Comparison of students' perception about curriculum design versus employability in Malaysia, Indonesia and Thailand

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Abstract: Globalisation and technological developments demand employees be highly skilled. The graduates of Higher Education Institutions are facing problems in getting jobs due to lack of employability skills. Curriculum designing plays an essential role in preparing the student to meet the challenges of employment. The purpose of this paper is to understand the perception of students regarding the followed scheme of studies explicitly focused on perceived quality and applicability of the curriculum for employment. This study is conducted in universities across three countries (Malaysia, Indonesia, and Thailand). Focus group discussion held which comprises of 20 Master's Program participants from each country. The findings revealed that universities curriculum under Master's Program needs revision by addition of modules related to skills development, practical work, fieldwork and industrial interaction in the form of internships. A model has been designed to explain the curriculum design effectiveness and employability of the students in the three countries.

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1 Introduction

The globalisation of the world and the increasing use of technology resulted in rapid changes in the business environment of Growth Triangle Countries (GTC) (Malaysia, Indonesia and Thailand). These environmental factors are also influencing the employability requirement of graduates in the countries' workplace. Employers are becoming more demanding in the recruitment and hiring process of new employees. Their high expectation of the graduates' soft skills needed for employment has significantly influenced the curriculum design of programs offered to the students by HEIs. Due to the industries' need and requirement, it is essential that students meet the employability skills to attain a place in today's competitive and swiftly changing environment. At present, in most instance, the student's selection of the course of study is mainly dependent upon job market and employment opportunities. They invest time and money while being enrolled in any program of which employability is considered as the outcome (Boden and Nedva, 2010). As part of the self-assessment evaluation, universities must get the understanding regarding the weaknesses of the offered courses, which can be obtained by getting the feedback from students in the form of a course or module evaluation (Yorke, 2004) as the HEIs are responsible and plays a vital role in imparting knowledge to society. Thus, investing in a university's education program can help HEIs to produce highly educated students, and may also trigger new researchers that will contribute towards new knowledge and involve in industry-based projects (Zucker and Darby, 2006). In line with this, Charles (2006) explained that HEIs play an essential role in a country's development, as they are custodians of knowledge spreading. Thus, HEIs must adopt effective strategies of knowledge transfer, which in return affects the universities' graduate employability ratio. The issue of graduate employability is considered as a global concern as many universities are facing a low rate of graduate employability including Malaysia, Indonesia and Thailand. Research highlights that both skills and knowledge are important for employability as well as management and subject knowledge along with skills competencies (Stewart and Knowles, 2000; Stukalina, 2008; Bridgstock, 2009; Sabourin and Ayande, 2014; Sankaran and Mohanty, 2018). The majority of graduates are not concerned about the in-depth study of their respective programs; instead, they are only concerned about to obtained employment upon graduation. Past research also indicates that employers are most concerned about the marketing skills of graduates as those who possess strong marketing skills have shown increased chances for jobs upon graduation (Rajan, 2010; Goswami, 2013; Laure et al., 2016; Osama et al., 2016; Abbasi et al., 2018). Thus, universities must impart a variety of skills to students, which could be done by various skills development activities, modules and courses. By offering such modules, there is increased likelihood that the employer demands will be met, which could further result as expanded success stories of graduate employment of HEIs (Krish et al., 2012; Vyas, 2013; Koe, 2019).

The present study is conducted in Malaysia, Indonesia and Thailand. As Indonesia and Thailand are neighbouring countries of Malaysia and considered as growth triangle countries (IMT-GT). The growth triangle initiative, established in 1933 by the government of Malaysia, Indonesia and Thailand, includes the collaboration between these countries in supporting economic development in lesser developed provinces in Indonesia, Thailand and Malaysia. Ever since its inception, the growth triangle initiative proves to be successful as 81 million people benefitted and covered 14 provinces in Southern Thailand, eight states in Malaysia and ten provinces in Indonesia. Malaysia,

Indonesia and Thailand are intimately connected with various ongoing projects on national levels (IMT-GT, 2018). However, the three countries are facing a mismatch in the employability skills possessed by recent graduates and the demands of the employers. This is worrisome as the mismatch negatively affects the employability ratio, which is utmost important in growth triangle countries (Osama et al., 2016). Thus, the need of the hour is to fulfil the employer requirements by addition of skill-based courses in the scheme. This practice is necessary to increase the employability ratio in these countries (Laure et al., 2016; Abbasi et al., 2018). The following research questions will guide the study:

1   To what extent do universities meet the requirements of the industry?

2   What type of skills do employers demand from graduates for successful entry in the job market?

3   What best practices can be proposed for the design of the curriculum to improve graduate employability readiness in the growth triangle region?

2   Literature review

The industrial sector is changing rapidly due to the progression of advanced technological development that demands skilled employees. Due to the constant sharing of information, industries are experiencing a changing environment. Hence, the rapid change in the digital economy is becoming the main reason to change the employment market (Abbasi et al., 2018). As a result, the younger generation is facing different employability challenges as compared to the older generation. Therefore, the primary responsibility to prepare the students for these challenges by training them with skills that increase their chances for successful employment comes on the shoulders of universities (Hamid et al., 2014; IMF, 2017). In the education industry, employability is considered as the most rewarding outcome of student's time and money investment in higher education. The problem which still lies is that, student may not be able to secure a job soon after graduation. As the European Commission (2014) reported, there are about 4.5 million or one in five young people under the age of 25 years are unemployed in western countries (Lesjak, 2014). In line with this, one of the core reason for lesser employability of recent graduates is the mismatch between knowledge and training provided by the universities (Shanmugam, 2017). To address the issue of a low employability ratio, governments across the globe are emphasising on the growth of knowledge transfer from universities to support the development of the overall country. Thus, universities are not only considered as a society transformer, but also as new society producer (Moss et al., 2007). Subsequently, students are considered as a human resource, who have a close connection with universities' knowledge-based economy (Santiago et al., 2008; Abbasi et al., 2018).

