EMPLOYABILITY OF LOCAL TRAINED SKILL LABOUR IN CONSTRUCTION INDUSTRY

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For my family and friends that always there for me whenever I needed them
For those who helped and pray for my success, thank you. You know who you are.
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ABSTRACT

Development in Malaysia is booming which can be witnessed by the various construction projects that currently in progress, especially in the state of Johor which has the highest value of construction work completed for the third quarter of 2016. This necessarily requires skilled labours in a high number especially among the locals since it has been reported that Malaysia’s construction industry is having problems related to the shortage of local skilled labour. In addition, the local workers have been reported to unable to fulfil the demand of construction market and this have caused the contractor to import foreign workers to meet the needs and requirement of labour market in construction sector. The objectives of this study are to determine the criteria set by the construction company in recruiting local skilled labour and to study the strategies that can attract local skilled labour to join construction industry. Questionnaire has been distributed to G7 contractor in the state of Johor in order to achieve the objectives of this study. Collected data was then evaluated and tested for its reliability using the SPSS 20.0 software before it can be analysed in order to obtain the mean value, frequencies and percentage. The outcome of this study indicates that the prospective employer prefers to work with man and they require young, experienced, knowledgeable and skilled workers in doing the job. Most of the strategies that have been selected are mainly related to money namely salary increment, bonus, allowance and overtime payment, apart from upgrading labours welfare and providing a better accommodation. This study can be a guideline to both skills institution and contractor to improve on what they are lacking in order to encourage the local trained skills labour to join the industry.
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CHAPTER 1

INTRODUCTION

1.1 Introduction

Construction is a very important industry in Malaysia and plays a vital role in providing a source of employment and career opportunities to the community. The industry is made up of many components including contractors, labours, developers, client organisations (government or private), management, engineering, architectural, and surveying consultants, manufacturers, material suppliers, and plant hirers (Mustafa Kamal, 2012). All these components have a significant role in the growth and development of Malaysian construction industry. After independence on year 1957, the Malaysian construction industry has developed from a low-tech, labour intensive, craft-based industry to one that has a capacity to deliver advanced buildings and infrastructure, using highly mechanized production techniques (Kamal and Flanagan, 2012).

Skill is defined as the ability to carry out the tasks and duties of a given job. Skilled labor refers to labor that requires workers who have specialized training or a learned skill-set to perform the work. These workers can have varied levels of training or education, while an unskilled labor does not require workers to have special training or skills. The rapid expansion of the construction industry causes high demands to the construction workforce.

Construction industry in Malaysia still practicing the labour-intensive approach as the method of construction, since source for the inexpensive labour from
nearby countries such as Indonesia is available. Lack of opportunities for training and skill formation contribute to the unattractiveness of a career in construction. In both developed and developing countries are having difficulties in recruiting an experienced and young, educated workers. The inability of the industry to attract workers and investing to train them has serious repercussions for the productivity and quality of construction products (ILO, 2001). This has resulted in a wide gap between demand for non-skilled labour and skilled labour. Certainly, these high demands cannot be fulfilled by the local workforce and it is the reason why employers prefer to hire foreign labours and their influx are visible in this country nowadays (Abdul Hamid et al, 2011).

1.2 Background of research

In order to perform construction projects, labours are one of the essential key factors for a successful construction project management. Construction industry is one of the industries that are labour intensive due to a lot of task need to be done manually on site. From mixing the concrete, bricklaying, plastering, plumbing work, managing the materials on site, installing scaffoldings and the lists goes on. The Malaysian construction industry has been experiencing a critical shortage of workforce since decades ago. Nowadays, the local workers unable to fulfill the demand of construction market and this has caused the contractor to import foreign workers from outside to meet the needs and requirement labor market in construction sector (Abdul Hamid et. al, 2013).

Demand for skilled labours, especially in the technical sector continues to be critical even though the country has a high number of labour forces of young, well-educated, and also a low unemployment rate (Devadoss, 2012). Poor market conditions and the uncertainty of global economy is also a factor companies hire skilled labours as the company focused on the development of human resources and retain skilled labours (Sinar Harian, 2013).

Through a statement released by Masters Builder Associations Malaysia (MBAM) in year 2012, the construction industry faces a shortage of labours and has caused companies to compete for a limited number of skilled labours in executing projects of the 10th Malaysia Plan and the Economic Transformation Programme
ETP). Sooi (2007) reports that the construction industry in Malaysia is grappling with unfilled positions in the skilled workforce sector, that he suggests an immediate solution would be importation of right talents from abroad (foreign labour). Matthew Tee, the president of MBAM has been quoted saying; one of the challenges that the industry is facing now is the need to provide adequate skilled construction labours. “While there is a need to limit the number of foreign labours, we also need to have the number of local skilled construction labours who can contribute to the economy, as the construction industry plays an important role in Malaysian economic growth” (Utusan Malaysia, 2013).

Malaysia requires about 50 per cents of skilled labours in technical fields by 2020 to compensate for the influx of the present migrant labours. Director General of the Manpower Department said that they are one of the agencies under the Ministry of Human Resources that has been assigned the task to produce a skilled workforce to meet the industry needs (Utusan Malaysia, 2014).

