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Supplier Relations and Control in the Malaysian Automotive Industry

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Abstract

This research examines the archetypes of buyer-supplier-supplier relationships within triad supply networks in the Malaysian automotive industry. Existing literature indicates that such triad relationships, involving buyers and two suppliers, are pivotal to supplier relations in the industry. In Malaysia, where the automotive industry is protected, this triad relationship may differ structurally. Through multiple-case studies, this research explores the opinions of interviewees on buyer-supplier relationships, focusing on control over business processes. The findings suggest that in these triads, various levels of control exist, and that competition between suppliers, facilitated by the buyer, is feasible if both parties' capabilities are developed.

Keywords: Supplier relations, triad, buyer-supplier relationship, automotive industry

1. INTRODUCTION

Supplier relations between buyers and suppliers, often referred to as buyer-supplier relationships, have been a key focus in supply chain literature. Historically, research has concentrated on dyadic relationships between the buyer and a single supplier. However, recent studies have highlighted the importance of triadic relationships, where two suppliers work for the same buyer (Wu & Choi, 2005; Wu, Choi, & Rungtusanatham, 2010). This triad requires buyers to not only manage their relationships with suppliers but also oversee interactions between the suppliers themselves.

Wu and Choi (2005) presented five archetypes of supplier-supplier relationships, later expanding their study to focus on triads, emphasizing the buyer's role in these relationships. The research suggests that the dynamics between suppliers within a triad can significantly affect overall supplier performance. This calls for further investigation into how these dynamics function within the automotive industry, particularly in developing countries like Malaysia, where the automotive sector is government-protected.

The significance of understanding triadic relationships in this context is considerable. By understanding how these dynamics function, buyers can improve supplier performance across various tiers, ultimately enhancing their own competitiveness. For example, a buyer might be unaware of tensions between Supplier A and Supplier B, which could prevent Supplier A from improving its performance. Thus, researching this dynamic in the context of Malaysia's automotive industry can provide insights that help buyers align systems and processes with triad dynamics to ensure operational efficiency. Recent research on these area highlight how buying groups influence buyer-supplier performance and the governance mechanisms (Kumar, Shi, Skiba, Saini & Lu, 2023) as well as role of buyers managing collaborative dynamics between suppliers in innovation-driven sectors (Patrucco, Walker, Luzzini & Ronchi, 2023).

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1.1 Triad supply networks

A triad in supply chain management involves a buyer and two suppliers. These relationships, as defined by Choi, Dooley, and Rungtusanatham (2001), represent the smallest unit of a supply network. Researchers have explored the formation and types of these triads (Wu & Choi, 2005; Choi & Wu, 2009) and the impact on performance when two suppliers are serving the same buyer. Triads are fundamental to understanding supply chain networks, as they reflect the complex interrelationships between buyers and suppliers at multiple tiers (Mena, Humphries, & Choi, 2013).

Wu and Choi (2005) identified five archetypes of supplier-supplier relationships in triads: conflicting, contracting, dogfighting, networking, and transacting. These archetypes span a spectrum from cooperative to competitive relationships. In particular, co-opetition, where two suppliers both cooperate and compete while supplying the same buyer, requires careful management by the buyer to ensure positive outcomes (Choi et al., 2001). Though the original study focused on the aerospace industry, these dynamics are also relevant in automotive manufacturing, where complex relationships between multiple suppliers often arise.

Although much of the triadic supply chain research has focused on the relationship between manufacturers and customers, there is still much to explore regarding the interactions between suppliers themselves. For example, in automotive supply chains, manufacturers may need to manage the performance of multiple suppliers while ensuring that these suppliers, often competitors, maintain a cooperative relationship (Pardo & Michel, 2015).

1.2 Managing control in triads

One key challenge in managing a triadic relationship is controlling the interactions between suppliers. Buyers need to balance positive and negative feedback to control their suppliers effectively. For instance, Choi et al. (2001) suggest that positive feedback loops help foster predictability and stability in supplier relationships, making it crucial to implement supplier development programs. By doing so, buyers can enhance the overall performance of suppliers and improve their own outcomes (Carr, Kaynak, Hartley, & Ross, 2008; Giannakis, Doran, & Chen, 2012; Kadir, Tam, & Ali, 2011).

Buyers can exert formal and informal control over suppliers. Formal control includes contracts and performance metrics, while informal control relies on trust and social relationships (Li, Xie, Teo, & Peng, 2010). In a triadic relationship, however, control dynamics may shift depending on the specific interactions between suppliers and buyers. For example, Weistra (2017) found that in some cases, one supplier may dominate the triadic relationship, with the buyer allowing this dominance due to long-term mutual dependence and harmonious relationships.

The automotive industry has seen significant changes in its approach to supplier relationships, particularly in the aftermath of scandals involving price-fixing and collusion (Shirouzu & Shiraki, 2015). These events led to shifts in supply chain management strategies, such as modularization, where parts can be sourced from multiple suppliers to reduce dependency on a single supplier (Corswant & Fredriksson, 2002). As a result, buyers can more easily switch between suppliers if needed. However, these changes have also raised concerns about quality control and safety, particularly for Japanese automakers with limited procurement capabilities (Matous & Todo, 2015).

2. METHODOLOGY

This study employs a qualitative approach, utilizing interviews to gather in-depth insights into the relationships between buyers and suppliers in the Malaysian automotive industry. Qualitative research is well-suited to exploring supply chain management (SCM) dynamics, particularly in triadic relationships (Ellinger et al., 2020). This study uses interviews with senior managers from three different companies in the Malaysian automotive industry, each of whom has experience managing buyer-supplier relationships.