Within Asia, Malaysia, Indonesia and Thailand are countries that face problems in knowledge-based economy as universities are facing tough competition by targeting the same consumer group. The universities of Malaysia, Indonesia and Thailand are facing challenges to formulate schemes that attract the industrial sector and help the students to get the right job from an employer (Charles, 2006; Kalei, 2016; Koe, 2019). In most instances, employability is considered as a complicated term as there is no set standard

definition. The research highlighted that it is the employment ratio after graduation; however, other research focussed on the performance of the recent graduates. Employability is also defined in terms of success, skills and personal attributes, which helps the recent graduate in obtaining the employment, carrying personnel and economic benefits as well (Knight et al., 2003; McQuaid and Lindsay, 2005).

Previous researches argued that employability is directly linked to universities and the job market, whereas the primary responsibility lies upon the students. University students must adopt a positive approach towards preparing themselves to meet the challenges of the job market (Leong and Kavanagh, 2013; Abbasi et al., 2018). HEIs should design courses or modules that fulfilled the industrial demands, and at the same time equipped the students with the right skills, especially marketing, management, stress management and technology management skills to contribute towards a prosperous future of the student (Tran, 2012; Leong and Kavanagh, 2013; Skrbinjek and Dermol, 2016). In addition, Business Insider (2018) stated that empirical, practical and analytical reasoning knowledge and skills play an essential role for successful adjustment of the student in the job market. Curriculum revision can be one of best strategies to help the students to learn the tackling of ambiguous and uncertain situations (Kalei, 2016).

In general, universities are considered as a significant source of knowledge that contributes to the development of a country's human capital and plays an important role in the transfer and management of technology and innovation. A sound curriculum that fosters human capital development and knowledge transfer may result in a higher employability ratio, which could further lead towards higher ranking of the university (Kee et al., 2012; OECD, 2012). HEIs prepare the student for the real job market and plays a remarkable role in preparing the knowledge-based economy (Zucker and Darby, 2006; Moss et al., 2007; Dill and Van Vught, 2010; Bridgstock and Tippett, 2019). However, Buntat et al. (2013) stated that a gap exists between the skills demanded by the employer and the skills taught in universities as the universities' curriculum is not in line with industrial requirements and do not address veracity, professional integrity and communication skills. Pertaining to this, Rasul and Puvanasvaran (2009) revealed that a large company with more than 200 employee's stresses more on employability as compared to smaller sized companies with lesser employees. This implicates the importance of various skills needed for the employment in large companies, which reflects the bigger a company is, the more significant the employability skills will be. Employability skills, which generally comprise of basic skills, thinking skills, resource skills, information skills, interpersonal skills, technology skills and personality attributes can help students to fit well in a workplace. Hence, the interpersonal skills and personality traits of recent graduates play an important role in attaining success in the job market.

Undoubtedly, it is crucial for HEIs to equip the students with various previously mentioned skills even though the curriculum stresses on subject knowledge. Khir (2006) found that graduates who lack soft skills have a higher likelihood to face challenges in employment, stressing the importance of the addressing of soft skills in addition to specific subject knowledge at universities (Nurita and Ainon, 2004; Al Kahtani and Syed, 2018). The analysis of current literature shows that employability is a complex phenomenon that affects graduates of universities but also concerns employers (Fugate et al., 2004; Clarke and Patrickson, 2008; Thijssen et al., 2008; Golovushkina et al., 2012). Keeping in view the changing curriculum design specifically for a business student is urgently needed in order to have strong industry linkage and to overcome the

problem of employability soon after graduation. More importantly the curriculum needs revision in teaching methods and strategies for assessments and learning (Filzah et al., 2016; Clarke, 2018; Siraye et al., 2018; Bridgstock and Tippett, 2019).

3   Methodology

The present study investigates the perceptions of students regarding the universities' curriculum design and their employability by looking at universities located in Malaysia, Indonesia and Thailand. This study considered the employer's demands and needs, the skills and knowledge transferred by the universities to the students in the form of modules and courses as well as a holistic view on the scheme of studies. To overcome the challenges of employability, this study involves an international approach to compare the student's perceptions to the offerings of the universities, and the demands of the employers for HEIs to develop a best practice model for higher employability. The researchers used the sampling technique to decide who can give the best information to attain the study objectives. Twenty students from each university were selected irrespective of sex and course of study. The total number of participants in this study is 60. The respondents who participated in this research provided detailed feedback on the area of analysis and voluntarily participated. Twenty students from each university are selected in order to have an attentive discussion. The study employed focus group discussions as the main data collection method that will provide detailed and rich information for better understanding and exploring the phenomena (Vaughn et al., 1996; Kitzinger, 1999; Barnett, 2002; Nassar-McMillan and Borders, 2002). The two-trained moderators carried out the focus group. Three focus group discussions were conducted at three different universities in three different countries. The universities included in this study are Taylor's University, Malaysia; Prince Songkla University (Hatyai), Thailand and Telkom University, Indonesia.