Numerous of construction project have been failed and unsuccessful due to the labour factor. Windapo (2016) emphasizes where projects failures happen due to insufficient number of skillful labour or qualified tradesmen. Concern regarding the shortage of skilled labour issue that is not enough to fill in the vacancies in construction industry has been hovering around for decades now (Abdul Aziz, 2002). Even some organizations that already aware about the issue thought it is challenging for the construction industry to attract and retain relevant skilled labour (Ahmad Zaki, 2012). Moreover, experienced labours are aging and their tacit knowledge embedded in them, another scenario that other countries are going through such as United Kingdom, United States, Bahamas, India and others.

The level of supply of skilled tradesmen is attributed to the lack of high-quality basic education, the state of the economy, compulsory certification of worker and an ageing workforce (Mohd Rahim et. al, 2016). Besides, Windapo (2016) also stated that there is a significant relationship between skilled labour shortages and the requirement that labour be certified, resulting unsatisfactory output when there is no certification requirement.

Employee’s recruitment and selection is a very important factor to ensure the successful management of human resources in an organization. The main purpose of recruitment and selection of employees is to pick the right person for the right job (Makhbul & Hasun, 2007). Without a good recruitment and selection strategy, it will
give negative effects to the organization. Huselid (1994) and Stewart & Knowles (2000) pointed out that the practice of recruitment and selection of workers will affect the performance of the organization as a whole. This defined that selection was heavily influenced by recruitment strategies used. By implementing a good strategy may attract as many candidates to apply for the position and employee selection can be done more effectively (Makhbul & Hasun, 2007).

1.3 Problem statements

Malaysia is having an issue of local labours shortage in construction industry. In October 2012, the former Deputy Prime Minister of Malaysia has been quoted as saying that Malaysia should reduce its dependency on foreign labour (Utusan Malaysia, 2012). A study has shown that the foreign labour has occupied most of the work position in construction project. Roughly, the composition of labour in one construction project were 82.77% foreign labour mostly from Indonesia and only 17.23% were local labours which is less than one fifth of the total number of labour in the construction project (Abdul Hamid, 2013)

Figure 1.1 shows the regional skilled labour shortage on year 2012 done by an international accounting firm named Grant Thornton International. Issues with shortage of skilled labours have gone globally with ASEAN region tops the chart. A study by The Grant Thornton International Business Report (IBR) had revealed that 62% of businesses in Malaysia are finding it hard to source skilled workers (Figure 1.2), with one per cent more compared to Singapore (61%). However, both countries were well above the global average of 39%. The survey has also revealed that in the ASEAN region, the shortage of specific or technical skills is the most significant factor for businesses in Vietnam (86%), followed by Philippines (76%) and thirdly in Malaysia at (68%). This is closely followed by Singapore (66%) and also business owners globally (64%).

Malaysia’s goal to be a developed country by 2020 may not come true as only 23 per cent of skill labours were recorded on 2011. As the government is targeting on achieving 37 per cent skilled labours by 2015, Malaysia may need to revise their target and strategy in order to reach the goal to become developed
country by 2020 (Nadaraj, 2013). However, to date only 28 per cent of skill labours were recorded for year 2016 (Bernama, 2016).

![Figure 1.1: Skilled labour shortage issue in worldwide](Grant Thornton IBR, 2012)

![Figure 1.2: Skills Recruitment Concerns](SOURCE: BR 2013)
Malaysia's ability to provide skilled labour at a rate of 50 per cent of all labours is a barometer of whether we really deserve to be recognized as a developed country by year 2020. Currently, highly skilled workforce in Malaysia is only 28 per cent and the fact that almost 70 per cent of labours in Malaysia are in the unskilled category (MBM, 2014) should be taken seriously because it gives a great impact on the human capital needs, economic development, social welfare and political patterns Malaysia in the future (Ministry of Human Resources Malaysia, 2013).

Although the skills training institute by both public and private, have drawn up their own strategies to ensure they produce a skilled workforce as required by the industry, they still need to take into consideration the industry player’s point of view. A contractor is anyone who directly employs or engages construction workers or manages construction work. The opinion of construction industry players mainly the contractor requirements in hiring skills labour need to take into account as they are the future employer that will employ all these skills trainers.

According to the Real Estate and Housing Developers Association Malaysia (REHDA), the construction industry has been experiencing critical skilled-labours shortage issue and it is indirectly affect the property sector as quality of product including housing and building are related directly to manpower and skilled. It seems that the construction workers is failed to attract workers in skilled and semi-skilled trades. Moreover, the 3D perception has discouraged skilled local workers in joining, resulting in a lot of job being executed by the untrained construction workers (Abdul Hamid et.al, 2013).

Working in construction sector requires a lot of physical work in uncomfortable surrounding, which causes the locals to avoid and not attracted to this kind of work compared to manufacturing sector that offers comfortable conditions and easier works (Ahmad Zaki, 2012). High demand on foreign labour happens because local people decline to work as a result of low salary offered and lack of skills, practices and passions (Willis, 1974). Young generation today has a completely different view of the workplace and of the work experience. New recruitment strategies need to be address, as examples appointing a talent director, identifying where is best to find recruits, setting standards for evaluating candidates, doing a thorough interview-evaluation process, providing job preview to avoid young candidates from become disenfranchised if the job turns out to be different from their
expectations, and understanding the importance of social media as a recruitment tool (Johnson, 2013).

