership and competitive advantages of Chinese automobile enterprises in China. Therefore, this research would be groundbreaking.

With the significant difference of market environment, technology factors, etc., between Chinese enterprises and developed European, American enterprises, exploratory research into the

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nature of Chinese manufacturing enterprises’ supply chain integration practice is of value and evaluating the nature of supply chain integration in this sector will be an important contribution to theory and practice.

The aim is to establish a framework of supply chain partnership strategies and processes which the joint venture enterprises have used or could use in the future. This will be evaluated based on the creation of the enterprises’ competitive advantage.

RESEARCH BACKGROUND

Nowadays, most enterprises all over the world choose the methods of mergers and acquisitions (M&A), etc., to realize powerful alliances to improve their own competitive advantages and participate in globalized competition and cooperation. In particular, these are undertaken for the reasons of the rapid development of new technology and the integration of the world economy, through which accelerated evolution has led to market competition becoming sharpened. As the internal expansion of the scale of the enterprise can struggle to adapt to the rapid change of the market, enterprise M&A, and especially horizontal mergers, as a model for the rapid expansion of enterprises, have become an important component in the economic life of the contemporary world.

Cross-border M&A are typically seen with multinational companies with foreign direct investment. Foreign direct investment theory has made significant progress since the 1960s. Vernon (1966) proposed the international product cycle theory, which seeks to explain the motivation for foreign direct investment, while Hymer (1976) proposed the monopoly advantage theory. Dunning (1977) combined the monopoly advantage theory, the internalization theory, and the location theory, and believed that the enterprise has a potential advantage in cross-border investment, as it can create rich market opportunities and high profit returns for international enterprises. Alan (1981) suggests that the enterprise sufficiently compensates for existing information internalization through the mode of foreign direct investment in order to guarantee the majority of its income through information investment. The internalization theory takes forward the traditional monopoly advantage theory and product cycle theory in many aspects and promotes the development of cross-border direct investment theory. Buckley and Casson (2003) introduced the trading internalization principle into cross-border direct investment, and so the internalization theory of international direct investment theory was formed. This theory proposes that market incompleteness is the reason for enterprises to engage in foreign direct investment activities. And these investment theories help to explain the motivation of multinational companies to conduct cross-border production and management activities from different points of view.

Chinese enterprises are also facing the grim task of how to deal with cross-border mergers and their relationships in the context of economic globalization. Western investment in China is gradually increasing, and this is presenting the potential for large-scale development.

Currently, joint ventures are mainly concentrated on industries which are encouraged by Chinese government policy as priorities, such as foundation industries with wide market prospects or other strong industries. China’s huge auto market has always been a key target for foreign automotive manufacturers. And many Chinese automotive enterprises currently have cooperation in the forms of joint ventures (Luo 2000), equity transfers, and the like.

Markusen (1998) examined many cases of holding companies investing in developing countries, and found that the unique technical advantages of multinational companies in the markets of developing countries can be rapidly realized through capital transfer and investment. A large number of empirical studies (Cantwell and Barnard 2008), have also
demonstrated that western direct investment can speed up the technological progress of cross-border mergers enterprise and be the enhancement of market competitiveness, and enterprises’ advantages in the international market can be enhanced.

Based on the literature, empirical evidence from different countries reveals the motivation for horizontal mergers, especially aiming at developing countries. It can be seen that the international business dimension of entry modes into new markets has been considered both in terms of theory and empirical research.

SUPPLY CHAIN PARTNERSHIP

This main section focuses on the conceptual development of the supply chain partnership and provides a review of supply chain partnership theories. Moreover, the strategies and processes of supply chain partnership and the criteria of supply chain partnership are also discussed.

Definitions of Supply Chain Partnership

The definition of “supply chain partnership” can be established based on the various definitions of the “supply chain” and “partnership” as previously described in the literature (see Table 1).

Based on the views of the above scholars on the definition of “a partnership”, it is believed that the partnership is a close cooperative relationship that is formed by two separate enterprises that have compatible strategic objectives, complementary resources, and capabilities. They are compatible in the aspects of enterprise culture, organizational structure, management and operation, and are capable of mutual trust, a high level of commitment, information sharing, risk sharing, and interest possession. The goals that cannot be independently finished by a single entity should be achieved by joint efforts, and this is generally the key point of supply chain management.

