# Employer's Perception On It Graduates Employbility: A Case Study Politeknik Ungku Omar

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## ABSTRACT

The objective of this survey is to find out the employer's perception towards Information Technology (IT) graduates of Politeknik Ungku Omar. The survey a questionnaire is adapts and adjusts from Md Saad and I. Ab. Majid [1] to identify the employer's perceptions. Among the skills being assesses were a combination of hard and soft skills, presentation skills, entrepreneur skills and other skills related. This study revealed that the overall job performance and the ability to function effectively as an individual and in a group get the highest score from the employers. On the other hand, the ability to understand the social, cultural, global and environmental responsibilities acquires the lowest score from the employers. Graduates are also required to be skilled in their use of techniques, skills and modern ICT tools in their workplace as well as ability to acquire and apply knowledge of ICT fundamentals. These finding are useful for improving Polytechnic Malaysia in understanding the perception of employers towards their graduates. Therefore, precarious actions can be taken to upgrade their graduates according to industry requirements.

**Key words :** Employer's perception, employability skills, information and communication technology graduates

## 1. INTRODUCTION

Graduate's employment is one of the important issues in deliberating an efficient educational institution. The failure of universities to deal with this issue could create unnecessary negative perception, which could lead to industries becoming more selective in recruiting capable and competent graduates to work for them [1]. Since graduate employability is usually one of the main objective of completing a higher education qualification, employer perceptions of the readiness of graduates to enter the workplace forms an essential part of the quality signal [2]. Therefore, employers' perceptions and expectations have its influential in determining the employability skills needed [3].

Several initiatives continued to be implemented to transform Malaysia into an innovative digital economy [4]. As a result, the demand for Information Technology graduate also is getting higher from the industry. However, the

Information Communication Technology (ICT) sector continues to be plagued by challenges such as declining supply of ICT graduates and quality of ICT graduates not meeting the industry demands [5]. This also agreed by [6] where the jobs are readily available, but these graduates lack what is needed to get and keep jobs.

Therefore, with the tremendous changing in the employment system, the tertiary education must take more responsibility in developing their student's personal qualities in terms of employability, and implement appropriate programs to meet the changing needs in the industry [3]. These qualities include competency in technical skills, problem solving skills, confidence, maturity, leadership and communication skills, especially in English language [5]. In order to develop these qualities education institution should come up with an emerging strategy in building graduate qualities demanded by industry.

Politeknik Ungku Omar (PUO) is one of the Malaysian Polytechnic which the main purpose is to breaking boundaries for the creation of transformative and creative learning environment for an innovation-led economy and to be Malaysia's number one provider of innovative human capital through transformational education and training for the global workforce by 2015 [7]. In creating high quality graduates from Malaysian Polytechnic this survey is required to find out the actual perception of employers towards graduates performance at the workplace. The job market in general is so competitive that we need to do more than just present our background and qualifications. Graduates tend to fail because they never display or communicate their employability skills, only presenting their factual credentials [6].

## 2. LITERATURE REVIEW

### 2.1 Graduate Employability

In the economic perspectives, according to the theory of human capital education and training are treated as an investment process which generates a future flow of income. Investment in education is assumed to exert a positive impact on worker's productivity and in turn on their income [23]. Therefore it is essential to create graduates that fulfill with high quality of employability skills. The skills and competencies of the work force, in turn, are dependent upon

the quality of the country's education and training systems [24].

Employability is a serious issue to Malaysia. According to Department of Statistic Malaysia on December 2015 it is recorded that employment rate is 3.3% amounting 467,500 unemployed people [19]. Omar et al. highlight that graduate unemployment will continue to increase unless Higher Education Institutions (HEI) and graduates are prepared to sharpen the soft skill [25].

