PARTICIPATION OF SME IN MANUFACTURING IN NATIONAL DUAL TRAINING SYSTEM

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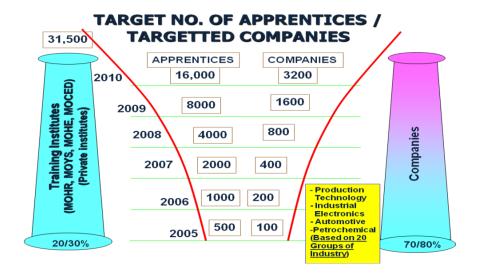
ABSTRACT

The National Dual Training System (NDTS) is a system that was adopted from European country which is structured with two learning environment in dual training. This training system would be able help to resolve the issue of incompatibility of skilled workers in order to meet the needs of the industries. On the contrary, many SMEs were not aware of the advantages due to several factors. NDTS allowed the practical or handson training to be conducted in the industry while the theoretical work would be carried out in the learning institution. The main aim of government introduced the NDTS was to produce 31,500 skilled workers by 2010 trained with the new approach. Therefore, this study aimed to identify the significant factors that influenced SMEs in manufacturing sector to participate in the NDTS. The study made use of quantitative and qualitative methods whereby the data were collected through survey questionnaire and interview. The survey had been conducted within the mechanical as well as electrical and electronic industry where some of them had been briefed on the implementation of NDTS. This research would be focusing on Motivation, Human Resource Development (HRD) and Culture as well as Pragmatics. Out of 403 questionnaires inclusive of mailed, emailed and walked-in, only 161 were returned. Hence making the response rate were 39.9 percent. The finding proved that the key factors that influence SMEs were cost implication, lack of promotion by Department of Skill Development (DSD), lack of guidance and downstream activities by DSD, company's reluctance to release their coaches and lack of management commitment in the company also cited high labor turnover, lack of knowledge about how to train and limited resources, as some of the reasons for no training. Research findings suggested that DSD needed to further encourage, promote, guide, reward and continually support on allowances of the trainees. In conclusion, three factors cost, promotion and guidance are found to be the most influential in determining participations of SMEs in NDTS.

Introduction

In response to the global changes in technology, the nation's industries signaled the demand for skilled workforce and a comprehensive training system. Thus, last May 2005, the Government of Malaysia introduced the NDTS to produce 31,500 skilled workers by 2010. This initiative was also expected to stimulate the training of K-workers to meet the human capital demand. The Department of Skills Development (DSD) (before known as National Vocational Training Council) was given the responsibility to coordinate the training activity and responsible for the introduction and implementation of the system.

The training system will resolve the issue of skilled workers being produced but not meeting the needs of the industries since 70 % of the learning need to take place within the actual working environment. The other 30 % was expected to be the theoretical input from the participating training institutions. The type of training is determined by the industries in collaboration with training institutes. The system is targeting school leavers, and workers from small and medium industries (SMIs) and multi-national companies. The parties involved in the program are the Government, DSD, companies or employers that sponsor apprentices and providers of workplace training, and selected training institutions.



There are two programmes to choose from. The industry may choose the day-release programme or the block-release programme. In the day-release program apprentices are trained at the industry for four days a week and spent the remaining days at the training institutes. In the block-release programme trainees need undergo training for five months in the industry and one month at the training institution for every semester. Nevertheless, both the industry and training institute are allowed to make any adjustment as required. The training is designed using several approaches:

- i. Hands-on and knowledge training to be conducted by the coaches at the industry. While at the institute, the instructors from the public or private training institutions or coaches from the industry conduct the training programs.
- ii. Training program may also be conducted by industries at their premises together with the instructors from any approved training institutes.

The number of skills courses under the NDTS increased annually to meet the requirements of the industry. The curriculums were designed base on work process as practised by the industry. The results from the work process can only be accessed with the help of skilled workers who are deemed experts in their field of work and possess sufficient experience to be able to reflect their own learning processes (Spöttl, G. 2000).

The general structures of NDTS are as follows:

i. Scope of implementation:

The scope of implementation includes public training institutes as partners of NDTS. The public training institutes are:

- a) TEVT institutions under MOE (polytechnic and Community college),
 - b) MOHR (Industrial training institute and Advanced Technical Institute),
- c) MOYS (National youth skill training institute), and
 - d) MARA (Malaysia skill institute).

ii. Duration of training

The duration of training is 2 years consisting of 4 semesters.

iii. Practical and theoretical training

70 % of practical that is done at the selected company workplace and the remainder of 30 % of theoretical learning at the training institutes.

iv. Methods of implementation

There are two types of implementation method:

