



Relationship marketing in Japan: the buyer-supplier relationships of four automakers

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Abstract *Examines the individual buyer-supplier relationships of the four major Japanese automobile manufacturers. Building on the relationship marketing and the interorganizational trust literature, relates their supplier management practices to the type of supplier organizations they use, the relative sales revenues, number of employees, and profitability of both buyers and suppliers, and the level of equity held by automakers in their suppliers. Major finding reveals that the major Japanese automakers have far more diversity than commonality in their supplier policies, and suggests that a comparison of major Japanese companies individually, not collectively, is a rich area of research into buyer-supplier relationships.*

Introduction

The evolution of relationship marketing has been one of the most notable topics in marketing over the last decade in general and industrial marketing in particular (Dwyer *et al.*, 1987; Morgan and Hunt, 1994; Sheth and Parvatiyar, 1995). Even though the term has recently been applied to consumer marketing (Bagozzi, 1995; Sheth and Parvatiyar, 1995; Gruen, 1995), relationship marketing originated from and has thus far been discussed mainly in industrial and business-to-business marketing (Dwyer *et al.*, 1987; Morgan and Hunt, 1994; Noordewier *et al.*, 1990). Since the typical industrial firm spends the equivalent of over half its sales revenues on industrial purchasing (Hutt and Speh, 1992), supplier management has been recognized as crucial to the firm's competitiveness. Two divergent views concerning supplier management have been discussed both in theory and practice: the contractual (arms-length) view; and the relational view (Anderson and Narus, 1990; Dwyer *et al.*, 1987). The first view, traditional in the West and previously widely accepted, places minimal dependence on suppliers, with the object of maximizing bargaining power (Frazier, 1983; Lusch, 1976; Provan and Gassenheimer, 1994), and avoiding commitment (Boyle *et al.*, 1992).

The relational view of supplier management, a key aspect of relationship marketing, has often been deemed to contribute to the success of Japanese firms. In this view, a buyer and a supplier establish and maintain close relationships on an ongoing basis. They share more information and better coordination of tasks (Ganesan, 1994; Iacobucci, 1994); make relation-specific investments, human and physical, to facilitate cost reduction and

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Homogeneous or heterogeneous relationship marketing practices?

quality improvement (Hill, 1995; Lohtia and Krapfel, 1994); and, build trust-based relationships that can minimize transaction costs (Barney and Hansen, 1995; Doney and Cannon, 1997; Lewin and Johnston, 1997; Sheard, 1996). Such partnerships, however, are costly to establish and maintain, and, further, may reduce a customer's ability to switch away from inefficient suppliers (Heide and John, 1990; Nielson, 1996; Salmond, 1994). In sum, the central theme of the relational view is that trust and commitment encourage the long-term relationships between suppliers and buyers to develop as partnerships (Morgan and Hunt, 1994; Hunt and Morgan, 1994).

The aim of this paper is to begin to examine the relationship marketing strategies of four major automotive manufacturers in Japan. Although there have been a number of comparative studies of buyer-supplier relationships in Japan and the US (Martin *et al.*, 1995; Dyer and Ouchi, 1993), writers have not dealt with the differences between the Japanese automakers. The key question we wish to address is: do Japanese automotive manufacturers have homogeneous or heterogeneous relationship marketing practices? If heterogeneous, how can firms' strategies be clustered?

The next section is concerned with the comparison of buyer-supplier relationships in the automotive industry between the US and Japan. Building on the comparison, we will deal with the differences between four major automakers in Japan in their supplier relationship with a sample of 165 suppliers, followed by the recent trends and conclusion.

