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NURTURING NATIONAL DUAL TRAINING SYSTEM TOWARDS GOVERNMENT-LINK COMPANIES' (GLCs) STANDARD

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ABSTRACT
It has been thirteen years since National Dual Training System (NDTS) was introduced and implemented as a training system with the potential to produce human capital that is labeled as knowledge worker (k-workers). Trainees will undergo 70% hands-on training in work environment and 30% theories at training centers. Not only talents needed by industries are produced, trainees are also getting early exposure to the real work. This paper discusses the strength of the dual system implemented in industries. In order to fulfill the mission, strategy, and thrusts of the Training Master Plan for Occupational Skills Development, three aspects of enhancement were listed, (1) full utilization of the Human Resource Development Fund (HRDF), (2) enforcement of specific laws strictly and prudently for the smooth implementation, and (3) making full use of the research information, obtain for the purpose of long-terms solutions in NDTS implementation.

Keywords: *Government-Linked Companies, National Dual Training System, Skills Development*

INTRODUCTION
The National Dual Training System (NDTS) a holistic training system uses the concept of a dual system from Germany. The system is to address the concern on the aspects of skill development alone. It also emphasizes the integration of knowledge, skills, values and language in the learning process (Habsah, 2009). It uses the National Occupational Core Curriculum (NOCC), developed based on the current policies of the government in national development programmes and carried out by a group of experts in a particular field of work (Pang, 2009; JPK 2009; Ahmad, 2005).

The main difference between the two systems executed in Malaysia and Germany is that in Malaysia the main role is driven by the central government, while the industry functions as a supporter. This is opposed to Germany, where the private sector plays a major role and dominant in the bilateral training system. Most companies in Malaysia are fully ready from various aspects to take over the main role and responsibilities carried out by the government. On 19 May 2004 the Malaysian government decided to implement the NDTS and began the implementation in the year 2005. It is expected to produce a skilled workforce of 31,500 knowledge workers (k-workers) by 2010 (SDS, 2005). It is introduced to develop skilled k-workers through a comprehensive and up-to-date training methods to meet the industry requirements (Malaysian Vocational Training Council, 2005).

The NDTS approach is able to reduce the number of skilled manpower that does not meet current industries' requirement. It provides exposure to real work environment required by apprentices in industries. To create understanding and exposure on the implementation of the system the Centre for Instructor and Advanced Skill Training (CIAST) has conducted series of exercises to relevant stakeholders. This new skill training system was introduced based on the principle of dual-location training exercises, at training institutions as well as workplace.

The implementation started in the early 2005, through joint ventures between companies and training institutions. Trainees will undergo between 70 to 80 percent hands-on training in real work environment and between 20 to 30 percent theory at training centers. It was introduced to produce

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skilled worker in accordance to the requirements of the industry and reduce the mismatch between workers' skills with the needs of the industry. Not only the talents needed by industries are produced, even the trainers are getting early exposure in doing the real work. There are two types of methods carried out. They are, (1) Day Release System – a four-day course in industries followed by one-day theory related lecture, and (2) Block Release System – three to four months of practicum-training followed by one to four weeks of theory related lecture.

The NDTS is offered to graduate of 17 years old and employees employed by companies. However, companies are not obligated to offer employment upon completion of the programme. Trainees will receive allowances if tasks during NDTS are completed within two years. Coaches will also receive a certificate of K-workers, equivalent to the Malaysian Skills Certificate (MSC) Level 3, Malaysian Skills Diploma (MSD) Level 4 Qualification or Malaysian Skills Advanced Diploma (MSAD) Level 5 certified by the relevant organizations.

GOVERNMENT-LINKED-COMPANIES (GLC) GROWTH

Public enterprises faced with a problem of poor performance (Ip, 2003; Ahmad Meyer 2001; Majumdar,1998; Lin et al, 1998; Gale, 1981; Abdul Aziz, 1990; Sheerwood, 1971; Walters & Monsen, 1977; Basir, 1990; Shaharuddin, 1990). Based on the literature reviewed, the cause of public enterprise poor performance can be divided into two main elements, namely the themes of ecology and ecological entity. According to Sheerwood (1971), the instrument of public enterprises is not suitable to be practiced by all, particularly by the third world countries. This is due to the difference of ecology or entity between the third world and the west. However, studies by Walters and Monsen (1977) have shown that public enterprises in the west are not immune from experiencing poor performance. According to Walters and Monsen (1977), the ownership structure of the entity by the government has led to poor performance.

