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**Detailed Program** November 16, 2016 15:00-18:00 Registration Desk Registration MC: Ms. Satsuki Shimada 17:00-17:30 ELSTON **Opening Ceremony** Fuiitsu Quality Laboratory Limited 17:30-18:30 ELSTON Keynote 1 Chair: Ms. Kyoko Mori Project Management - a Tool for Success Fuiltsu Learning Media Limited Ms. Fiona Balfour Non-executive director with Metcash Limited, Salmat Limited, TAL (Dai-ichi Life) Australia and Airservices Australia 18:30-19:00 Break MC: Ms. Hiromi Inoue and Mr. Keiichi Minakawa 19:00-20:30 Pool side of Marriott Welcome Reception IBM Japan, Ltd. November 17, 2016 9:00-15:00 Registration Desk Registration 9:30-10:30 ELSTON Keynote 2 Chair: Prof. Akira Yamazak Social Capital, Networks and Communication Chiba Institute of Technology, Japan Dr. Jim Taggart OAM, Adjunct Professor and Chairman and Chancellor of Asia Pacific International College Coffee Break 10:30-10:50 10:50-12:30 Special Lecture 1/Breakout Session 1 Room ELSTON "A" WAIANBAH 1 "B" WAIANBAH 2 "C" WAIANBAH 3 "D" HINTERLAND ROOMS 1 "E" HINTERLAND ROOMS 2 "F" TERRACE ROOM 1 "G" TERRACE ROOM 2 "H" VERANDAH ROOM "I" Chair Mr. Tatsuo Shimizu Ms. Kyoko Mori Dr. Rakesh Khnal Ms. Keiko Sakagam Dr. Ehssan Sakhaee TRE Dr. Ali Jaafari Mr. David Hudson 1 thinking Monitoring and Evaluation (M&E) as a Tool Successful Projects – The Case of International velopment Projects -. Sanele Wandile Nhlabatsi (The University of South ID1
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Mr. Koen Tomita (NTT DATA Corporation) Ms. Mikiko Kagevama (FUJITSU LIMITED) B05 A Study of Dynamic Phase Decision Flow in EAC The Efforts and their Evaluation to Succeed Product Tender Evaluation Criteria for Engineering-Report of Project Management Mentoring Activity for roject Management Approach using Visualization of Effective Approach Using the Action List for Unskilled Quality Management for Cloud Services Higher Education Internationalization in a Developing Prediction Method in Software Development Processes Prtof, Shigeaki Tanimoto (Chiba Institute of Technology evelopment Project Ir. Norihiro Kambara (OMRON Corporation) Procurement-Construction (EPC) Contractor Selection
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Accelerating Autonomous Functionality: Trends, Challenges, Strategies