Buyer-supplier relationships in the automotive industry in the United States and Japan

The automotive industry is a good illustration of both the traditional and the relational models of the buyer-supplier relationship and a stream of literature deals with such relationships in the US and Japan, individually and comparatively (Aoki, 1988; Bensaou and Venkatraman, 1995; Hill, 1995). Ford and, to a lesser extent, General Motors in the USA have historically taken an arms-length view (Asanuma, 1993). In the early 1990s, for example, GM attempted to save cost by encouraging intense supplier competition. Potential long-term negative effects apart, GM can point as a consequence to saving around US\$4 billion. Meanwhile, Toyota and Nissan in Japan have followed a partnership model. Toyota, for instance, have developed long-term relationships with suppliers by implicitly guaranteeing future business (Bensaou and Venkatraman, 1995; Miwa, 1996). Suppliers, in return, have made relation-specific investments to improve Toyota's productivity (Hill, 1995).

Three types of suppliers

Before proceeding further, the buyer-supplier relationship in Japan should be described. Japanese automotive manufacturers have networks of suppliers. Some of these suppliers are affiliated ones (Kankei Kaisha), while others are independent (Dokuritsu Kaisha) (Asanuma, 1989; Shimokawa, 1985). Within these categories, there exist three types of suppliers. The first is a small number, in their tens, of suppliers very close to the automaker. These are generally subsidiaries or affiliated companies where more than 20 percent of equity is owned by the automaker (Asanuma, 1989; Miwa, 1996). The automotive manufacturer typically transfers personnel and/or provides guidance on long-term strategic plans, capital investments and capacity planning, and finance (Aoki, 1988; Cusumano and Takeishi, 1991; Walker, 1994). These few suppliers manufacture high value components highly tailored to the automaker's particular needs. The second category, between one hundred and four hundred suppliers, involves members of one of the automakers' supplier associations, including not just the inner *keiretsu* group

Arms-length arrangements with suppliers

but independent companies as well (Asanuma, 1993). The exchange of often proprietary information and need for close coordination restrict the number of suppliers allowed to join the associations. The third group represents the second tier supplier associations, open to all suppliers. Suppliers in this group tend to manufacture more standardized parts, such as tires, fasteners, and batteries (Smitka, 1991).

In the US, the Big Three have generally maintained non-exclusive and arms-length arrangements with suppliers, thus sharing a large number of common suppliers (Womack, 1990). Suppliers in principle benefit from such practices by learning from multiple customers and economies of scale opportunities. Yet, due to the maintenance of multiple sources and thus bargaining power by the US automotive manufacturers, the size and scale of suppliers are restricted. The annual sales revenues of main suppliers in the Japanese sample, on average, triples their American counterparts. The percentage of sales to a particular automaker is highest among Japanese relational suppliers (60.0 percent), followed, by a large margin, by American relational and arms-length suppliers (33.9 percent and 33.5 percent, respectively).

Dyer (1996), and then Dyer *et al.* (1996), investigated the suppliers of three US (GM, Ford, Chrysler) and two Japanese (Toyota and Nissan) automotive manufacturers. Dyer *et al.* (1996) used the purchasing managers at the five auto manufacturers to identify supplier executives responsible for the relationship with them, split into the most independent and the closest relational suppliers (John and Reve, 1982). The data related to 1991, and response rates were very high, 66 percent in the US (92 firms), and 68 percent in Japan (93 firms). Table I presents some of the main findings, compiled from Dyer (1996) and Dyer *et al.* (1996).

	US		Japan	
	<i>Contractual</i>	<i>Relational</i>	<i>Contractual</i>	<i>Relational</i>
<i>Relation-Specificity</i>				
Percent of supplier sales to automaker	33.5	33.9	18.9	60.0
Percent of non-redeployable capital equipment	15.4	17.7	13.2	30.6
Annual "man-days" of face to face contract	1,169	1,385	3,181	7,270
<i>Information Sharing</i>				
Sharing confidential information*	3.1	3.3	5.3	6.2
Sharing detailed cost data*	4.5	4.3	4.3	5.9
<i>Assistance</i>				
Assisting cost reduction*	2.1	1.9	2.6	4.2
Assisting quality improvement*	2.9	3.1	3.0	4.4
<i>Trust/contracts</i>				
Supplier's trust in automaker's fairness*	4.2	4.7	6.0	6.3
Supplier's expectation of unfair (fair) treatment (even) if automaker has the chance*	4.2 (2.8)	3.6 (3.4)	1.6 (5.4)	1.6 (5.4)
Notes: Compiled from Dyer (1996) and Dyer <i>et al.</i> (1996); *Mean ratings based on 7 rating scale				