1.4 Research questions

From the main issue about the low number of local skills in the construction industry, two research questions have been generate about the employability of these local trained skill labour in joining the construction industry, which are:

i. What are the criteria set by the construction company when recruiting local trained skill labour?

ii. How the industry players can attract the locals to join the construction industry?

1.5 Research objectives

The aim of this study is to investigate the criteria from employer perspective in recruiting the local trained skill labour to work in the construction industry and how the best strategies deem effective to be implement in order to increase their participation rate. To achieve this aims, two objectives are being delineated. Those are as follows:

i. To determine the criteria set by the construction company in recruiting local trained skill labour.

ii. To study the strategies that can attract local trained skill labour to join construction industry
1.6 Research scope

This research will focus on the state of Johor where various development and construction activities are currently on-going. As shown in Figure 1.3, Johor recorded the highest value of construction work done of RM7.1 billion or 22.3 per cent share among the states. Quantitative method by distribution of questionnaire was chosen as the data collection method to help obtain data. Target respondents are the construction industry players, mainly Grade 7 (G7) contractors registered with the Construction Industry Development Board (CIDB). Contractor G7 was chosen because they are the main contractor with unlimited tendering abilities as shown in Table 1.1.

A total of 418 G7 contractors in Johor were registered with the CIDB, which making the number of respondents required is 300 respondents with a confidence level of 95% that the sample will reflect the total population and margin of error of 3% that the answer will gave a true value to this study.

![Figure 1.3: Value of construction work done by location of project for Q3 2016 (Department of Statistics Malaysia, 2016)](image-url)
Table 1.1: CIDB registration requirement and procedure. (CIDB Malaysia, 2016)

<table>
<thead>
<tr>
<th>Grade</th>
<th>Tendering Capacity (RM)</th>
<th>Paid Up Capital / Net Capital Worth (RM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>G7</td>
<td>Unlimited</td>
<td>750,000.00</td>
</tr>
<tr>
<td>G6</td>
<td>Not exceeding 10 mil</td>
<td>500,000.00</td>
</tr>
<tr>
<td>G5</td>
<td>Not exceeding 5 mil</td>
<td>250,000.00</td>
</tr>
<tr>
<td>G4</td>
<td>Not exceeding 3 mil</td>
<td>150,000.00</td>
</tr>
<tr>
<td>G3</td>
<td>Not exceeding 1 mil</td>
<td>50,000.00</td>
</tr>
<tr>
<td>G2</td>
<td>Not exceeding 500,000.00</td>
<td>25,000.00</td>
</tr>
<tr>
<td>G1</td>
<td>Not exceeding 200,000.00</td>
<td>5,000.00</td>
</tr>
</tbody>
</table>

1.7 Significance of research

Government is optimistic in its attempt to produce a total of 300,000 skilled labours per year in various sectors in order to realize the vision of Malaysia to become a developed high income nation by 2020 by ensuring that the country has 50 per cent of skilled labour. With various construction projects that are currently on going around Johor region, the demand for local skilled worker in construction industry can be identified through this study. Therefore, by knowing the demand of local skilled worker in the industry, contractor’s requirement and criteria as a prospective employer in hiring local skilled worker can be determined. In addition, this research will also identify some strategies on how to attract the local skilled labour to join the construction industry in order to reduce the dependency on foreign unskilled labour. This research will benefit the training institute especially future graduates as an early preparation before entering the real construction world.

1.8 Summary

This study provides some valuable insights on the issue of skills labour shortage and its demand in industry, and what have been refraining the skilled labour from joining
the construction industry. In this chapter, the introduction of the research will explain about the fact and issues in the industry, followed by research background, statement of problems, objectives of the study, the scope and justification of the study.
CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

The Malaysian construction industry is among the most important industries in the country that closely related to other economic sectors (Abdul Rahim, 2013). Construction also is among the sectors which rely heavily on foreign labours owing to a confluence of factors; Malaysian youth’s aversion to low status work, an expanding manufacturing sector which is offering much better employment conditions, labour attrition, wide opportunities for tertiary education, lower birth rate and emigration of Malaysian labours to high-wage countries (Abdul Aziz, 1995).

According to Ministry of Home Affairs, most of the foreign labours in Malaysia are semi-skilled and unskilled labours dominating the manufacturing, agriculture, construction and services industry, and their numbers are increasing (Berita Harian Online, 2016). The presence of many unskilled labours today may threaten our nation’s goal of being an industrialized country by 2020 and keeps the country on a low-skill and low-tech trajectory (Migration Issue, 1995).

Government of Malaysia is optimistic in achieving their target of producing 300 thousand skilled labours in various sectors in a year. Minister of Human Resources has quoted saying that until to date (2016), the country has only 28 per cent of skilled labours in key sectors throughout the country and the efforts deployed to achieve 50 per cent of skilled worker by 2020 to achieve the developed nation with high income status (Bernama, 2013).
Despite the economic growth and constantly increase demand for skilled and trained labours by the industry, the number of skilled labours in Malaysia is still low compared to other developed countries such as Finland (58%), Singapore (52%) and Germany (80%) (Bernama, 2013)

2.2 Classification of labours and skills

Generally, labours in the construction industry can be divided into three categories which are the general labour, semi-skilled labour and skilled labour.