- a) Day-release program, where students are trained at the company for three or four days a week and spent the remaining days at the training institute.
- b) Block-release program, where trainees will be trained for four month in the company and two month at the training institute.
- v. Theory classes and instructor-trainee ratio:

The number of trainees for theoretical is 20 persons per class while ratio of coach to trainee for practical class is 1 to 3.

vi. Target group and admission requirements:

The target groups for the NDTS program are SPM school leavers and workers. The company undertakes the enrollment, with specific admission requirements such as interview, aptitude and dexterity tests. Selection of trainee are done by the Company under coordination of a Placement Committee.

vii. Teaching and learning approach:

The approach of NDTS is self-reliant learning, action-oriented teaching with assessment of learning and work assignment.

viii. Evaluation and certification:

The evaluation of NDTS is based on examination and assessment. Whereas the certification is awarded by DSD as Malaysia Skill Certificate Level III (MSC III).

ix. Incentive for employers:

The employers will get tax incentive or reimbursement from Human Resource Development Fund in return.

THE STUDY'S PROBLEM STATEMENT

Available literature revealed that in Malaysia the small and medium sized enterprises had not sufficiently undertaken training commitment as part of their business operation. Even through various policies and strategies have been introduced to encourage those businesses to commit a more significant role in training their own employees, but many are still unwilling to invest in training.

Study from Wold Bank (The World Bank 1997) indicated that the reasons why small and medium sized industries in Malaysia were not interest to participate in training activities as follow:

- Training is not affordable because of limited resources;
- Training is costly because of high labour turnover;
- The firm lacks knowledge about training techniques and organization;
- The firm uses a mature technology, so learning by doing is sufficient;
- Skilled workers are readily hired from other firms;
- Skills provided by schools are adequate;
- We are sceptical about the benefits of training.

Most SMEs are not sufficiently conscious of their environment and of the necessity to keep their company adapted and up to date. Take example the experience of DSD in organizing seminars to explain the implementation of NDTS. The first seminar was held at Sunway Resort on September 2005. Out of 1000 invitations only 300 enterprises attended the seminar. DSD organized similar seminars in a few other states throughout the country base on zoning, i.e. north, south, east, west Peninsular Malaysia and east Malaysia. Only159 firms agreed to join NDTS. The reason given by the industries why they do not participate in NDTS in the seminar are as shown in Table below:

Table 1: Reasons given by the industries why they reluctant to participate

No.	Reasons	No of companies response
a.	Not able to provide monthly allowance to apprentices	9
b.	Not enough incentive from government	11
c.	The government should be responsible to train and produce skill workers	7
d.	No qualified coaches in the company	9
e.	The machine/facilities in the company could not be shared by apprentices	8
f.	No experience to undertake training	6
g.	We have enough workers and do not want to take new workers in the near future	6
h.	Others Company already has its own training program. Possibility to link the existing company's training program with NDTS. Small company – no continuous job. Not viable to train new workers. Different scope of work. No confidence the apprentice will stay long with the company. Problem with local workers. Experienced high turnover. Problem to access to plant.	10

Source: Report on NDTS series of dialogue with CEO, 2005

Despite the government strong encouragement and supports for human resource training for SMEs, the Malaysian SMEs generally did not reciprocate. This research study is geared to investigate why many SMEs do not participate in NDTS program. Key indicators which influence the participation of SMEs in NDTS need to be identified. These indicators will then be used by DSD to develop strategies to enhance NDTS participation among the SMEs. The success of NDTS implementation will inevitably rests on their active participation.

The study is to find out the significant factors that influence the participation of SME in NDTS. It will provide relevant information to answer the following research questions:

- a) How is the market structured under the specific consideration of SMEs in Malaysia and how are the SMEs structured?
- b) What are the significant factors that contribute toward participation of SMEs in NDTS in the perspective of Malaysian Industries?
- c) How can the participation of SMEs in NDTS be improved in Malaysia

Category SMEs in Malaysia

The small and medium sized enterprises (SMEs) sector forms an important part of the development and developing economies. The SMEs sector in Malaysia plays a significant role in the national economy. The sector's contributions to the nation's economy can be seen from various aspects such as in term of business units, employment opportunities as well as economic output. Apart from these contributions, the SMEs sector in Malaysia is also known to make other value contributions such as regional income generation, savings, training, stimulation of competition, aiding large firms, introduction of innovation, and as a seed-bed for growth. Generally, SMEs are defined into two broad categories:

Manufacturing, Manufacturing-Related Services and Agro-based industries

"Small and medium enterprises in the manufacturing, manufacturing related services and agro-based industries are enterprises with full-time employees not exceeding 150 or with annual sales turnover not exceeding RM25 million"

Services, Primary Agriculture and Information & Communication Technology (ICT)