Table I. A comparison of supplier-buyer relationships in the US and Japan

Three factors all closely concerned with trust

First, by type of supplier relationship. In the US sample, there were no significant differences throughout between both types of suppliers, except in the duration of contracts awarded to the supplier. Relational partners received contracts of twice the duration of their counterparts (4.7 years *via-à-vis* 2.4 years). Of note, as presented in Table II, arms-length types of relationship exhibited slightly higher levels of data sharing and assistance on cost reduction. As for Japan, both types of relationship presented very high levels of trust, implying that the level of trust is not dependent on the particular type of buyer-supplier relationship, but is rather embedded in the society (Whitley, 1992). However, relational suppliers exhibited higher averages on both types of assistance (1.62, 1.47) and relation-specific investment (2.32).

Second, by country. When contractual suppliers in both countries are compared, Japanese suppliers showed higher means, notably on reverse-opportunism (less likelihood to turn to opportunism) and the sharing of confidential information, and, to a lesser extent, on trust in the automotive manufacturer's fairness. These three factors are all closely concerned with trust. Conversely, the arms-length US suppliers demonstrated higher relation-specific investment and higher percentage of sales to the relational buyer. As regards the relational suppliers, Japanese firms exhibited far higher means overall. The most notable differences could be observed in assistance with cost reduction, confidential information sharing, relation-specific investment and the percentage of sales concentrated with the relational buyer.

Third, by both type of relationship and country. Two factors on relation-specificity, the percentage of sales concentrated with the automakers, and

	C/A*		J/U**	
	US	Japan	Relational	Contractual
<i>Relation-specificity</i>				
Percent of sales to automaker	1.01	3.17	0.56	1.77
Percent of non-redeployable capital equipment	1.15	2.32	0.86	1.73
Annual "man-days" of face to face contract	1.18	2.29	2.72	5.25
<i>Information sharing</i>				
Supplier shares confidential information	1.06	1.17	1.71	1.88
Sharing detailed cost data	0.96	1.37	0.96	1.37
<i>Assistance</i>				
Assistance of cost reduction	0.90	1.62	1.24	2.21
Assistance of quality improvement	1.07	1.47	1.03	1.42
<i>Trust/contracts</i>				
Supplier's trust in automaker's fairness	1.12	1.05	1.43	1.34
Expectation of unfair treatment if automaker has the chance***	1.21	1.00	1.93	1.59

Notes: Calculated from Table I. *Relational over contractual (the figures refer to the ratios of the relational to the contractual); **Japan over the US (the figures refer to the ratios of the relational to the contractual); ***To be in comparison with the other figures, the calculation is based on the figures in the bracket in Table I

Table II. Comparisons of auto parts suppliers by country and type of relationship

Automotive survey

relation-specific investment, were distinctly different between the two types of suppliers in Japan. Japanese firms, irrespective of the types of relationship, exhibited substantially higher means on three factors related to trust: confidential information sharing; reverse-opportunism; and, trust in the automaker's fairness.

We will now discuss an automotive survey conducted by the Japanese government concerning the buyer-supplier relationship in Japan. In a recent survey by the Fair Trade Commission (1993), Japanese automotive parts suppliers were asked to select the major, and also the most critical, reason[s] perceived by them as enabling them to be selected by an automaker as suppliers. Of the major reasons, where multiple answers were allowed, parts quality (88 percent), technology development capability (87 percent), and high reliability and trust based on past transactions (86 percent), were the three highest, followed by production technology (77 percent), price within the maker's request (72 percent), JIT delivery (64 percent) and stable supply (58 percent). As regards the most critical reason, where only a single answer was allowed, reliability and trust based on past transactions (34 percent) headed the list, followed by technology development capability (28 percent). JIT delivery and stable supply were virtually negligible (0 percent and 2 percent, respectively). Such low percentages do not mean that these factors were not important, rather these factors were deemed necessary, not sufficient, conditions for supplier selection (Miwa, 1996).