In the context of entity-ownership, Walters and Monsen (1977) have suggested two weaknesses of the company's achievements in the west. The first reason is the most reputable company is in a state of bankrupt. This led to huge losses, rendering the country paralyzed. The second reason is due to the country that has led an engagement goals and achievement of royal succession, which receives impressions from the government. The accountability of influence for commerce reputable experts assessed was based on uniform clues. Thus, it is financially necessary to maintain free and flexible in practice in order to achieve the economic goal. According to Gomez (1990), similarly, the involvement of kingdom lay when the company has opened the way to a class that has considerable political influence and other like-minded individuals with the kingdom, to gain wealth and form a new capitalist class in the country.

Several elements are to be taken into considerations to differentiate NDTS from other training systems. Among them, the need to develop skills and social values explicitly in the process of teaching and learning in order to improve the technical sense of self-esteem, self-confidence and sense of achievement among trainees (Donna, 2007). This is conducted by integrating the subjects in the curriculum in order to meet the needs of industries. NDTS is a training system that is unique because it emphasizes the duality of bilateral cooperation of the industry and training center in every aspect of its execution (Ahmad, 2005). NDTS operation is performed using the semester system in which each apprentice must attend training for 4 semesters and they are also given the option of whether to attend training with day-release approach, where they will train for 3-4 days a week in the industrial center and 1-2 days at the training center. Another approach is Block-Release Approach, where they will attend ongoing training for 3-4 months and 1-2 month at industrial center at training center respectively in one semester (Gilani, 2006; Ahmad, 2005). The NDTS training involves a ratio of where 70-80 percent of the training is based on the practical experience of hands-on training in the industry, and the remaining 20-30 per cent is based on the basic knowledge and theory which is "minds-on" at training center (NCC, 2009).

To attract apprentices to attend this training system, they are given a monthly allowance of MYR350, MYR400, MYR450, MYR500 in the first, second, third and the final semesters respectively (Ahmad, 2005). In addition, the ratio of 1 trainer per 20 apprentices at training centers and 1 coach per 3

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apprentices in the industrial hub will be put into practice to ensure the effectiveness of teaching and learning for apprentices in both theory and practical. The apprentices will attend this training system based on the NOCC and also Learn and Work Assignments (LWA) curriculums, which will be developed jointly by the industrial and training centers. At the end of this training, apprentices will be awarded with a certificate of k-workers NDTS (Ahmad, 2005; Pang, 2010) and it is at par with the Malaysian Skills Certificate (MSC) Level 3 which is also supervised by Department of Skills Development (DSD, 2009).

Recent study conducted on GLCs' Perception towards NDTS by Asnul and Salina (2017) found that majority of the respondents stated that GLCs' perception towards NDTS is average as illustrated in Table 1. Ultimately, the network and collaboration between organizations and industries could help to ensure graduates be able to face the challenges of globalization.

Table 1. GLCs' perception toward NDTS

No.	Perceptions	NS	S	A	G	VS
1	Training Concept	11.2	13.8	21.2	47.5	6.2
2	Curriculum	3.8	15.0	22.5	32.5	26.2
3	Technical Abilities Apprentice	1.2	20.0	48.8	15.0	15.0
4	Social Abilities Apprentice	12.5	28.8	18.8	22.5	17.5
5	Multi Incentives on Apprentice	5.0	10.0	43.8	25.0	16.2
6	Multi Incentives on Industries	21.2	7.5	33.8	18.8	18.8
7	Training Infrastructure	0.0	10.0	21.2	37.5	31.2
8	Image of Working in Industries	18.8	17.5	31.2	15.0	17.5
9	Apprentice Competencies	12.5	11.2	36.2	23.8	16.2
Percentage of Perceptions		10.7	14.9	30.8	26.4	18.3

NS: Not Satisfying, S: Satisfying, A: Average, G: Good, VS: Very Satisfying

In this discussion, the strengths and weaknesses of NDTS implementation are stated in order to fulfil the satisfaction levels of performance from the NDTS trainee.