3.1   Taylors University (TU)

An excellent international university in Malaysia, aims to provide outstanding services to students in terms of a wide variety of educational programs and curricula, modern teaching methods along with leading partnerships with other worldwide educational institutions. TU works not only on academic excellence but also focuses on the practical training of graduates to be successful in the global market place. TU focuses on curricula relevant to the industrial sector by collaborating with the industry offering experiential learning programs to their students to enhance the critical skills. TU has a strong international outlook, which can be recognised by its international faculties as well as international students. TU is a modern university and provides students with the facilities to learn from smart devices in a self-directed and personalised manner. Recorded lectures can be accessed anytime and anywhere, offering flexibility to the students towards learning needs. Besides, TU facilitates students to study in X-space technological classrooms. Taylor's became the first Asian university in the year 2013 for running the Massive Open Online Courses (MOOCs), which aims to provide education to students all around the world by providing online and flexible learning, a demand of the today's student. TU has gained remarkable appreciations as a leading private university and is the only Gold Award winner in the Education & Learning category. TU ranks in the top

150 in Asia and is the number one private university in Malaysia. TU received five stars in the QS star rating, which focuses on teaching, employability, facilities, internationalisation and inclusiveness. TU ranked at number 29 in the world with its Hospitality & Leisure Management subject and is number one private university in Malaysia for Art and Design in the year 2017 QS World University Ranking by subject.

3.2 Telkom University (Tel-U)

Telkom University is a private university established in 2013 and located in Bandung, West Java, Indonesia. Tel-U works under Telkom Indonesia since it is owned by PT Telecommunication Indonesia, the biggest telecommunication company in Indonesia. Four institutes, the Telkom Institute of Technology, Telkom Institute of Management, Telkom Polytechnic and the Telkom College of Art and Design Indonesia merged as Tel-U. Tel-U offered programs in various fields, for example, Information and Communication Technologies, Management and Creative Industries, Art and Design, Engineering, Business Studies, Hotel Management and Hospitality, among others. Telkom University collaborates with universities from Korea, France, Germany, Thailand, Turkey, China, Australia and Malaysia, and encouraged the semester exchange programs, short-term courses and research degree programs.

3.3 Prince of Songkla University (PSU)

Prince of Songkla University is a renowned public university in Thailand, established in 1967. PSU comprises 39 faculties and colleges, four hospitals and more than 40 research centres. The main aim of PSU is to attain academic excellence and strong industrial linkages. PSU is a research university, which aims at grooming the students in all aspects by teaching skills such as indoctrinating problem-solving, teamwork, self-research and lifelong learning. The motto of PSU 'Our Soul is for the Benefit of Mankind'. PSU is a well-known educational institution due to outstanding programs, research teams, ranking and achievements, which have appreciated all across the ASEAN region. PSU ranked fourth in Thailand regarding research publications in international journals, which depicts the highly qualified faculty and research team members in the university. Also, PSU scored 4.65 out of 5 in a quality assessment by the National Education Standards and Quality Assessment of Thailand, the highest among all Thai universities.

4 Findings

Based on the focus group discussions, the following findings are derived that reflect the perception of the students from the three countries on the curriculum design and their employability.

4.1 Demographic profile of participants – Taylor's University (Malaysia), Telkom University (Indonesia) and Prince of Songkla University (Thailand)

Table 1 demonstrates the participants' demographic profile of 20 responses obtained from Taylor's University. Within the category of Master's in Management, three students belonged to age group 21–25 years while four under 26–30 years and one under

36–40 years and one belonged to age group 41–45 years. Under the program of Master's in Management, five male and four females responded of whom seven have work experience and two without work experience. The majority (five) were from Malaysia, and the remaining were from Bangladesh, Pakistan and China, respectively. For Masters in Finance, only two students with age 26–30 years and one student under age of 31–45 years were participated. All of them are female, along with work experience. Two students registered as full time and one as part time. Thus, the respondents from Taylors University belong to Oman, China and Malaysia. However, within the group of Management and Business Administration, out of eight students, six fall within the age group 26–30 years and two fall within the age group 31–35 years. Female participants dominate this group, and all of the respondents have working experience.

Table 1   Demographic profile of participants (Taylor's University, Malaysia)

Education	Age (years)	Gender	Work experience	Country
Master's in Management	21 to 25 – (3)	Male – (5)	Yes –(7)	Malaysia – (5)
	26 to 30 – (4)	Female – (4)	No – (2)	Bangladesh – (2)
	36 to 40 – (1)			Pakistan – (1)
	41 to 45 – (1)			China – (1)
Master's in Finance	26 to 30 – (2)	Male – (0)	Nil	Oman – (1)
				China – (1)
	31 to 35 – (1)	Female – (3)	Yes – (3)	Malaysia – (1)
Master's in Business Administration	26 to 30 – (6)	Female – (6)	Yes – (8)	Malaysia – (7)
	31 to 35 – (2)	Male – (2)	Nil	Bangladesh – (1)

Table 2 shows the demographic profile of the respondents of Telkom University, Indonesia. Twenty responses were received. Within the Master's in Management category, six students fall within the age group 21–25 years, whereas ten students were between the age of 26 and 30 years and three students were 36–40 years. However, no student has recorded above 40 years of age within the category of Master in Management, 11 male and eight female responded in which 18 have work experience and one respondent recorded as without work experience. The majority of respondents were from Indonesia. Within the Master's in Informatics category, only one student between 26 and 30 years and national of Indonesia along with one-year work experience.

