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Technology Transfer Impact on Bina Nusantara University Students in Astra Corporation Jakarta

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Abstract

Technology transfer in Indonesia is an actual fact in the context of globalization in various fields of human life today. Technology transfer occurs when science and technology transferred from abroad into the country of Indonesia. At the same time occurred a significant impact to the attitudes or character of the employees working in the company. It takes a critical attitude to accept and adjust to the dynamics of the existing technology transfer. This paper examines the results of research on technology transfer Astra culture from outside Indonesia and its impact on students and employees of Bina Nusantara University who works at PT Astra International of Jakarta. This methods study used qualitative methods to gather data relevant to the research topic. The results stated in writing that includes the main idea which relevant in the context of character education development at the university in Indonesia to face the challenges of globalization.

Keywords: Technology transfer, impact, Bina Nusantara University, students, Astra Corporation.

1. Introduction

The industrial revolution initiated drastic changes and developments in various fields of life including industry and the global economy. The most striking case is characterized by the transition from an agricultural economy to a pattern of industrial economic system characterized by the possession of a machine or production technology (factory) that produce goods to fulfill human needs. Those who have production machines most likely to

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dominate the economy (global business). The owner of the company also determines the direction of the
dynamics of the various elements in it, including human resources or employee in it.

The transfer of technology from other countries to Indonesia is not new, but a substantial process in the industry
that can not be denied existence. Technology transfer has become a phenomenal business activity undertaken
many other countries with Indonesia as one of the main destination countries. The transfer of technology has
bring fundamental impact that directly touch the attitude and character dimension of the people of Indonesian.
Big countries such as Japan, Singapore, China, the U.S, Franc, England etc are aggressively spreading economy
business in Indonesia. Astra International Company is one example or prototype of this phenomenon at the level
of technology transfer as a global business. Technology transfer company Astra brings significant impacts to
human and interesting to search in the context of the development of education quality in Indonesia.

This paper expose the research and critical interpretation of the authors focus on the phenomenon of transfer of
technology and its impact on the attitude and human characters Indonesian (Binus University students) who was
working at PT Astra International Jakarta. The study focused on two (2) important constructs such as: technology
transfer and Binus University students attitude. Researchers identify attitudes and basic characters that must be
possessed by employees who want to work in the Astra International Company-Jakarta or others multinational
companies. Researchers recommend a model characters as an input for higher education institutions to prepare
students who are studying in college.

2. Astra Company Jakarta and Bina Nusantara University Students
2.1. Astra Company Jakarta
Astra International Company is located in the northern of the capital city of Indonesia, Jakarta. This corporation
started its business in Bandung, West Java, on February 20, 1957 as a trading company. In 1965, the company
moved locations in Jakarta and is engaged in a Toyota, Daihatsu, Isuzu, Nissan Truck etc. Over time dynamics,
Astra formed partnerships with a number of world class companies (overseas) to develop business in Indonesia.
Currently Astra Corporation made six (6) types of businesses are: automotive, financial services, heavy
equipment, mining and energy, agribusiness, information technology, infrastructure and logistics.
In December 31, 2011 the number of employees listed in the Company and its subsidiaries are 112,003 people, an
increase of 20% from the previous year (2010). Total number of employees, including associates and jointly
controlled entities reached 168,703, an increase of 16% from the previous year. The amount is spread across 158
companies. Astra Company made a significant contribution to the life and welfare of the people of Indonesia.
Astra understand that dimension of human resources (HR) plays an important role in achieving business success.
Referring to the strategic framework "Winning Concept, Winning System & Winning Team", Astra has always endeavored to improve the quality of employees so they can contribute significantly to the company's performance.

Human Resource Development in the Astra Company is not just a corporate responsibility and human capital development (CHCD), but the management of the Astra Corporation. The entire management board is responsible for developing human resources through the efforts that led to the strengthening of the culture of the company that had a positive impact on the development of business-constructive Astra holistically.

Astra continues to innovate and innovation technology applications to serve the Indonesian market and abroad. Astra is committed to develop human resources in Indonesia to absorb the labor force who graduated from various universities in Indonesia and outside Indonesia. Certainly the recruitment process involves competency soft skills and hard skills of adequate personal labor willing to work in this company.

Astra International Company carries four (4) basic culture (caturdharma) in business, namely: to be a useful asset to the nation, provide the best service to customers, respecting individuals and foster cooperation, always strive to achieve the best. While the primary missions of Astra Company are: being one of the best-managed companies in the Asia Pacific region with emphasis on sustainable growth with the development of competencies through human resource development, a solid financial structure, customer satisfaction and efficiency; being a socially responsible and environmentally friendly.