Figure 1 shows the employment rate in Malaysia from December 2014 to December 2015. Year-on- year comparison showed that the employability rate rose by 0.3 percentage points.
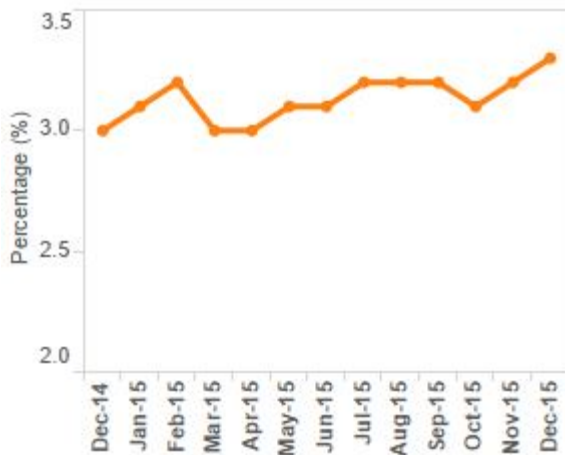


Figure 1. Employment rate in Malaysia from December 2014 to December 2015. Reprinted from Department of Statistics of Malaysia, In *eStatistik,* n, d., Retrieved March 18, 2016, from *https://newss.statistics.gov.m.* Copyright 2015 by Department of Statistics of Malaysia. Reprinted with permission.

Based on National Graduates Employability Blueprint 2012-2017 report that that the main problems for fresh graduates to secure a job are their poor command of English as well as poor character, personality and attitude [20]. Higher education institutions are facing intense pressure to arm students with more than academic knowledge. The industry has urged the higher education institutions to provide students with relevant interpersonal skills in order to prepare them for the working arenas [21].

Despite the low unemployment and tight labor environment, unemployment among graduates has always reminded as a critical issue politically and socially, as it affects the aspirations and motivations as well dignity among educated young job entrants into the market [5].

## 2.2 Employability Skills

Generally speaking, there is a perceived conflict between the requirements of industry for graduates trained in the specific tools and methodologies that are currently using, and the desire universities to teach students in a broader, more theoretical way in order to equip them to deal with what is likely to be used in the future as well as what is current [13].

Employability skills is undeniable crucial for graduates to be success at the workplace environment. These skills, whether they are transferable skills, personal competencies, core skills, soft skills or key skills are the desirable prime outcomes of higher education in making students employable [8]. According to Commonwealth of Australia [9] there are eight identified skills are:

i. Communication skills that contribute to productive and harmonious relations between employees and customers
ii. Teamwork skills that contribute to productive working relationships and outcomes
iii. Problem solving skills that contribute to productive outcomes
iv. Self-management skills that contribute to employee satisfaction and growth
v. Planning and organising skills that contributes to long-term and short-term strategic planning
vi. Technology skills that contribute to effective execution of tasks
vii. Life-long learning skills that contribute to ongoing improvement and expansion in employee and company operations and outcomes
viii. Initiative and enterprise skills that contribute to innovative outcomes.

Skills that are valued by employers are such as team working, problem solving and self-management [10-11]. To be employable to a wide range of employers therefore, graduates must hold a variety of soft skills (including generic skills such as team working) and particular attributes (such as interpersonal skills) in addition to the more traditional academic skills (including critical thinking and problem solving) alongside holding work experience and commercial awareness [12].

It was also reported that the employers are looking for job-seekers with the talented competencies and skills ability to learn and think freely, have analytical thinking and problem solving, creativity, communication teamwork and ability to work within various groups [14]. Furthermore, employers are complaining that lots of graduates do not meet their requirements. Among the weaknesses of graduates are lack of soft skills and not performing well at work place [15-16]. In addition, another factor that may limit graduate employability was high demand of specific soft skills by employers, among which were graduates with high quality of communication/interpersonal skills, foreign language proficiency, ICT and technical abilities, high spirit of teamwork and specific personal attributes [25].

Students must be made to realize that the training, which they receive in colleges or universities, is merely to prepare

them with a good foundation and background in IT. They need to always keep abreast with the ever-changing technology. Therefore, the best training that university education can provide for them is the ability to learn in whatever area necessary, especially in the technical aspects [22].

