The Innovation-driven Economy as the Fundamental of Indonesian Economic Growth
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International Conference on Indonesia Development (ICID)
Thursday 12th September – Saturday 14th September 2013

Institute of Social Studies (ISS), Erasmus University,
The Hague, The Netherlands
Foreword

We warmly welcome you to The Hague and to the first Indonesian Conference organized by PPI Belanda (Indonesian students association) in the Netherlands, ICID 2013. ICID stands for the International conference on Indonesian Development. This year, the chosen theme is “The Innovation-driven Economy as the Fundamental of the Indonesian Economic Growth”, as we believe that it acts as the open question for all Indonesian/international scientists, policy maker, students, and other stakeholder, who sees and considers Indonesia is a one of the remarkable ASEAN economies post the Asian crisis in 1998 and the pro-longed global economic crisis in the US and Europe in 2008 up to now.

In this international academic conference, we believe that this event will comprise a vibrant mix of session including plenary sessions, parallel paper presentations, inspiration talk, and informative discussion, as well as essay and jingle competition. Not forget to mention the special gala dinner hosted by the Indonesian embassy in The Hague. Therefore, we do hope that you make the most of these activities to encourage you to share your latest research, academic findings, debate, enhancing your presentation and writing skill as well as a networking opportunity. During the conference we will be hearing 47 papers over the two days and we warmly thank all those who will be contributing to this event for their preparation time and their on-going commitment to ICID and to work in Indonesian studies. In fact, those who will present their papers in this conference are the 47 out of 589 submission all over the world. In this sense, these 47 papers have passed the peer-reviewed system from our scientific committee, meaning that the quality, the originality, and the structure of the papers themselves have convinced the reviewer to get through to the next level: presentation at ICID CONFERENCE 2013.

Additionally, this first ICID 2013 Conference has given a multidisciplinary approach for all the sub-theme paper and the methodology. We tried to include the political aspect in competitive economy, followed by innovation driven economy from social science-management-and technological perspective, to focus the role of technopreneurship, creative economy, as well as a benchmarking from and between Indonesian economy to other developed and developing countries. In short, we intend to engage with the current debate in this field to further and to enhance the quality of Indonesian studies, particularly for young scholars namely students or early career researcher.

For the long-term, we aim to continually held ICID as an annual conference with different themes but still in the corridor of the Indonesian development idea. Also, we plan to develop the publication outlet for those who are selected to get published in the international journal or an international edited book, with the help from our scientific committee. The reason is to leverage the ability for the Indonesian authors specifically, to be able to showcase their works at international level by attending peer-reviewed conference like ICID as well as an international academic publication.

In closing this warm welcome to you, we must thank our ICID organizing committee for their hard-work, the premium sponsor from BNI, all the scientific reviewers, and other stakeholders. We do believe that in the future ICID Conference in the Netherlands will be one of the profound
international conferences, specifically for the Indonesian studies. Therefore, ongoing cooperation and supports are needed to achieve this aspire.

In short, we do hope that you enjoy the conference and look forward to meeting you.

With all best wishes,

Dr. Dessy Irawati FeRSA  
Scientific Chair

Mr. Rihan Handaulah  
Organizing Committee Chair
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Competitive Intelligence and Triple Helix as Strategic to Aid Developing Countries in Economic Growth

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Abstract:
Developing countries such as Indonesia with 250 million inhabitants, has sought solutions to better the performance of their economies. It occurs that the complexity of Indonesia with 17,508 island and more than 6,000 languages with thousands tribes indicated in the highest variety country in the world. It’s all potential resources this country is favourable to achieve better standards of development in all areas, such as economy, health and education. Private-public-partnership can provide good result through interaction between University-Industry-Government (UIG), beyond of the competitive intelligence tools, which it could aid in the management of research, development and innovation for news perspectives in the digital world. Low cost solution offering by Information Communication Technology (ICT) should bring the high impact by survey database indexed through Web 2.0 technology. So, competitive intelligence focussed on information and decision to develop a way integrated government whose object is the control of strategic information. Thereby, aims at the competitiveness and security of the national economic and domestic enterprises. In 2012, Big data created 2,5 quintillion of information’s every day. Thus, it is necessary priority to select data and information. The right decision at the right time it needs to apply in Indonesia country toward to gain maximal impact of development. University-Industry-Government relations must involve the community in dynamic continuous and spiral transition to the generation of knowledge, innovation and economic development in strategic and priority areas.

