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**Intercorporate Governance:  
Golden Roads Toward the Best-Practice Supplier Relations**

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**INTERCORPORATE GOVERNANCE:  
GOLDEN ROADS TOWARD THE BEST-PRACTICE SUPPLIER RELATIONS**

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Building on a decade of study on supplier relations, I have over the last four years been conducting focused research on how intercorporate governance is organized between automakers and auto component suppliers particularly at various stages of auto component development activities. The purpose of this paper is to give a brief anthology of my recent research efforts, with an appendix of a practical checklist for best-practice manufacturers in the 1990s, drawing on the evidence I have collected as part of the ongoing IMVP (International Motor Vehicle Program) research as well as my previous study that resulted in publishing a prize-winning book, Strategic Industrial Sourcing (1994), Oxford University Press. Though partially still of an interim nature, it is hoped that the information that follows will be useful for both practitioners and researchers to understand where North American, Japanese, and European suppliers stand today and help determine how best to allocate stakeholders' resources and efforts for managing the best-practice supplier relations.

### **Three Regional Types of Auto Component Development**

Based on original field data (total sample size, approximately 300) collected from all the passenger car producers and the majority of first-tier suppliers in four component areas in North America, Europe and Japan, I (1993; 1995) argue that there are distinctive interregional patterns of auto component developing organization.

Briefly, Japanese suppliers carry out projects with the highest design scope of their own and high new design input, accommodating the highest rate of common parts and the smallest number of variants from a project. They concurrently engage most of their product development personnel in multiprojects, flexibly mobilizing know-how across borders. The Japanese average lead time is in a middle range. Taking into account all these factors, they can be compared with middleweight kick-boxers, fully exploiting the flexible and simultaneous use of limbs for competition.

In contrast, North American suppliers are conservative in design, developing an auto component with the least new design features, the least design of their own, and the least lead time. They develop the largest number of variants out of a single component platform, using a mid-range of common parts. They use a dedicated product development organization, especially prominent in the number of hours allocated to a single project. Thus characterized, the North American suppliers could be called lightweight Greco-Roman wrestlers. In Greco-Roman wrestling, the player is not allowed to use the lower part of the body; only arms and the upper body are used for fight if the wrestler's legs and all the other body parts are fully functional.

European suppliers are innovative; they have the second highest new design ratio and the second highest design scope. They exhibit a strong preference to develop unique parts, using a dedicated product development organization and spending the longest lead time. There is a problem of fit between their development organization and the bimodal pattern of new design and derivation of existing design, however. Presumably, derivation of existing design can be carried out better by multiproject involvement. The European model with its orthodox approach to development and long lead time, reminds us of the heavyweight, authentic wrestler, who does not accept anything substandard and whose current standing can only be fully understood in the light of long tradition of European craftsmanship.

Three distinctive regional patterns thus being identified, the adjusted productivity of an average auto component project has been measured in terms of person hours: 37,705 hours for North America, 23,961 hours for Japan, and 41,054 hours for Europe, to date (for more details, see Nishiguchi, 1993; 1995).

### **Resident Engineers: A Brief History**

Some of the most important interorganizational coordination functions between assembler and supplier are carried out by resident engineers. Historically, tendencies

towards collaborative design and production also led to the creation of a manpower institution that came to play an important role in interfirm product development. Japanese automotive producers pioneered in this area. Often at the request of customers or based on mutual agreements, components suppliers implemented the formation of engineer groups, both in development and manufacturing, regularly positioned at their customers' facilities. Hence, the term "resident engineers" or "guest engineers" as are often called in Japan.

In the product development phase, it gradually became common practice during the 1960s and 1970s for major suppliers to send several resident design and/or product engineers to their customers for two-to-three years prior to Job 1.<sup>1</sup> They were incorporated into a project team consisting of planning, design, product and process engineers of the customer (often reinforced with quality assurance and purchasing managers) and other suppliers' resident engineers. They collaborated to solve various design problems and to attain target costs. At this stage, accumulated new model design change proposals from suppliers' production resident engineers (to be discussed below) were re-evaluated and adopted as appropriate. The number of design changes and modifications tended to peak in this phase of new product development. Approximately one year prior to Job 1, production managers from the assembler and suppliers were called in to run pilot production. Teething problems of a new design