Dr. Paul Nielsen

Director and CEO of Carnegie Mellon University's Software Engineering Institute

Chair: Prof. Michio Shimomura, Chiba Institute of Technology, Japan November 18, 2016 9:00-15:00 Registration Desk Registration 9:30-10:30 ELSTON Keynote 4 Chair: Ms. Hiromi Inoue Leadership in the Cognitive Era. IBM Japan, Ltd. Dr. Priscilla Rogers Senior Manager, Cognitive Health & Life Sciences Research, IBM Research - Australia Coffee Break 10:30-10:50 Special Lecture 2/Breakout Session 3 10:50-12:30 Room ELSTON "A" WAIANBAH 1 "B" WAIANBAH 2 "C" WAIANBAH 3 "D" HINTERLAND ROOMS 1 "E" HINTERLAND ROOMS 2 "F" TERRACE ROOM 1 "G" TERRACE ROOM 2 "H" VERANDAH ROOM "I" Chair Mr. Kazutoshi Shimanaka Dr. George Sammy Agoki Mr. Kazuo Kogure Ms. Hiromi Inoue Dr. Venkatesh Mahadevan Dr. Rakesh Khnal Mr. Hao Dinh Dr. Jim Taggart Special Lecture 2 edicting the Change in Critical Path Agile Iteration Plan based upon Risk Quantification tomation of Old-New Comparing and Matching Test Development and Validation of Common Base troduction of Multi-business Project Management A Study of Project Problem Solutions for Reduction of E-portfolio as a Tool for Better Practices in PBL Risk Assessment with Consideration for Indirect eveloping Organisational Project Management (OPN Analysis Mr. Daisuke Tomoda (IBM Japan, Ltd.) or Quality Assurance in Legacy Migration Methodology for Global Projects Mr. Toshiki Maeno (Hitachi, Ltd.) Mr. Mohammed Wajdi Hammad (University of New South Wales) etroactive Contract Risks s. Yukari Okujo (NTT DATA Corporation) Masatoshi Kaimasu (Kohe Women's University) keholder in SNS stakenolder in SNS Ar Takashi Imai (Chiha Institute of Technology Ms. Midori Odawara (Hitachi Document Solutions Capability
Mr. Paul Hodgkins
Executive Director of Paul Hodgkins Project
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— Considering "Agreement Level" Between Principal New Management Process of Operation and Maintenance Service for Keeping Service Level Mr. Noriyuki Ogawa (Hitachi Systems,Ltd.) Perspective for Multinational Project Management in Sharing Economy towards Technological Singularity Mr. Hiroyuki Endo (NTT DATA Corporation) Management-Dr. Viral Upendrabhai Pandya (Asia Pacific Interna And Agent — Mr. Toru Hanayama (Fujitsu Ltd Global Business Interviews Ms. Kiyomi Miyoshi 12:30-13:30 GERDEN TERRACE Lunch 13:30-14:50 Special Lecture 3/Breakout Session 4 Room WAIANBAH 1 "B" WAIANBAH 2 "C" WAIANBAH 3 "D" HINTERLAND ROOMS 1 "E" HINTERLAND ROOMS 2 "F" TERRACE ROOM 1 "G" TERRACE ROOM 2 "H" ELSTON "A" Chair Ms. Natsuko Sato Dr. Rina Shahriyani Shahrullah Dr.Elza Syarief Mr. Paul Hodgkins Dr. Ali Jaafari Dr. Ehssan Sakhaee Dr. Akira Yamazaki Dr. Michio Shimomura necial Lecture 3 ccessful Project Management Might Disturb sks and Preventive Measures in Global Projects Quality Management in Large-scale Developme Projects —A study based on the introduction of Optimized Back-Office Management Control of the Group Companies by Process Standardization and ost Reducing Modifications to CCPM and Criteria fo ving Systems Performance by Innovative The Practice of the Human Resource Management to Ant Colony Innovation n Formula to Lame Scale Rusines statistical control methods— Ms. Mami Kimura (IBM Japan, Ltd.) nared IT Systems Implementation r. Akikazu Tanaka (Hitachi Systems.Ltd.) Ir. Toshikazu Emura (NTT DATA SYSTEM Iculation for Japanese Mega-Bank . Takavuki Nakavama (FUJITSU LIMITED) Yasuaki Fukuda (IBM Janan I td.) Prof. Koji Okada (Tokyo City University) CHNOLOGIES INC.) Make Effective Process and Shorten Schedule in velopment of Efficient Project Conditions Diagnostic Quality Improvement Approach of Large-Scale SI valuation of Hybrid Project Communication Model The Framework to Hold and Keep Knowledge in The effectiveness in project management functions and The Model for Predicting A Required Man-hour by A Software and Hardware Development Mr. Yoshikazu Miyajima (NEC Corporation) Study on Project Risk Analysis of IS Development Project by Multi-agent Simulation -Mr. Shinnosuke Yokota (Bunkyo University) the size of in-house team Mr. Edoghogho Ogbeifun (University of Johannesburg) Fest Phase in The Method of Detecting Incons petween Design Items Dr. Atsushi Motovama (Hitachi, Ltd.) faintenance Development Project fr. Junichiro Wada (FUJITSU LIMITED) ojects r. Keiichi Minakawa (IBM Japan, Ltd.) Tenio Endo (NIPPON TELEGRAPH AND TELEPHONE WEST CORPORATION Case Studies of Stakeholder and Scope management evelopment of Management Process for IT Service Applying for Quality Control of Services to Package The Methods towards Quality Standards for Global The Mental Health Management as Project Risk and Risk Management Techniques and Practices for Towards a Competency Assessment Planning Framework for IT Project Managers Dr. Venkatesh Mahadevan (Asia Pacific International nterorise Risk —Visualization of the Risks Focusing in Standardized Regional Shared Accounting System Software Installation Process Mr. Hirofumi Kawamoto (NEC Nexsolutions, Ltd.) Rollout and the Effect outhern African Construction Projects Yoshikazu Kobayashi (Hitachi, Ltd.) Mr. Katsuhiro Orita (FUJITSU LIMITED) on the Losses Using Risk Management Approach . Arnesh Telukdarie (University of Johannesburg) Ir Masahiro Ohira (NTT DATA Cornoration ls. Hitomi Abe (IBM Japan, Ltd.) Focal Points and Practical Guideline in the Situation of Introduction of Front-Loading Method to Improve The Effects of Organizational Improvement by Implementing Quantitative Project Management Based on CMMI level 5 Approach to Build Prediction Model for System platforn mproving Efficiency of Stakeholder Analysis with Mind G19
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10:00-16:00 Currumbin Wildlife Sanctuary ProMAC Fact Finding Tour