Keywords: Bidik Misi, Dikti, Program Hibah Kompetisi, Public-Private-Partnership, and Sigwp
Competitive Intelligence and Triple Helix as Strategic to Aid Developing Countries in Economic Growth

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1 Introduction

The National Innovation System (NIS) of a country can be defined as the set of institutions and their interactions that provide the environment for innovation and development of a nation. According to the literature on the economics of technology, the presence of an NIS induces the transformation of knowledge, the technology development and economic growth, providing the conditions for a country to leave poverty and social exclusion (Filippetti & Archibugi, 2011; Nelson, 1993).

Indonesia belongs to the group of countries with NIS immature, those who have observed the presence of some institutions with weak interactions between participants (NIS mature countries are leaders in development and technology as the U.S. and Japan, whereas countries process of catching up are the ones that have good institutions that interact with each other, but are at a level below the leading countries: Taiwan, Korea, and the systems are immature Indonesia, Brazil, India, Mexico etc.). According to the economics of technology, one of the factors is the need for the incorporation of science in business
according to the characteristics of each sector, as they have different technological trajectories (Jacobsson & Bergek, 2011; Nelson, 1993).

Thus, it need better management of knowledge and technology, especially with the adaptation to actual conditions of each country. For this it is necessary to interconnect all sectors of society such as research institutions, universities, industrial sector, public health and health care. However, technological cooperation, either by governmental bodies and/or private, and even non-governmental organizations (NGOs), have gradually strengthened the development process.

Etzkowitz et al (2000) and Lastres et al (1999) described that strategic alliances between companies and Public-Private-Partnership (PPP), involve not only government, but also universities, research centers and businesses - are necessary for the continuity of the innovative process. In other words, as the innovation process becomes more complex and businesses become more specialized, the generation of innovations comes to depend increasingly on "cooperative networks" and institutional arrangements to support (Etzkowitz & Leydesdorff, 2000; Lastres, HMM & Sarita, A, 1999).

The development must cover various background populations which is complex. So, PPP can provide dynamic and consistent results in the production through of the interaction between the actors of University-Industry-Government (UIG) (Magalhães, Boechat, & Antunes, 2012). UIG must involve well the community in order to get the maximal impact of development not only with statistic/number result but the really good result of community satisfied.

While the resources from the government need to improve to implement better education and health, the third party like professional organization need to involve in this case. Web searching with clustering engine could help to find the information needed. Web Clustering engine search result by providing a clustering for each specific meaning of the input query (Di Marco & Navigli, 2012). Recent Indonesia data we could found only by web search, for example the description of 1.500 hospitals, 9.000 primary care centres and 200.000 village health posts with primary issues about revitalizing primary care, addressing health disparities and decreasing maternal mortality by having more health professional attend to birth as important goal (Dwyer, 2011). Partnering with private company, the numbering of population in Indonesia that cover by health insurance reach 63,5% which equal to 151,5 million population with various program, but we still have 87 million people that need health insurance (Ghufron Mukti, 2013).

Fundamental change at the organizational and institutional levels within and between university, industry, and government constitute a new environment, based on science, technology, and a culture of entrepreneurial initiative and go beyond the receive practices of both capitalism and socialism (Etzkowitz, 2011). Interaction between university and industry that imported from USA to Brazil, created in University Sao Paolo, implemented in Pontifical Catholic University of Rio de Janeiro (PUC) and the University of Brasilia. Related to develop a knowledge-bases society, the keys to success have been cross-institutional entrepreneurship, aggregating regional and national resources to realize a unique, locally generated strategy rather than adopting the usual list of hot high-tech topics such as information technology, biotechnology or alternative energy, and striking a balance between intra-regional competition and collaboration in order to archive common objectives and avoid any stasis arising from hyper-competitiveness (Svensson, Klofsten, & Etzkowitz, 2012). But the case about information technology, it is good as long as it could be maximized considering cost and benefits.