2.2. Bina Nusantara Students in Astra Company

Bina Nusantara University (Binus) is a private university located in Jakarta. Currently Binus University has 25,000 students active learning. Among these students, there are students who are learning while working in international companies in Indonesia. Binus has produced many students who work in the country and abroad. One (1) of three (3) graduate students at Binus University has worked in international companies.

The sample study drew on data from 17 Binus University students who was working at PT Astra International Jakarta. Male students 14 people (82.3%) while the female students 3 people (11.7%). They generally work in Astra International Company and scattered in several branches Astra, among others: PT Toyota Astra Motor, PT Astra Honda Motor, PT Astra Daihatsu Motor, and PT Denso Indonesia. Employees working position of Binus University students generally varies in different units such as: cost analysis 1 person (5.8%), product staff/export staff/supply chain/engineering 13 people (76.5%), asset management 1 person (5.8%), administrator 1 person.
(5.8%), and warrant processor 1 person (5.8%).

3. Technology Transfer Impact on Bina Nusantara Students at Astra Corporation

3.1. Technology Transfer Process in Astra International Company

Japan, America and Singapore are some of the modern world are aggressively shift its technology business in Indonesia through PT Astra International, specializing in the automotive industry and other relevant business areas to address the markets of Indonesia. Certainly not many people know how the process of technology transfer to Indonesia happens and the effects of the transfer of technology for the attitude/character of the employees (Binus students) at Astra Company.

Foreign technology transfer to Indonesia has brought impacts to humans. Astra Corporation is one of the companies which transfer technology in all their work in Indonesia. Present in Indonesia since 1957, PT Astra began business technology transfer from modern countries like as Japan, Singapore and the United States. In 1965, Astra import cars and heavy equipment from the United States. Beginning in 1970 Astra became the sole distributor of Honda motorcycles and Xerox copier, following Daihatsu car (1978) and Toyota. Even in 2012 ago, Astra continued to introduce several new models Toyota Dyna, launched Komtrax excavators, build new factories in East Kalimantan, Isuzu launched the Bison, introduced the Honda Scoopy scooter, launched a Fuji Xerox multifunction printing machine and a few other cars environmentally friendly.

This technology transfer brings the impact for the employees who work for Astra company. The employees who work in the Astra would have to adapt, to adjust to the demands of technology transfer from abroad in order to survive with the Astra Company. About technology transfer in Astra, Mrs. Lenny Tjundoro (Coordinator Application Support And Testing and Training Center) says that Astra is open to the transfer of technology from abroad to her company. "The transfer of technology in the field of information technology (using SAP & Microsoft) we divert from Singapore and it is important for computerized systems in the enterprise." Types of science and technology developed in the Astra Corporation include Web application, Mobile application, SAP and Workflow. Technology transfer is done Astra to expedite and streamline employee performance and accelerate the company's business in Indonesia.

3.2. Technology Transfer Impact on Binus Students at the Astra Corporation

Technology transfer of Astra to Indonesia brings an important impact on the attitudes and behavior of students Binus University in Astra. Binus students are required to conform to the cultural values Astra Corporation. Fundamental cultural values that need to be internalized Astra among Binus students are to serve others,
discipline in working, responsibility, loyalty, and working with others. Thus, anyone who wants to work in the Astra needs to be ready to change themselves to abandon the attitude/character counter unwanted side firms such as selfishness, procrastination, poor time management, apathy and laziness.

Benedictus Dannan (Profit Pricing Section) and Vionita Kartika Putri (Asset Management Software Information Technology) said that laziness is something not to be ingrained in the employees of Astra Corporation. "Feeling lazy to be abandoned when it works into this Astra". Meanwhile Grace Hidayatullah (Production Staff Astra Corporation) said selfishness and apathy have left by people who want to work in the Astra Corporation. This indicates that individuals who want to work in the Astra needs to be ready for change. The change was associated with a willingness to abandon bad habits in order to adapt themselves to the process of technology transfer at Astra. Who would not want to change, it is not worth working on Astra.

In connection with the technology transfer in Astra Corporation, attitudes Binus students needed to be able to adjust to the demands of Astra, among others: the ability to communicate well, self-discipline, critical thinking, problem solving, dynamic and willing to continue to learn, have integrity, to be sociable, humble, open, collaborative, innovative, and has high durability in the work.