Table 2   Demographic profile of participants (Telkom University, Indonesia)

Education	Age (years)	Gender	Work experience	Country
Master's in Management	21 to 25 – (6)	Male – (11)	Yes – (18)	Indonesia – (19)
	26 to 30 – (10)	Female – (8)	No – (1)	
	36 to 40 – (3)			
	41 to 45 – (0)			
Master's in informatics	26 to 30 – (1)	Female – (1)	Yes – (1)	Indonesia – (1)

Table 3 shows the demographic profile of the respondents of the Prince of Songkla University, Thailand. Twenty responses were received. Within the Master's in Business Administration category, two students fall within the age group of 21–25 years, one respondent under the age group of 36–40 years. This category comprises female respondents, in which only one respondent with work experience. The majority were nationals of Thailand. For the Master's in Management program, three students were between the age of 21 and 25 years, and 14 students were between the age of 31 and 35 years. In terms of work experience, six students were with work experience, and 11 students reported not having any work experience.

Table 3 Demographic profile of participants (Prince of Songkla University, Thailand)

Education	Age (years)	Gender	Work experience	Country
Master's in Business Administration	21 to 25 – (2)	Male – (0)	Yes – (1)	
	26 to 30 – (0)	Female – (3)	No – (2)	Thailand – (3)
	36 to 40 – (1)			
	41 to 45 – (0)			
Master's in Management	21 to 25 – (3)	Male – (3)	Yes – (6)	Thailand – (17)
	31 to 35 – (14)	Female – (14)	No – (11)	

4.2 Findings on research question 1: To what extent do universities meet the requirements of the industry?

4.2.1 Feedback on university current curriculum (Taylor's University, Malaysia; Telkom University, Indonesia; and Prince of Songkla University, Thailand)

Table 4 shows that 16 out of 20 students at Taylor's University (TU) agreed that the curriculum design is good and up to mark, whereas four students considered the present curriculum is not good and not very relevant in the job market. The results implicate that most of the students at TU find the curriculum design to meet the current market demands and to help them to obtain suitable employment. Few students pointed out that the curriculum is more in-depth as compared to other current degrees. For the Masters in Management degree, the students generally believed that the curriculum design is not suitable in guaranteeing employability and meeting of market demands due to lack of class availability and long teaching hours. They pointed out that there is a need to increase the number of classes for students for better interaction with the other students and lecturers. Others believed that a skills related module might also contribute to a more significant extent, as the current curriculum needs revisions according to current market demands.

At the Telkom University, Indonesia, 19 out of 20 students stated that the curriculum design is good and up to mark, whereas only one student considered the present curriculum as not sufficient and applicable in the job market. Few students pointed out that increased interaction between student and lecturer will contribute to better employability. Increased interaction can be obtained by splitting a single class into multiple classes and reduce the length of the classes.

Table 4   Feedback on university current curriculum design (TU, Tel-U and PSU)

Taylors University, Malaysia	Telkom University, Indonesia	Prince of Songkla University, Thailand
Good – (16)	Good – (19)	Good – (10)
Not good – (4)	Not good – (1)	Not good – (8)
		No idea – (2)

In Prince of Songkla University, Thailand, ten out of 20 students agreed that the curriculum design is good and up to the mark, whereas eight students considered the present curriculum is not useful for the job market and two respondents were neutral. This finding implicates the lowest positive perception of PSU students regarding the curriculum design of the universities. Therefore, overall findings revealed that universities have met the requirement of the industries. The feedback from the respondent of the three universities (Malaysia, Indonesia and Thailand) are mostly positive, especially from Indonesia followed by Malaysia and Thailand whereby they perceived that the curriculum designs are good, and thus fit the current trend and requirement in the industries.

4.2.2   Do you think the university provides comprehensive modules (subjects) that are needed by employers in the industries? Please justify your answer

Table 5 shows that the majority of the student (14) commented that the modules are comprehensive, whereas four students believed that the modules are not comprehensive enough. One student had a neutral opinion. This mixed perception should be reviewed further to allow better learning experience among students. Based on their comments, most of the respondents opined that the lecturers should quote the demonstration of real-world case study examples in class, for example, providing business models to be used for performance management in analysing the employee behaviour and work management, understanding investment activities and discussions on global issues that require problem-solving. In terms of job placement and advancement, the respondents commented that they had gained increased knowledge regarding the transferring of theories to practice. At Telkom University, Indonesia, the majority of respondents (19) agreed that the university is providing a comprehensive module that matches the needs of the employers in the industries. Only one student did not agree with the previous statement, and another student had a neutral opinion. The results of Prince of Songkla University, Thailand, revealed that the majority of respondents (15) agreed with the comprehensiveness of the module being taught, while five opposed the curriculum as non-comprehensive. Overall, the respondents agreed that the three universities offered comprehensive module (subjects) for the students that are sufficient to employ them with the necessary skills needed by the employers.

Table 5   Feedback on comprehensive modules (subjects) offerings – (TU, Tel-U and PSU)

Taylors University, Malaysia	Telkom University, Indonesia	Prince of Songkla University, Thailand
Comprehensive – (14)	Comprehensive – (19)	Comprehensive – (15)
Not comprehensive – (4)	Not comprehensive – (0)	Not comprehensive – (0)
Moderate – (1)	Not really – (1)	Not really – (5)
No idea – (1)	No idea – (0)	No idea – (0)

4.3 Findings on research question 2: What type of skills do employers demand from graduates for successful entry in the job market?

