Changes and Challenges of Japanese Automobile and Auto-Parts Industry

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The Automobile Industry in Japan and Germany: Strategic Challenges and New Perspectives in the Age of Globalization
October 12, 2004, in Tokyo, Japan
Changes of Japanese automobile production

The trend of motor vehicle production in Japan

\[ \text{(industry-wide)} \]

Source: *World Motor Vehicle Statistics*, compiled from the data
Changes of Japanese automobile production②

The trend of motor vehicle production in Japan (by manufactures)

Number of production

Source: World Motor Vehicle Statistics, compiled from the data

Toyota
Nissan
Honda
Mitsubishi
Mazda
Suzuki
Daihatsu
Fuji
Isuzu

Year


(10 thousands)
Changes of Japanese automobile production

Productivity and number of employee
(include Auto-Parts industry)

Source: World Motor Vehicle Statistics, Census of Manufactures, compiled from the data
Number of model and average number of variation per model

Source: Car Specifications, compiled from the data
Changes of Japanese automobile production

Number of model and average number of production per model

Source: Car Specifications, World Motor Vehicle Statistics, compiled from the data
Price changes of popular small cars in Japanese market

Source: Automotive yearbook, compiled from the data
Present state of Japanese automobile market

Prospect of automobile market trend

Price and cost

Value of product, Environment and safety technology

Present

Future
The competition is becoming ever severer!!

Higher Value, Meets Consumer Needs Better
||
Value of product & Environment and safety technology

More cost-effective & shorter lead-time
R&D and production
The structural change of the Japanese supplier system
(companies level)

Source: Japanese Automotive Parts Industry, compiled from the data
Changes of transaction structure②

The structural change of the Japanese supplier system②: overall (parts level)

Source: Automotive Parts Sourcing in Japan, compiled from the data
Changes of transaction structure

The structural change of the Japanese supplier system by supplier systems (parts level)

Source: Automotive Parts Sourcing in Japan, compiled from the data

n=86 parts
Changes of transaction structure

Ratio of new entry and exit companies
(parts level)

Source: Automotive Parts Sourcing in Japan, compiled from the data

n=86 parts
The amount of development that suppliers undertook in component development

<table>
<thead>
<tr>
<th>Percentage Interval</th>
<th>Number of Suppliers</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-10%</td>
<td>11.3</td>
</tr>
<tr>
<td>10-20%</td>
<td>5.7</td>
</tr>
<tr>
<td>20-30%</td>
<td>7.1</td>
</tr>
<tr>
<td>30-40%</td>
<td>5.7</td>
</tr>
<tr>
<td>40-50%</td>
<td>1.4</td>
</tr>
<tr>
<td>50-60%</td>
<td>4.3</td>
</tr>
<tr>
<td>60-70%</td>
<td>5.0</td>
</tr>
<tr>
<td>70-80%</td>
<td>7.8</td>
</tr>
<tr>
<td>80-90%</td>
<td>14.2</td>
</tr>
<tr>
<td>90-100%</td>
<td>31.2</td>
</tr>
<tr>
<td>No answer</td>
<td>6.4</td>
</tr>
</tbody>
</table>

(n=141 companies)

The change in this ratio over the last 4 years

- Decrease
- Increase
- (Unchanged)
- No answer

(n=141 companies)

Change in relationship with manufactures over the last 4 years, from suppliers point of view

- a. Timing of participation has become much earlier
- b. Increased number of on-site guest engineers
- c. Increased face-to-face communication
- d. More frequent overall communication


(n=141 companies)
R&D-related ties between assemblers and suppliers is becoming closer with regards to “development of completely new technology”
  - Relationship is becoming “closer” in terms of “knowledge chain”

For projects that only involve “mere improvement of established technologies”, both assemblers and suppliers tend to expand transaction base, without being limited to their long-term partners.
  - Relationship is becoming more “open” in terms of “product chain”

At least for leading suppliers, transaction relationship is becoming “more open” and “closer” concurrently at the same time
The core suppliers can be further classified into two groups; “Ones that are able to work as assemblers’ R&D partners in generating completely new technology” and those that are not.
Thank you very much for your kind attention!!