In this sense, researchers and decision makers without access to appropriate information it leads to inaccurate decisions and sometimes disastrous. Decisions based on facts and on reliable information are more likely to generate good results and it still gives decision makers face every day. The information appropriately and in a timely manner, by which they can make decisions, develops effective strategies and acting proactively. This action can be
called competitive strategy when it involves the placement of a business, which maximizes the value of the organization's capabilities and distinguish the company from its competitors (Porter, 2008).

When a decision is based into reliable information and the appropriate time it is not only regarded as a competitive strategy but also strategic for the success of the business. In this approach we have intelligence - the area that deals with the strategic analysis in the organization's business and still answers questions that decision makers are faced in every day. Thus, the responses coming from the strategic issues became Competitive Intelligence (CI) and not just information for portals. This is the differential knowledge. The activities of companies, research groups, institutions and national governments are effective when they attribute value and quality their information. These critical factors are crucial for organizations’ success in their domestic and international planning, whatever their long- and short-term strategies (Quoniam, L, 2011).

Information science has tools that can help organizations produce, treat, store and manage data on any activities or processes, resulting in more effective management for innovation. With the increasingly turbulent, complex and competitive conditions in the markets in which companies operate, the use of industrial/intellectual property has become a way of assuring the continuation of their activities into the future by protecting innovations and restricting how their competitors can act. The industrial property information contained in patents identifies the latest science and technology developments, which also makes it a powerful competitive weapon (Magalhães et al., 2012; Pierret, 2006).

It is widely known that the mechanisms for mining information have developed from “manuals” to dedicated portals or websites (from Web 1.0 to Web 2.0) – we have progressed towards mass information that is obtainable by automated means. This new paradigm allows huge quantities of data to be downloaded in different formats, but it cannot process this data to produce indicators that can actually help decision-makers. This is why studies are required using information science, such as technology trends (Quoniam, L, Lucien, A, 2010).

In the knowledge-based era, the education system becomes main platform in developing country, mainly Indonesia with several geopolitics situations. This complexity need to understand, educational system must be well treated to reach its goal for the sustainable development and to compete in the flat world as stated by Friedman (Friedman, 2009). The second point, it needs to consider as emerging country is public health. Education and health politics are primary need in developing nation; it needs to treat well in order to get the maximal impact of development (Nelson, 1993; Pereira, Baltar, & Mello, 2004; Vetterlein, 2006).

While the resources are limited, solutions with low cost seem to be a good way for developing. To gain the maximal impact of development in related to concern about cost and benefits. For example, the open source software in technology had saved amount US$60 billon per year according to Standish Group Report in 2008 (Rothwell, 2008) in this digital era. Another case such as optimization of Information Communication Technology (ICT) impact in Fab Lab (Fabrication Laboratory) from MIT (Fab Lab, 2012) Hackers Space (Hackerspace, 2013) LILAN Living Lab by NORDFORSK (LILAN, 2010). The success of organization development in the global context, is reach the continues development, not only in term or annual based (Quoniam, 2010); The data shows that health funding in 2013 allocated in 1.86% (Mas Sari, 2013) while the funding at previous year was not all used even just less than 2% from total budget. The National examination 2013 had delay in 11 regional areas in Indonesia, just the problem of logistic management in the archipelagos country. The planning indicates concreteness, but on the territorial dimension of Indonesia, the problem in human resource should be observed due variety in the region.
According to Economist Intelligence Unit from Pearson (McCauley, 2012a), based on international standard education measurement (thelearningcurve, OECD-PISA; Organisation for Economic Co-operation and Development-The Programme for International Student Assessment (OECD, 2013), TIMMS-The Trends in International Mathematics and Science Study, PIRLS - The Progress in International Reading Literacy Study by International Association for the Evaluation of Educational Achievement ("IEA," 2012) among the 40 countries being measured, Indonesia was at the lowest position. Executive editor the Economist Intelligence unit said the Learning Curve breaks new ground in terms of data collection and analysis, but there is so much to do, with hope our studies serves as a catalyst for further collaborative efforts by academics, practitioners and policymakers to deepen our knowledge about what contributes to better education performance and outcomes (McCauley, 2012b).