4. Facing Technology Transfer with Strengthening Character Education

4.1. International Company in Indonesia Demands Quality Character

Stock Indonesia industry labor market demands of high-quality human resources. This demand is a major challenge for higher education institutions (in Indonesia) to prepare graduates who are able to compete in an increasingly competitive job market. Indonesia orientation of higher education not only focus on the dimensions of the hard skills (mastering technology), but also the need to develop soft skills dimension (good attitude/good behavior). Character education became urgent in student self-development efforts in the sphere of higher education. The direction of development of higher education need to consider the balance between technological mastery of the instrument and soft skill competencies.

International companies in Indonesia requires students have a quality soft skills or reliable character. This demand is important as an integrative element firmly attached (inherent) to attribute the current scholarly work in the professional world. That is a strong character desired and demanded by the labor market or the global corporations in Indonesia.
4.2. Importance of Character Education in Higher Education

If international companies in Indonesia need employees who have a high soft skills, the character education to be the answer. Education needs to stay put in the college. Character education is not only done when students learn in the elementary school, but it needs to be matured in the process of education to the college level.

But what kind of character? In ethical-philosophical, characters are virtues associated with the internalized by a person in everyday life wherever he/she exist. Long ago, Heraclitus, the Greek philosopher had confirmed "character is your destiny". American Dictionary defines the character qualities and specialized firm, which was built in one's life that determines the response to existing conditions (Wilson, 1996). Character is the basic options *(optio fundamentalis)* that underlies the attitude/behavior of people in life.

De Janasz defines attitude as a consistent favorite or not favorite responses given by an individual to object (De Janasz: 2009). As being qualified ratio and feeling, every human person choose how he/she should react to situations and events around. Human behavior can be different in certain situations to other situations in the context of the experiences. Thoughts and feelings in one's chosen actions determine his attitudes. Strong attitude automatically bring a significant impact on personal relationships and professional person. Attitude is a very important component to our ability to be more productive in the workplace. Our attitude greatly affects others around us in the workplace. The attitude of an impact in our interactions with others. Likewise, friends and colleagues we are very influenced by our thoughts and our feelings to situations around us. Higher education need to embed the characters themselves firmly into the students. This task is the responsibility of the teacher as a manager in the lecture halls.

Which form the subject of character education at the college educated to be urgent to be rebuild. Institutions of higher education need to re-actualized models of teaching/education during this ignores the dimension of the formation of character. Though it plays an important character determines destiny (future) one when working in real terms in the professional world. Higher education environment that ignores character education, not helping many students to work effectively in an international company. Students will not compete or unable to adapt to a company that insisted on the importance of strong character of employees.

5. Model of Personality of Students in the Age of Technology Transfer

5.1. Self Disciplined Student

Discipline is the most classic term in the context of the education of the past, present and future. Discipline is understood as a subjective attitude which appears in the form of action consistent with the rules (norms) to achieve the goals of the organization (company). Higher education in Indonesia need to realize the importance of
discipline. Personal discipline should be the basic character of every student who graduated from college. Students need to demonstrate discipline as virtue itself during the process of education in higher education so that they can be responsible for oneself, for others, the professional world in social development. Educators in higher education need to be revived for a consistent shape the character of its students being personally disciplined.

5.2. Students are Responsible
Character education in universities should also give attention to the dimensions of responsibility. Responsibilities related to the ability to provide feedback in the form of positive morality to complete a job or task. Students need to be taught and made aware of the importance of the responsibility. They need to be given projects that contextual college to train their personal character to be a responsible consistently.

In the context of work, responsibility can be defined as a person's ability to complete the work (aufgabe) to complete. Employees are constantly required to complete the work on time but good quality. If yet the work was not completed on time, he/she should be on the implementation of the work was incomplete. He must have the courage to bear the risk. He can not run away from responsibility or run away from the problem. It has a moral responsibility to maintain the quality and completion of work starting from the beginning to the end. Gea says we could be held responsible if the work is not finished, but we can give a reasonable explanation why the actual work was not finished (Gea:2005). People should feel guilty and ashamed if the work is not completed. Culture of shame should be instilled into the students always be aware to accomplish the work/task through to completion successfully. Students need to be trained to be responsible for their selves, work, duty, and community. These responsibilities require students to do not things that harm themselves and the company, but should always try to do "the best and useful" for the company. Responsibility is a moral value that confirms the quality of character of a person in a professional career.

5.3. Students Having personal Durability
Learning activities in higher education needs to be directed to the establishment of private enterprises that have durability (resilience). Durability is understood as a person's ability to endure or adapt to the challenges in the experience of working in the professional world. Endurance can be learned, trained, and developed by everyone. One who does not have good endurance, will easily evade the challenge and run from a challenge. Personal vulnerability and strength to face reality. In the work, the typology personally like this can not work under pressure.