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<sup>1</sup> A developed derivative of this is the supplier's "dedicated team" of product development engineers resident at their customers irrespective of product cycles. In Japan this practice was not unusual between assemblers and their "key" suppliers, and the team tended to entail multidisciplinary expertise. In 1988, for example, Nisshin Kogyo, one of the world's largest automotive brake suppliers, had a "product development team," comprising six product and production engineers, one cost analysis engineer, one cost control manager, one accountant and one salesman, regularly positioned at Honda's Research and Development Center. This team served as if part of Honda itself and was heavily involved on a daily basis in the product development and even research of new Honda cars from the very beginning (i.e., 3-to-4 years before Job 1). With other customers, however, Nisshin Kogyo sent resident engineers only when called in. (The author's interviews: T. Miyashita, Manager, Total Quality Control and General Affairs, and S. Nezu, Manager, Production Engineering and Investigation, Nisshin Kogyo, 26 May 1988.)

were sorted out in this process. Frequently, second-tier subcontractors were also involved in this debugging process.<sup>2</sup> The layouts and process technologies concerned were finalized approximately six months before the commercial launching of a new car model. As a result, there proved to be relatively few design changes after Job 1.<sup>3</sup>

Compared with the above process of Japanese new car development, the typical European or North American counterparts were organized radically differently, as reflected in design change patterns. In Europe or North America, design changes tended to skyrocket immediately after Job 1, during the first commercial production year of a new car model.<sup>4</sup> Afterwards, though, design changes tended to decline only slowly, but never to the low Japanese level. In other words, the European and North American producers experimented with the reliability of their new car models in the field. This was in significant part a reflection of a different product development organization especially in North America in which the majority of the automotive components were still designed and detail-controlled by the assemblers in the late 1980s while suppliers' tasks tended to be restricted to producing as dictated. Suppliers' proposals--let alone resident engineers--remained a rare commodity.<sup>5</sup>

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<sup>2</sup> The author's interviews: M. Koitabashi, Manager, Production Section, and H. Tsuda, Manager, Engineering Section, Ishikawa Kogyo, 4 July 1986.

<sup>3</sup> This paragraph is based on the author's interviews with managers of many Japanese assemblers and suppliers in the late 1990s (Nishiguchi, 1994). While details differed from company to company, basic features of collaboration and scheduling of new product development were similar.

<sup>4</sup> The author's interviews: M. Yamamoto, Vice President, K. Yoshinami, General Manager, 1st Sales Department, American Yazaki Corporation, Michigan, 16 March 1987.

<sup>5</sup> Nishiguchi (1988) discusses the problem of the traditional annual bidding system of the North American automotive industry in which supplier switches based on cheaper price alone were so frequent that it institutionally prohibited suppliers from investing sufficiently and resulted in poor product quality.

It is worthy of note, however, that the author's recent field research (focused on automotive components development in North America, Japan, and Europe) has revealed that at the turn of the 1990s "resident engineers" were increasingly being

After Job 1 in Japan, resident "design" engineers were in general called back with the dissolution of the project team itself. But resident "production" engineers remained in the customer's plant on a continual basis. Their main tasks were to observe how their components were being assembled into the car and to report back to their own firm any problems arising thereof including the customer's complaints, and also to give proposals for design changes for easier manufacture and cost reduction. They were in this sense customer-specific intelligence agents who served as much for "preventive maintenance" purposes as for ex post facto dealings. At the supplier, this information was then divided into three categories: the first that must be immediately applied, the second that would be better if adopted in the next model change, and the third to be discarded. The supplier's reaction was then passed back to the customer through its resident engineers. The latter's face-to-face contacts with the customer facilitated this communication. Another important job for resident production engineers was to obtain information about the customer's long-term product strategy and reflect this in the supplier's next proposals for a new car model at an early stage. Again, being resident helped this intelligence activity.

Thus, both in development and production, the institution of resident engineers came to play a significant role in promoting the benefits of bilateral design and collaborative manufacturing in the Japanese automotive industry.

Recognizing the advantage of this system, some Western firms began to introduce resident engineers in much the same manner as in Japan. In 1984, for example, Packard Electric, General Motor's in-house supplier of wire harnesses and electric connectors, received some of the lowest quality ratings from New United Motor Manufacturing, Inc (NUMMI), a Toyota-GM joint venture assembly plant in California, when Packard's first shipment was delivered. Rather than protesting

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experimented by advanced U.S. manufacturers whereas many of the European automotive managers interviewed had not even heard of resident engineers.