All the above data conform closely with the general literature highlighting the importance of trust and commitment (Weiss and Kurland, 1997) and, as a basis of both, the role of reverse-opportunism, in successful buyer supplier relationships in industrial marketing (Anderson and Weitz, 1989; Doney and Cannon, 1997; Hunt and Morgan, 1994).

Comparisons of the buyer-supplier relationships of the four major automotive manufacturers in Japan

Building on the above discussion, we will compare the supplier relationships of four major automotive manufacturers in Japan. Table III presents the statistics of four automotive manufacturers: Toyota, the largest in sales

	<i>Toyota</i>	<i>Nissan</i>	<i>Mitsubishi</i>	<i>Honda</i>
Sales revenue**	7,957	3,518	2,523	2,448
Net profit**	183	4	20	27
ROS (%)	2.3	0.1	0.8	1.1
Suppliers' organization	Kyoho-Kai	Nissho-Kai	Mitsubishi Kashiwa-Kai	No supplier organization
Number of the first and second-tier suppliers (A)	191	191	381	338
Number of the first-tier suppliers (B)	56	57	21	31
Listed companies (C)	23	23	2	5
(B)/(A)***	29.3	30.4	5.5	9.2
(C)/(B)***	41.1	39.7	9.5	16.1
(C)/(A)***	12.0	12.0	0.5	1.5

Notes: *Fiscal year ends in March; **Unit Y Billion; ***Percentage (%). Compiled from API Yearbook and Japan Company Handbook 1996 *Yoyo Keizai*

*Table III. Financial data and supplier organizations of four major Japanese automotive manufacturers in 1996**

Toyota more profitable than Mitsubishi and Honda

revenues, followed by Nissan, Mitsubishi, and Honda. Toyota and Nissan are the two largest automotive makers in Japan and a number of comparative studies mainly deal with these two companies (Cusumano, 1985; Dyer, 1996). This paper aims to begin a systemic comparison of four major Japanese automakers in their supplier relationships.

As presented in Table III, the four automotive manufacturers are substantially different in sales revenues, net profit, and profitability. In sales revenues, Toyota is approximately double the size of Nissan and triple Mitsubishi and Honda. In net profit, Toyota is far more profitable than Mitsubishi and Honda, and Nissan registers virtually no profits. Profitability in all four companies is very low by Western, particularly Anglo-Saxon, standards, on average 1.1 percent. Toyota is most profitable (2.3 percent), followed by Honda (1.1 percent), Mitsubishi (0.8 percent), and by a large margin Nissan (0.1 percent).

We will now compare the supplier relationships of the four automakers. First, Toyota, Nissan and Mitsubishi have suppliers' organizations, while Honda does not. Honda just has a loosely related group of suppliers (Miwa, 1996). In the foregoing section, three tiers of suppliers were detailed. Published data allows us to elaborate only on the first tier identified and double-checked through the Automotive Parts Industry (API) Yearbook, and publications of the Machine Industries Economic Studies Promotion Association in Japan. The number of second tier suppliers varies between the two largest automakers and the other two (Asanuma, 1989). Toyota and Nissan have far fewer suppliers in the category (191 each) than Mitsubishi (381) or Honda (338). As for the number of first tier suppliers, Toyota (56) and Nissan (57) have double those of Mitsubishi (21) or Honda (31). The number of listed companies among the first tier in Toyota and Nissan (23 for each) more than quadruples that of Mitsubishi (2) or Honda (5). These figures suggest that the two largest companies rely on fewer but larger suppliers, while the two smaller ones rely on a larger number of smaller suppliers. As exhibited in Table III, the percentage of the first tier suppliers over the first and the second combined (B/A) is much higher in Toyota (29.3 percent) and Nissan (30.4 percent) than in Mitsubishi (5.5 percent) and Honda (9.2 percent).

