


## Changes in University-Industry (UI) Interaction

 Three lecturers from the Faculty of Engineering, Achmad Witjaksono PhD (the Head of LP3M UB, on behalf of the Rector), Dr. Surjono (secretary of University Ranking Centre “ LP3M), and Ludfi Djakfar (WCU program) were invited by the Chair of QS WorldClass 2018 seminar event in Abu Dhabi, United Arab Emirates. The event was hosted by the United Arab Emirates University, the rank 1 university in UAE, rank 5 in Arab Region and under 200 World according to Quacquerelli Symonds (QS). This three days event, from 16 to 18 April 2018, had brought insights and raised awareness of the challenges in the era of industry 4.0. University-Industry (UI) partnership is a must. Again, this underlined the concept of triple helix: university-private-government relationship. The synergy of this three components is the key that universities must develop to play their roles in the emerging knowledge economy at industrial revolution 4.0.

University in this era must prepare versatile scholars through learning and teaching 4.0. Dr. Suzanne Ortega, President of Council of Graduate Schools- USA, stated that graduates, at least must have interdisciplinary habits, public communication skill, global competences, and big data literacy. UI relationship is also importance to close gaps and mismatch between graduate skills and industry needs, said Ms Rehab Rajab, a representative from Apple industry. Relevant to condition in Indonesia (UB), where UI relationship is not strong enough, Dr. Bhanu Chowdhary, Associate Provost for Research Dean, College of Food & Agriculture UAE University, precribes that universities must 2 steps ahead industry, then, Industries will consider to collaborate with universities. Universities must convince industries that they need universities to work with them, and this must be facilitated by the Government.

This 3 days event, in general promoted universities who have strong collaboration with industries, e.g. Universiti Brunei Darussalam with Hengyi Industries (petrol refinery); City University of Hongkong with Apple Education; Hong Kong Baptist University (the World best university in Traditional Chinese Medicine) with pharmacy industries, Universiti Putra Malaysia with Huawei; Universiti Tenaga Nasional with Tenaga Nasional Berhad; Binus University with Microsoft. The last is one of delegates from Indonesia. Other Indonesian Universities that joined this event were Universitas Indonesia, ITB, Unair, UNS.

The event was closed by a visit to United Arab Emirates University Campus. All facilities in the laboratories were explored (can be visited through its official web: <https://virtualtour.uaeu.ac.ae/...>). The next event will be hosted by Jordan University of Science and Technology in 2019 and by Binus University in 2020. Remarks obtained from this event for UB are:

<ol style="text-align: justify;">

<li>The need to raise the awareness of learning and teaching in the industry revolution 4.0. Baca lebih lanjut di <a href="http://www.sumberdaya.risetdikti.go.id/">www.sumberdaya.risetdikti.go.id</a> </li>

<li>The importance in strengthening UI partnership. Learning from good practices in Hong Kong is that the number of student intake is based on the actual need of in the market, for example: the TCM program must graduate no more than 40 students, because the market in Hong Kong is 40 per year. Collaboration with industries or banks and other commercial enterprises in providing early training, so that graduates have particular skills needed by the enterprises. Industries will reduce the budget for training for new employees, and universities may cut times for graduates to get jobs (Binus has good experiences in this UI model).</li>

<li>Actualizing UB in publications and international events, university branding to boost recognition by QS since university rank by QS is one of Key Performance Index (KPI) measured by the General Directorate of Higher Education.</li>

<li style="text-align: justify;">Inovation in implementing the notion of entrepreneurial university in real curriculum and activities: a choice that students must select in the begining of their study, that is: a) Real internship with industries prepared by agreement between university and industries; b) creating start up enterprises, industries provide tutorial assistance; c) having international outlook for 1 – 2 years; or d) continue their education for postgraduate program.</li>

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