[Note] This program may be changed without previous notice

# Higher Education Internationalization in a Developing Country: A Road Map

Agustina Fitrianingrum\* Rina Shahriyani Shahrullah\*

Internationalization of Higher Education Institution (HEI) is driven by the needs of HEI to survive in the global competition. It is also implying that HEI is internationally competitive, strong in academic quality, internationally recognized hence able to produce competitive graduates. HEIs from developed countries have devised themselves by designing strategies and set plans with enormous budgets, which is vice versa in developing countries. Since, HEI global competition is going to be in a red rather than a blue ocean, the alternative strategy for HEIs in developing countries is presented to initiate the internationalization process in effective ways.

Key Words & Phrases: internationalization, strategy, Higher Education Institutions, developing country, ASEAN.

#### 1. Introduction

The quote "internationalization isn't just for the best universities, it's now something that every university needs", starts this paper [1]. Internationalization of Higher Education Institution (HEI) is not a new term for education. It is started from Western countries since 1950's. Internationalization of HEI is the process of integrating an international/intercultural dimension into the teaching, research and service functions of the institution [1]. Hence, internationalization of HEI basically is the acceptance process to globalization in education. This is a process that brings two aspects internal and external. Internally, HEI should be prepared with the changes structural, cultural and While externally, HEI becomes more international by having collaboration with other international partners, projects and recruitment of foreign students [2].

Authors indicate that there are three drivers of HEI's internationalization: HEI's core services, stakeholders' satisfaction and government policy. Firstly, HEIs have a vision and missions to delivers qualified education, research and society service, as these are the main pillars in higher education. However, globalization forces HEI should be in the chain of international collaboration to achieve the excellences. International network and collaborations will enhance the capacity of HEI to deliver better services for society. The success of HEI in the internationalization means that HEI is internationally competitive, internationally recognized and strong in academic quality. It indicates that a HEI will sustain in the long run. Secondly, stakeholder's satisfaction is as a crucial issue including in education. Stakeholders are students, parents and staffs. For students, when an international program is crafted well, it opens some

opportunities for students to go further and enrich themselves with international experiences. It develops not only their cognitive skills for critical, comparative and complex thinking but also for soft skills to live in the multicultural organization, such as cross-cultural communication, adaptation, flexibility, tolerance, and empathy. Thirdly is government policy. It is widely known that nation' competitiveness is built from the economic power of a country, which is always equivalent with the quality of education. Therefore, government designs a set policy to support HEIs' internationalization. Being at the first top tier university in the world rank become national agenda of every nations. Therefore, government sets national policy to regulate, encourage and support HEIs to go further in global competition.