The relation study between health and education also depend on numerous economic and social outcomes as research by comparing the high school and its equivalent General Education Development in US (Zajacova & Everett, 2013). Aljazeera media reported only a third of Indonesian students – in a country where 57 million attend school, complete basic schooling and the education system is plagued by poor teaching system especially challenges the inequality of education access in Indonesia (Jazeera, 2013).

Accordingly, demonstrate the technological digital advances and like the competitive intelligence tools can aid developing countries overcome challenges for contemporary management in the digital world it is necessary, mainly in Health and Education area (Magalhães, Quoniam, & Boechat, 2013). In the 21st century (digital era), the contents that provided by internet are really big data, so need to filter the needed data and information by clustering engine. This tool from Competitive Intelligence is the system that perform clustering of web search result (Carpineto, Osiński, Romano, & Weiss, 2009). There are several about the clustering engine such as iBoogie, e-LiSe, Vivisimo, Carrot2, etc. Sometimes there are special clustering engine for certain purpose such as Quertle® for MEDLINE (PubMed) related to health area. Figure 1 shows the clustering of map information search about Education Indonesia on 25 June 2013 at 22:50 UTC+02:00 time.

It was identified 77 documents linking Indonesia with education Indonesia as key word. With total amount of data and data mining by Lingo3G there was obtained 162,000,000 documents. These results allowed correlations to be found to spot business trends, research technologies and give subsidies so establishment of public health policies. The 77 topic about Indonesia education are intimately tied to various actions and partnerships both nationally and internationally.

Source: Created by the authors using carrot2 in June/2013

Figure 1 Clustering engine about Indonesia Education
History shows that economic development and public health actions to combat the epidemic are most effective when there is constant synergy of government and society, for example, prevention in the fight against dengue fever, influenza H1N1 (Magalhaes, JL, Antunes, AMS, & Boechat, N, 2012). Therefore, the PPP can provide dynamic and consistent results in the production, through the interaction between the actors of UIG. In this sense, this work propose to collaborate in thinking on ways to better development of the Indonesia through the PPP using the concept of Triple Helix of Etzkowitz to minimize the issue of economic development and public health.

2 Methodology

This study involves data mining. The data was taken from official government website of the Indonesia, National Education (Kemendikbud, 2013), Higher Education (Dikti, 2013) and for health department (Kemenkes, 2013a, Kemenkes, 2013b). Bibliographical references were also consulted on indexed scientific databases such as Web of Science, Scopus and Sciencedirect. The big data were treated using data mining in a cluster engineering Lingo3G carrot2 – version 3.6.2. Regarding the data gathered was treated using Excel software spreadsheets (Microsoft Office 2010) and use tools from Special Interested Group on Wikipedia Mining, Sigwp (Shirakawa, Nakayama, Hara, & Nishio, 2009). After, results were analysed and conclusions drawn as set forth in the following sections. Principal analysis was economic development and health public policy as well as a use Triple Helix like a management tool for Indonesia.

Like a descriptive study, accomplished through databases available on the web. So, numerous tools to improve web information organization have been appearing since O’Reilly (2007) attempts to define and understand the web 2.0 (O’Reilly, 2007). Thus, there is a massive amount of information in different formats, being necessary subsequent treatments of the Big data in order to produce indicators for decision makers. Thereby, there is no presumption of bringing new indicator, but demonstrate the use them for non-experts.