2.2.1 General labour

General labour is a group that does have neither skills nor expertise to do the work and consists of those who just started working and act as an assistant to a skilled and semi-skilled labour in doing construction work. Their task is to carry out basic work such as bringing construction materials to a place, clear excess building materials, clean up the site office and other tasks that will be directed. It is easier to get a supply of general labour compared to skilled labours and semi-skilled labours because of their low wage. However, this group still have the opportunity to improve their status by obtaining the skills acquired through the long working experiences (Mohd Yusof, 2004)

2.2.2 Semi-skilled labour

Semi-skilled labours have skills in one or more tred but did not reach the required skill level to be a skilled worker. They normally work together with a skilled labour in the construction sites. Even though the semi-skilled has the required skills, the skilled labour is the people that decide and determine how the work goes. Normally semi-skilled labour is made up of the trainers from the skills institute who have just completed their apprentice period as their working experience is less than 3 years (Mohd Yusof, 2004).
2.2.3 Skilled labour

Skilled labour could be defined as an employee who has been recognized for its specialized ability and also competent in their field of work with a quality workmanship. Skilled labour is defined as someone with a training skills institute background and proven by certification. In addition, a person who has skilled and experience working in the construction for several years can also be categorized as a skilled labour although they did not undergo formal training (Mohd Yusof, 2004).

2.2.4 Skill traits

A skilled worker is someone who can carry out its work according to specifications, based on the requirements of the national industry, and has taken accreditation test provided. Table 2.1 below shows the listed traits for construction labour. Category specialisation for each trait is as attached in Appendix A.

Table 2.1: Construction labour type of traits (Ministry of Work, 2015)

<table>
<thead>
<tr>
<th>General Labour Traits</th>
<th>Semi-Skilled Labour Traits</th>
<th>Skilled Labour Traits</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Construction Work</td>
<td>Assistant Plumber</td>
<td>Assistant Scaffolder</td>
</tr>
<tr>
<td></td>
<td>Bricklayer</td>
<td>Painting and decoration work</td>
</tr>
<tr>
<td></td>
<td>Plasterer</td>
<td>Aluminum framework installer</td>
</tr>
<tr>
<td></td>
<td>Tiler</td>
<td>Steel structure installer</td>
</tr>
<tr>
<td></td>
<td>Carpenter (Joinery)</td>
<td>Precast concrete installer (building)</td>
</tr>
<tr>
<td></td>
<td>Carpenter (Formwork)</td>
<td>Light concrete block installer</td>
</tr>
<tr>
<td></td>
<td>Partition installer</td>
<td>Light panel installer</td>
</tr>
<tr>
<td></td>
<td>Ceiling installer</td>
<td>Roof trusses installer (steel)</td>
</tr>
<tr>
<td></td>
<td>Plaster board ceiling installer</td>
<td>Roof trusses installer (wood)</td>
</tr>
<tr>
<td></td>
<td>Concretor</td>
<td>Wireman</td>
</tr>
<tr>
<td></td>
<td>Barbender</td>
<td>Chargeman</td>
</tr>
<tr>
<td></td>
<td>Plumber</td>
<td>Welder (Copper gas pipe)</td>
</tr>
</tbody>
</table>
Table 2.2 shows the classification of skilled workers in Malaysia as explained by Ahmad Zaki et. al (2012). After successfully passing the test of practical skills and gain accreditation, CIDB will certify the candidate as skilled labours and produce CIDB Skill Competency Certificate, based on their expertise.

Table 2.2: Malaysian Skills Certificate (Ahmad Zaki et. al, 2012)

<table>
<thead>
<tr>
<th>Level of Education</th>
<th>Job Function</th>
<th>Example of Job Title</th>
<th>Skill Level</th>
<th>SKM Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced Diploma</td>
<td>Management Stage</td>
<td>Manager, Engineer</td>
<td>Level 5</td>
<td>Competent in applying a significant range of fundamental principles and complex techniques across a wide and often unpredictable variety of contexts. Very substantial personal autonomy and often significant responsibility for the work of others and for the allocation of substantial resources feature strongly, as do personal accountabilities for analysis and diagnose, design planning, execution and evaluation.</td>
</tr>
<tr>
<td>Diploma</td>
<td>Supervising Stage</td>
<td>Executive, Assistant Engineer</td>
<td>Level 4</td>
<td>Competent in performing a broad range of complex technical or professional work activities that are performed in a wide variety of context with substantial degree of personal responsibility and autonomy. Responsibility for the work of others and the allocation of resources is often present.</td>
</tr>
<tr>
<td>Advanced Certificate</td>
<td></td>
<td>Supervisor, Technician</td>
<td>Level 3</td>
<td>Competent in performing a broad range of varied work activities, performed in a variety contexts, most of which are complex and non-routine. There is also a considerable responsibility and autonomy and control or guidance of others is often required.</td>
</tr>
<tr>
<td>Certificate</td>
<td>Operation and Production Stage</td>
<td>Assistant Technician</td>
<td>Level 2</td>
<td>Competent in performing a significant range of varied work activities that are being performed in a variety of contexts. Some of these activities are non-routine and require individual responsibility and autonomy.</td>
</tr>
<tr>
<td>Certificate</td>
<td></td>
<td>Operator</td>
<td>Level 1</td>
<td>Competent in performing a range of varied work activities, most of which are routine and predictable</td>
</tr>
</tbody>
</table>
2.3 Involvement of the local skills in the construction industry

According to Datuk Mohammad Zahir Abdul Khalid, Chairman of the Committee on Industry, Investment and Development Corridor Perak, 93 per cent of foreign workers in the construction industry do not have the skills, and local skilled labour was only about 16 per cent. These statistics are based on the registration of construction personnel with CIDB (Bernama, 2016). Industry stakeholders mostly agreed that the biggest concern in the construction industry is the insufficient number of skilled manpower (Jorge et al, 2005).