4.3.1 What types of soft skills or new knowledge that you have gained or improved after going through the learning process as a Master's student? Briefly explain

Table 6 reveals the new soft skills and new knowledge that students gained or achieved as a Master student. At Taylor's University (TU), team-work is the most highlighted skill of the respondents (eight), followed by knowledge, presentation skills, communication skills and leadership skills (five) as well as problem-solving and interpersonal skills (three), and business analysis, time management, critical thinking and increased confidence (two). Thus, skills acknowledged by single respondent are trustworthiness, global horizon perspective, increased diplomacy, change perception, network building, economic skills, adaptability and self-awareness. The results further revealed that an increase in team-work, along with communication, leadership and presentation skills are needed. Group work for the completion of assignments is common at TU and team-work is considered essential to the student's learning process. At Telkom University, Indonesia, respondents acknowledged the presentation skills (12), communication skills, decision-making skills and having a knowledge mind-set (six), followed by analytical skills (five), confidence (four), team-work and job management (three) and cooperation and network building (two) are essential soft skills. The results revealed that presentation skill is considered as the most important. Respondents of Prince of Songkla University, Thailand, highlighted that communication skills as most important (seven), followed by conflict management (five), like skills (three), analysis and knowledge (two) as well as strategic thinking, reading skills, advanced laboratory skills, language writing skills and team-work and cooperation (one). The diversity of soft skills in the three universities are quite distinctive. Therefore, the majority of students on the three universities stated their readiness for employment after attending the university. This implicates the students believes the skills that they possess are sufficient to allow them to land on jobs they are seeking from an employer. They perceived that the skills they learnt in the university fit the industries' current demand.

Table 6   Feedbacks on soft skills or new knowledge gained (TU, Tel-U and PSU)

Taylors University, Malaysia	*Telkom University, Indonesia*	*Prince of Songkla University, Thailand*
Knowledge – (5)	Analytical skills – (5)	Analysis – (2)
Presentation – (5)	Presentation skills – (12)	Life skills (social adaptation, listening and express opinion) – (3)
Communication – (5)	Communication skills – (6)	Conflict management – (5)
Leadership – (5)	Marketing skills – (3)	Strategic thinking – (1)
Problem-solving – (3)	Confidence – (4)	Reading skills – (1)
Interpersonal – (3)	Decision-making – (6)	Advance laboratory skills – (1)
Business analysis – (2)	Team work – (3)	Language – (1)
Time management – (2)	Knowledge – (6)Mind-set	Writing skill – (1)
Critical thinking – (2)	Cooperate – (2)	Cooperation – (1)

Table 6   Feedbacks on soft skills or new knowledge gained (TU, Tel-U and PSU) (continued)

Taylors University, Malaysia	Telkom University, Indonesia	Prince of Songkla University, Thailand
Confidence level – (2)	Self-esteem – (3)	Team work – (1)
Trustworthiness – (1)	Job management – (3)	Knowledge – (2)
Global horizon – (1)	Build network – (2)	Time management – (1)
Diplomacy – (1)		Communication skill – (7)
Perception – (1)		
Mind-set – (1)		
Networking – (1)		
Economic skills – (1)		
Adaptability skills – (1)		
Self-awareness – (1)		

4.3.2 *Based on the accumulated knowledge and expertise that you gathered from your learning experience in the university, are you ready for employment? Please justify your answer*

Table 7 reveals the readiness of Taylor's University (TU) graduates to enter the employment market. In this regard, 16 students responded that they are ready to enter employment upon graduation as opposed to four students claiming that they do not consider themselves to be prepared for the job market. The students that measured themselves ready to work believed so because the modules taught in the university provided them with enough confidence to enter employment. Other reasons were that the respondents believed that the taught modules had conveyed remarkable knowledge in accordance to market demand, especially the MBA program, which has given an opportunity to explored more in the industry. The MBA program has provided the students with increased marketability by offering opportunities for work experience and training opportunities for analysing the business environment to create strategies, effective behaviours at the workplace, financial planning and making corporate and strategic management decisions by considering the rapid changes imposed by globalisation. Teamwork and time management highlighted as factors contributing to perceptions of increased employability.

Table 7   Feedback on readiness for employment (TU, Tel-U and PSU)

Taylors University, Malaysia	Telkom University, Indonesia	Prince of Songkla University, Thailand
Ready – (16)	Ready – (18)	Ready – (18)
Not ready – (4)	Not ready – (2)	Not ready – (2)

At Telkom University, Indonesia, the majority of the respondents (18) believed that they would be ready for employment upon graduation, as opposed to two who believed that they would not be prepared. The respondents who believed that they would be ready did so because they trust the quality of the module being taught in increasing the chances for

employment. Few of the courses or modules have provided the opportunity to explore the actual industry practices, and the liaison between the university and the industry is considered as the most crucial step in securing employability.

Finally, the respondents of the Prince of Songkla University, Thailand, were also confident in their perceptions of employability upon graduation. Similar to Telkom University, the majority of the students (18) believed they would be ready as opposed to only two students who thought that they would not be prepared for employment. The student who considered themselves capable of entering the employment market is due to their confidence in the quality and comprehensiveness of the modules taught as well as the possible opportunity to explore industry during the modules. In general, the findings implicates that the student from these universities are ready for employment and, therefore, their skills fit the employer demand and requirement of the students.

