I. GENERAL BACKGROUND

Thailand's industrial development starts from 1960's with 3 main policies of promoting domestic and foreign private investment in the form of joint venture, import substitutional industrialization and export oriented agro-industrialization, and public investment in infrastructural facilities.

However, manpower development program both educational and training programs for supporting the policy of industrialization is still lacking and received little interest in both public and private sectors.

Since the stage of industrialization of Thailand is in the stage of turning point from low level of technology to higher level of technology, more diversification of production and highly competition in both domestic and foreign markets, thus education and training programs for manpower development in the industrial sector is an important factor for the future development of Thailand.

However, there are some problems relating to the education and training program development in the industrial sector in Thailand, such as

(1) the majority of workers' education is relatively low (about 70% of workers finished only primary school)
(2) the lack of concrete measure for strengthening of skills development in both public and private levels
(3) the needs of continual efforts to raise work performance and responsibility as well as work efficiency and discipline.

According to these circumstances, we should consider both on how to level up the general knowledge of the majority workers and how to develop a skills formation program for the present stage of industrialization.

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Footnote

1 This was emphasized by Prof. KOIKE KAZUO in his series articles in "NIHON KEIZAI SHIMBUN" from 19-26 Jan. 1985, on "JUKURENRODORYOKUEISEI NO NIHON. TAI HIKAKU" (Comparative studies on Skilled Labour Formation in Japan and Thailand.)


3 Dr. KONOSUKE ODARA "Manpower Training in the Japanese Industries-A Note on Japan’s Experience in Human Resources Development in Line with Industrial Development." a paper presented at "Symposium on Human Resources Development in Asean and the South Pacific Countries" 24-25 April, 1985, JICA, TOKYO

4 See : Konosuke Odaka (1985) pp. 6-7 for further critical comments on Japanese experiences.

5 This strategy was adopted by the big firms, see : Toshio Ishikawa "Vocational Training" Japanese Industrial Relation Series No. 7, The Japan Institute of Labour, Tokyo. 1981, pp. 31.


7 According to Prof. Jitsuo Tawara "Jugyoin Kyoku No Kaekata Susumekata" (Employee’s Education: It’s Thought and Promotion), NIHON RODO KYOKAI, TOKYO, 1978 pp. 63-66.


9 See : more detail in Toshio Ueda, Tsuneomi Mishima and Hirotada Terazawa "OJT Ni Ihusu Kotohada Katsudo.” (Make a good use of small group activities for OJT). NIHONNORITSUKYOKAI, Tokyo, 1983.

10 See : Koike, (1985) op. cit.


14 Hitachi Co., Ltd. is an example company, which paid much attention to this matters and was a pioneer one


16 The small and medium scale enterprises which do not have sufficient financial resources would even give up their manpower training.


18 The number of this group of people is said to be around 20% of middle level employees.


20 See : Toshio Ueda ; ibid, pp. 21.
with further attempts to systematized the human resource management.

Concerning to the practice of skills formation in Thai and Japanese manufacturing firms, it was said that, although there were some degree of differences in detail, but the general practices were the same that skills formation did not rely upon training from outside of the firms but by experiences within the firms, by long term works and work rotations in the firms, and the work experiences or skills were gained from gradual steps—from easy works to more complicated works and from solving problems of unusual troubles in the process of production at the production line. It could be said that the present skills formation in Japanese industry was not mainly from schools, vocational training centers and apprenticeship system nor the formal off-the-job training courses within the firms, it was absolutely from on-the-job training, namely training through working on the shop floor. In practical fields, learning by doing is very important in skills formation and development. Thus, the Japanese education and training which centered on the so called on-the-job training is seemed to be a key factor that contributed to the success stories of Japanese companies.

Although the so called O.J.T. would play a leading role in promoting skills formation, the patterns and intensity of O.J.T. vary from one occupation to another and from one industry to another. And the system of O.J.T. in practice, may be different according to the stage of economic and technological development, cultural background of the society, the environment and policy of the firms.

In this sense, it is debatable that the Japanese system of O.J.T. will become the model for other countries or not, and what are the Japanese experiences for a developing country like Thailand.

Therefore, the purpose of this paper is to survey the system and function of O.J.T. as a mechanism for skills formation and manpower development in Japanese companies. And the Japanese training system will be analysed.