Four factors concerning supplier relationships

As Mitsubishi and Honda only have a few suppliers listed in the stock market, we will only make comparisons between the first tier suppliers of the four majors, both listed and unlisted. We will compare four factors concerning supplier relationships: sales revenues; profitability (Return on Sales); the number of employees; and, the percentage of supplier's equity held by the automaker.

Empirical results

The first tier suppliers identified above amount to 165: 56 suppliers to Toyota, 57 to Nissan, 21 to Mitsubishi, and 31 to Honda. Financial and non-financial data for these first tier suppliers were collected from a variety of published sources including Toyo Keizai's Japan Company Handbook. To gain insights, we conducted one way analysis of variance (ANOVA) tests and made comparisons based on quartiles.

First, size. We utilized sales revenues and the number of employees as surrogates of size. The average sales revenues of Toyota's suppliers (Y 116,147), as presented in Table IV, double those of Nissan (Y 59,056), triple those of Honda (Y 39,025), and quintuple those of Mitsubishi (Y 22,616). The difference between Toyota and the other three companies is significant

		Toyota (56)	Nissan (57)	Mitsubishi (21)	Honda (31)	Average [expected value]
Average revenue**	Sales (A)	116,147	59,056	22,616	39,025	70,098
	I1	0.68	0.30	0.00	0.19	[0.33]
	I2	0.19	0.47	0.50	0.29	[0.33]
Average number of employees		3,070	1,435	598	1,023	1,808
	I1	0.58	0.33	0.00	0.19	[0.33]
	I2	0.19	0.47	0.62	0.24	[0.33]
Average profits**	Net (B)	1,838	570	297	666	997
Average profitability*** (B)/(A)		1.61	0.84	1.40	1.79	1.36
	I1	0.40	0.23	0.46	0.27	[0.33]
	I2	0.22	0.59	0.46	0.11	[0.33]
Average per cent of equity held by automaker		35.9	32.6	42.2	30.2	34.3
	I1	0.19	0.47	0.62	0.24	[0.33]
	I2	0.58	0.33	0.00	0.19	[0.33]

Notes: *Fiscal year ends in March; **Unit Y million; ***Percent. I1 = Q1/(Q2 + Q3 + Q4); I2 = Q4/(Q1 + Q2 + Q3)

*Table IV. Financial data on main suppliers of four automakers**

at the 0.01 level, but the differences between the three companies are not significant even at the 0.10 level. To note, the average sales revenue of Honda's suppliers was nearly double that of Mitsubishi's (Y 22,616), despite the larger sales revenues of Mitsubishi over Honda.

Differences between firms

A comparison based on quartiles enables us to highlight the differences. First, we calculated the top, second, third, and bottom quartiles of the total sample (Churchill, 1991, p. 427). Then, we calculated the number of suppliers of each automaker clustered into the four groups above. The indices we have calculated are, first, the number of suppliers of a particular automaker that can be classified into the top quartile over the rest (I1 = Q4/(Q1+Q2+Q3)). This index shows the proportion of large suppliers. The expected value for this index is, assuming the suppliers are evenly distributed in each quartile, 0.33. The second index is the number of suppliers of a particular automaker that can be classified into the bottom quartile over the rest (I2 = Q4/(Q1+Q2+Q3)). This index shows the proportion of small-sized suppliers. The expected value for this index again is 0.33. The above two indices more clearly demonstrates the differences between firms in comparison with the indices that divide a specific quartile by the total.