4.4 Findings on research question 3: What best practices can be proposed for the design of the curriculum to improve graduate employability readiness in the growth triangle region?
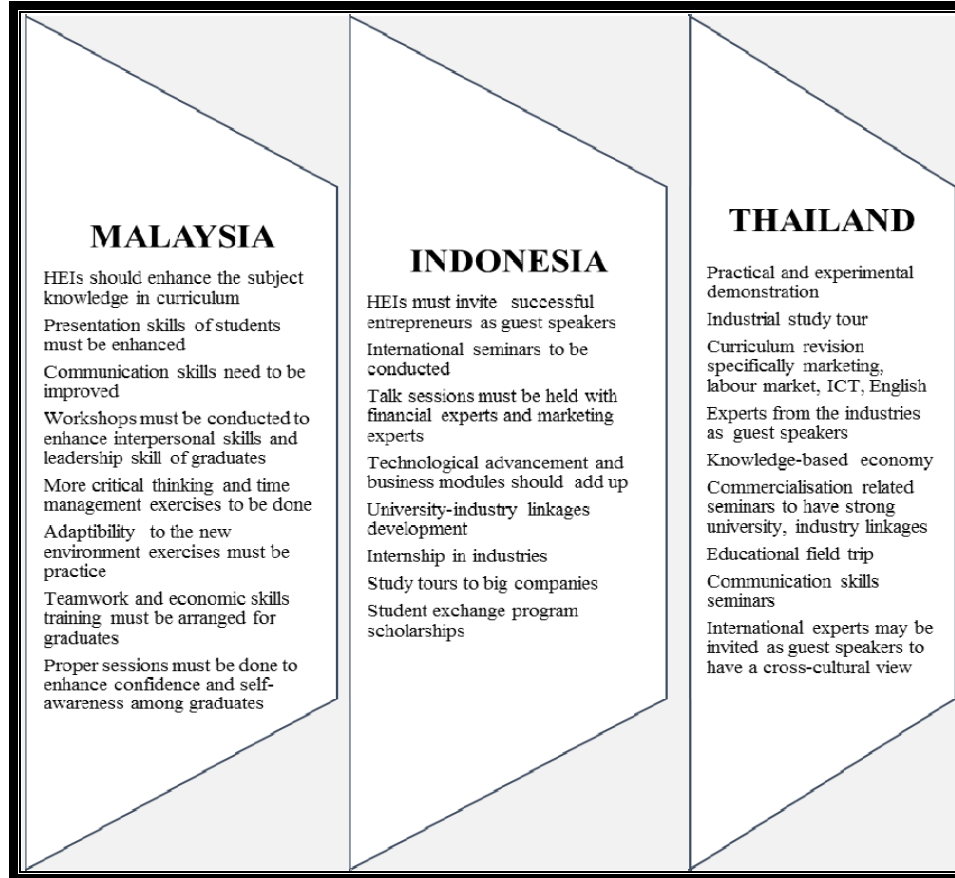
Based on the data collected, the lists of strategies have been recommended by the respondents that should be undertaken by the university to improve the curriculum design and to increase the students' employability in the market place (refer Figure 1). These strategies could be regarded as the best practices that the universities can adopt to improve their curriculum designs.

Figure 1 depicts that in *Malaysian universities*, HEIs must increase the subject-related knowledge in the curriculum along with stress on presentation skills to improve the communication skills simultaneously. There is a dire need for workshops related to leadership skills among graduates. The students lack in critical thinking and adaptation to a new environment, hence exercises needed in this regard. The graduate must be trained to work as a confident and productive team member.

In *Indonesian universities*, successful entrepreneurs may be invited as a guest speaker, similarly financial and marketing experts must be requested for a talk session. In the curriculum, the addition of business and commercialisation related modules might add up. To familiarise the student with industry culture, study tours and internship opportunities in the industrial sector are required, along with student exchange, program scholarship to give them international exposure.

The HEIs in *Thailand* requires practical and experimental demonstration along with industrial study tour. However, marketing, ICT and English curriculum need to be revised. Similarly, universities should develop strong academia-industry linkage. Hence, education field trip must also include in the curriculum. In these aforementioned universities, similarities in suggestion lies such as addition of university industrial trip, industry interaction, commercialisation and technology transfer related activities/ similarly, workshop needed to enhance student's communication skills and team work capabilities to increase confidence among students. Thus the universities as mentioned above have similarities in suggestion such as the addition of university industrial trip, industry interaction, commercialisation and technology transfer related activities/ similarly, workshop needed to enhance student's communication skills and teamwork capabilities to increase confidence among students.

Figure 1   Best practices Malaysia, Indonesia and Thailand

MALAYSIA

HEIs should enhance the subject knowledge in curriculum

Presentation skills of students must be enhanced

Communication skills need to be improved

Workshops must be conducted to enhance interpersonal skills and leadership skill of graduates

More critical thinking and time management exercises to be done

Adaptibility to the new environment exercises must be practice

Teamwork and economic skills training must be arranged for graduates

Proper sessions must be done to enhance confidence and self-awareness among graduates

INDONESIA

HEIs must invite successful entrepreneurs as guest speakers

International seminars to be conducted

Talk sessions must be held with financial experts and marketing experts

Technological advancement and business modules should add up

University-industry linkages development

Internship in industries

Study tours to big companies

Student exchange program scholarships

THAILAND

Practical and experimental demonstration

Industrial study tour

Curriculum revision specifically marketing, labour market, ICT, English

Experts from the industries as guest speakers

Knowledge-based economy

Commercialisation related seminars to have strong university, industry linkages

Educational field trip

Communication skills seminars

International experts may be invited as guest speakers to have a cross-cultural view

4.5   What are your recommendations for further improvement of the curriculum designs to increase graduate's readiness for employment?