II. CONCEPTUAL FRAMEWORK

1. Education and training framework

The definition of the so called “on-the-job training” or O.J.T. is relatively important, because without the clear definition, the word O.J.T. might give the wrong understanding.

On-the-job training should mean that “the superior person or leader of the working place has consciousness in mind and has an action plan to promote and level up self-development of his subordinates or his followers capabilities and attitudes, through working on the job and relating to the job, by individually guidance and training”.

In relation to the system of education and training, the ultimate aim of it’s activities is directed to increase the three dimensions of human resources, namely, the knowledge, the skills and the attitudes, which are the important factors to support and fulfill the actual activities of human being. In this sense, O.J.T. is not only the method of education and training, there is another kind of education and training that is off-the-job training which is also very important and has great impacts on the development of capable human resources.

But concerning the skills formation, O.J.T. is the main method of training and off-J.T. is the complementary of supplementary method to increase the achievement.
This two methods of training have both strong and weak points. Thus, both kinds of training are necessary because its complementary effects to cover up the weak points of each method of training.

However, education and training achievement is also depend upon the strong intention of self-development of the trainee himself. The motivation and ambition for self-development and job satisfaction are also the condition for the successful training.

Moreover, the basic and general knowledge and education are also related to the speed and the level of skills formation as well as the method of education and training programs. The basic education is just not only the problem of what level of education that the trainees have finished, it should be considered on the detail contents as well as the real knowledge attained from schooling as well.

The above mentioned factors are systematically interacted to each other and are shown in the illustration as follows

![Diagram](image)

2. On-the-job training program

The company, in Japanese sense, is an organization which formed up by people who will share the same fate together. The feeling of one family life is relatively strong in the members of the company. And the long term commitment by the top managers and the general employees is based on mutual trust in which can be said as a special characteristic of Japanese style management. The seniority system of wage and promotion are also the practice in Japanese company. These characteristics are the background of Japanese present growth and stability.

The pattern of on-the-job training which was developed as a system of education and training within the firms today is considered to be the appropriate human resource development in Japan. This O.J.T. conceptual framework is based on the human capital approach in which the important factors of management are consisted of "man", "material" and "money". In the case of human factor, the capable human resources are the engines for the long term growth of the organization. To develop the capable human resources, the top leader should interest and actually promote the activities of total education and training programs, such as

1. Have a concrete policy and guideline actions

2. Have the program of education and training according to the rank and file for the staff and the line persons, and organizes it step by step

3. Have a special skills and knowledge program for all interested persons.

The above mentioned programs are the real program for human resources development.
III. O.J.T. DEVELOPMENT IN JAPANESE INDUSTRIES

Although, on-the-job training was developed as a system in Japan 30 years ago, it was rooted in Japanese industries that most of The training was primarily conducted in the form of on-the-job training on O.J.T. This principle continues to be a basic characteristic of education and training in Japanese companies, both the large scale enterprises and small and medium scale enterprises.

According to Prof. ODABA’s analysis there are four reasons that O.J.T. has been a dominant form of occupational training in Japanese industries.

(1) Japanese education has consistently stressed the upgrading of general intellectual capabilities (such as languages and arithmetic) make it both necessary and sufficient that the industries fulfil the need for practical training.

(2) The process of Japanese economic development has resulted in a considerable rise of capital intensity in production, whereby increasingly complexed and expensive machinery have been introduced, replacing skilled craftsmen. As a consequence, the work process of factory workers have progressively become complementary to production equipment.

(3) In the complex system of production, activities are performed by groups. And when the work organizations grow in size, the indispensable know-how and information for the task can be learned and acquired only through on-the-job training.

(4) The relatively rapid adoption of foreign technology and production methods and since the imported technology was not quite identical from one factory to another, it demanded the individual firms to tailor the worker education specifically to meet the needs of individual firms, and such training was most often conducted on the job.

In addition to these reasons, the homogeneity of work force with a reasonably high level of education attainment has in effect shortened the period of training, and under the life time employment system, the work force is usually recruited straight from school and stays with company until retirement age, thus it is necessary for the company to adopt the policy to provide training and retraining within the firm and is generally intended for acquisition of skills and attitudes conducive to organized activities and adaptable to technological changes.