Survey database indexed via Web 2.0. The low cost offering by the ICT field must be optimal used, in order to get the high impact of development, especially country like Indonesia. The geography condition with so many island need to therapy with efficiency design in all field, especially related to distribution and logistics. Tools that focus on information offering by competitive intelligence need to maximize the Search Engine Optimizer (SEO) in order to get the update data and use to support on-going activities. Alan Juillet as French Senior Economic Intelligence Officer Prime Minister said develop a way of governance whose object is the control of strategic information which aims at the competitiveness and security of the national economy and domestic enterprises (Quoniam, 2011). There are various about the tools, but as university researcher it’s better to use the open source tools as parts of low cost strategy.

3 Results and discussion

The World Bank has undergone tremendous change during the past decade. One crucial innovation is its initiative to raise social development to the level of core issue within its development strategy, as reflected in its 2005 social development strategy. While there had never been a Banksides approach to social development before, the Bank has always been concerned with social issues. However, the meaning and operational significance of the social has changed over time. Once at the core of the development strategy in the late 1970s, social policies seemed to be forgotten over the course of the 1980s (Vetterlein, 2006).

In the early 1990s, social policies were transformed into facilitators of economic growth in order to reduce poverty, before finally returning to become the core of development today. Social policies have always been closely tied to the relationship between economic growth
and poverty reduction and thus to the Bank's development strategy. The role of social 
(dvelopment) policies within the economic growth and poverty-reduction nexus has shifted 
according to the World Bank's understanding of development at different times. I argue that 
the Bank's discourse on the social dimension of development can be delineated into three 
periods. Within each period, the Bank's understanding of social (development) policy is 
reflected in different problem definitions and underlying assumptions and, hence, different 
policy responses (Filippetti & Archibugi, 2011; Vetterlein, 2006).

Developing countries traditionally adopt protectionist economic policies to allow nascent 
industries room to grow without being overwhelmed by international competition. For much of 
the 19th century the USA was a leading practitioner of protectionism, nurturing its industries 
behind strong tariff walls. Even today some industrial and agricultural products are protected 
in Europe and in the United States. Local efforts such as the invention of interchangeable 
parts, the so-called American system of manufactures, were enhanced by the illicit transfer of 
technology from England. As U.S. industries became technically dynamic and internationally 
competitive the U.S. reversed its position on protection of intellectual property. As a 
developing country the U.S. opposed stringent protection of intellectual property; as a 
developed country, it favoured a protective stance (Etzkowitz & Brisolla, 1999).

In a knowledge-based society, the bar is raised from the development goal of 
industrialization, focusing solely on manufacturing of tangibles objects, to an economy based 
on the capitalization of knowledge. This transition to a post-industrial mode of production has 
led to rethinking the development process. Socio-economic development is no longer limited 
to a series of stages that every society will not inevitably pass through, nor inherently 
precluded by not following a traditional strategy primarily focused on heavy industry 
(Etzkowitz & Zhou, 2008).

The multi-faceted context of socio-economic development requires the interaction of different 
actors and institutions. The unitary notion of development in which, central government 
reserved initiative to itself; industry carried out technology transfer and local application and 
the university limited itself to training human resources is superseded. In the triple helix 
development model, government devolves decision making to collaborations with regional 
and local authorities and other actors. Industry engages in endogenous innovation as well as 
transfer. Universities play an innovative role in society, active in translational research, 
entrepreneurial training and community development, as well as, traditional tasks. These 
nascent transformations have fundamentally changed the development landscape, making 
triple helix actors the central development partners (Dzisah & Etzkowitz, 2008a).

Combine different organizations in pursuit of one goal are complex. Therefore, like large 
differences permeate the various commercial advantages and academic policies as noted in 
chart 1. So it is still a challenge the authorities aware of the need for balance of interests for 
the achievement of a more just and equitable with respect to access to information, health 
care and economic development. Considering that the three spheres have to live, a new 
culture of balancing between the differences should be encouraged, as the culture of 
novation, time-quality (Moments experienced in tune quickly pass; those characterized by 
boredom arise slowly; hours may be experienced as minutes and, conversely, minutes like 
hours, the past can extend to the future, and this, to the present) and think global attitudes to 
local development (glocalization) (Hippel, 2005; Hong & Song, 2010; Magalhães et al., 
2012).
Table 2 Example of differences and factors existing within government, university and industry