The interviews were conducted with senior managers responsible for overseeing relationships with both their buyers and other suppliers working with the same buyers. Each case was analyzed using Miles and Huberman's (1994) three-phase process of data analysis: interviews were transcribed, data were coded, and results were tabulated and interpreted.

3. FINDINGS AND DISCUSSION

3.1 Case profile

Table 1. Case profile

Attributes	C1	C2	C3
Category	Supplier	Supplier	Supplier/Buyer
Buyer	Japanese automaker	Local automakers	Japanese automakers
Supplier	SS1	SS2	Not applicable
Sector	Wire Harness	Mould Injection	Plastic parts

The case study above presents the three case studies of this research.

All case studies are automotive companies in Malaysia. The first case, C1, is a Malaysian automotive supplier company that supplies to a Japanese automaker as well as other buyers. This company has been established since early 1990s, and supply wire harness products in automotive. A Supplier that C1 also deals with, in relation with the Japanese automaker, is SS1. SS1 also deals in similar product – wire harness. Both suppliers are sources for the same similar products, as part of the 'dual sourcing' – i.e. Two suppliers suppling the same product.

The second case study is C2. This company is also a Malaysian company, also established at least more than 30 years. This supplier focuses on supplying to the local automakers. Their products are in the mould injection category. The supplier that is also a competitor that deals with similar product is SS2.

The third case is C3. This company is both a buyer and a supplier. They source suppliers to their products, and later they supply their products to major buyers of Japanese automakers. In this case, one Japanese automaker, is a more prominent buyer as it has links with C3 thru shares in C3. C3 assembles products mostly, but can be considered as started in the plastic parts sector.

3.2 Level of control

Table 2. Level of control

	Managerial Control	Process Control	Technical Control	Administrative Control	Relational Control via Other Supplier
C1	✔	✔	✔	✔	✔
C2	✔	✔	✔	✔	
C3	✔	✔		✔	

The above table presents the findings based on the analysis of the data on the topic of control. The interviews presented various types of scenarios in the experiences of the senior managers in their company as they dealt with their buyers as well as other suppliers.

An explanation of the concepts mentioned above:

1. Managerial control: Rules and policies regarding management of business process
2. Process control: Rules and policies regarding production control process
3. Technical control: Rules and policies regarding Technical Assistance (TA) companies that suppliers' partner with
4. Administrative control (finance) : Rules and policies regarding typical disclosure with regard to financial statements of the suppliers when applying for projects
5. Relational control (other suppliers): Rules and policies (written and unwritten) with regard with other suppliers under the same buyer

For both C1 and C2, they both faced similar situations. As they worked with their buyers, they also dealt with situations where they also faced situations that deal with other suppliers, particularly with suppliers that they supply similar parts. Surprisingly, they seem to understand this situation, and from the interview, there seem to be less any disagreeableness, and more of the understanding of the way things were. Though these suppliers are not close, they seem to regard the other supplier (competitors basically) as part of the situation.

Overall, when referring to Table 2 on the level of control, there were many similarities that faced C1 and C2 . Both face all the types of control mentioned in the Table 2, except for Relational control for C2. However, this

could be due to the interview itself and depending on the experiences mentioned, was less discernible compared with C1.

For C3, the situation is a bit different. As C3 is a buyer and has links with a Japanese automaker. At the same time, they too supply to other big global automakers in Malaysia, including other Japanese automakers. Therefore, the types of control more relates with their control over their suppliers and the level that they have over them. In this case, it seems that this was more related to managerial and process control. With relational control being less applicable as C3 is a buyer compared with the other two cases.

The findings section presented the relationships in relation to the types of control that the case studies encountered. Overall, the various types of control were presented as identified in the table present as additional type of control that was perceived from the interviews.

The findings look at the level of control and overall, this suggest that the cases were able to handle this level of control and manage their relationships with both their buyer and other supplier.

4. CONCLUSION AND IMPLICATION

In comparison with the literature, this research focused on the processes between the supplier and buyer and the level of control between these organizations. Other research has emphasized on the different types of control between triadic actors (Swierczek, 2024). The latter research has found that of the two types of control developed in the research, one led to positive impact on the relational performance between the triad actors, while another led to negative impact. However, if combined, the two types of control lead to positive relational performance between the triad actors.

Based on the literature, the control issued by buyers could be both positive (example between buyers and high-level suppliers) while the control delivers a more negative impact when between buyers and lower-level suppliers (Choi and Hong, 2002). Thus, for this paper, the research support both studies. This research suggests that when suppliers are dealing with other suppliers, there could be both positive aspects with regard to control, either between the buyers and suppliers, or within the suppliers themselves. In addition, this paper identifies the type of control that suppliers face, either with the buyer or with another supplier.

5. LIMITATIONS

This research has only looked at three case studies in the automotive sector. Thus, this research has limitations in the applicability of its findings to the rest of the automotive sector as well as other manufacturing sectors. In addition, the environment seems to focus on the automotive industry which some buyer organisations has been known to build its vendors/suppliers capability in cohort with the Malaysian government's desire as the automotive industry is a protected industry. Thus, some differences might be expected in other industries. Future research could explore other industries, as well as the services industry, in looking at the level of control exacted and the impact on both supplier partners vis-à-vis the buyer.

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