
Transfer of Management System to the Asian Countries

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1. Integration of the affiliated and subcontracting companies as semi-corporate units

When analyzing the Japanese Management System not on the level of a single enterprise, but rather on a broader scale that includes also the subcontracting and affiliated companies, we can pinpoint some important characteristics of the Japanese-style management. On viewing a Japanese corporation from the perspective of “Internal Organization”, we can see that the relationship between the parent company and its subcontracting and affiliated companies is extremely close. These companies, serving as semi-corporate units like the internal departments of a corporation, assume important positions. That is to say, these subcontracting and affiliated companies are not just subcontractors for product parts, they are special semi-internal organizations of a corporation in that they have not only executives but also middle management despatched from the parent company for temporary assignments. And while they communicate a high level of information to the parent company, they also receive from

the parent company almost the same amount of information as its internal departments. For instance, the “Kanban System”(Just-in-time inventory system), representative of the Toyota production, is made possible by the close relationship between the parent company and its subcontracting and affiliated companies.

In comparing the subcontracting and affiliated companies of Japan and those of the U.S.A., there are remarkable differences. First, the subcontracting and affiliated companies in Japan are closely-related to the parent company in terms of capital, human resources, transactions, information, technology and so on. The subcontracting companies are structured into layers, ranging from the layer of immediate subcontractors to the layers of multiple subcontractors receiving orders from the immediate subcontractors. In the U.S.A., however, there are very few subcontracting companies that function in the same manner as the semi-corporate organizations in Japan. Although U.S. enterprises also place substantial amount of orders with subcontractors, the subcontracted manufacturers are independent from their corporate clients in capital, technology and personnel. Unlike Japan, that is, the U.S.A. does not have the structure of subcontracting companies in layers.

Second, the subcontractors in Japan often rely heavily on a specific parent company and their transactions are for long term, whereas the subcontractors in the U.S.A. seldom rely on one specific corporate client and the transactions are for short term.

The above accounts for the structural characteristic of the Japanese enterprises in their low percentage of parts manufactured within the company. Since the Japanese enterprises have integrated the subcontracting and affiliated companies(especially the immediate subcontractors) as

semi-corporate units, they exchange information and personnel with each other frequently during the product development and the pre-production stages. For this reason, the parent company is able to entrust the subcontracting companies to develop and to manufacture product parts, resulting in a low percentage of parts made at the parent company. On the other hand, since there is no subcontracting relationship in the U.S.A as the semi-corporate units in Japan, the U.S. enterprises have to develop and design the essential product parts on their own during the stages of product development and pre-production. Naturally, there is a higher percentage of parts manufactured within the U.S. companies. Furthermore, the U.S. enterprises are characterized by developing a great portion of the manufacturing equipment on their own. From the above, we can see that the U.S. enterprises are more advanced than the Japanese enterprises in the vertical integration of production.

Next, we will examine the internal organization of the Japanese enterprises—especially the production relationship—from the perspective of the international technology transfer. When Japanese enterprises launch business in the semi-developed and developing nations, the biggest obstacles to production are the difficulty to secure the supply of parts and the problem with the manufacturing equipment. In the Asian countries where many Japanese enterprises expanded their businesses, these companies had to import a considerable amount of essential parts and manufacturing equipment from Japan because the local industries manufacturing the necessary parts and machinery are not well-developed. Therefore, most of the Japanese enterprises in Asia end up functioning as assembly plants. The governments of these Asian countries are increasingly urging the Japanese enterprises to increase the manufacturing of parts in their

countries and to promote the technology transfer. Although the Japanese enterprises also made efforts to answer these requests, in reality, their attempts are not necessarily successful.