Relevant Curriculum with Industry Growth

Networking and collaboration with industry should be developed as early as possible, especially during curriculum development. Improvements towards curriculum should be conducted in an on-going basis to achieve the aspired quality. In order to reduce the gap between industry and society needs, the curriculum developed should be fully occupied with activities related to industries and courses taught in the training center.

Lecturers from Industries

This could be implemented without a Memorandum of Understanding (MoU). According to McAdam and Leonard (2003), corporate bodies and industry often have a Corporate Social Responsibility (CSR) programme. They will always lend a hand to contribute to the social and community service organizations, and it will be much easier if we have a network and collaboration with their organizations. For instance, in Polytechnics has organized a seminar for students on free trade. Also, a company, Astronautic Technology Sdn. Bhd., a company that is primarily associated with up and coming Razak Sat and Tiong Sat satellites, has contributed their expertise to students in the field of satellite electricity. This enables the latest technology being shared with the students in polytechnics. The curriculum implemented is parallel with the development of industries, and would be able to produce graduates who are able to compete globally.

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Work-Based Learning Programme
Students who enrol in the Work-Based Learning programme have their own advantages. They are involved and exposed in real work environment. Hence, it would be easy for employers to continue recruiting them.

Industry Solely Concerned with Profit
Industry involvement in the formulation of the curriculum sometimes only benefit industry alone. For example, if the industry that we invite to be a counselor in the formulation of our curriculum-based robots, they will advise us to use their products as one of the content of the course. There are also industries that are less willing to cooperate with organizations when asked to give their views and suggestions for the curriculum improvement.

Lack of Commitment from Industries
The Work-Based Learning programme cannot be fully implemented in the teaching and learning. The participation and commitment of the industries are desperately needed. Based on previous studies, several recommendations were made to improve and encourage the networking and collaboration with industry directly.

DISCUSSION AND CONCLUSION
Under the Eight Malaysia Plan, there are a number of initiatives in the implementation of NDTS. Among the feedback that have been given is a system of education and training provided should be able to (1) generate employment for skilled worker, (2) develop a knowledgeable host, (3) individual that has passion for continuous learning, and (4) produce an entrepreneurial knowledge worker with the ability to get and use other knowledge, especially in information technology (Malaysia, 2001b). A concerted effort has been made to increase the supply of skilled and knowledgeable workforce via education and training programme development. The operation emphasizes a close cooperation between training institutions and industries. This is to ensure the curriculum used in schools is still relevant to be utilized in industries. NDTS does not only help to improve the technical skills of apprentices with their collaboration among industries, but it also improves social skills such as problem-solving, communication, and soft skills (Asnul & Salina, 2017).

There are several approaches to planning bilateral exercises or programmes. These approaches have been strengthened via the apprentice system, which has been conducted in the past. The training system can also be conducted by training institutions to encourage further with industries. The operation of the system requires learning environment that affect the training delivery, methods and overall potential of both parties involved in the training institutes and the actual work of the industry (DSP, 2004). Therefore, the bilateral system has given much attention to process improvement culture in technical and vocational education (DSP, 2001). The participation of a wide range of companies and institutions are considered as an appropriate training.

To ensure NDTS can be applied with confidence in a company, the pioneers have issued several recommendations. One of them is characterized as a full and complete facility such as machinery, equipment and tools. This functions as a preparation for the prospective employee who will undergo training at the venue. They also need to do things like the following; (1) 70 to 80 percent of the training given in place and a real working environment, (2) conduct training programme in collaboration with training institutions for two years, (3) provide a logbook, training plans, training materials and training equipment and facilities required, (4) provide qualified and experienced counselor in the ratio of at least one instructor for every three students, and (5) provide allowance for each trainee training (SDS, 2005).

Benefits of having NDTS includes; (1) provide financial incentives which reduce the cost of hiring skilled workers in terms of training, evaluation, advertising and selection. Also, which are entitlement to a tax deduction under the Income Tax Act 1967 or a tax training of Human Resource Development Fund (HRDF) to companies/employers, (2) increase quality and productivity of work because workers are trained in industries, (3) develops and improves human capacity as the training provided during

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specified time, (4) trainers and instructors benefits through allowances, certification and career enhancement.