Table 8 shows that Taylor's University (TU) respondents suggested the improvement of the curriculum design. The respondents recommended an increase in the incorporation of corporate and industry collaboration and linkage by introducing more real-life case study examples in the modules or courses (five respondents). The hiring of industry experienced lecturers (three) and the respondents also acknowledged the efficiency of administrative services (two). Other points of improvement that were mentioned such as conducting career fairs for postgraduate students, using less theory in classroom teaching and increased practical knowledge and social interaction among the students and the lecturers. Some of the respondents also mentioned that they required help in connecting with industry experts, which can be done by including field trips in the module. Furthermore, technical skills are mainly focussing on software, and information technology adds up in future modules to help the students to recognise the employers demand upon employment. Further, the reduction in the number of hours spend on exams during the module was suggested to add practical courses and training, looking at

innovativeness. Other respondents addressed their concerns related to assignment, workload and recommended to introduce practical industrial experience in the form of an internship. Overall, the respondent's main suggestion refers to collaboration with industry experts in designing the curriculum to address the mismatch between what was taught and what is expected from the employers.

Table 8 Recommendations for further improvement of the curriculum designs (TU, Tel-U and PSU)

Taylors University, Malaysia	*Telkom University, Indonesia*	*Prince of Songkla University, Thailand*
More experienced lecturers – (3)	Invite international lecturers – (3)	Fieldwork – (1)
Improve the efficiency of administration – (2)	Leaders talk (financial expert, marketing expert and successful entrepreneurs) – (8)	Practical – (6)
Careers fairs – (1)	International seminar – (3)	Fieldtrip – (4)
Practical classes – (1)	Mini seminar every week or month – (2)	Enhance student management system – (1)
More social experience– (1)	Add important topics combining with business and technological advance – (1)	Update modules (labour market, ICT, marketing and English) – (7)
Forefront for seeking employments – (1)	Business incubator– (2)	Experts in industry– (1)
Field trips – (1)	Scholarship for exchange program – (2)	
IT subject as an elective – (1)	Expand network with large companies– (2)	
	Comparative studies with other universities– (1)	
Industrial involvement – (1)	Site visit for big companies – (2)	
No need exam – (1)	Add more classes– (1)	
New teaching – (1)	Add more facilities– (library, reference books) – (1)	
Student welfare – (1)		
Communication training – (1)		
Critical thinking training – (1)		
New people linkage – (1)		
Work Integrated Learning (WIL) activities for credit – (1)		
Industry collaboration and participation in designing the modules– (1)		

At Telkom University, Indonesia, the respondents suggested improving the curriculum design by inviting successful entrepreneurs and marketers to collaborate in the design process. Besides, industry visits within the telecommunication industry by encouraging the international lecturers, interactive seminars on marketing, financial and business

topics were mentioned as aspects that could be improved. The industry visits should include large telecommunication companies, as it will provide the students with a real-life perspective of what a telecommunication company does. The respondents would also encourage the conduction of weekly seminars with industry experts. Finally, the respondents of Prince of Songkla University, Thailand, suggested that refining the curriculum design by the introduction of fieldwork and practical classes along with academic classes. Other recommendations were upgrading of the student management system, the revision of specific modules such as labour market, English and marketing, as well as increasing the interaction between industry experts and the students in the form of industrial exercises.

5   Discussion

Based on the objectives of the study, the following discussions are provided.

### 5.1   To what extent do universities meet the requirements of the industry?

Overall, the majority of students in the three universities perceived that the curriculum design is good and up to mark and the modules or subjects being offered by the universities are comprehensive and made their learning process worthwhile. With various soft skills, that is, communication, presentation, analytical, leadership and conflict management that they learnt and gained during their study, many students of the three universities expressed their readiness for employment. Even though there are some significant variations in the number of answers among the respondents (please refer to Tables 4, 5 and 6), we can imply that the curriculum designs in the three universities are in line with the industrial demands. Nonetheless, more improvements on the curriculum designs are needed to increase the students' employability in the job market. The significant relationship between curriculum design and employability has been discussed widely in the previous studies (Hamid et al., 2014; Skrbinjek and Dermol, 2016; Clark, 2018; Siraye et al., 2018; Adrina et al., 2019).

5.2   Type of skills do employers demand from graduates for successful entry in the job market

In the previous studies, many skills such as teamwork, leadership, technological knowledge, professionalism, problem-solving skills and willingness to learn (Stukalina, 2008; Rasul and Puvanasvaran, 2009; Skrbinjek and Dermol, 2016; Bridgstock and Tippett, 2019) have been mentioned as the skills required by the employers. From this study, the students perceived that the skills that they gained or achieved during their study are sufficient to meet the demand of the prospective employers. Among the skills listed in Table 6 are communication, leadership, presentation, marketing, life skills, etc. Apparently, the employability skills are diverse and fulfilled the students' knowledge and skills gap. To the respondents, these skills are the skills that their prospective employer demand from them. However, they also believe that their skills can be further enhance if curriculum designs are improved.