## 2.3 ICT Graduates

Education in Information and Communication Technology (ICT) field is very challenging situation. The nature of the technology that is rapidly growth gives a lot of pressure to all participants in this industry. It is difficult for Information Systems faculty and collegiate curricula to keep current with the latest technology [17]. Mcmurtrey et al. also agreed that rapid advances in technology, as well as changing ICT practices, alter the importance of particular skills for IT professionals over time and therefore necessitate that frequent updates be performed. The dynamic nature of the ICT industry creates a set of circumstances that make it extremely difficult to obtain this level of experience before the technology becomes outdated [27].

Results found that the most important skills for new ICT professionals were soft skills, specifically the personal attributes of problem-solving, critical thinking, and team skills. However, the study also found that technical skills were essential, especially database knowledge and proficiency, knowledge of programming languages, object-oriented knowledge, and web development skills [18]. According to Shah in her research regarding computer science graduate, indicate that the graduates themselves feel that they are to be blamed for being unemployed. Oral and written communications were significantly rated as more important than a comprehensive knowledge of Information System (IS) [26].

In addition, the employers too feel similarly, so reinforcing graduates' attitudes as one of the major reasons for graduates' unemployment [8]. Like in the previous years, the issues pertaining to short supply of ICT graduates from Institutes of Higher Learning, quality of graduates not able to meet the industry demands, negative perception and disillusionment of low employment opportunities in IT segments by the wider public and the students and lack of professional recognition and accreditation, continue to plague the sector [5]. Rapid advances in technology, as well as changing ICT practices, alter the importance of particular skills for ICT professionals over time and therefore necessitate that frequent updates be performed [18].

## 3. RESEARCH METHODOLOGY

### 3.1 Sample of Population

The study identified the employers that employed PUO graduates based on the database provided by PUO internet we portal (iPUO). This study survey the 1288 IT graduates who had complete their studies between 8 months to 5 years was conducted. It graduates from PUO consisted of three programs such as Diploma in Information Technology (Programming), Diploma in Information Technology (Networking), Diploma in Information Technology (Information Security) and Advance Diploma in Information Technology (Networking).

### 3.2 Research Instrument

This study adopted and adjusts a questionnaire of 8 items related to employability skills from Md Saad and I. Ab. Majid [1]. The questionnaires consisted of two parts which the first part consisted of the profile of the employer and the second part questioned the employers to rate on the scale of 0-3 employability skills. The scale is varied from very satisfied, satisfied and dissatisfied. Data from the survey has been analyse by using IBM SPSS Statistic 21.

### 3.3 Research Procedure

Emails were sent to graduates to forward the link of the online survey to their employer. Online survey is done in order to minimize the process of collecting the data from the employer. The emails were sent based on the contact details in iPUO database. A total of 1288 emails were sent. However, only 1002 emails were sent and the others are failed because of the inactive status of the emails. A total of 42 employers responded to the online survey and the results of the findings are discussed in the next section.

### 3.4 Research Limitation

It is hard to get response from graduates that have been working in the industry for 3-5 years. In future study it is suggested that the respondent is the entry level of graduates in the working industry is targeted. Furthermore, it easier to contact them through their email since their data is still considered reliable and recently used.

## 4. FINDINGS

This section discusses descriptive analysis on the eight most important employability skills as perceived by employers from the different types of organizations. These findings are organized according the rank given by employers toward graduates employability skills. The eight questions are:

i. Overall job performance
ii. The ability to acquire and apply knowledge of ICT fundamentals
iii. The ability to use techniques, skills and modern ICT tools
iv. The ability to continue learning independently in the acquisition of new knowledge, skills, and technologies
v. The ability to undertake problem identification,

apply problem-solving, formulations and solutions

vi. The ability to function effectively as an individual and in a group
vii. The ability to understand the social, cultural, global and environmental responsibilities
viii. Having basic entrepreneurial skills

Table 4.1 to 4.8 shows the frequency and percentage of each question.