"Small and medium enterprises in the services, primary agriculture and Information & Communication Technology (ICT) sectors are enterprises with full-time employees not exceeding 50 peoples or with annual sales turnover not exceeding RM5 million"

Table 1: Definitions of SMEs by the National SME Development Council

	Category	Micro-enterprise	Small enterprise	Medium enterprise
1	Manufacturing, Manufacturing- Related Services and Agro-based industries	Sales turnover of less than RM250,000 OR full time employees less than 5	Sales turnover between RM250,000 and less than RM10 million OR full time employees between 5 and 50	Sales turnover between RM10 million and RM25 million OR full time employees between 51 and 150
2	Services, Primary Agriculture and Information & Communication Technology (ICT)		Sales turnover between RM200,000 and less than RM1 million OR full time employees between 5 and 19	Sales turnover between RM1 million and RM5 million OR full time employees between 20 and 50

Source: SMIDEC, 2004

Problem of SMEs in Malaysia

In recent decades, few researches have been made to identify problems faced by the SMEs. Regular problem facing SMEs is using an out of date technology in their operation. The problem faced by SMEs can be divided to internal factor and external factor. The internal factors such as lack of skilful workers, lack of experts, lack of experience and out of date technology are the problems faced by SMEs. Whereas, the external factors such as the economic factor, technology, socio-cultural, governmental, demographical and politics are the factors for several problems faced by SMEs.

Business companies as well as SMEs are usually having problems with their operations. Several researches have been made where SMEs are facing a lot of problems in their operations that will impair their competitiveness (Hashim, 1999; Huang & Brown; Chee.P.L., 1986). All the researches found that part of the source of operation problems in SMEs is lack of skills and knowledge.

According to Chee (1986), a serious problem facing SMEs is the lack of skilled workers. A part from that, SMEs also have to compete with big companies to grab skilled workers in the market. Then, SMEs often blame the big companies for offering high salary and interesting workplace to their skilled workers.

In an earlier study conducted in Malaysia, Hashim (1999) identified and reported the nature of the business problems experienced by SMEs in the manufacturing. In the study the researcher uncovered 196 problems

from 96 owners/ managers of small and medium manufacturing firms and the result 69 problems (35.8 %) were determined to be related to human resource management and 31 problems (16.1%) with financial management. After that a research that has been made by Hashim in year 2005 about the human resource management problem in SME found that 56.5% is the shortage of workers. Meanwhile, 20.3% is shortage of skilled workers. When the shortage of workers problem are being add up, (skilled workers and unskilled workers) they lead to 78% total of human resource management problem in SMEs. Other problems facing by SMEs are high rate employee turnover (13.2%), workers lack of training (7.2%) and non motivated and not committed workers (5.8%). As these problems that have been stated above are facing SMEs, a special training programme need to be planned so that SMEs will not facing any problem regarding lack of workers, especially the skilful workers, besides that, high employee turnover can also be reduced (Hashim 2000).

In recent years, the importance of training and retraining in an organization has been expressed in several researches. Big and small organizations have aware to upgrade their workers' skill to be more competitive. Formal training need to be given to the workers, only skilful and trained workers are capable to produce quality products and fit to compete in the world market.

Through formal training, companies not only obtain workers with new knowledge and skill, but also will change the attitudes of those workers.

Study Design

This study focuses on the investigation of the factors that influence the participation of SMEs in the NDTS. The research will utilize the triangulation approach which includes quantitative and qualitative methods. The initial research design for this study include a detailed questionnaire for experts which aims to assess the importance of a number of factors affecting participation SMEs in NDTS.

Population and Sampling

The SMEs companies which have been briefed on the implementation of NDTS will be involved in the study. The study will be carried out among the training personnel of industries, the target respondent is the human resource manager and/or operation manager from the industry. The study will include the elements or factors significant to participate in NDTS such as motivation, HRD and culture. Focus will also be on the pragmatics which includes organizational change, investment in HRD and learning environment

Result of the study

A total of 403 guestionnaires were distributed, 161 out of 403 were return by the respondents. Resulting in the response rate of 44%. Preliminary survey conducted on the SMEs companies indicated that out of 161 questionnaires received, 88 respondents knew about NDTS existence, but still did not participate in it, 59 of them were interested to participate in NDTS. Whereas, the balance of 31 respondents out of 161 were found to be not interested to participate in any training activities. In summary, from the total of 161 respondents only 42 companies (23.6%) are micro enterprises, 98 firms (55.1%) are small enterprise and 38 firms (21.3%) are medium enterprise.