NUMMI's decision, Packard managers came to see NUMMI managers for advice. After a series of talks, it was agreed that Sumitomo Electric Wiring systems, a long-standing Japanese supplier of wire harnesses to Toyota, and recently to NUMMI, would provide consultants to help Packard meet the customer's requirements. The consultants, three industrial engineers from the Japanese supplier, stayed at Packard for six months. Drawing on the principles of the Toyota Production System or lean production (Womack *et al.*, 1990), they helped Packard thoroughly to reorganize materials control, layouts, scheduling, quality control, and so on.

While quality and productivity of Packard products rapidly improved, a Quality Resident Engineer (QRE) was also sent to NUMMI. The Engineer spent approximately 50-70 percent of his time at NUMMI and the remainder at Packard's Technical Center. He followed up on issues related to quality, cost savings, manufacturing, production control and pilot vehicle evaluation. This helped Packard a great deal by developing a first-hand, in-plant information source for their products.

As a result of these efforts, the quality of Packard products improved dramatically. Within 18 months of their initial setback, NUMMI was rating Packard as one of its best suppliers. NUMMI's Quality Problem Reports (QPRs) demonstrated the striking decline in Packard product defects: 147 in 1985, 47 in 1986, 10 in 1987 and a mere 4 in 1988. According to a NUMMI quality control engineer who followed this development, "On balance the resident engineer was more important in improving Packard's performance than other joint teams on a short-term basis." The case of Packard Electric has thus demonstrated that the resident engineer system can work in the United States too.<sup>6</sup>

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<sup>6</sup> This case story of Packard Electric is based on the author's interviews with key managers at NUMMI and Packard Electric in the late 1990s. Reflecting the importance of this intercultural learning of the best practice, there has emerged a body of literature which provides fascinating stories about NUMMI and Packard Electric. For example, see Krafcik, 1986; Nishiguchi, 1987, 1989, 1991; Walker, 1988; Gillett, 1992.

## Resident Engineers Today

Let us now examine the degree to which resident engineers from suppliers are prevalent during the development phases of automobile development today.

Table 1 summarizes the degree of resident engineers' diffusion among North America, Europe, and Japan from suppliers of four components (i.e., electronic engine management systems, air conditioning units, brake systems, and radio/cassette combination units) as reported by automakers. The level of analysis is the new car development project in the early 1990s.

Table 1. Diffusion of Resident Engineers from Auto Component Suppliers.  
(The early 1990s)

|                    | ( )=sample size |
|--------------------|-----------------|
| North America (35) | 54.3%           |
| Japan (60)         | 58.3            |
| Europe (76)        | 21.1            |

Source: Nishiguchi's field research

Resident engineers refer to those sent by the supplier to the assembler to work regularly on a nonfee basis for the development of auto components, spending at least three working days a week on the assembler's premises. While more than half the North American and Japanese projects have resident engineers, only one-fifths of European projects carry them.

How then the decision to have resident engineers can be reached? Table 2 provides a regional breakdown of the decision-making process.

Table 2. Resident Engineers: Who's Initiative? (The early 1990s)  
( )=sample size

|                    | Supplier's | Assembler's | Mutual Agreement | N.A.  |
|--------------------|------------|-------------|------------------|-------|
| North America (17) | 0.0%       | 11.8%       | 70.6%            | 17.6% |
| Japan (35)         | 8.6        | 11.4        | 80.0             | 0.0   |
| Europe (15)        | 0.0        | 46.7        | 31.3             | 22.0  |

Source: Nishiguchi's field research

North America and Japan show a similar pattern with most cases determined by mutual agreement. Moreover, some Japanese cases are initiated by suppliers, whereas there is no such case in North America and Europe. On the other hand, close to half the European resident engineers are sent under demand from assemblers.

Regarding man months spent by resident engineers per auto component project in a given car project, Table 3 gives a regional breakdown.