**Table 4.1**: (Q1) Overall job performance

| Likert Scale | Frequency | Percent (%) |
|---|---|---|
| Very Satisfied | 19 | 45.2 |
| Satisfied | 23 | 54.8 |
| **Total** | **42** | **100.0** |

Table 4.1 shows the employer's perception on the overall job performance. None of them choose "Dissatisfied" in this question. 45.2% respondent choose "Very Satisfied" and 54.8% opt for "Satisfied".

**Table 4.2**: (Q2) The ability to acquire and apply knowledge of ICT fundamentals

| Likert Scale | Frequency | Percent (%) |
|---|---|---|
| Very Satisfied | 18 | 42.9 |
| Satisfied | 21 | 50.0 |
| Dissatisfied | 3 | 7.1 |
| **Total** | **42** | **100.0** |

Table 4.2 shows the employer's perception on the ability to acquire and apply knowledge of ICT fundamentals. Only 7.1% of them choose "Dissatisfied" in this question. Meanwhile, 42.9% respondent choose "Very Satisfied" and 50.0% opt for "Satisfied".

**Table 4.3**: (Q3) The ability to use techniques, skills and modern ICT tools

| Likert Scale | Frequency | Percent (%) |
|---|---|---|
| Very Satisfied | 18 | 42.9 |
| Satisfied | 20 | 47.6 |
| Dissatisfied | 4 | 9.5 |
| Total | 42 | 100.0 |

Table 4.3 shows the employer's perception on the ability to use techniques, skills and modern ICT tools. Only 9.5% of them choose "Dissatisfied" in this question. Meanwhile, 42.9% respondent choose "Very Satisfied" and 47.6% opt for "Satisfied".

**Table 4.4**: (Q4) The ability to continue learning independently in the acquisition of new knowledge, skills, and technologies

| Likert Scale | Frequency | Percent (%) |
|---|---|---|
| Very Satisfied | 16 | 38.1 |
| Satisfied | 22 | 52.4 |
| Dissatisfied | 4 | 9.5 |
| **Total** | **42** | **100.0** |

Table 4.4 shows the employer's perception on the ability to continue learning independently in the acquisition of new knowledge, skills, and technologies. 9.5% of them choose "Dissatisfied". Meanwhile, 38.1% respondent choose "Very Satisfied" and most of them (47.6%) opt for "Satisfied".

**Table 4.5**: (Q5) The ability to undertake problem identification; apply problem-solving, formulations and solutions

| Likert Scale | Frequency | Percent (%) |
|---|---|---|
| Very Satisfied | 21 | 50.0 |
| Satisfied | 18 | 42.9 |
| Dissatisfied | 3 | 7.1 |
| **Total** | **42** | **100.0** |

Table 4.5 shows the employer's perception on the ability to undertake problem identification; apply problem-solving, formulations and solutions. Minority of the employers (7.1%) choose "Dissatisfied". Meanwhile, half of the respondent (50.00%) choose "Very Satisfied" and 42.9% opt for "Satisfied".

**Table 4.6**: (Q6) The ability to function effectively as an individual and in a group

| Likert Scale | Frequency | Percent (%) |
|---|---|---|
| Very Satisfied | 18 | 42.9 |
| Satisfied | 23 | 54.8 |
| Dissatisfied | 1 | 2.4 |
| **Total** | **42** | **100.0** |

Table 4.6 shows the employer's perception on the ability to function effectively as an individual and in a group. Only 2.4% of the employers choose "Dissatisfied". Meanwhile, (42.9%) choose "Very Satisfied" and 54.8% opt for "Satisfied".

**Table 4.7**: (Q7) The ability to understand the social, cultural, global and environmental responsibilities

| Likert Scale | Frequency | Percent (%) |
|---|---|---|
| Very Satisfied | 22 | 52.4 |
| Satisfied | 18 | 42.9 |
| Dissatisfied | 2 | 4.8 |
| **Total** | **42** | **100.0** |

Table 4.7 shows the employer's perception on the ability to understand the social, cultural, global and environmental responsibilities. Only 4.8% of the employers choose "Dissatisfied". Meanwhile, most of the respondent (52.4%) choose "Very Satisfied" and 42.9% opt for "Satisfied".