NOCC is the curriculum that used NDTS framework. It is a practical and reputable training in line with technological advances in producing a competent workforce. This document is utilized during the process of teaching and learning, and used as guidelines in providing material for the learning (JPK, 2009; Pang et al, 2010). According to Alexandra (2001), the effectiveness and acceptability of NDTS are influenced by various factors such as the stability of the structure and the current economic conditions, management, demographic factors, and also the educational system adopted by the country. Nevertheless, the participation of industry is crucial in ensuring the successful implementation of NDTS, it is very important to know the factors that may prevent the industry from participating in this NDTS programme. Several factors have been identified and used in this study, namely: cultural training, organizational structure, resources (financial, physical), policies, awareness of NDTS, committed leader and technological factors (Sambrook, 2002). Figure 1 illustrates the process of NDTS implementation process:

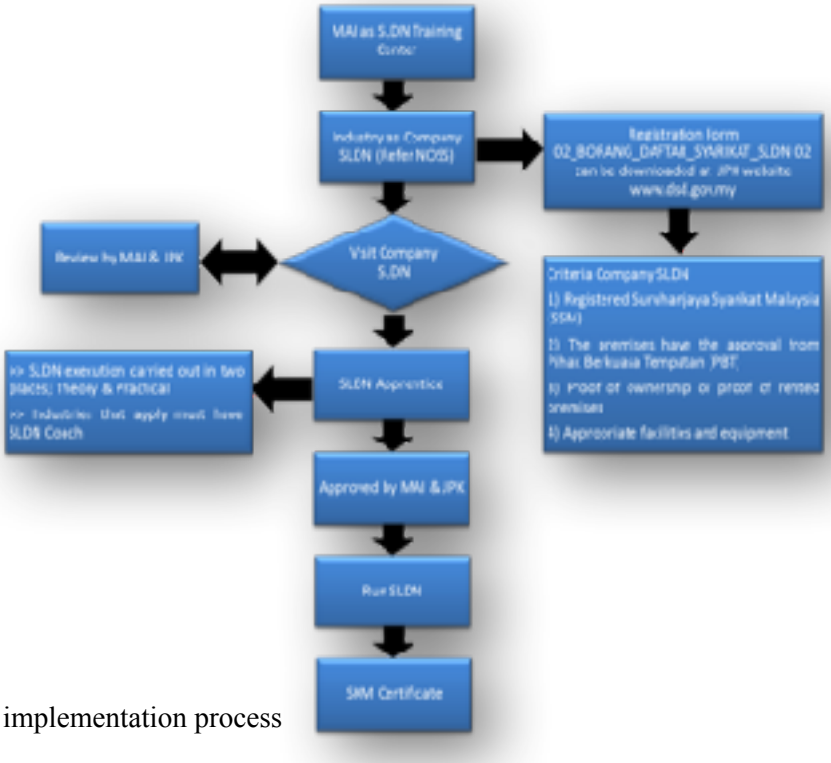

Figure 1. NDTS implementation process

Until now, it has been almost thirteen years since NDTS was introduced and implemented as a training system with the potential to produce human capital that is known in and labeled as k-workers (Rahim et. al, 2007). There are many indicators to learn in order to further strengthen and enhance the effectiveness of this dual system. Among the few things that need to be examined in details to ensure the success of NDTS are: (1) utilizing the Human Resource Development Fund (HRDF) in full (Ahmad, 2005), (2) enforce specific laws strictly and prudently for the smooth implementation of the NDTS (Pang et al, 2010), and (3) make full use of research and information obtained via the research process that occurs in institutions of higher learning and training centers to find long-term solutions that are real for the dual training system (Pang et al, 2010).

These could be a reality by first grasping the mission, strategy, and thrusts of the Training Master Plan for Malaysian Occupational Skills Development 2008-2020 (CBO, 2008). They are: (1) to strengthen the national training and skills development, (2) improving the quality of training and skills development, (3) to expand access and opportunity for individuals, (4) meet the needs of skilled manpower by the industry, and (5) enhance the prestige and recognition of qualifications and skill-

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based career. NDTS not only helps to improve the technical skills of apprentices with their collaboration with industries, but the programme is also able to improve social skills such as problem solving, communication, and soft skills (Agrawal, 2009).

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