Table 3. Resident Engineers' Man Months per Auto Component Development Project  
(The early 1990s)

|                   |       |                 |
|-------------------|-------|-----------------|
|                   |       | ( )=sample size |
| North America (9) | 40.3  |                 |
| Japan (25)        | 190.4 |                 |
| Europe (8)        | 74.6  |                 |

Source: Nishiguchi's field research

Building on the results of Tables 1 and 2, we can observe distinctive overall regional characteristics. Even though the North American pattern of resident engineers' diffusion and how they come about may be similar to Japan, the actual time they spend on the assembler's site is approximately one fifth of Japan and a half of Europe. Although the small sample size of this particular data must be cautiously taken into account, it can at least be inferred from this that the substance of what resident engineers do may radically differ from region to region. My field interview material has also revealed that in Japan key suppliers retain a permanent pool of resident engineers on the premises of their major customers and collaborate with the latter for a series of long-term projects, entailing basic research and development commitments (see footnote 1 and Nishiguchi, 1994).

### **Toward the Best-Practice Intercorporate Governance**

Some technicalities thus being identified, there are some bottom-line principles of the best-practice intercorporate governance that sustain these institutional arrangements

(Nishiguchi and Anderson, 1995). Notably, the best-practice networks of buyers and suppliers exhibit four properties:

1. Both parties practice win-win behavior consistently.
2. Suppliers and buyers share vulnerability.
3. The more powerful party involves and rewards its counterpart.
4. The system has a recognized leader.

I suggest that these organizing principles help explain successful buyer-supplier collaboration. I argue that, while these principles may be more compatible with the Japanese management paradigm, they can be transferred outside the Japanese context to form a new outsourcing paradigm for Western firms.

### **History Matters**

Before delving further into the principles, let me briefly review how Japanese sourcing networks developed. Compared with common practices in North America and Europe, contemporary supplier relations in Japan are characterized by investments specific to certain contracts and/or customers ("asset specificity" by Williamson, 1985; "relation-specific skills" by Asanuma, 1989; "contextual skills" by Aoki, 1995). This is a historical (not cultural) product of the strategies of large Japanese manufacturers from the 1960s onwards. Faced with increasing manufacturing complexity and product proliferation in the rapidly growing, competitive domestic market, these firms gradually converted many of their suppliers, previously used chiefly for instrumental reasons and for simple processing tasks (such as machining and treating the surface of metals), into contract assemblers and systems components manufacturers, performing much more complex tasks.

In this process, firms transferred technology to suppliers. Customers taught multiple skills to their suppliers in the interest of maintaining product quality. Asset-specific features of contract assembly and systems components manufacture contributed to stabilizing contractual relations. In turn, stability provided further opportunities for suppliers to grow. Over time, the proportion of development and design input from suppliers increased (e.g., black box design, in which customers provide basic ideas and specifications while suppliers work on details), and suppliers even began to provide self-developed technologies to their customers.

For principal manufacturers, the new arrangements secured ongoing sources of production for part of their own products (frequently of a small-lot, specialized and mature kind) without investing heavily themselves. In this way, they were able to allocate newly-freed resources to state-of-the-art technologies and to the development of new products. Outsourcing a variety of production and development activities to external organizations shortened overall lead times and product cycles while enabling many Japanese manufacturers to maintain the full product-line strategy they pursued in the wake of a high-growth economy. Principal manufacturers benefited from the new arrangements by being able to adjust to shifting demand and thereby got ahead of the competition; suppliers enjoyed relatively stable contractual relations together with enhanced responsibilities and increased commitment from their customers.

Along with the development of contract assembly and systems components manufacture, a well-defined clustered structure for manufacturing control, "clustered control," came into being. For instance, parts procurement for particular systems components, or for contract-assembly products, could be concentrated on select first-tier suppliers. Such a first-tier supplier acted on behalf of the principal manufacturer, but the control function resided with the supplier, who managed that function for other suppliers in the lower tiers in the pyramid. Thus, first- and lower-tier suppliers formed a series of clusters for controlling manufacturing and purchasing functions. Again, this

new organization relieved the principal manufacturer from the increasingly complex control functions that accompanied product proliferation and rapid technological progress; at the same time, first-tier suppliers enjoyed prospects for stable growth and enhanced responsibilities.

In short, systems developed in which suppliers took on unusual levels of responsibility for customized products they supplied to a set of buyers. The ability to delegate such responsibility, in spite of the customized nature of the products, in turn freed up manufacturers to turn to the other demands of their principal business. Essentially, suppliers exchanged volume, stability, and growth for a measure of dependence, as they increasingly concentrated on meeting the specialty needs of a single manufacturer.

This is the system which has attracted considerable attention for the results it achieves. What enables this system to work are the four portable principles.