Using sales revenues, a high proportion of top quartile suppliers can only be observed in Toyota (I1 = 0.68), double that of the expected proportion (0.33). Nissan exhibited approximately the average (0.30), and Honda showed far below the average proportion of top quartile suppliers (0.19). None of Mitsubishi's suppliers was in the top quartile, indicating that Mitsubishi has no large sized first-tier suppliers in terms of industry norms. Conversely, Toyota had a small proportion of smallest (bottom quartile) suppliers (I2 = 0.19), compared to Honda (0.29) at around average, and Nissan and Mitsubishi way above average (0.47 and 0.50 respectively). Toyota thus had a disproportionately large number of large suppliers with a very few

Productivity per employee very similar across the four groups

small-sized suppliers, while Mitsubishi had the opposite. These two companies are therefore in sharp contrast in their composition of suppliers. Nissan and Honda are in between.

As to the number of employees, the mean of Toyota's suppliers (3,070) was again double that of Nissan (1,435) and triple that of Honda (1,023). The mean for Mitsubishi's suppliers (598) was about half that of Honda. The differences between Toyota and Mitsubishi, and between Toyota and Honda, were significant at the 0.01 level, and the difference concerning Nissan was significant at the 0.05 level. One finding from the comparisons is that productivity per employee was very similar across the four groups (37.8, 41.1, 37.8, and 38.2), suggesting that productivity may not explain the differences in profitability shown below. Using quartiles, each supplier group demonstrates very similar patterns to those revealed in the sales revenue analysis as predicted by the very high correlation between the two variables (0.95). Toyota had a disproportionately high (low) proportion of top (bottom) quartile suppliers (I1 = 0.58, I2 = 0.19), while Mitsubishi had the opposite (I1 = 0.00, I2 = 0.62). Of note, Mitsubishi did not have any top quartile suppliers. Honda showed a low proportion of top and bottom quartile suppliers (I1 = 0, 19 and I2 = 0.24 each), leaving a majority of suppliers in the mid range. In sum, Toyota and Mitsubishi presented most contrasting patterns, and Nissan and Honda were in between. Yet, none exhibited similar patterns.

Overall profitability, measured by return on sales (ROS), was very low across the four automaker supplier groups, at least partly reflecting the low ROS of the automakers. Profitability was quite similar between three of the groups (1.61, 1.40, 1.79), Nissan's suppliers apart (0.8). The differences between Nissan and Toyota, and between Nissan and Honda were significant at the 0.01 level, and the difference relating to Mitsubishi was significant at the 0.10 level. Now, we will compare the ROS of the suppliers and the automakers. $ROS(m/s)_i$ as outlined below represents the relative profitability of a manufacturer over its main parts suppliers. If $ROS(m/s)_i$ is above 1, the profitability of the manufacturer is greater than its supplier. If ROS is below 1, the average profitability of its suppliers is greater.

$$[\quad ROS(m/s)_i = ROS_{mi} / [(\sum ROS_{si}) / N] \quad]$$

ROS_{mi} = return on sales of the automotive manufacturer I

$(\sum ROS_{si}) / N$ = average return on sales of the automotive manufacturer i's

i = 1, - - -, n main suppliers

Toyota has not shared higher profits with suppliers

The $ROS_{m/s}$ for Nissan, Mitsubishi and Honda were all below 1, indicating that the ROS of the auto parts suppliers are higher than that of the automaker. Conversely, the ROS for Toyota was well above 1 (1.43). These findings imply that, in the buyer supplier relationship, Toyota has not shared its higher profits with its suppliers. In Nissan's case, as the firm suffered from sluggish sales and registered losses until 1995 (API Yearbook; Miwa, 1996), the firm's bargaining power has become weakened (Asanuma, 1993; Miwa, 1996). Higher $ROS(m/s)$ enjoyed by Nissan's suppliers (84) in comparison with the groups of suppliers of the other automakers (0.7, 1.75, 1.63) means Nissan's suppliers do not fully share the poor performances of Nissan. In the quartile-based analysis, Toyota had a relatively smaller number of suppliers in the bottom quartile (I2 = 0.22), and a relatively higher number in the top quartile (I1 = 0.40). Nissan had a very high proportion of bottom quartile

Empirical tests may be utilized as a platform for further studies

suppliers ($I2 = 0.59$) and a relatively small proportion in the top quartile ($I1 = 0.23$), mainly reflecting the very low profits recorded by Nissan. As to Mitsubishi's suppliers, a relatively large number of firms were in both the top and the bottom quartiles (0.46 each). Conversely, Honda had relatively few suppliers at both extremes (0.27 and 0.11 respectively). In sum, Mitsubishi showed contrasting differences with Toyota, on one hand, and with Honda, on the other. None showed similar patterns.

