

How Islamic University Beneficial For Industry Revolution 4.0?

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Abstract - Industry revolution 4.0 provides new challenges for Indonesia's young generation. Even theoretical and practical knowledge is not enough to equip them to survive in this smart technology era. Islamic universities as one of the educational institutions have a very significant role in order to prepare their graduates with the Islamic performance ethics and ethical character as the controlling of the youth generation. Islamic universities systemize religious education not only as the subject that are required to pass in transcripts, but actually become a thorough learning to shape students' attitudes in theory and practice.

Keywords: *Industry revolution 4.0, Islamic universities, Islamic performance ethics, ethical character*

1. Introduction

The world today is being faced with a borderless relationship which results in increasingly competitive competition between countries. Globalization extends to various development sectors including the world industrial sector. This has caused the human resource needs in the industry sector to become increasingly complex along with the development of the industry revolution era. Lasi, et al. (2014) stated that the "industrial revolution" marked by continuous technological progress. The early era of the industrial revolution known as the first industrial revolution began with the multitude of the mechanization of the production sector both in the activities of supplying raw materials and processing in factories. Furthermore, intensive use of electrical energy and the development of digitalization then became the second and third markers of the industrial revolution. The more sophisticated of it is that the new era of industrial revolution has shown it signs at this time. A variety of smart devices and products become favorable for the ease of most human activities. Internet and technology are the very important needs wherever and whenever. Including in industrial activities, computers and various software applications are needed to make profits. Smart technology becomes a new paradigm which marks the fourth industrial revolution.

The advancement of industry is a challenge for educational institutions, especially universities, in preparing competent graduates. It has started since the beginning of the first industrial revolution, humans is no longer only needed by their energy but also their capability. In addition, technological advances also cause many workers dismissed from their positions as their existence has been replaced by machines. Even the future needs will be increasingly difficult for those who do not have adequate skills for the industry i.e. innovative and be able to operate various technological devices. Universities' graduates are required to have better abilities than secondary school graduates. To be able to compete in

the era of highly competitive industry, human resources have to be skilled in learning, innovating, mastering technology and information, and utilizing their ability to survive (Wijaya et al. 20:2016). Therefore, the role of higher education is very important in order to equip the young generation with good insight and knowledge in the form of theory and practice as well as various skills and improvement of soft skills so that their students are ready to be a smart generation to face the industrial revolution 4.0.

Further, the 4.0 industrial revolution also raises challenges more related to the establishment of moral and character of the younger generation. In a prior literature, Raka (2008) stated that he observed in a university environment, some students were enthusiastic to utilise their study period not only for increasing knowledge, but also for improving their own identity. This shows that universities have very complex functions as educational institutions. Higher education in general will shape the character of students by guiding local wisdom and social culture of the local community. Religious education is also an element in the formation of these characters. The importance of teaching morality and shaping the character of students is to limit humans from their human nature and motivate them to always act according to religious norms and teachings in the era of freedom in the 4.0 industrial revolution. In accordance with the word of God Almighty: "To understand the laws of God, humans need to use their intellect guided by monotheism as a differentiator between humans and other beings (Qur'an 7: 199). Thus humans will become more dignified not only with the knowledge they possess, but also accompanied by faith and devotion to Allah Almighty. as self-controllers not to exploit the rights of others in free competition.

Highlighting religious education as an element of forming students' moral and character in this case, public universities and Islamic universities have a significant difference (Halstead: 2004). The orientation of religious education for students in public universities has basic standards according to government regulations. Although it is one of the compulsory subjects, some problems in learning religious education make its absorption ineffective. These problems include less varied teaching materials and methods (Barnes, 2001) as well as very limited time allocation. On average, public universities place religious education subject in the first semester with a portion of 2 credits (in semester credit system). Unlike public universities, in Islamic universities, religious education is taught in more depth and generally more than 2 credits divided into several semesters. Even religious education is not only delivered in lecture learning but also included in tutorial activities and in campus activity policies. This aims to instill Islamic values in a friendly manner to students. Religious education is not merely the subject of lectures that are required to pass in value transcripts, but actually become a thorough learning to shape students' attitudes in theory and practice (Halstead: 2004). Thus, the moral and character of Islam that *rahmatil lil alamin* will form more mature in Islamic higher education by not ruling out the main subject in lectures based on the majors or fields of each student.