### **The Four Best-Practice Principles**

The first principle of best-practice Japanese management of supplier-buyer relationships is that both sides practice win-win behavior. By this I mean that both suppliers and buyers seek to find ways to create benefits for both sides. Typically, they do so by trying to enlarge the pool of benefits that is being divided. (In contrast, many Western buyer-supplier networks are strained because one party tries to win at the other party's expense by taking a bigger piece of a fixed pie of benefits.) For example, in Japanese buyer-supplier networks, powerful buyers institutionalize certain mechanisms (e.g., joint value analysis meetings and cost reduction conferences) to work with suppliers to achieve cost savings jointly.<sup>7</sup> When the savings are achieved, the supplier cuts its price to the buyer--usually by 50% but not to the full extent of the savings--in exchange for

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<sup>7</sup> In this connection, the formal roles of Japanese suppliers' associations (kyoryokukai) are well studied (Sako, 1993; Nishiguchi, 1987, 1994).

the de facto guarantee of long-term commitments. Thus, even with a lower price, the supplier achieves a return on its improvements in efficiency, thereby protecting its profits and at the same time stabilizing the contractual arrangement. In contrast, powerful Western buyers often impose unilateral price reductions upon their suppliers, leaving the suppliers to figure out how profits can be protected while giving them little or no prospect of continued trading.

An important feature of win-win behavior is that parties pass up short-term gains that come at the partner's expense; this would constitute win-lose behavior, which is unacceptable. Because the relationship is valued for its long-term potential, windfalls are not reaped at the other party's expense.

This is all well and good, but on what basis can the weaker party trust the stronger party not to violate the win-win ethic? The answer is that both parties have some weakness in the relationship because they share "strategic vulnerability." Japanese buyer-supplier networks rest on a bedrock of mutual need, deliberately created and enhanced by the players themselves. This leads to best-practice principle number 2, that buyers and suppliers make sure they need each other, and this the Japanese do. They make sure that each side would suffer significant losses, long and short term, were it to walk away from the relationship.

Strategic vulnerability is created in many ways. One of the most common is to limit the number of trading partners to a handful. As noted above, suppliers are willing to concentrate their buyers in just a few buyers. The buyers reciprocate. They rely on only a handful of suppliers, frequently parallel sourcing very similar but not exactly the same items. This is a marked contrast to the common Western practice of keeping a stable of suppliers available, routinely splitting business among them and switching them around as necessary.

Another way that supplier-buyer networks share vulnerability is to make investments in each other. These investments can be in the form of equity, but they are

more often in the form of dedicated facilities, equipment, practices, and personnel. By "dedicated" I mean tailored to the relationship. A supplier, for example, could adapt its factory, its processes, and even its location to the needs of a particular buyer. That buyer, in turn, could invest in developing an intimate working knowledge of the supplier's personnel and procedures. Personal bonds, specialized knowledge, tailored equipment, convenient siting--these are examples of experience-based assets that grow slowly and represent a substantial investment in the other party. When such assets are in place, the advantages they create make it difficult to walk away from the relationship. When the supplier is in trouble, there are incentives for the buyer to help. Depending on the degree of trouble, it is not unusual that a "rescue" team comprising engineers and other specialists is dispatched from the buyer's company to the supplier and stays there until the problem is solved. (Nishiguchi [1994] provides extensive empirical evidence on these.) Contrast this with the common practice of trying to keep suppliers as interchangeable as possible so that they may be played off against each other.

If shared vulnerability pins parties to their place in the network and if both parties practice win-win behavior (motivated by their shared vulnerability), relationships should be cordial. But will they be productive? An insurance policy against complacency in these relationships is best-practice principle number 3: Involve and reward your counterpart. In the Japanese auto industry, best-performing outside suppliers fill a much higher proportion of parts needs than they do in North America. (North America may be an extreme; outsourcing is much more common in many European markets.) Buyers (e.g., Toyota and Honda) frequently are more powerful than their suppliers. The buyers involve their suppliers heavily in problem solving and decision making. To do so, they share confidential information (e.g., proprietary designs and plans) early. Suppliers are expected to use their information and access in order to be innovative and responsive to the buyer's needs. Performance on these

dimensions is rewarded in terms of awarding or renewing a contract with an increased volume.