To think in theoretical terms, one of the causes lies in the Japanese management system which is structured with the subcontracting and affiliated companies integrated as semi—corporate units. In other words, due to the characteristics of the Japanese parent company in the low level of vertical integration in production and the low percentage of parts and equipment manufactured within the company, the parent company is unable to accumulate the technologies and know-hows to make parts and equipment on its own; therefore, when the parent company expands operation overseas, the production or the improvement of essential parts and machinery by the overseas subsidiaries become difficult. To begin with, when a product is said to have the technology transferred overseas, strictly speaking, 100% of the parts shall be made in that country and the parts assembled in that country as well. In transferring technology overseas, it is important to accomplish not only the stage of assembly but also the manufacturing of essential parts in that country. As a matter of fact, the emphasis in transferring technology to NIES, the rapidly developing Asian economies, has shifted towards increasing the percentage of local procurement and improving the quality. Given these factors, the Japanese-style management may not function necessarily in a favorable way. Unlike the Japanese enterprises, the U.S. multinational corporations are free from the concerns of parts procurement and equipment because they produce a greater portion of the parts and equipment by themselves. From now on, in order for the Japanese parent company to promote the technology transfer of essential parts through the expansion of sub-

contracting and affiliated companies overseas, and to increase the percentage of essential parts manufactured by the overseas subsidiaries, it will be necessary for the parent company to obtain assistance in technology and human resources from the subcontracting and affiliated companies.

2. The lack of manuals at production plants

One of the characteristics of the Japanese management system is that the Japanese enterprises, in comparison with the U.S. and European companies, are slow in adopting the use of manuals. In Japan, manuals in the written format of job descriptions, standard operation procedures and operation guidebooks can hardly be said detailed and these manuals are often not utilized effectively.

The reason can be found in the characteristics of the Japanese-style company organization. That is, in the Japanese structure of management, the job content, responsibility and rights of the individuals are not well-defined, thus deterring the adoption of manuals.

Manuals are commonly used in the U.S.A. for some special reasons. Because the U.S.A. is a multiracial country with immigrants from many countries, the communication among the workers and any attempt to achieve mutual understanding were difficult. Other than the differences in religions and races, there were also many workers who could not speak English to a sufficient level and those who were not technologically trained. Under such circumstances, the division of labor and the specialization of the work had to be carried out thoroughly in the U.S.A., thus giving rise to the need to prepare detailed manuals regarding the contents

of work, methods of execution, responsibilities and rights. On the other hand, since Japan is a homogeneous nation, the communication and mutual understanding among the workers are not likely to be hindered. Furthermore, since the employees are trained thoroughly within the company, even without written instructions like manuals, they can perform their duties without any problems.

However, in the case of the technology transfer to Asia, the situation differs from that of Japan. In a survey conducted by the Japanese Association of Corporate Executives, 168 out of 203 executives representing the Japanese companies in the ASEAN countries responded that manuals are “necessary” for departmental management.

When transferring the management know-hows to the semi-developed and developing nations as the ones in Asia, especially for the purpose of promoting technology transfer and allowing the technology to take root, it is necessary to actively initiate the use of manuals and written instructions. This is because many countries in Asia are multiracial, and there are very few technologically skilled labor. Therefore, rather than pursuing the Japanese approach of familiarizing each employee with the know-hows and the knowledge on production and technology, it is necessary to enable the unskilled labor to learn and to utilize the technological know-hows with the help of written instructions and manuals. Even in a situation with high labor turnover, by using manuals, it is possible to train the employees efficiently within a short period of time. Also, by accumulating the knowledge and know-hows on production and technologies in manuals and written documents, it enables the technologies to take root after the transfer.