By this time, research on the topic of Islamic religious education in higher education is still very limited. Researchers consider this topic to be very important to be discussed in the present, given the increasing vulnerability of young people towards technological addiction, making most of them be apathetic and selfish. With a discussion about how Islamic universities provide benefits for the era of the 4.0 industry revolution, it is expected that Islamic universities will increasingly exist in Indonesia in order to produce graduates who are qualified in science and

technology as well as qualified in iman and taqwa. This discussion will also be useful for the government to support Islamic higher education institutions so that Indonesia has superior human resources by the accompaniment of Islam character and moral which are taught deeply in every activities in Islamic universities. This study refers to the method of literature study by collecting research results from various previous sources to be analyzed to produce the findings of several benefits of Islamic universities for the industrial revolution era 4.0.

1.1. History of the Development of Islamic Universities in Indonesia

History of development and characteristics of Islamic universities in Indonesia have been discussed in some literature. According to Minhaji (2007), the momentum of the beginning establishment of Islamic universities in this country emerged in 1939. It was the time when the Islamic Forum of A'la Indonesia held the Al Islam II Congress where the submission of the establishment of Islamic universities was proposed to be one of the agenda in the congress. The results began to appear after the congress where Islamel Medelbare School was established in Solo, even though it was eventually closed due to the war conditions at that time. However, this condition did not dampen the desire of Muslims in particular to establish Islamic colleges. One of the fathers of the Indonesian proclamer, Mohammad Hatta, then led a committee of Islamic high school planners so that the Islamic High School (STI) was born in Jakarta on 8 July 1945.

During the revolution after the proclamation of independence, the Indonesian capital was moved from Jakarta to Yogyakarta. According to Daulay (2007) that incident affected the transfer of STI and was officially reopened in Yogyakarta on April 10, 1946. Then in November 1947 a STI improvement committee was formed. The committee in its session resulted in an agreement to change the name STI to the Indonesian Islamic University to develop its role and function. So that the Indonesian Islamic University was officially opened on March 10, 1948 and became the first and oldest Islamic university in Indonesia. At the beginning of the establishment, the Indonesian Islamic University had four faculties, namely the faculty of religion, law faculty, economics faculty, and education faculty.

Menurut Zuhairini (1997) sejumlah ulama dan pemimpin Islam di kota Solo juga mendirikan sebuah Universitas Islam pada tanggal 22 Januari 1950. Pada tahun yang sama fakultas agama dari Universitas Islam Indonesia diserahkan ke Kementrian Agama dan dijadikan Perguruan Tinggi Agama Islam Negeri (PTAIN) berdasarkan PP No.34 tahun 1950. Selanjutnya PTAIN digabung dengan Akademik Dinas Ilmu Agama Jakarta sehingga terbentuklah Institut Agama Islam Negeri (IAIN) pada tanggal 24 Agustus 1960 di Yogyakarta. Selain Universitas Islam Indonesia dan IAIN di Yogyakarta, pada tahun-tahun berikutnya juga banyak berdiri IAIN di berbagai kota di Indonesia. Pada perkembangannya IAIN di berbagai kota juga berubah Universitas Islam Negeri. Selain itu juga telah banyak berkembang Universitas Islam swasta di berbagai kota di Indonesia.

According to Zuhairini (1997) a number of Islamic scholars and leaders in the city of Solo also established an Islamic University on January 22, 1950. In the same year, the faculty of religion from the Indonesian Islamic University was handed over to the Ministry of Religion and was made the State Islamic Higher Education (PTAIN) based on PP No.34 of 1950. PTAIN was later merged with the Jakarta Academic Office of Religion Sciences to form the State Islamic Institute

(IAIN) on August 24, 1960 in Yogyakarta. In addition to the Indonesian Islamic University and IAIN in Yogyakarta, in the following years there were also many IAIN stands. in various cities in Indonesia. In its development, the IAIN in various cities also changed the State Islamic University. In addition there have also been many developing private Islamic universities in various cities in Indonesia.

2. Research Methods

This research is a qualitative study to observe a recent phenomenon in social life that is related to the existence of an Islamic university in the industrial revolution 4.0 paradigms. Qualitative research is a type of study that is not applying statistical procedures or other methods of measurement relating to the processing of data quantification (Strauss and Corbin in Cresswell, J.: 1998). To learn a certain paradigm, it requires in-depth observation including directly interacting and analyzing the findings of previous researchers to then be compared each other and finally, drawing conclusions that most suit to the actual facts. Kirk & Miller (in Nasution, 1988: 23) defines qualitative methods as a tradition to study social science by relying on fundamental observations of humans in certain regions and by being part of the region. Generally this method can be used to analyze problems related to the order of community life, history, behavior, organizational function, social activities, etc. (Rahmat, 2009). For this reason, besides building direct interaction with the object of research, literature studies are also used in this study through in-depth studies of previous studies relating to the history, characteristics, and role of Islamic universities and related to the needs of the industrial revolution from time to time. By relying on learning ethnographically, researchers made a fairly long observation and were involved in the daily implementation of education systems in Islamic universities. The conclusions in this study were drawn by studying the meaning of behavior, language, and the interaction of the practitioner group in Islamic universities.