Figure 2 Model of curriculum designs and employability of GTC's students
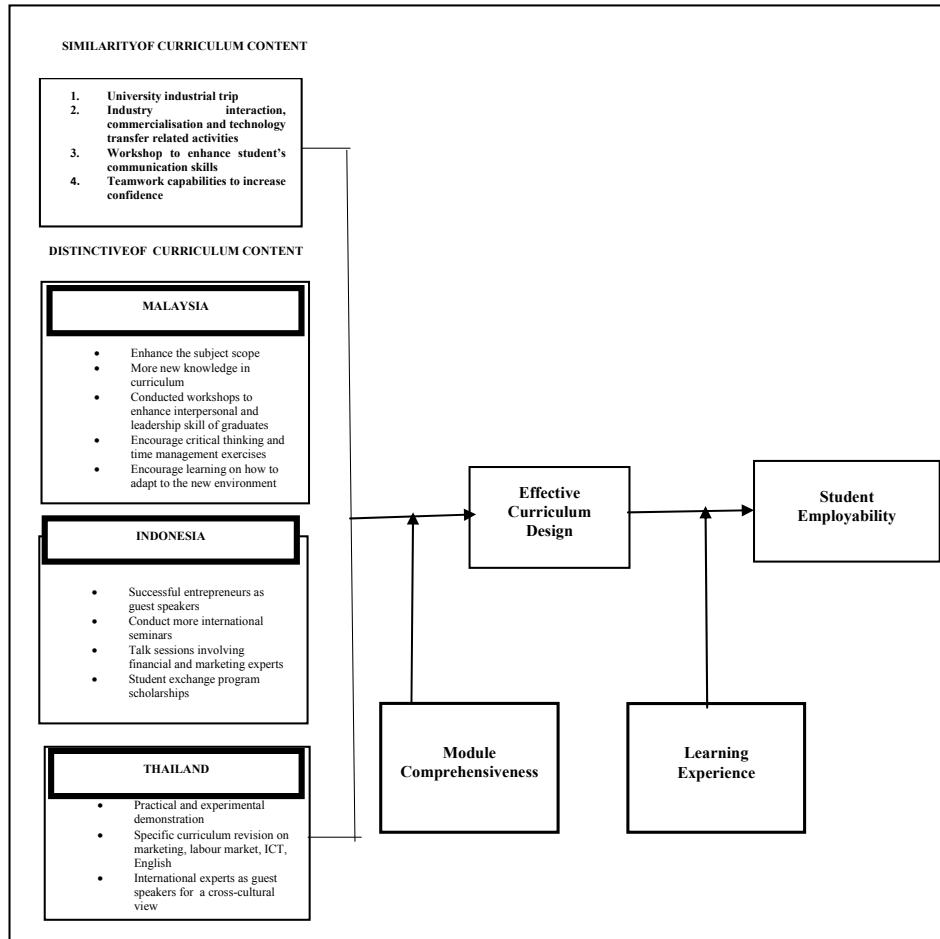
Source: Isa et al. (2019)

5.3 *Proposed model for growth triangle countries (Malaysia, Indonesia and Thailand)*

Based on the best practices depicted in Figure 1, a model is proposed (refer to Figure 2) to highlight the relationship between similarities and distinctiveness of curriculum design content of each university of growth triangle countries (Malaysia, Indonesia and Thailand) with the curriculum design effectiveness and employability. The similarity curriculum content comprises the similar recommendation of curriculum contents as suggested by the students from the three countries. On the other hand, distinctive curriculum content represents the specific content of curriculum design that have been suggested by each university's respondents. Regardless, it is proposed that, in the curriculum design, both similar and distinctive curriculum contents can equally influence the effectiveness of curriculum design. It is suggested that effective curriculum design can subsequently increase student's employability in the industry. Based on the findings,

module comprehensiveness and learning experience can act as two distinct moderators, whereby module comprehensiveness may affect the effectiveness of curriculum design, while learning experience may affect the student's employability. Hence, the proposed model can enable higher employability of student in the growth triangle countries.

The effective curriculum design will increase the employability of students in these countries. The curriculum design in this study acts as a mediator between the similarities.

6   Conclusion

Past research highlights that lack of soft skills among graduating students is considered as the main reason for decreased employability ratio among graduates. Marketing skills, teamwork, stress management skills, interpersonal attributes and personality traits are considered the ultimate essential skills in securing a suitable job. This study has compared three universities from three different countries by looking at the curriculum design versus employability. Results highlighted that the three universities lack to some extent in the curriculum content design. Therefore, a revision of the curriculum is explicitly needed in terms of knowledge transfer; focus on technological innovation, critical thinking, time management, practical work experimentation, seminars, field trips, business expert interaction, business site visits and industrial expert lecturers. Successful entrepreneurs should be involved to share their experiences and provide a platform for others to learn from their experiences. This requires an active approach of universities in acquiring increased involvement of the industrial sector within the curriculum. Increased interaction between universities and industry should add up in the curriculum in the form of industrial visits and lectures, as it will be fruitful in the future, especially during the job search process, since students already formed the communication with industry experts and established a network during their studies, which will ease the approachability. Higher Education Institutions must place increased focus on employability as this study has revealed that the curriculum revision is the main factor that is hindering increased employability. Program Deans must be involved in the making of strategies for their respective curriculum discipline revision in which the best practice model presented in this paper may assist. The best practices are necessary to overcome the employability issues among graduating students. Earlier studies too have clarified that student should be equipped with necessary skills for employability to allow them to fit well in the work place, and to transform themselves to become valuable human capital. A model is proposed to depict the relationships among the contents of curriculum design, curriculum design effectiveness, module comprehensiveness, learning experience and student employability in the three countries, Malaysia, Indonesia and Thailand, as the actors in the GTC.

Since the study is conducted from the student perspective about curriculum effectiveness and employability, it has some obvious limitations for instance the employer viewpoint about curriculum effectiveness must be studies to get a holistic view about curriculum effectiveness. Thus, further studies under employer perception and curriculum effectiveness in growth triangle countries should be conducted.

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