The percentage of supplier equity held by the automaker was similar for three makers: 35.9 percent for Toyota; 32.6 percent for Nissan; and, 30.2 percent for Honda. The percentage for Mitsubishi's suppliers (42.2 percent) was much higher than the others, but significantly different only with Nissan at the 0.10 level (one way ANOVA test). In Honda's case, the low figure at least partly reflected the fact that Honda does not have a formally organized but a loosely related suppliers' association (Miwa, 1996). Toyota has traditionally maintained very close relationships with its suppliers (Cusumano, 1985), and this appears to be responsible for the relatively high percentage. In the quartile-based analysis, most notably, in the case of Mitsubishi, a high proportion of suppliers were at both extreme quartiles ($I1$ and $I2 = 0.71$ each). Honda had a relatively high proportion of bottom quartile suppliers ($I2 = 0.69$), while Toyota had a relatively small number of suppliers in that quartile ($I2 = 0.22$). Nissan had a relatively low proportion of suppliers at both extremes ($I1 = 0.19$ and $I2 = 0.16$). In sum, Mitsubishi and Nissan present very contrasting patterns, with less contrast between Toyota and Honda.

The empirical tests we have conducted are exploratory, but may be utilized as a platform for further studies. The propositions generated by our findings are as follows:

P1: Each group of suppliers of the four automakers will be different in size. Specifically, assuming the same proportions of first tier suppliers, then the larger the sales revenue of the automaker the larger the average sales revenue of their first tier suppliers.

Two surrogates may be utilized for size: sales revenue and the number of employees.

PIA: Each group of suppliers of the four automakers will be different in terms of mean sales revenues.

PIB: Each group of suppliers of the four automakers will be different in terms of the number of employees.

P2: Each group of suppliers of the four automakers will be different in terms of profitability, measured by return on sales. The more profitable the automotive manufacturer, the more profitable is the supplier to the automaker.

P3: Each group of suppliers of the four automakers will show a different average percentage of equity held by the automaker concerned.

Conclusion and managerial implications

First, we made comparisons between US and Japanese buyer-supplier relationships in the automotive industry, and then between four of the major automakers in Japan. In the comparative study of the US and Japan, the data support the existence of a clear difference in supplier management between the two countries. Future research directions may be suggested, both conceptually and empirically. First, existing works, including Bensaou and

Venkatraman (1995) and Dyer (1996), have compared automotive manufacturers in both countries as a group. Yet, the supplier management strategies of three automakers in the US appear different, as can be seen by the case of Chrysler. Differences in supplier management between the major automakers in Japan have been under-researched, particularly in industrial marketing, aside from Cusumano (1985). Future research may thus give focus to the differences between the majors in each country and possible convergence between both types of relationship, contractual (arm's length) and relational.

A potential myth

Second, a managerial implication drawn from our exploratory study is that there is a potential myth that Japanese automakers have pursued very similar supplier relationships. They have more likely pursued different supplier relationships based on, for instance, their size and profitability. Automakers in the US and Europe should be more keenly aware of such diversities. Again, related to the above, recent trends have shown the beginning of a convergence between the supplier management policies of the Japanese and the Western automakers (Hill, 1995). Chrysler, for instance, is now trying to develop and maintain long-term relationships with its suppliers (Dyer and Ouchi, 1993). Honda and Nissan meanwhile have increased the number of auto parts supplied outside their keiretsu and by foreign manufacturers (API Yearbook, 1995, 1996).

To conclude, we envisage more research in the field of relationship marketing in an international context. Specifically, in line with our study, we recommend a comparison of major automakers in Japan individually, not collectively.

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