A Case Study of Joint Product Development in Automobile Industries - Collaborative Development of a Light-duty Truck by Passenger Car and Truck Manufactures-

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The purpose of the thesis is to investigate the actual process of product development by collaboration, and to recommend success factors for future joint product development.

Most of the case studies in automobile industries focused on the product development of passenger cars, as the consumer goods, and their collaborations among passenger-car makers at their joint venture.

This thesis focused on the joint product development by consumer goods and industry goods manufactures that has different product domain, and took the case of truck development as production goods. In particular, the following points are discussed:

① How the differences of main products business domain and the features of consumer goods or production goods effects on the joint product development?
② What kind of internal adjustment should be made in two companies, and how know-how and technologies of them shared?

I chose the practical case of light-duty truck development by Toyota Motor and Hino Motors. The trucks, developed through the successfully collaboration are sold by both sales

networks, under the name brand of “Hino Dutro” and “Toyota Dyna / Toyoace”. In addition, they are supplied to Daihatsu Motor in the same group, to sell with the name of “Daihatsu Delta”. Since debut in the market in May 1999, total market share and sales amount have increased by year and year.

For the main success factors, three points are picked up as follows;

First, there are dissimilarities in main products, users, and business domains between Toyota and Hino. One is the passenger cars maker, and other is the truck and bus maker. So it is not necessarily sensitive for the flow of technologies and know-how to each other.

Second, there existed variety of communication as the cross supply of their products and licensed production of Toyota vehicle, between two companies before the joint product development of light-duty truck.

Third, both companies could enjoy their contribution of technologies to the integration of the product development system. In this process, Hino became the leader of the product development, and Toyota acted as the technical adviser for Hino, and supplied Toyota’s know-how and technologies to the weak point of it. Finally they could produce the brand-new light-duty tracks, included both companies and market demand.

For the future collaboration among companies, following three points are recommended;.

1. The differences in business domains between two companies may lead the successfully joint product development by collaboration. This is because that, if both main products and markets are similar, the outflow of technologies and know-how to other side will cause the conflict between them.

2. Collaborative companies are not only seeking short-term benefit but also building long-term partnership. They had better to establish good relationships in advance to joint work, for example, cross supply of their products, technical tie-up, and licensed manufacturing.

3. Making contributes to merits of collaboration, they have to make their clearly objectives of it. Toyota’s goal was to secure 40% domestic market share, while Hino’s strategy was

to build the good standing in the light-duty track market. Therefore, the light-duty track development by collaboration became a common interest for them.

These conclusions and recommendations are based on the limited case studies, and it is necessary to add some other case studies.