As of May 2015, Malaysia has nearly 1.9 million foreign labours spread across the nation as shown in Table 2.3. Construction industry is the second industry with the highest number of foreign labours (18.9%) after the manufacturing industry with 37.4%. Most of the foreign labours that dominate the construction industry are from Indonesia and Bangladesh.

Table 2.3: Statistic of active foreign labour based on industry (Berita Harian, 2015)

| STATISTIC OF ACTIVE FOREIGN LABOR BASED ON SECTOR AND NATIONALITY UNTIL 21 MAY 2015 |
|-----------------------------------------------|---------------------|----------------|-------------------|----------------|------------------------|-------------------------|---------------------|
| BANGLADESH                      | 119                | 90,475         | 91,325          | 24,183          | 16,409                 | 12,258                  | 234,769              |
| CAMBODIA                         | 3,760              | 227            | 2,892           | 360             | 210                    | 268                     | 7,717                |
| CHINA                            | 231                | 3,679          | 510             | 6,055           | 39                     | 38                      | 10,552               |
| INDIA                            | 871                | 5,434          | 3,598           | 45,226          | 18,144                 | 25,429                  | 94,997               |
| INDONESIA                       | 94,370             | 189,392        | 97,145          | 32,031          | 218,098                | 71,685                  | 703,521              |
| LAOS                             | 34                 | 3              | 20              | 7               | 1                      | 4                       | 69                  |
| MYANMAR                          | 124                | 19,138         | 88,877          | 16,143          | 2,495                  | 5,298                   | 132,075              |
| NEPAL                            | 76                 | 16,137         | 333,603         | 99,439          | 6,521                  | 17,657                  | 493,435              |
| PAKISTAN                         | 51                 | 18,020         | 3,333           | 3,449           | 7,381                  | 16,772                  | 48,806               |
| PHILIPPINES                      | 39,463             | 3,821          | 4,192           | 4,945           | 5,409                  | 4,509                   | 62,239               |
| SRI LANKA                        | 1,755              | 157            | 3,362           | 936             | 301                    | 241                     | 6,752                |
| THAILAND                         | 328                | 675            | 313             | 5,553           | 440                    | 1,349                   | 9,658                |
| VIETNAM                          | 839                | 4,798          | 43,099          | 1,683           | 107                    | 533                     | 50,999               |
| OTHERS                           | 65                 | 761            | 5,148           | 726             | 251                    | 308                     | 7,259                |
| TOTAL                            | 142,086            | 352,717        | 687,154         | 240,836         | 275,806                | 154,349                 | 1,862,948            |

Over the past decades, Malaysia seems increasingly being taken over by foreigners. Originally, their presence was to meet the needs of unskilled labourers and job vacancies that were not preferred by the locals but then they began to take
over the space in factories, as semi-skilled and skilled labour where many greedy employers chose to employ foreigners rather than the locals due to the cheaper cost.

Secretary General of MBAM said that Malaysia starting to face shortage of quality people in construction on year 2006 when the 9th Malaysia Plan was introduced as many development project was planned for the construction market but issue with the low number of skilled labours arise and the existing number of skilled labour is not enough to fill in for the vacancies. Even so, the issue with skilled labour shortage still exist until to-date.

Therefore, the number of local workforce is still insufficient resulting in the construction industry is filled with unskilled foreign workers. Lack of skilled and competent workers in the construction industry has always been one of the big challenges Malaysia has to gone through in order to achieve the developed nation status by the year 2020, which is about 4 years from now (Bernama, 2016).

Deputy Minister of Human Resources had reported that only 28 per cent of Malaysians are highly skilled workforce, a figure that is relatively low compared with other developed countries that achieved about 40 per cent of skilled workers among its citizens. Ministry of Human Resources is committed to improve the current statistic of skilled workforce by at least seven percent of the amount, to ensure the country is on the right track to emerge as a developed nation by the year 2020.

Issues concerning the lack of skilled labours in Malaysia must be addressed immediately to ensure the country's economic growth to keep pace with the development of human capital in the country. The fact that almost 80 per cent of labours in Malaysia are in the unskilled category should be taken seriously because it gives a great impact on the human capital needs, economic development, social welfare and political patterns Malaysia in the future.

2.4 Criteria in employing local skill labour by Construction Company

With the current economic goal to become a high-income nation and as Malaysia is moving towards a developed country status by year 2020, vacancies in most industry including construction will most likely continue to grow. It is important to ensure
that future graduates have the necessary skills, both soft skills and hard skills, for the industry.

The concept of employability refers to the attitudes, knowledge, and skills of workers that determine their labour market potential (De Grip and Zwick, 2004). Sanders & De Grip (2004) define a worker’s employability as ‘the capacity as well as the willingness to be and to remain attractive in the labour market, by anticipating on changes in tasks and work environment and pro-acting on these changes’.