These kinds of high adaptability and capability would likely help the company remaining its competition in domestic and overseas markets. Thus training is generally intend not so much for specific job, and may be better described as “employee training” rather than “vocational training” and may imply that training is actually for job individuals are called to do.

Large scale enterprises which hold a virtual monopoly of particular training or highly developed, may use their own methods of O.J.T. because the amount and type of training offered by public vocational training are inadequate for their needs. It is also economically feasible for large companies to invest in general and specific training, especially for young employees. Since they are able to provide more up to date equipment and instruction for use in training and that training skills can be mastered more effectively if simultaneously related to a real world production situation. And their training may be of higher quality or with lower cost involved when comparing to the external
training program because of time away from production can be arranged in more convenient way and without impact on production output.

Apart from skills formation, attitude towards work, group, and the existing system of practices in particular shopfloor is also an important factor which must be trained on the job level. Especially in Japanese society, human relations is very important and groupism is very strong, therefore one's feeling and attitude should be harmonized with the majority of the group and the climate of the working place. In some cases, the so called TATEMAE (one's stand) and HONNE (one's real intention) means something. In this sense, on-the-job training is relatively easy to develop and grow in Japanese organizations.

From a technological perspective, the Japanese emphasis on O.J.T. can be evaluated in the desire for a higher level of employee's capability. And through developing employee's feeling and attitude towards work and member of the group, the active and lively job site can be attained. Thus improve the communications and harmonious at workshop level which in consequence will increase job satisfaction.

Further more, the Japanese spirit of team work and groupism which supporting the highly effective small group activities at the shop floor level, also supported the system of O.J.T. And the function of small group activities can be easily integrated into the system of O.J.T., thus these kinds of training are seemed to be a good method of organizational ability development in The Japanese organization.

However, the success of O.J.T. is much depend upon the attitude, know-how, ability and recognition of supervisor of group leader in the shop floor. The seniority system concerning wage and promotion, human relations and the system of supervision and evaluation on O.J.T. by the higher level manager, have resulted in the improvement of O.J.T. practice. A senior who is an instructor or O.J.T. leader has to educate and develop himself in order to train and supervise his junior followers to increase their work capabilities and having desirable attitudes with high responsibility and efficiency. These kinds of activities become a system of work and were encouraged by the strong determination of self-development both in learning and working of Japanese employees. Although, it was said that until 30 years ago, Japanese workers even in the big firms believed that the know-how will not easily come form the teaching from someone but they have to steal from someone. However, in the case of general know-how, it might be something but for the specific and the most valuable know-how might be another, even in the present time. Nevertheless, it can be said that the spirit of self-development, learning facts by listening and learning skills by doing are relatively strong in Japanese way of practices. Thus, the amount of education and training is strongly determined by how good relation and trust are created between the senior leader and the junior follower. In this relationship, The senior leader will not only guide his subordinates in formal duties but also counsel on variety of personal issues. These kinds of leader are regarded as a good leader in Japanese traditional value. In facts, both job performance and personality are highly evaluated in the Japanese style management. Thus, O.J.T. is a system that fit to the Japanese culture and is widely adopted in Japanese firms.

Again, it should be noted that self-development is an important factor in the process of O.J.T. The importance management attaches to self-development is indicated
by the comprehensive set of programs such as providing information and financial assistance to employees on education by correspondence. Surely, “One can lead a horse to water but one can not make him drink.” In the same way, management can provide a range of training and education programs but the programs are effective only if employees are willing to study. This is also the true story for O.J.T. as well. It can be said that the Japanese spirit of self-development and learning by doing are resulted in the successful implementation of O.J.T. Therefore, O.J.T. is seemed to be an appropriate training method in Japan.

As the larger part of capabilities (as much as 80%) is depend upon O.J.T., Thus the effective of O.J.T. practices is depend upon the setting up of long term planning for manpower development programs of the company. Education and training programs both O.J.T. and Off-the-job training for all level of employees and the manager themselves are necessary. The establishment of a section or the assignment of staff to be in charged of planning and carry out the education and training programs within the company and the external training programs provided by specialized agencies is a forceful action. Especially, it should be reminded that education and training programs for the supervisors and group leaders level to develop and improve their capabilities as well as techniques and method of training people or preparing them to be a good instructor is a precondition for the O.J.T. It should be also realized that only the motivation is not enough, the system of O.J.T. which facilitated with O.J.T. manuals and promotive system, would give a good hand and greater chance to the persons who involving in O.J.T. to increase the effective results.