Moreover, internationalization is the need for all HEIs to survive in the future; competition amongst HEIs is getting tight. HEIs from developed countries have been competing in the international market since long time ago. They devise themselves by designing strategies and set plans with ambitious target and enormous budget. In contrast, it becomes the constraint of HEIs internationalization for developing countries. HEI global competition is going to the red rather than blue ocean. Red ocean is a symbol of blood; it represents the war in the market place. Therefore, term of HEI internationalization sounds challenging for universities in developing countries. The illustration of internationalization of HEIs from the developing country in the global market is like a tiny tail fish swimming in the ocean between the sharks. The head to head competition with established HEIs from developed country is impossible. How to survive in the competition becomes the main agenda of HEI. Therefore, this paper purpose is to present the alternative strategy of internationalization for HEIs in Indonesian context. This paper contributes to design

<sup>\*</sup> Universitas Internasional Batam

the roadmap and a step-by-step approach to start the internationalization process.

#### 2. Form of Internationalization

Internationalization is identical with students and staffs mobility. Indonesian Ministry of Education regulates the cooperation between HEIs under the regulation of Education and Culture Ministry no. 14 Year 2014. There are thirteen form of cooperation such us cooperation in teaching, research and society services, internal quality assurance, twinning program, joint degree program, double degree program, credit earning, visiting professor, exchange program for students and lecturer, sharing resources, establishing center of Indonesian Studies, publication, internship, joint seminar and other forms of important cooperation.

identified Huang [3] pattern of internationalization in Asia. There are three patterns: an import-oriented type, an import and export type, and a transitional type. The import-oriented type is country that imports educational programs and institutions from other countries mostly from the West. Vietnam and Indonesia are typical of this first type. The second is country that import higher education activities from Western countries and at the same time export their higher education activities to other Asian countries, such as Singapore and Hong Kong. The third type is country that tends to import more educational services than they export, but are keen to export their own higher education services. This refers to countries such as China and Japan.

The following are descriptions of activities of the internationalization program related to students and staffs or lecturers mobility.

# 2.1 Students Mobility

There are some forms of students' mobility program. There are short-term international camp, credit earning, joint degree or dual degree program. Short-term program usually is a short program between 10 days to two months; mostly the content is improving English language for non-English speaking country students and also exploring cultures to enhance cross-cultural competency. Credit Earning Program is a program that offering a student to earn credit from university partners in overseas for one up to two semesters. The third is a Joint Degree Program that offering a student to get a degree from home university and one Host University by spending two years in each university.

The last form is dual degree or double degree program. This is a program that a student obtains two degrees from home university and one Host University. These kinds of program are designed purposively to foster the global graduate.

Nowadays, the needs of joining international program amongst students in Indonesia are increasing. This phenomenon drives by the demand of graduates that not only competent in the related fields but also posses good soft skills such as understanding cross-cultural communication, high adaptation and flexibility, tolerance for ambiguity, empathy and better understanding for the society. So, they attributed themselves with global graduates. Global graduate has characteristics with the ability to work with team from global background of countries. Regarding the survey from CFE Global Graduates (2011) [4], this is the first top ten skills sought by 12 leading employers collectively representing 3500+ graduate recruits. The description is as following: A ability to work collaboratively with teams of people □ from a range of backgrounds and countries; Excellent communication skills: both speaking and □listening; □A high degree of drive and resilience; 

An ability to embrace multiple perspectives and  $\Box$ challenge thinking;  $\Box$ A capacity to develop new skills and behaviors □according to role requirements; □A high degree of self-awareness; 

An ability to negotiate and influence clients across the □globe from different cultures; □An ability to form professional, global networks; □An openness to and respect for a range of perspectives □ from around the world; □ Multicultural learning agility (e.g. ability to learn in any Dculture or environment). 

In many researches evidence that the graduate attributed with the described skills are having higher opportunities to be success in carrier and job.