<table>
<thead>
<tr>
<th>Cultural</th>
<th>Time/Perspective</th>
<th>Geographical perspective</th>
<th>Award</th>
<th>Suggestion to balance of the three spheres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business (Industry)</td>
<td>Government</td>
<td>Research &amp; Development (university)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economical</td>
<td>Politics</td>
<td>Scientific</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 months</td>
<td>4-5 years</td>
<td>6-10 years</td>
<td>Conscious about time-quality</td>
<td></td>
</tr>
<tr>
<td>Global</td>
<td>Regional/local</td>
<td>Global</td>
<td>“Glocalization”</td>
<td></td>
</tr>
<tr>
<td>Profit</td>
<td>Re-election</td>
<td>Scientific knowledge</td>
<td>Development</td>
<td></td>
</tr>
</tbody>
</table>

Source: (Magalhães et al., 2012) adapted from (Etzkowitz & Zhou, 2008).

The Triple Helix (TH) by Etzkowitz (1999) proposes a spiral model innovation based on the generation and distribution of knowledge (see figure 2). It is a complex mechanism and dynamic continuous interaction between three propellers, UIG in infinite spiral transitions, which can deploy consistent policies for network improvement common with regard to the generation of knowledge, innovation and economic development. The structure is focused on common goals of all three levels as an indicator, but multidisciplinary, in which all involved to communicate dynamically, complementing studies, yielding knowledge, advancing the science and thus socializing information for decision making and advance the economy regional (Etzkowitz & Brisolla, 1999).

Source: Adapted by the authors from (Etzkowitz & Leydesdorff, 2000)

Figure 3 Triple Helix concept

1 Thinking globally and act locally.
Given the complexity of the issue of economic development and health care, the TH approach aims to address the complexity issues inherent to Indonesia, cohesive and productive for the country. Schumpeter's theory (1942) about the creative destruction shows how outdated economic regimes have disappeared, but the TH outlines how the new arrangements will appear. The structure of this new model goes through to list a set of elements, relations and functions and then discuss the specific activities and formats of knowledge, innovation and environments consensus, and to observe the nonlinear dynamics of the possible transitions between them.

Thinking about the economic development of a country and the improvement of public health, the prospect is that the main actor to "rotate" the first helix (circle in figure 3) in the TH concept should be the Government through the planning and coordination of actions (Etzkowitz & Klofsten, 2005; Etzkowitz & Leydesdorff, 2000; Etzkowitz & Zhou, 2008).

The contributions of the scientific community could make up the 2nd helix (circle in figure 3) and the capacities of national entrepreneurs (companies) are considered later in the 3rd helix (circle in figure 3). Although the blades are "rotated" one after another in a theoretical point of view the movements may overlap or even "spin" while seeking synergies and concrete actions to outcomes based aiming system innovation in health care and economic development (see figure 3). It is noted that the all system has a common goal (innovation) for society (as a 4th helix collaborating) and this approach may increase or decrease depending on the needs and interactions, as well as the speed at which one "turns" in relation to another.

![TH Model Diagram](image-url)

Source: Adapted by the authors from (Dzisah & Etzkowitz, 2008b; Etzkowitz & Klofsten, 2005).

**Figure 4: Example of governance for the TH concept involving the participation of society.**

The policy implication of this balance achieved between the internal and external approaches of each organization, aims at the common good to win-win relationship, where all profit from society and enjoy the benefits. Government intervention is essential, on the one hand, encouraging the development of entrepreneurial universities, and on the other, defining the rules. For example, it's necessary the structuring of intellectual property, regulation and, if applicable, tax systems to encourage new companies. Likewise with companies extracting what each does best in its essence.

In general, the collaborative environment of the TH approach, proposes provide a framework for interactive communication with reflections in all instances to increase innovation. The knowledge generation, dissemination and utilization will arise as a result of two processes of communication and differentiation: A functional, between science and markets and another
like a Institutional control between public and private at the UIG, enabling various degrees of mutual selective and constant adjustment.