2.4.1 Age

Having a skilled and talented workforce is essential to the competitiveness of the construction industry, as most of the organization requires the right skills, in the right place, at the right time. The industry needs to develop the flow of young people into the industry to tackle skills shortages and deliver future projects. Malaysian Statistic Department (2016) has also revealed that the unemployment rate of graduates has increase although it is still below 4 percent. It is not because graduates are being choosy in selecting jobs, but not a lot of work appropriate for young and fresh graduates. In addition, the attitude of employers who only require experienced workers with extra credibilities and skills make it harder for these graduates to be employed (Astro Awani, 2016).

A wide variety of research has been done since the passing of the Age Discrimination in Employment Act (ADEA) on 1967 in the United States, into how age might impact decisions in the employment setting. For example, scholars have examined how age affects actual job performance, the nature of age stereotypes in the work setting, how age might impact performance ratings, and how age relates to recruitment, selection, and promotion decisions (Morgeson et. al, 2008).

Age discrimination during interview and selection is not something new since over the past 30 years, a study conducted by Avolio and Barrett on 1987 has found that it is proven that younger applicants have higher future potential to be employed with higher overall evaluation ratings compared to the ratings given to older applicants (Morgeson et. al, 2008).

Similar to studies done by Wilson et. al (2007) although they are facing skills shortage, their findings indicate that younger workers were seen as more suitable and
were significantly more likely to be shortlisted. The key factor that differentiated older and younger employees was the assumed flexibility and adaptability of younger workers. The younger applicants were described as ‘trainable’, easy to ‘get up to speed’ and ‘go-getters’. It is also revealed in the study that the human capital rationale may also lead to employers favouring the young as representing a longer future income stream and greater development opportunity than older workers.

2.4.2 Marital Status

Marital status refers to being single, married, divorced, widowed, and married but separated. Marital status discrimination refers to when a person is treated unfairly, or is denied the same opportunities as others, due to their marital status. Overlooking someone for employment because they are single or divorced, for example, is a type of marital status discrimination.

Marital status is still inquired about on application form, as well as in job interviews (Harcourt & Harcourt, 2002; Mullen et. al, 2007 and Nadler & Kufahl, 2014). It has become a norm for employer to check on applicant’s marital status and asking such questions before employment. Some of the pre-employment inquiries that oftenly asked are listed below:

i. Whether applicant is pregnant.
ii. Marital status of applicant or whether applicant plans to marry.
iii. Number and age of children or future child bearing plans.
vi. Name of spouse.

Furthermore, biases may influence employment decisions such as intuitive assumptions that often involve stereotypes. An employer might use stereotypes based on marital status to determine whether or not to hire an individual (Beattie, 1991; Nadler & Stockdle, 2012, Nadler & Kufahl, 2014). According to Beattie (1991), marital status sometimes is used as an indicator to determine how likely it is for an employee to remain in the same geographical location, their willingness to travel,
health benefits and also their level of commitment, as well as how fit they are within the organization as an example, the relationship between the employee with other employees.

2.4.3 Gender

Gender inequalities in the labour market have been explicitly evidenced all around the world, for instance the labour force participation, employment by economic sectors, occupational distribution, involvement in organisational decision making, and the like (Wye & Ismail, 2012).

Table 2.4 shows the workforce composition based on gender and industry, a survey done by Australian Workplace Gender Equality Agency. The survey main purposes is to explore the share of male and female workers across 19 industry categories in Australia and identify which industries are male-dominated and which are female-dominated. As shown in the table, the main male-dominated industry is the construction industry with the highest percentage of 88.3 per cent compared to female (11.7 per cent). This was supported by the study done by Abdul Majid et. al, (2015), Ahuja & Kumari (2012); Berik & Bilginsoy (2006); Gurjao (2006); and Mohd Yusof (2005) which stated that construction industry has always relied on male to form the vast majority of its workforce. The fact that construction industry is male-dominated industry has encouraged various researches, particularly with attempt to promote gender equality and highlight the impact of women under-representation in the construction industries (Chan & Dainty, 2007; Andrew R. J. Dainty, Neale, & Bagilhole, 2000; Yean & Poh, 2004).

<table>
<thead>
<tr>
<th>Industry</th>
<th>Gender (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
</tr>
<tr>
<td>Accommodation and Food Services</td>
<td>45.3</td>
</tr>
<tr>
<td>Administrative and Support Services</td>
<td>51.1</td>
</tr>
<tr>
<td>Agriculture, Forestry and Fisheries</td>
<td>69.1</td>
</tr>
<tr>
<td>Arts and Recreation Services</td>
<td>53.3</td>
</tr>
<tr>
<td><strong>Construction</strong></td>
<td><strong>88.3</strong></td>
</tr>
<tr>
<td>Education and Training</td>
<td>29.1</td>
</tr>
</tbody>
</table>

Table 2.4: Workforce composition by gender and industry. (Australian Workplace Gender Equality Agency, 2016)
However, a different story was recorded in Malaysia. Apparently, the initiatives diversify recruitment and attract women to become skilled labour seems to be more important issue, in order to solve the existing shortage of local skilled labour problem, rather than promoting equal opportunities (Abdul Majid et. al, 2015). Moreover, women in Malaysia has receive equal opportunities to venture in any field of education and workforce (Yet-Mee, 2013), compared to other country like India in which gender discrimination is obvious due to scarcity of work opportunities (Ahuja & Kumari, 2012).