The trend of studying abroad is not only in Indonesia but also in other ASEAN countries in this last three years. The latest data collected from the UNESCO Institute for Statistic is from 1999 to 2013 [5]. It is shown that Malaysia is the leading country to send the student to overseas (Outbound program), followed by Vietnam and Indonesia. The data from 1999-2013 shown that Vietnam is the most progressive country in sending the students to overseas, it is double almost 7 times since 1999. It makes Vietnam becomes number 2 in ASEAN since 2006. The total number of outbound students from ASEAN country is presented in the following table 1:

Table 1 Number of Outbound Students from ASEAN

No	Country	2011	2012	2013
1	Malaysia	59.855	58.485	56.260
2	Vietnam	52.029	53.004	53.546
3	Indonesia	36.559	35.785	39.098
4	Thailand	27.130	26.310	25.517
5	Singapore	21.281	22.037	22.578
6	Philippines	11.672	11.208	11.454
7	Myanmar	7.248	6.616	6.388
	Lao People's			
	Democratic			
8	Republic	4.146	4.344	4.985
9	Cambodia	4.253	4.180	4.221
	Brunei			
10	Darussalam	3.425	3.550	3.365

Source: UNESCO Institute for Statistic (2016)

The following data is describing the percentage of students study abroad compares to the total population of each country in ASEAN countries. The data is presented in the Figure 1:

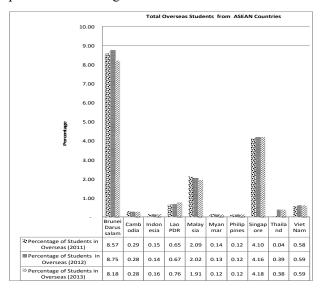


Figure 1 The Total Percentage of Overseas Students from ASEAN Countries

The data is analyzed based on the annual report of United Nation Economic and Social Commissions for Asia and Pacific. The result shows that Singapore and Brunei Darussalam as developed countries from ASEAN, delegate the highest number of students to overseas, followed by Malaysia.

The following figures are descriptions of studying abroad in each ASEAN countries from 2011-2013.