Theories of Supply Chain Partnership

In the literature on partnerships, the research on the aspects of motivation, formation, and performance of partnerships is relatively rich. At present, the development and evolution of partnerships has attracted the attention of more and more researchers. The establishment of a partnership through a supply chain is usually based on a long-term and strategic strategy. Its development generally needs a relatively long process. In reality, the formation of a supply chain relationship has various motivations. Relevant theories include the transaction cost economics theory, value chain theory, resource based view theory, and so on.

(1) Transaction cost theory believes that a partnership can reduce the information searching cost and relationship integration cost in the process of supply chain integration to some extent, so as to facilitate the improvement of integrated capabilities (Williamson 1987; Lambert, Cooper, and Pagh 1998; Kaufman, Wood, and Theyel 2000; Holweg 2005);

(2) Value chain theory believes enterprises can cooperate with each other in the key success factors—value chain and advantageous links, in order to maximize overall benefits, which is the original drive to the establishment of the supply chain partnership (Croom, Romano, and Giannakis 2000; Carter and Rogers 2008);

(3) Resource-based theory believes an enterprise’s resources and capabilities that are rare, precious, and difficult to copy are the prerequisites to attract partners. Thus, the complement of resources and capabilities is a decisive element in the cooperation of enterprises (Cohen and Levinthal 1990; Teece, Pisano, and Shuen 1997; Dyer and Singh 1998; Jap 2001; Knudsen 2003; Park, Mezias, and Song 2004);

(4) Other theory views of partnership. In recent years, there are more and more literatures have considered the causes of partnerships. Besides the above theories, many scholars have given their opinions from various perspectives.
Network theory combines all the aforesaid theories to explain the cooperation among enterprises. Network theory has a fundamental hypothesis in that the resources of an enterprise rely on being controlled by other enterprises, and these resources must be obtained through the network. A network is a kind of relationship which decides the characteristics and behaviors of a network (Jarillo 1990).

Powell (2011) has claimed that a single organization is often restricted by a lack of efficiency, resource, and scale economy. In this situation, more companies are forced to employ partnerships and strategic alliances.

Liu et al. (2007) studied partnerships from the perspective of research and development (R&D), and argued that the motive of the R&D partnership is to win orders, establish technical standards, transfer technology, reduce the pressure from protectionism, and standardize the degree of competition since the technical R&D cost increases dramatically.

Lorange and Roos (1993) have suggested that the strategic partnership is widely employed because enterprises must implement strategic partnerships under competitive pressure in order to achieve advantages on a global scale and scope. An enterprise must resort to a strategic alliance to maintain its powerful position and adjusting to the locality is necessary in the market in every country. Especially when a new competitor appears in the world, the enterprise must reposition itself to facilitate the establishment of a strategic partnership.

**Process of the Supply Chain Partnership**

The relationship of a supply chain partnership with a competitive advantage is not only a strategic issue in an enterprise’s operation, but also a fundamental issue for the study of supply chain management (Christopher and Towill 2001). It has revealed that many operators take partnerships as a crucial strategy to improve their competitive advantages and fulfill their objectives (Stevens 2008).

In an empirical study, Lambert, Emmelhainz, and Gardner (1996) undertook measurements on