India has recorded about one-third of its workers in the construction site consist of women and children. Women are engaged almost exclusively as casual manual labourers in the Indian construction industry. The female employment in the construction industry is very high, even though they work only as the helpers or unskilled workers (Rajanna, 2015). According to Ahuja & Kumari (2012), women in India always seek for opportunities to become skilled labour in order to obtain more decent wages. Their skills are always at the same level and are not upgraded as they assist only the male work fare the workplace. Contrary in Malaysia, job as construction skilled labour is not widely applied by women despite of the numerous vacancies available.

The increasing participation of women in non-traditional sectors is found to be closely linked with economic factor. Based on the changes experienced by women, in relation to the present study, the high acceptance on non-traditional jobs assert a good sign that there is a potential in attracting them to become skilled labour
for the construction industry of Malaysia and address the problem of shortage of local skilled labour (Abdul Majid et. al, 2015).

2.4.4 Working experience

Building a working experience can be as important as one qualification in securing a job. Working experience can come from internship, part-time work while studying or doing any volunteering work in the spare time. Working experience will provide good merit and can be crucial for skills development. A degree qualification used to be a major deciding factor in employment, but as more qualification is available nowadays, employer has become less impressed on the whole and focused more on experience particularly when it involve skills (Walker & Zhu, 2013).

In recent years, employer’s organisations have repeatedly argued that recent graduates from higher education do not possess the broad employability skills needed to make an immediate contribution to the workplace (McCulloch, 2013). Working experience can be a critical element of the recruitment cycle. It is important to ensure that young graduates from the skills institute to leave education not just with qualifications, but also other skills and high quality experiences to help them become and remain economically active. It is anticipated to ensure that graduates on entering the workforce will have not only the required education but also the necessary skills to be immediately employable in their chosen profession (Ostwald & Williams, 2008). By having work experience or work integrated learning incorporated into the undergraduate program the employment outcome for the students will greatly enhanced.

Lack of experience and competency of labours must be taken into account as a factor contributes to poor workmanship (Ali and Wen, 2011). Although Abdul Hamid et al (2011) has conclude the preference of foreign workers among Malaysian employers were due to their hard working and high motivated working attitude, Kasun and Janaka (2006) mentioned that productivity alone cannot be achieved by speed and hardwork without adopting better work practices. From a human capital perspective, older and more experienced workers would be preferred when considering organisation’s human capital accumulation (Wilson et. al, 2007).
2.4.5 Educational Background

Employers do not consider young people with such educational background as solid specialists because they lack special knowledge, experience and qualification. The interview results witness that the theoretical knowledge of study programme are outdated, insufficient attention is paid to the quality of specialist training and poor development of practical training and education (Vilnius, 2008). Study by the Conference Board of Canada (2002) stated that the education system has to strike a balance between developing generic skills that are applicable in a variety of work settings and specific skills unique to a particular work setting.

As Malaysia charts a transformational path towards a high-income economy, jobs for skilled workers continue to grow across key economic sectors. To ensure a productive workforce, Malaysia must ensure a high quality flow of talent supply to fill these jobs to avoid growing skills imbalances, as skilled talent is a critical factor in driving the economy.

Currently, out of the the 12 million working people in this nation with almost 70 per cent were unskilled workers. It was reported, there are 200,000 SPM holders each year that did not enrolling in neither tertiary education nor skills training, that has caused a greater concern. These numbers not only increase the number of unskilled workers every year but they are also into the job sector without any qualification (MBM, 2014).

A total of 529 institutions were established with a 199,459 student enrolment until September 2014 (Table 2.5). For example, the upgrading of vocational schools into vocational colleges implemented gradually from 2013 shows the nation’s commitment to produce qualified skilled labours. The upgrading was also in line to provide opportunities and better platform for students who are more interested in the skills to focus, rather than the fully-academic field. Granting rating from vocational school to vocational college is an effort to meet the aspirations thus giving the advantage of labour resources to the country for the long term. The existence of vocational colleges acted as a support to help the country and the education sector to achieve the target through skills starting from the school level, in other words, students are exposed early on to the skills so it steady once they graduate (Harian Metro, 2015).
Enhancement for competent skills development is not a training institute responsibilities alone but the involvement of the industry will be instrumental to the curriculum, training in industry and experts in the field can work together with the government to develop a highly skilled workforce in turn makes the country more competitive (Berita Harian, 2015).

Table 2.5: Public Training Institute in Malaysia until 2014
(Ministry of Human Resources, 2015)