The main task of higher education is to create a strong personal, a person who has high endurance in the face of
hard competition contemporary world of work. Baumgardner suggests some basic things related to the formation of the endurance of the human person are: self-acceptance, personal growth, purpose in live, environmental mastery, autonomic, and positive relations (Baumgardner: 2010). If someone has instilled these values in him, so he/she was able to have a strong resilience to face challenges in the workplace.

5.4. Students are able to work in a team
Every employee who works in an international company comprised of individuals who have different backgrounds in the aspects of age, gender, level of education, life values, personality typology, cultural characteristics, religious, beliefs, ethnic origin, and ideology. People from different backgrounds being together in the company to achieve the company's goal: succeed in business. Of course these people will not work alone. In many instances, the employee would be working together in group. There are many job functions that involve even require a synergy, cooperation, coordination and net working parties.

Higher education institutions have to train students to work together in teams. This presupposes everyone should be open to accept the unique and differences in human character to another. Egoistic attitudes, negative stereotypes, and social prejudices on others to be abandoned. Because teamwork can only be run if the mutual openness and trust among the people who work. The main substance of learning materials to develop cooperation in the team need to consider the multicultural aspect.

5.5. Students continue to learn
Human life reality is a learning process that continues throughout life in the bladder body (long life education). The development of science and technology are increasingly quick to answer life's challenges, requires people to continue to learn in order to master the science and technology. Mastery of science and technology to enable people to live efficiently and effectively. Who would not want to continue to learn in life, do not deserve to live as civilized human beings. Because private civilized certainly have to adapt to the development of science and technology constantly dynamic. Student established himself/herself as a creative-innovative to create themselves always been upgraded time to time. Person who is not open to continue to learn in life, sooner or later going to miss information and hampered the progress. One character education efforts at colleges that instill positive morality to students ready to learn the dynamics of life continues.

5.6. Students are able to think critically
Contemporary professional career world requires people to think critically. Critical thinking is an activity or moral reason that can be justified in a logical and rational in the reality of life (Fios:2013). In critical thinking, a
person must use a regular basis in law reasoning, pattern, flow and valid standards-logical thinking. Standards of critical thinking include: clear, accurate, relevant, consistent, logical and complete. With the ability to think critically is right, people are able to understand the real issues in the world of work so that it can determine an effective strategy to solve problems found in professional careers.

Character education efforts in higher education need to consider aspects of logic and critical thinking. Highly recommended for higher education institutions to train students of logic and critical thinking. It is important that students appreciate the value of science that applies the critical attitude embodied in the world of work and professional career. With critical thinking skills, students are able to think independently to solve problems in the workplace. The mindset of logical, critical and rational to be one of the absolute basic skills mastered by every student in college.

5.7. Students are able to adapt to new environments

Ability to adapt to a new environment is one of the character and skills that need to be possessed by humans. Adaptability category of human practical intelligence (practical intelligence). Practical intelligence interpreted as the intelligence to adapt to the environment to suit our needs (Sumual, 2009). The goal is to help us do a job in a state of comfortable (comfortable) so knowing how to solve it successfully. A lot of work can not be done well, if someone does not have adequate adaptive skills in the workplace. As a result many of the plans and programs of work that is dormant in the workplace. It hurt yourself or your company or organization.

Character education efforts at the level of higher education in Indonesia need to pay attention to student adaptability to new environments. Students need to be given training, project and learning experience in a real engagement outside the classroom related to the business development of this adaptive ability. Necessary to create a lot of social events and activities in the field and on the job training workshops that are studies prepare students to adapt to the working environment varied with different levels of experience so that they get used to a sufficient variety of work experience. It is important to note in the context of the character education effort in college. The forms of concrete like to invite students to do social activities such as live in, mutual assistance, etc..

6. Closing
We have to understand that a strong personal character is an important requirement in many multinational companies today including in Indonesia. These characters among others, discipline, responsibility, willing to continue to learn, adaptability, critical thinking, have endurance, and the ability to work together in teams. This is
the basic attitude and character needed by international companies in Indonesia like as Astra Company. Along with the high demands of these international companies, institutions of higher education in Indonesia has a major responsibility for preparing, designing and applying program (method) to strengthen the educational development of self-formation of character (character building) students. This needs to be taught and trained consistently to the students during the running of the scope of study in college. Only with this, college graduates have a reliable character competence in the era economic globalization, science and technology.

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