**Table 1. Definitions Partnership**

<table>
<thead>
<tr>
<th>Literatures</th>
<th>The conceptual development</th>
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<tbody>
<tr>
<td>Mohr and Spekman (1994)</td>
<td>Purposive strategic relationships occur between independent firms who share compatible goals, strive for mutual benefits, and acknowledge a high level of mutual independence</td>
</tr>
<tr>
<td>Spekman, Kamauff Jr., and Myhr (1998)</td>
<td>Partnership sourcing is the buyer-seller partnerships that have been defined as agreements which involve commitment and trust over an extended time-period and which include the sharing of information, risks and rewards, and is an on-going relationship between two firms and a dynamic process of continual improvement</td>
</tr>
<tr>
<td>Aulakh, Kotabe, and Sahay (1996)</td>
<td>A long-term relationship is mutual and lasting under the commitment over an extended time-period and involves the sharing of information, risks, and rewards</td>
</tr>
<tr>
<td>Duysters and Vaandrager (1999)</td>
<td>A good partnership must take into account communication, culture, trust, and mutual capabilities</td>
</tr>
<tr>
<td>Rottman (2008)</td>
<td>Partnership management involves four aspects: professional knowledge, good procedure, a common goal and motive, and the same attitude, which are necessary inside or between organizations. Trust is a factor in the success of an alliance and must depend on the communication and information processing procedure of partners</td>
</tr>
<tr>
<td>McLvor and Mchugh (2000)</td>
<td>The partnership is defined as synergic relationship. An organization can develop a partnership by uniting with a buyer or seller for cost reduction, and this can include a seller’s participation in the development of new products, distribution and logistics management, and a core enterprise strategy</td>
</tr>
<tr>
<td>Johnston, Stuart, and Kerwood (2004)</td>
<td>Information sharing and trust are added into a partnership. A partnership is a temporary relationship among organizations, which can lead to a further relationship through their mutual trust and information sharing and exchange</td>
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</table>
partnerships from the three aspects of trust, commitment, and relationship elasticity. External supply chain integration was measured from four aspects of customer integration, supplier integration, information integration, and measurement integration. Lambert et al. (1996) confirmed that trust and commitment between partners have a significant influence on supply chain integration and information integration. Moreover, relationship elasticity has a significant influence on customer integration, supplier integration, and measurement integration.

For most enterprises, supply chain partnership is often formed based on long-term and strategic policy, which is often a very long process (Gunasekaran, Patel, and McGaughey 2004). Claycomb and Frankwick (2005) believe that a good relationship must be formed after a process of knowing, exploration, expansion, and commitment. At each stage, there are several critical processes (see Table 2). Through a survey of 40 enterprises, Christopher and Towill (2001) identified that supply chain relationship is mainly formed through five key steps: (1) defining a balanced set of relationships; (2) developing the right interface structure; (3) cooperating across systems; (4) managing people through change; and (5) monitoring the relationship.

Choy, Lee, and Victor (2002) argue that the development of a partnership is divided into five stages: (1) selecting a partner; (2) defining the target; (3) setting the relationship boundaries; (4) creating relationship value; and (5) maintaining the relationship. These variables may be necessary at one stage, but have a potential influence on other stages.

From the literature, it can be concluded that the development of a supply chain partnership is a progressive process. This process includes the strategy position, choosing and evaluating the partnership, developing the partnership, and estimating and maintaining the partnership.

**Partnership strategy position.** Lambert et al. (1996) suggest that the strategic positioning of a partnership should be decided by a high level leader of the enterprises according to the strategic target of the enterprises. Enterprises choose the type of supply chain partnership according to their own conditions. In the environment of integrated supply chain management, the supply chain partnership has many types. Generally, it can be divided into two levels: important partners and secondary partners. The important partners are the partners who are few but better and have a close relationship with the manufacturers, while the secondary partners are fewer and do not have such a tight relationship with the manufacturers. Changes in the supply chain partnership have a main influence on the important partners and less influence on the secondary partners.

Das and Teng (2000) argued that the strategic positioning of a partnership should include two types, these being the polling relationship and symbiosis relationship according to the type of mutual resource aggregation. The polling relationship is when enterprises and partners accumulate similar resources, and the goal of establishing a relationship is to pursue the scale of the economy and share supply risks (Zhao et al. 2008). The symbiosis relationship occurs when enterprises and partners accumulate complementary resources, and when the purpose of establishing a relationship is to explore a new market.