For the Japanese enterprises overseas, the demand for the localization

of personnel and technology is on the rise. On the other hand, given the insufficient number of expatriates from Japanese enterprises, the overseas offices have to make do with a small number of Japanese engineers. In order that the product quality and the technology do not deteriorate when the number of Japanese expatriates decreases or after they are repatriated, it is important to carry out technology transfer with the active use of manuals. One of the reasons for the rising discontent towards the technology transfer of the Japanese enterprises in Asian countries is that since the technologies and know-hows are not recorded or stored in a written format, the technologies of these Japanese enterprises cannot be shared or utilized by others. The Japanese enterprises have been putting their priority on the educational training of OJT(On the Job Training) rather than on the preparation of manuals. Of course it needs no reiteration regarding the importance of OJT, but from now on, the emphasis shall also be placed on preparing and promoting the use of manuals. We shall pay attention to the remarkable success of the U.S. multinational corporations in the way they prepare detailed manuals, train local personnel and make efforts to facilitate technology transfer. For example, according to a survey conducted by the Japan Overseas Enterprises Association on U.S. and European enterprises in Thailand, it is reported that "All U.S. and European joint-ventures in Thailand have manuals or small handbooks regarding their technologies. The manuals or handbooks are mainly in English(45%), 22% in both English and the Thai language, and 33% in Thai only". Based on a survey the author conducted on the Japanese enterprises in Taiwan, 65.5% of the companies have compiled manuals.

When it comes to actually preparing the manual, however, there are

various kinds of problems. First, there is the problem with the language. In the Asian countries, many kinds of languages are spoken. Even within the same country, depending on the races and the regions, the languages are different. It is of course most convenient to use English ; unfortunately, only the managers and engineers with high educational level can understand English whereas the common workers seldom do. Meanwhile, it is difficult for the Japanese people to translate the manuals from Japanese into the local languages, given how different the local languages are from the Japanese language. Consequently, the translation has to be left to the capable local people. It is, therefore, imperative to have local engineers who are proficient in Japanese, English and the local language. In promoting the use of manuals, there is this tremendous barrier of language.

Second, since Japanese executives have little experience with the use of manuals, they cannot shake themselves free from the Japanese-style management system. If the use of manuals is to be promoted, the only way is by trial and error in that country. From now on, in order for the Japanese enterprises to promote the use of manuals overseas, it is necessary for the Japanese headquarters to provide substantial support, to facilitate information exchange among overseas subsidiaries and to actively promote the accumulation of information for the manuals. Storing information at the headquarters helps not only the transfer of technology to other nations but also, the information can be used as reference materials to draw up overseas strategies at the headquarters or to train officers for overseas assignments.

3. Developing skilled labor in the internal labor market

The workers at the Japanese plants are in general characterized by their highly skilled labor and ability to perform various kinds of jobs. Theoretically speaking, their expertise was nurtured over the long tenure of their employment and by the scheduled shop-rotation within the internal labor market of the company. The skill of the Japanese labor can also be attributed to the high educational level in Japan.

In this respect, the Asian countries are quite different. Although the Asian countries are various in nature and they cannot be brought up en bloc for discussion, they are almost in common with each other in that they all have few skilled labor, little chance for promotion or career development within the company's internal labor market, and high turnover rate of the workers. There are several studies in Japan conducted regarding the development of skilled labor in Asia. In Asia, the various types of corporate jobs and occupations are directly linked to the external job market. When there is a vacancy to a position, it is often filled by the most suitable person recruited from the external labor market. Therefore, it is difficult to develop skill labor through the long-termed, scheduled shop-rotation as practiced by the Japanese enterprises.

In Asian countries with such background, the Japanese enterprises are bound to encounter difficulties when they transfer their production or technology to these countries using the same kind of machinery and plants as in Japan. In order to adapt to the environment of the Asian plants, if circumstances require, it is advisable to adopt appropriate technology to modify the design and equipment of the Japanese plant.

“Appropriate technology” refers to the technology which matches the technological level of the local operators as well as the cost of production, quality, quantity and the types of products. When deciding on the equipment for installment and the design of the plant, it is necessary to take into consideration the important factors as to what level of skillfulness is required from the operators, what technological level is needed for the maintenance of the machinery and how to adopt the labor-intensive technologies. Often, the latest and most sophisticated machinery are designed to perform specific functions. They require a high level technical skill from the operators and are in general very expensive ; yet, in order to make the return on investment, it becomes necessary to keep the machinery in operation for a long period of time. In view of these, instead of the latest machinery, it is perhaps more appropriate to have machinery that operate with the standardized technology—technology that can be handled by the local level of technical skill. Under certain circumstances, it may even be necessary to install used machines or to make adjustment to equipment in Japan.