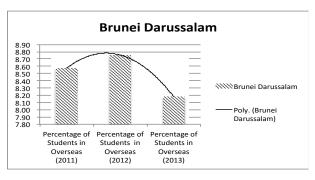


Figure 2 Brunei Darussalam's Trends of Students Study Abroad

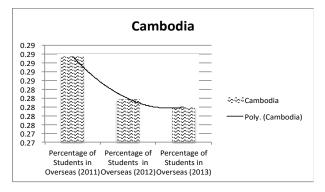


Figure 3 Cambodia's Trends of Students Study Abroad

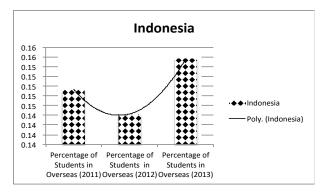


Figure 4 Indonesia's Trends of Students Study Abroad

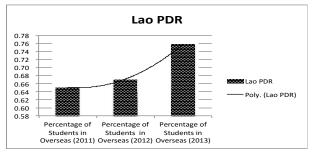


Figure 5 Lao PDR's Trends of Students Study Abroad

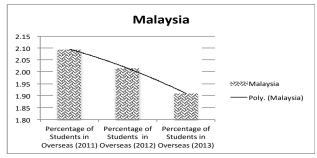


Figure 6 Malaysia Trends of Students Study Abroad

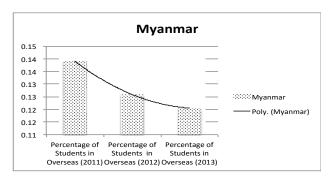


Figure 7 Myanmar's Trends of Students Study Abroad

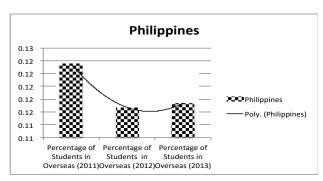


Figure 8 Philippine Trends of Students Study Abroad

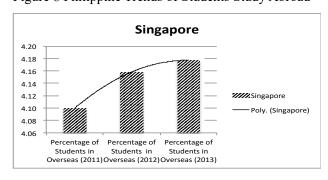


Figure 9 Singapore Trends of Students Study Abroad

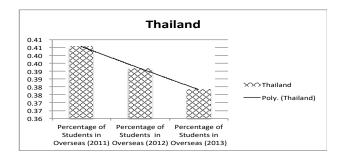


Figure 10 Thailand Trends of Students Study Abroad

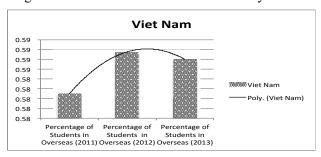


Figure 11 Vietnam Trends of Students Study Abroad

From the figures 2- 11 shown that Indonesia and Lao PDR have increasing potential trend in sending students to overseas. However, from the country size of Indonesia and also the positive trend of economic growth, Indonesia becomes the most potential country in the internationalization process. As ASEAN report stated that Gross Domestic Product per August 2015 is 983,571 (in US\$ million) followed by Thailand, Malaysia and Singapore. From another point of view it also means that Indonesia is strengthening the international collaboration with the international partners through students mobility.

#### 2.2 Staffs Mobility

Staffs' mobility is one of some important elements of internationalization. This type of mobility can be in short or longer time. The example of short time lecturer mobility is the international conferences, while visiting professor program for teaching or international joint research are the examples of longer program mobility. This is a method to share the knowledge amongst international partners and human resource development. Besides, the international staff mobility also brings the positive atmosphere in campus to enhance the awareness and willingness of all faculty member and students of Host University to be open to other cultures, for example by learning and exchanging the foreign language and culture through the daily communications [1].

The staffs mobility can be established when Sabbatical or a *scientific leave* abroad is awarded after staff working for five or six years. By this scheme, staffs can leave for professional development or research up to twelve months [6]. The sabbatical leave in Indonesia is regulated under Indonesian Government Regulation Number 37 Year 2009 article 32. It is stated that lecturer under the Associate Professor level may take the sabbatical leave every five years, while Associate Professor level and above

may take the sabbatical leave for every four years. However, the implementation of sabbatical leave is yet popular in Indonesia. In this regards, HEIs in Indonesia should have their own regulation. If the sabbatical scheme can be implemented well, it benefits to enhance the quality of education and also foster research and publication area in Indonesia.

Even though sabbatical leave considered being important issue, obtaining the source of funding for staffs mobility can be challenging. To solve this matter, staffs are encouraged to apply international grant for professional development that offers by government or foundations from developed countries.

3. The Road Map of HEI Internationalization Internationalization is not simply an issue of managing student mobility but an issue of strategic transformation of HEI [1]. Hence, the road map of HEI internationalization is presented as follows:

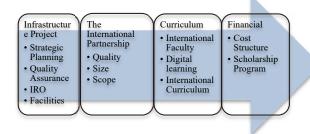


Figure 12. HEI Internationalization Road Map

#### 3.1 Infrastructure Project

Infrastructure consists of soft and hard infrastructures. The soft infrastructures are strategic planning, quality assurance, International Relation Office. The hard infrastructure is facility that supports the teaching learning process.

#### 3.1.1 Strategic Planning

The vision and mission of HEI is the key to set the strategic planning in long-term planning. Since it is a foresight of HEI future direction, all of departments should be involved to achieve each milestone. The design of an internationalization strategy development is not only the responsibility of international relation office but actuate in the whole HEI's program.

#### 3.1.2 Ouality Assurance

The requirement of establishing international collaboration between institutions is equality. Equality means that each of institution recognized each other quality. Trust is principal in building a mutual relationship. For example in the credit earning program that each institution will accept the result of

subject credits taken by students in other institution. The teaching learning process, curriculum and output of the study must be met the standard of each institution. Furthermore, this can be continued for the longer program such as joint degree or double degree program.