Walters and Lancaster (2000) have analyzed the partnership on the basis of the value that creates. The partnership can be divided into three types. The symbiosis relationship occurs when partners have different competitiveness, and they can create value by themselves. The commensalism relationship is
Table 2. Main Development Stages of Partnership

<table>
<thead>
<tr>
<th>Stage</th>
<th>Critical development process</th>
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<tbody>
<tr>
<td>Knowing</td>
<td>Evaluate the qualification of partner</td>
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<tr>
<td></td>
<td>Investigate the benefits of partner</td>
</tr>
<tr>
<td>Exploration</td>
<td>Attract</td>
</tr>
<tr>
<td></td>
<td>Communicate and negotiate</td>
</tr>
<tr>
<td></td>
<td>Develop and utilize powers</td>
</tr>
<tr>
<td></td>
<td>Develop regulations and expectations</td>
</tr>
<tr>
<td>Expansion</td>
<td>Improve the added value from the partnership and enhance mutual reliance</td>
</tr>
<tr>
<td>Commitment</td>
<td>Loyal</td>
</tr>
<tr>
<td></td>
<td>Share values, objectives, and expectations</td>
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<tr>
<td></td>
<td>Willing to overlook partner's one-time mistakes</td>
</tr>
<tr>
<td></td>
<td>Trust</td>
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<td></td>
<td>Future-oriented</td>
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when partners create value and the other partners share the value, while the parasite relationship is seen when the partners mutually offset the created value.

Christopher and Towill (2001) analyzed partnership positioning from the perspective of power distribution. It includes two types: the multilateral relationship and the hierarchical relationship. The multilateral relationship has the status of equality and mutual benefit with mutual trust, while the hierarchical relationship has a partner with leadership who is responsible for coordinating the other partners.

A partnership requires building a solid and powerful foundation, which can be sustainable based on suppliers with competitive potential and effective management. At present, many enterprises have reduced the number of suppliers and have regarded this as a part of the overall supply chain plan (Lee and Whang 2004). Enterprises believe in having several reliable suppliers and maintaining long-term cooperation with them, which is more efficient than cooperation with many enterprises across every project (Altenburg and Meyer-Stamer 1999). More and more enterprises have reduced their number of supplier and have developed a partnership with competitive potential suppliers.

Selection of partner in a supply chain. According to analysis of the requirements of enterprises, enterprises need to select partners after establishing a supply chain partnership strategy. The evaluation and selection of the partners are the basis for the successful operation of a supply chain partnership. Enterprises need to determine the partner selection process principle, the establishment of evaluation criteria, collect information about the partners, and then select the partners.

Child, Faulkner, and Tallman (2005) suggest that complementary is a main principle for selecting a partnership. The lack of complementary between partners or misunderstanding a partner’s expectations is an important reason for the failure of cooperation. Kelly, Schaan, and Joncas (2002) have pointed out that a good choice of partners must consider the compatibility, which means the complementary advantages and disadvantages. Partners must have the ability to resolve the differences of opinion, and partners must also have capacity capability, which is sufficient capacity to contribute to cooperation. Partners should have commitment, which means both partners in the process of cooperation have a commitment to complete targets. K. Brouthers, L. Brouthers, and Wilkinson (1995) have pointed out that in the choice of a partner, partners should be considered that have complementary skills, there should be a culture of cooperation between enterprises, they should have compatible targets, and should be commensurate with the level of risk (see Table 3).
Table 3. Criterion for Partner Selection

<table>
<thead>
<tr>
<th>The Capabilities of partner selection</th>
<th>Importance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complementation of technology and resources</td>
<td>This is the most important choice criteria</td>
</tr>
<tr>
<td>Mutual</td>
<td>The degree of mutual dependence should not be too high or too low</td>
</tr>
<tr>
<td>Avoiding anchoring</td>
<td>It should be assured that the future partner has enough financial resources to maintain the development of the cooperative ventures</td>
</tr>
<tr>
<td>Relative scale</td>
<td>If the corresponding scales are close to each other, generally successful opportunities are much greater</td>
</tr>
<tr>
<td>Complementation on strategy</td>
<td>The partners with high compatibility of strategy also have the same targets and values</td>
</tr>
<tr>
<td>Compatibility of the operation strategy among partners</td>
<td>Partners should clearly understand which kind of operation policy can be operated compatibly</td>
</tr>
<tr>
<td>Potential communication obstacles</td>
<td>This includes the communication obstacles caused by language and enterprise culture because of national, moral, and cultural differences</td>
</tr>
<tr>
<td>Compatible management team</td>
<td>The personal relationship of the main decision maker is highly important in the process of decision selection</td>
</tr>
<tr>
<td>Trust and commitment</td>
<td>The unique ability that the cooperation ventures who involve the core technology and competitive advantages rely on</td>
</tr>
</tbody>
</table>