<table>
<thead>
<tr>
<th>No</th>
<th>Ministry</th>
<th>ILKA</th>
<th>No. of Institute</th>
<th>Capacity</th>
<th>Enrolment 2013</th>
<th>Enrolment Sept 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ministry of Human Resources</td>
<td>Industrial Training Institute</td>
<td>23</td>
<td>15,150</td>
<td>12,847</td>
<td>14,615</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Advanced Technology Training Centre (ADITEC)</td>
<td>8</td>
<td>6,100</td>
<td>3,739</td>
<td>4,511</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Japan-Malaysia Technical Institute (JMTI)</td>
<td>1</td>
<td>800</td>
<td>992</td>
<td>937</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td></td>
<td><strong>32</strong></td>
<td><strong>22,060</strong></td>
<td><strong>17,578</strong></td>
<td><strong>20,063</strong></td>
</tr>
<tr>
<td>2</td>
<td>Ministry of Education (MOE)</td>
<td>Polytechnic</td>
<td>33</td>
<td>89,000</td>
<td>89,502</td>
<td>88,421</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Community College</td>
<td>91</td>
<td>32,470</td>
<td>21,439</td>
<td>16,134</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Vocational College</td>
<td>80</td>
<td>17,760</td>
<td>15,384</td>
<td>16,262</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td></td>
<td><strong>204</strong></td>
<td><strong>139,230</strong></td>
<td><strong>126,306</strong></td>
<td><strong>118,617</strong></td>
</tr>
<tr>
<td>3</td>
<td>Ministry of Women, Family and Community Development</td>
<td>Industrial training and rehabilitation center</td>
<td>1 (for OKU)</td>
<td>300</td>
<td>113</td>
<td>91</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td></td>
<td><strong>1</strong></td>
<td><strong>300</strong></td>
<td><strong>113</strong></td>
<td><strong>91</strong></td>
</tr>
<tr>
<td>4</td>
<td>Ministry of Agriculture</td>
<td>National Agriculture Training Council (NATC)</td>
<td>12</td>
<td>5,620</td>
<td>1,859</td>
<td>2,505</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td></td>
<td><strong>12</strong></td>
<td><strong>5,620</strong></td>
<td><strong>1,859</strong></td>
<td><strong>2,505</strong></td>
</tr>
<tr>
<td>5</td>
<td>Ministry of Rural and Regional Development</td>
<td>MARA Training Institute</td>
<td>13</td>
<td>13,162</td>
<td>10,344</td>
<td>10,983</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MARA Higher Skills College (K.TMG)</td>
<td>10</td>
<td>9,976</td>
<td>4,322</td>
<td>5,270</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CityMova</td>
<td>231</td>
<td>28,900</td>
<td>23,166</td>
<td>24,435</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td></td>
<td><strong>254</strong></td>
<td><strong>46,138</strong></td>
<td><strong>33,332</strong></td>
<td><strong>30,798</strong></td>
</tr>
<tr>
<td>6</td>
<td>Ministry of Youth and Sport</td>
<td>National Youth Higher Skills Institute (ZEEN)</td>
<td>1</td>
<td>600</td>
<td>408</td>
<td>594</td>
</tr>
<tr>
<td></td>
<td></td>
<td>National Youth Higher Skills Institute (ZEEN)</td>
<td>19</td>
<td>15,940</td>
<td>10,356</td>
<td>12,968</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td></td>
<td><strong>20</strong></td>
<td><strong>15,640</strong></td>
<td><strong>10,994</strong></td>
<td><strong>13,562</strong></td>
</tr>
<tr>
<td>7</td>
<td>Construction Industry Development Board (CIDI), Ministry of Public Work</td>
<td>Malaysian Construction Academy</td>
<td>6</td>
<td>6,000</td>
<td>6,476</td>
<td>4,623</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td></td>
<td><strong>6</strong></td>
<td><strong>6,000</strong></td>
<td><strong>6,476</strong></td>
<td><strong>4,623</strong></td>
</tr>
<tr>
<td></td>
<td><strong>GRAND TOTAL</strong></td>
<td></td>
<td><strong>529</strong></td>
<td><strong>232,988</strong></td>
<td><strong>204,658</strong></td>
<td><strong>199,459</strong></td>
</tr>
</tbody>
</table>

Technical field has greatly contributed to the nation's development that constantly has abundant needs for labor sources. Technical graduates are always in need to seize the job opportunities. Hence, there is no issue of technical graduates having difficulty in getting employed as portrayed by certain parties. Lots of changes have been made in key sectors including transition in education system that is more
focus on the technical skills courses. Generally, Malaysia is also taking steps and actions to make various preparations in becoming a developed nation by year 2020.

2.4.6 Skills

Most of the industries especially the construction industry demand for skills because unskilled workers has no necessary knowledge regarding the industry that is full with hazards. Poor quality in construction projects is a common phenomenon in the construction world. Most of the foreign workers that were hired to work in the industry have neither experience nor knowledge regarding construction work. Most definitely, they have zero skill. According to Wai Kiong and Sui Pheng (2005), most of the defects in construction work are due to human factors mainly caused by poor quality of workmanship. Meanwhile, the low quality of workmanship in construction project was because of the lack of skill and knowledge.

Although the Malaysian workforce is becoming more educated over the years, companies are finding it difficult to find talent with the right skills to fill positions that are critical for the industries growth. A recent study by Talent Corporation Malaysia (TalentCorp) and the Institute of Labour Market Information and Analysis (ILMIA) found that the top three difficulties that companies faced in filling up critical occupations are:

- a) Applicants did not meet the required skills/ experiences;
- b) Applicants did not possess the required soft and interpersonal skills; and
- c) Applicants are qualified for the job, but company is unable to meet the salary or benefits requested.

According to Marshall and Tucker (1993), construction employees suffer greatly from a lack of adequate knowledge and skills when responding to the increasing complexity associated with construction works. Employee competencies are generally divided into technical and generic skills categories. Technical skills are specific to a particular job, whereas generic skills are those that could be transferred between various roles (Detsimas et. al, 2016; Grugulis, 2007). Both of these skillsets contribute to the overall performance and employability of construction workers. In
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