**Table 4.8**: (Q8) Having basic entrepreneurial skills

| Likert Scale | Frequency | Percent (%) |
|---|---|---|
| Very Satisfied | 17 | 40.5 |
| Satisfied | 20 | 47.6 |
| Dissatisfied | 5 | 11.9 |
| **Total** | **42** | **100.0** |

Table 4.8 shows the employer's perception on having basic entrepreneurial skills. 11.9% of the employers choose "Dissatisfied". Meanwhile, 40.5& choose "Very Satisfied" and 40.5% opt for "Satisfied".

Result from the survey is further analyzed to obtain the mean value of the questions and it is depicted by the bar chart below.

Figure 2.  Mean value of Questions rated by Employer
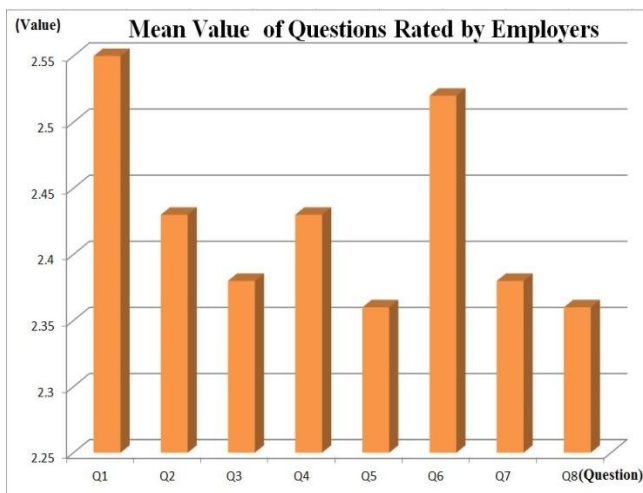


Based on Figure 2 it can be seen that the highest mean value was achieved from the first question. The mean is 2.55. Most of the employers is very satisfied in the overall job performance of the graduates. Meanwhile, the lowest mean value was obtained from question number 5 and number 8. Question number 5 asked the employer about the ability to undertake problem identification; apply problem-solving, formulations and solutions. Meanwhile question number 8 asked about the graduate basic entrepreneurial skills.

## 5. CONCLUSIONS

In spite of the fact that the number of responses was much smaller than the researchers hoped nevertheless the level of consistency in the responses reassures that we can make some general statements about the employer's perception of our graduates.

The study has found that most of the employers are satisfied with the overall job performance of graduates from Politeknik Ungku Omar. Overall job performance can include various type of personal quality such as hardworking, independence, loyalty, punctuality and responsibility. Inclusively, this finding will give a positive impact of the graduate's value. It is hoped that continuously effort will be taken in order to maintain and upgrade this criteria for the graduates.

The ability to acquire and apply knowledge of ICT fundamentals among graduates also achieved a good perception from the employers. Likewise, ICT graduates also needed to upgrade their skills in Information and Communication Technology gradually because of nature of the technology. This is to make sure that they are fully equipped with the needed skills in the work place. The changing nature of ICT has driven the demand for the ability to use wide range of software applications and tools.

Furthermore, majority of the employers also satisfied with the graduate's ability to use techniques, skills and modern ICT tools. Therefore, exposing students with various skills in ICT is crucial in order to make sure that graduates survive in the industry. Exploring the technology available and updating their knowledge in ICT skills is demanded in ICT field of work.

Polytechnics are known as the leading institution in the field of technical training should provide relevant training and will be able to upgrade skills and quality of the graduates. To do this, polytechnic must have a consistent communication with the industry in evolving the employability skill required. On the other hand, graduates also should participate actively to empower their quality in the competitive nature of market place in the industry. The gap between industry and polytechnic should be able to minimize in order to make sure that polytechnic is producing graduates that will be able fulfill the industry demand in the future.

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