*Develop and maintenance of the supply chain partnership.* Partnership maintenance and improvement are one of the research directions for the future supply chain partnership management (Croom et al. 2000; Arshinder and Deshmukh 2008). According to several stages of supply chain partnership management, it can be found that the maintenance of management is more important than the formation of the relationship (Gunasekaran et al. 2004). The implementation of many suppliers will not achieve an improvement in relations and cannot improve supply chain performance during actual operations (Tan et al. 1999).

Trust, relationship commitment, communication, the distribution of benefits, and other factors require an in-depth analysis aimed at the process (Demirbag, Weir, and Mirza 2003). The relationship of cooperative behavior on performance should be examined (Johnston et al. 2004). Some studies have explored the impact of various factors on performance through empirical research. However, there is no complete framework to integrate a variety of factors into supply chain partnership management during the ongoing management of the partnership for the supply chain. This research needs to include the influential factors into an integrated frame after the supply chain partnership management is divided into the different stages.

*Capabilities of Partnership Selection and Implementation*

There are some previous studies that have examined the capabilities of the supply chain partnership. Weber and Current (1993) identified the evaluation capabilities through 170 data points that focused on the purchasing agent and purchasing manager. The research by Weber and Current (1993) focused on the evaluation criteria of partner selection in supply chain but was now quite dated, and was biased with respect to partnership operation. Geringer (1991) has proposed nine capabilities for partner selection for international joint ventures.

In the literature, different scholars have identified different factors for evaluation (see Table 4).

Many of these aspects are compatible with each other. Trust may incorporate asset size, profitability, technical capability, relationship quality, interest sharing and risk sharing, etc. Commitment includes behavior commitment and sustainable commitment.
Table 4. Summary of the Factors Considered in Partnership Evaluation

<table>
<thead>
<tr>
<th>Literature</th>
<th>Measurement aspect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anderson and Weitz (1992)</td>
<td>Trust, profitability, resource reliance, relationship quality, interest sharing, risk sharing, flexibility of product and service, and consistency</td>
</tr>
<tr>
<td>Mohr (1994)</td>
<td>Trust, benefit commitment, behavior commitment, continual cooperation, relationship flexibility, dispute resolution mechanism, and mutual communication</td>
</tr>
<tr>
<td>Mentzer and Zacharia (2000)</td>
<td>Trust, relationship reliance, objective consistency, behavior commitment, and degree of cooperation</td>
</tr>
<tr>
<td>Choi (2006)</td>
<td>Trust, long-term relationship, capability, objective consistency, communication efficiency for important matters</td>
</tr>
</tbody>
</table>

The degree of reliance is similar to the complementation of resources, coexistence of interest, and technical reliance, etc.

In summary, good cooperation of supply chain partnership is based on full trust and cooperation among supply chain member enterprises. If the trust and strong desire for cooperation are deficient, a supply chain partnership cannot be operated properly. At present, the main means of connection in the cooperation enterprises of the supply chain is the contract. A strong contract is an important guarantee for the operation of a supply chain partnership. The changes in the external environment, internal benefit distribution, and the like will result in disagreements and contradictions, or even conflicts among partners in the supply chain partnership operation process. Therefore, it is necessary that the enterprises are aware of the objective existence of these issues, and enterprises can find the corresponding solution to adjust the cooperation mode and stabilize the relations of the cooperation. This is the only way to maintain the long-term continuous operation of the supply chain partnership.

**CONCLUSIONS**

Above all, the causes and theoretical bases for the formation of supply chain partnership have been analyzed from different approaches including the transaction cost theory, value chain theory, resource-based view, and other theories. All these theories complement each other to form a systematic analysis and present the theoretical study on its relationship. With respect to the supply chain partnership strategy and process and partners’ capability literature, there is limited research on the special background such as joint ventures or the Chinese automotive industry. Some literature on partners’ capabilities is biased in favor of the operational aspects. This research based on previous studies would be verified by subsequent empirical research in the future.

**References**


Bio

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