The above mentioned measures and policies are widely adopted and actively executed by all most large scale companies in Japan, with some adaptations according to their own conditions, and some degrees of differences in development.

However, we can say that the activities of O.J.T. is a pattern of manpower training and has been a dominant form of skills formation in Japanese companies, and it is an appropriate training method for Japanese socio-economic conditions and Japanese culture.

IV. SOME PROBLEMS IN O.J.T.

Concerning on Japanese companies emphasis on the human capital approach, Prof. Dore has suggested that Japanese approach will become the model for other industrialized countries to follow because of the efficient. However, it is dangerous if the practices in Japanese company be seen as total success stories. There are some instances where the short sighted managers had not considered the human resources as the most important factor, especially during the recession period, the activities and budget on education and training for employees would be limited.

There are also numerous instances where young workers do not accept the discipline and low emphasis on individual merit and there are many instances where middle level executives experience “burn out” and low productivity. The so called “MADO GIWA ZOKU” is an example which increasing in recent years because of rapid changes in technology and business practices.
At the same time, it can be said on the problem of O.J.T. development in Japanese firms.

Although it is widely understood that O.J.T. is a pattern of manpower training in Japanese companies, the clear and sufficient understandings of O.J.T. system still have some gaps among people concerns. According to the survey of 1010 employees on the understanding of O.J.T. conducted by the Japan Monopoly Cooperation in December, 1977, there are only 31% of employees who having good understanding. The majority, 61% of employees, understood the gist of O.J.T., while by classifications the general employees have less understanding when comparing to the supervisor and managerial classes.¹⁹

Without full understanding of the system and clear guidance as well as continuity of training policy in the company, it is hardly to expect the effective results. Some companies may have a good system, but only the form is not enough. Practically speaking, the negative results of O.J.T. are from the lack of consciousness and understanding of people who involving in O.J.T. activities, especially the low level of employees.²⁰

There are also many causes that hindering the development of O.J.T. For example, the trainers who in charge of O.J.T. programs do not fully understand the necessity of the system. At the workshop level, when the diary work is very busy, it is very hard to spare the times for training purpose. The old aged people are sometimes reluctant to this system and still believed in the old practices of a apprenticeship. Some manager even thought that O.J.T. is only for the newly recruited employees and some do not prepare capable trainers, facilities, manuals, times and promotive systems for O.J.T. activities in all levels of workshops and in the long term perspectives.

The system of O.J.T. itself has also some week points which should be carefully supplemented by giving various kines of Off-J.T. programs either within the company or outside the company.

The weak points of O.J.T. are for example, it is usually trained in a narrow scope and has tendency to finish at that workshop. It is very much depended upon the capability of the trainer who may be an highly skilled employee but may not be a good trainer. Some trainer may not like to use the manuals because of his bias thinking or just dislike the written guide books and manuals which were prepared by the staff managers. The quality and level of know-how in which the O.J.T. was conducted at each workshop level and at individual level, may be different and imbalance. These problems are arised partly from the behavior of individuals and partly from the structure and function of organization.

In this sense, the total system which integrated O.J.T. system as a part of its operation would be necessary. Organization development is seemed to be one of the important factors for the successful development of O.J.T. And through the system of job rotation as well as promotion system, the multi-skills formation based on O.J.T. activities would be effectively developed.

V. CONCLUSION

The development of O.J.T. depends on the good matching between the trainer and trainee, likes the catch ball game, and the enviromental circumstances of the workshop level as well as in the whole organization.
The Japanese experiences in O.J.T. development may be concluded in this paper that the mixture of experiences with know-how and strong determination of self-development are the basic foundations of progressiveness in Japanese O.J.T. On the other hand, the adopt and adapt efforts are also stimulated the growth and the continuity of O.J.T. in Japanese industries.

Finally, the P.D.C.A. cycle, namely, Plan. Do. Check and Action, to standardize the system and level up the performance of O.J.T. is seemed to be the wisdom of Japanese employees. This can be said about the group dynamic actions of Japanese people.