The study has revealed related factors and reasons on why companies were not interested to participate in NDTS such as follows:

- The company still needs more attention and guidance from DSD because NDTS is new system;
- NDTS is too costly to be implemented;
- The company lack of resources, in particular time and financial;
- NDTS very often are organized poorly. They do not offer the knowledge which is required;
- The management of company lack of learning culture that should facilitating and enabling company to grow and develops capabilities thus enhancing profitability;
- The company normally sceptical about the benefits of training;
- Follow up and follow through by DSD is still weak;

- The company still does not understand deeply about NDTS structure especially with regards of coaches, curriculum and training providers as a partner;
- The company does not have motivation in the adaptation of new work practices that have move towards more sophisticated systems of human resource management and changes in business strategy;
- The company is reluctant to release their skill workers/coaches due to business activities;
- The government incentives such as tax exemption are insufficient for NDTS implementation;
- Employee's initial education and training were very good. Therefore company decided not to participate in NDTS; and
- Awareness about NDTS programme through the promotional campaigns done by DSD is still
 insufficient and at the surface.

On contrary, this study also revealed the related factors that influence SMEs to participate in the NDTS were as follows:

- The company having sufficient equipment for the training.
- Trainees or workers trained in the company under real production conditions meet exactly the skills and attitudes that particular business operations require.
- By training more trainees as needed by the company, it can contribute a pool of highly skilled workers which stabilizes the labour market and gradually reduces the risks of "poaching"
- NDTS creates a solid corporate identity and pride to contribute to the success of the company's which increase productivity and reduces employee fluctuation.
- It saves recruitment cost and greatly reduces or eliminates the risk of employing the wrong person because attitude and performance of the trainees can be observed over a long period of time.
- NDTS saves the cost and time consume of work process orientation, better familiarisation with organisation and identification of necessary skills upgrading courses for workers recruited from the labour market.
- Top management commitment for implementing NDTS programme.
- After completion of NDTS, company can select the best performers for continued employment and release the others. This increases and secures the competitiveness of the company's.
- The workers being trained according to the company's needs.
- The worker's interest/readiness to undergo the training.
- Agree to cooperate with other company in staff's training.
- Being a NDTS provider greatly enhances the image and reputation of the company's, because company name is printed on the certificate.
- National obligation.

Summary and Recomendation

Apparently, the findings showed that the Department of Skill Development (DSD) needs to plan for some big strategies in their future action plan. Briefing and seminar is insufficient since NDTS is still a very new system to the Malaysian SMEs employers. The SMEs organisations were aware about NDTS, but they still did not participate because they may be confused, need more convincing attention and guidance from DSD. Furthermore, they are not sure about the structure of NDTS with regard to the roles of coaches, curriculum, and training provider as the partner and trainees enrolment matters.

It seems that DSD promotional plan and strategy should be improvised and more aggressive effort to be in place. There must be a master plan of the promotional activities and massive promotional advertisement to attract the organisation to buy in NDTS programme that offer good incentives that provide win-win situation. Responses from SMEs organisation showed that they need to be guided, to be followed up and to be followed through continuously by respective DSD officers.

Obviously, the finding from the study shows that SMEs in Malaysia still lack of interest in training, that's why they are a bit reluctant to release their skill workers and coaches to participate in NDTS programme due to its business activities. This is in line with the study from (The World Bank (1997) which indicated one of the reasons why industries in Malaysia were not interested to participate in training activities is that many

firm were lacks of knowledge about the long-term benefits for their organization. Thus, smaller enterprises with fewer employees may not have financial resources to employed professional staff to create training plans and utilises other human resources management tools. In addition, it is also difficult for SMEs to send large number of employees on training course in due to both the financial implications and the SMEs business activities.

Moreover, the finding of this study also showed that most company does not have the motivation in the adaptation of new work practices that move towards more sophisticated systems of human resource management and changes in business strategy. This is because of the technology used by SMEs is often out of date. In-line with Chee (1986) finding, the technology used by small firms in Malaysia is often outdated. In addition, according to Hashim (2005), some small firm did not used new technology due to capital constraint. He concluded that many small firms rely on traditional technology which in many cases is inefficient. Another study by Ghazali & Shaari (1988) suggested that SMEs did not utilise the latest technology that is available in the market.

Interesting the factor of funding and cost for training can be considered as important from the opinion of respondent. "The company doesn't have enough monetary funds for training" and "Training is costly because of high labour turnover "shown as a major factors why companies not participate in training activities. This is consistent with previous study by World Bank (1977) finding that one of the reasons why industries in Malaysia especially SMEs were not interested to participate in training activities due to 'Training is costly because of the high labour turnover'. This is the first barrier of mentality that needs to be addressed, so that smooth implementation of NDTS could be materialised. Therefore, the success of NDTS implementation is more likely to depend on involvement of training institutions and participation from industries especially the SMEs.

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