Related to Health funding in Indonesia, that the constitution says at least 5% of the national budget and at least 10% of regional budget (Undang-undang No.36 tahun 2009 Tentang Kesehatan) need to well design, plan-implementation. Program, activity and outcome need to organize well, include establish an educational access in rural area. Usually the health worker refused to work in rural area with various reason, for example concern of safety, salary, social relation, school (for their children), sickness (afraid being contaminated epidemic illness) so need local people to be educate in public health. Concern to maximized the funding usage and public health, partnerships with company/NGO could be apply even there is different perspective in time in TH as long as to aim the conscious time-quality (see table 1).

The budget usage from government department seems not good achievement based on annual usage. For example, the Funding from Education Department in 2010, just reach 50% in 10th months (Agustia, 2010) and it's almost similar with other department. There are some difficulties about this, the human resources related to design the program, activity, priority the program with target, identify the crucial issue and also there is various ability of the skilled staff at different region. This phenomenon need to solve with good training and information well delivery so the person in charge could work and managed well about the project.

According to Higher Education Department there are 984.818 higher education student in Public university/Higher Education and 2.889.343 students in private Higher Education based on 2010 report; the amount of Higher Education are 3.098 institution and only 94 public higher education with 16.225 study program (Pendidikan Tinggi, 2011). The amount of student received in university/higher Education just 30 % according to Higher Education Secretary (Okezone, 2013). There are formal scholarship from government called Bidik Misi to cover the 20 % the poor and prestige student to study at university. And it will be more concern, when we talk about the quality of higher education. The Webometrics ranked 361 university in Indonesia (around 11,6%) based on internet access means 2738 still do not have website. Based on webometrics report in July 2012, there is no Indonesian University that include in 500 top university bases on criteria given. There are some program to raise the Higher Education/ University, like QUE (Quality of Undergraduate Education) and now Program Hibah Kompetisi (PHK) and will see the result in 2014 as part of Dikti strategic Plan 2010-2014 with formal report.

The correlation between Indonesia, Health and Education show by wiki visualizer could be shown at figure 5. Health link with Indonesia connect nodes: Physician-United States-School-Australia and Education by India-China-Borneo and some longer nodes.
This node describes how the digital content in Indonesia related to education and health is still made by other countries and it's also may be the same with the other field. It is good to design the database about scientific work in Indonesia. Start from the university database design for a scientific work is a good idea, based on internet based so the group of similar interest/expert could collaborate all over Indonesia, even all interested researcher related to Indonesia from the globe.

4 Conclusions

- The decision maker should make a right decision at a right time due the existence of big data in the new century.
- Health and education commonly take the highest percentage in budgeting in countries. Therefore, it’s important confirm the influence of “big-data” and growth trends in health and education in emerging countries.
- Necessary treatment information to improve the economic growth, health care of populations. The triple helix spiral model proposes an innovation based on the generation and distribution of knowledge.
- Observes a complex mechanism and dynamic continuous interaction between three “propellers” UIG in infinite spiral transitions to the generation of knowledge, innovation and economic development.
- Indonesia has the powers in the national territory in the spheres of UIG. The advances made in policies in the economic and health’s are notorious, yet synergistically to maximize the time in the sense of a large growth still needs is a big challenge.
- Strategic intersectional actions are essential to improve access of the population to better health and thus reflect a large economic growth.
- PPPPs can be an example for the development of new technologies in the economic and public health, favouring a large network of R,D&I.
- Therefore, synergies are key skills for UIG distinct vertical process and thereby achieve a balance between maximizing the success and sustainability of innovation.
• ICT literate that need to improve to all level that involve TH collaboration and focus at the low cost ICT impact for open source usage for example.

• Transparent budget usage for all stake holder and even involve industrial sector/NGO to take part in Health and Education improvement.

• Maximized TH role must be referee by Government as the fair referee, in order to accelerate the development of Indonesia.

• Hyper competition era need also best strategy collaboration as every nation could be corporate and also competition. Competitive Intelligence could be the good tools in finding complete, accurate and update information for best strategic decision.

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6 References