Therefore, to establish a good mutual relationship, quality assurance is the answer. HEI should ensure the quality assurance in curriculum development, staff development, and teaching learning facilities, ensuring transparency within the assessment to create conducive atmosphere of education.

Before HEIs come to internationalization process, they have to fulfill the requirement of government policy in conducting the teaching learning process. The quality assurance means that internally the system is monitor and evaluated to ensure that the process is running as the standard of implementation. The result of quality assurance can be reflected from the result of accreditation that is conducted by government or private. This is become the basic requirement to recognized the credits of teaching learning process from each institution.

#### 3.1.3 International Relation Office

Internationalization can be established by project or institutionalized. When it is a project based, the sustainability of the internationalization of HEI is difficult to determine, while the institutionalized ones is clearer, because it has a road map, target of the milestone. The institutionalized of HEI internationalization required a certain of organization structure which has responsibility to run the internationalization program. The existence of IRO has undergone substantial changes, because it has engaged in strategic and operational planning in regard to support the achievement of HEI's vision.

# 3.1.4. Facilities

HEI should provide the facilities to create the academic atmospheres such as library and its collections and activities, discussion room, laboratories. The dorm for international students is required because student's security is always at the top priority. Therefore, staying in the dormitory at least for the first semester is significant to monitor students' activities after class. Not least important is student's canteen. Instead of provide healthy foods, the variety of menu will help overseas students to adjust with the new environment.

#### 3.2 The International Partnership

In the process of international partnership, HEI should consider the quality, size and scope of the collaboration. Quality comes at the first to consider. The international cooperation can be started by join an international consortium. Size is not always related with the bigger, the better. HEI can choose appropriate size of international partners that will be able to boost the growth. The scope of the cooperation can be started from a small scope that both of institution can cope it well. Satisfaction of both parties is the basic of mutual relationship in the long run.

#### 3.3 Curriculum

#### 3.3.1 International Faculty

The first common language for the international student is English. English as foreign language that is most widely known and use in many countries over the world. However, English is not the only language use in the international classroom. Non-English speaking country is still prefer to conduct the teaching learning process using their native language, such as Japan, South Korea, Taiwan and China. Then, international faculty is a medium to prepare the students before studying at overseas.

The challenge of conducting program with language barrier is not only at students' side but also for HEI. HEI that offers a program for international students using a certain native language should ensure that the process of language preparation program is well prepared so that students can achieve the target at the meantime.

#### 3.3.2 Digital Learning

The technology quantum leaps have been starting when the Internet technology launched. The class can be conducted borderless using e-learning. Currently, the free platform of e-learning can be applied to support the teaching learning process, such as Edmodo or Webex application for classroom discussion. The barrier is Internet capacity to ensure that the process can be running well.

#### 3.3.3 International Curriculum

In the internationalization process, internationalizing curriculum is the requirement. It means that curriculum applied must be update to keep up the demand of international market. This is important because graduates are prepared their future to be accepted in the multi national company or involve in the international business. Using English as the medium language in teaching learning process is

chosen as a tangible form of internationalization of the curriculum. Moreover, in the process of joint degree or double degree program, a study program should find a partner that offers a set of curriculum comprehends achieving the target of competency.

## 3.4 Financial Aspect

Establishing international program is costly and difficult to afford for students from developing countries. Thus, the scheme of tuition cost reduction and scholarship for students can be alternative solutions. The creativity to get the funding resource is a challenge of HEI management.

Moreover, Governments' policy that gives a part time working hour for international students is also beneficial for students not only from the financial side but also to speed up the language acquisition of the native language used in teaching learning process.

#### 4. Conclusion

Internationalization is the need for all HEI regardless its size and age. Even though it considered as a small and young HEI can initiate the internationalization by institutionalized its target that stated in the vision and mission of HEI. The quality assurance in each HEI is the requirement establishes international collaboration. For the smaller size university, joining with the international consortium can be the initial platform of international collaboration.

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