A further insurance policy against complacency in stable relationships is best-practice principle number 4: One of the parties in the network should play the role of leader, a role that is recognized by the other players. The leader in Japanese buyer-supplier relationships appears to possess a sort of "legitimate authority" in the eyes of the other players in that the leader's suggestions and initiatives are respected and followed. The leader role is essential because without it the parties in the network have difficulty achieving closure on projects and settling disagreements. The leader breaks deadlocks and circumvents inertia. As deadlocks and inertia occur readily in systems which neither party can exit readily, the leader's role is critical. Notably, the type of leadership exercised in these systems is not a simple exercise of oligopoly power, an exercise which threaten the followers' autonomy and create power struggles. Rather, the leader in question makes sure that various constituencies within the networks do not operate at cross purposes, which would lead to their disintegration.

Who will be the leader? Who will be tacitly granted legitimate authority? Leaders in Japanese buyer-supplier networks are organizations which are proven performers. Their good performance leads their partners to attribute expertise to the leaders and to defer in case of deadlock. But when performance slides, the leader's role is in jeopardy and if the faltering leader's role were to be maintained, oligopoly power, if any, would have to be exercised to compensate for the decline in the leader's legitimate authority. Clearly, this is not functional, and it should be stressed, not all Japanese networks are functional; only networks headed by better performing firms are effective.

These four best-practice principles (practice win-win behavior, share vulnerability, involve and reward your counterpart, acknowledge a system leader) are interlocking. Each principle is necessary--and none by itself is sufficient. Sharing vulnerability

insures against exploitation (the degradation of win-win behavior). The system leader makes the mutually vulnerable partners take initiative and risk, thereby renewing and extending their relationships and blocking the threat of stagnation. Against the assumption of stability without exploitation, win-win behavior encourages cooperation. And with that cooperation as a norm of the relationship, involvement and reward bring out the performance that has attracted attention to Japanese buyer-supplier networks and that encourages a level of outsourcing that is unusual by traditional Western standards.

### **Conclusion**

There are regional differences in organizing auto component development among North America, Japan, and Europe. Resident engineers are identified to play a critical role in best-practice auto component development and manufacturing. Sustaining institutional arrangements are the four principles of best-practice suppliers relations (i.e., win-win behavior, sharing vulnerability, involvement and reward, and leadership) that are proposed and discussed as a crucial competitive weapon of intercorporate governance.

## **Appendix: A Practical Checklist**

This checklist is provided here as a useful reminder for practitioners and researchers to pursue and identify areas of questions when inquiring into the attributes of the best-practice manufacturer in the light of intercorporate governance. The issues covered are applicable to assemblers and suppliers.

### **1. Product Planning and Development**

- 1.1 How is your firm's product planning organized?
  - 1.1.1 Contracts with your customers and suppliers
  - 1.1.2 Decisions on carryover or brand-new designs
  - 1.1.3 Degree of product variations from one platform
- 1.2 How is your firm's product development organized?
  - 1.2.1. Lead time and Phases (sequential or overlapping?)
  - 1.2.2. How many people in what functions in which phases?
  - 1.2.3. Who leads the product development (a "heavy weight" project leader or bookkeeping manager, what's the leader's background)?
  - 1.2.4. How are customers and suppliers involved (part of the project team, early involvement in what functions in which phases, resident, percentages of their involvement in design in value or part numbers, or only tangential contacts)?
- 1.3 To what extent are suppliers' components off-the-shelf or detail-controlled by the automaker?

### **2. Manufacturing and Outsourcing**

- 2.1 How is your firm's manufacturing organized?
  - 2.1.1. How are manufacturing people involved during development phases?
  - 2.1.2. At which development phase does tooling begin?
  - 2.1.3 When do design changes occur most (their cost as a percentage of original tooling investment)?
  - 2.1.4 Degree of common parts with other car platforms
- 2.2. How are suppliers selected (predetermined or by bidding, how many compete and actually win a contract)?
- 2.3 Single, dual, or multiple sourcing?
- 2.4 How are components prices determined (target costing, annual reduction or increase in price)?
- 2.5 How are supply contracts organized (development contracts, production contracts, release orders, purchase orders, for how long)?
- 2.6 Terms of payment for suppliers
- 2.7 The role of your firm's purchasing department
- 2.8 How is communication with suppliers organized (primarily through the coordination of the purchasing dept. or various departments contacting directly)?
- 2.9 Evaluation of suppliers (who does it by what methods)?
- 2.10 How is quality control organized at your firm and suppliers?

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