3. Characteristics of Islamic Universities

To begin the discussion on the role of Islamic universities in the industrial revolution era 4.0, this article will review the characteristics that distinguish between Islamic universities and public universities. Islamic universities have the main characteristics in the cultivation of Islamic values and the formation of Islamic character in the personalities of their students. This is reflected in the vision of Islamic universities in Indonesia. For example is STI. Minhaji (2007) explained the expression of Mohammad Hatta as one of the initiators of the establishment of STI, that STI was a place for encounter between religion and science in an atmosphere of cooperation that could guide the community in prosperity. The prominent vision of religion cannot be separated from the curriculum which is based on the curriculum of the Ushuluddin faculty of Al-Azhar University, Cairo-Egypt. The vision that highlighted the religion in its development experienced a slight shift after the STI changed to the Indonesian Islamic University. The vision that was previously intended to form ulama candidates who were concentrated in the field of religious science shifted slightly to secular science such as economics, law, engineering, and medicine. Nonetheless, Islamic values and Islamic spirit remain the foundation for the taught secular science.

The characteristics of Islamic universities based on Islamic or spiritual values are very important in facing the current era of globalization. According to

Zukaf (1991), the era of globalization and liberalization is an era of blind materialism. The material seems to be everything. Many people think that the measure of success is from the amount of material they have. This will certainly have an impact on the human race in pursuing and getting as much material as possible. As a result, all kinds of methods can be done to achieve the goal of obtaining material. If we look at the reality that exists, we will find many workers who are in bars because of acts of corruption, collusion and nepotism to simply get wealth in the world by ignoring morality. So that, competition in the world of work will no longer be harmonious and healthy. Furthermore, unfair competition can have an impact on human psychology as it is vulnerable to stress.

According to Wajdi (2016), spirituality or religion is a human life platform that functions so that a human being is not alienated from his environment and God. By having a strong religious character, people will realize that the environment around them is not only limited to material, there are also neighbors, communities and nature who need harmony in life. So that there will be a sense of empathy, respect and love for their environment. Besides that they will also have strong confidence with their God. This belief will lead to adherence to his religion. So that people will realize that they will be held accountable for what they do and what they have. With this awareness it will undoubtedly be able to prevent them from committing acts that are not commendable such as bribery, corruption, collusion and nepotism.

Planting of Islamic characteristics will also be very beneficial for the younger generation in this era of globalization in the face of negative free association. Zine (2001) reveals that young people face various problems in the global era such as free sex, the influence of alcohol, Islamophobia, and freedom in dressing. These challenges will undoubtedly be avoided by the Islamic values embedded in each student. In addition, students can also be agents in counteracting issues of Islamophobia that hit the surrounding environment. The experience of good Islamic values will also be a good means of promotion to provide an image that Islam is a religion that teaches peace.

The above description leads to further discussion which is the main topic of discussion in this article, namely how the role of Islamic higher education institutions to shape the good spiritual character in the face of the Industrial revolution 4.0. The role that will be discussed in this article is limited only to the main role in the business world and ethical character that the author considers the most important thing so that it can be a differentiator from public universities.

3.1. The Role of Islamic Work Ethics for the Business World

Human Resources, as the driving force of the company's operations, are one of the main determinants of the success or failure of a company in running its business. The behavior of company employees is certainly one thing that needs to be considered by company management, because someone's attitude and behavior shows the seriousness of someone at work. With the presence of employees who have good ethics and morals are expected to improve the company's performance to be better and avoid corporate losses. Therefore, searching for ethical and moral resources is one of the main problems that many companies pay attention to.

The existence of ethical human resources is demonstrated by the application of religious values in carrying out every job. Especially for Muslims, Hidayat and Tjahjono (2015), revealed that someone who works accompanied by

the application of Islamic values can encourage him to do a good job, because their intentions in carrying out their work are not only limited to completing work and generating rewards but intended as a form of worship. This is consistent with the concept of Islamic Work Ethics, which defines as a moral principle a person to distinguish between what is right and what is wrong, what is good and what is bad in the context of Islam (Beekun, 1997). Islamic Work Ethics according to Rohkman (2010) is an orientation towards work and approach to work as a virtue in human life. Islamic Work Ethics is an ethical concept derived from the Qur'an and Sunnah.

Rohkman (2010) explains that Islam has an ideological foundation that can be applied to every Muslims with the aim of economic development. It is Islamic ethics that brings Muslims to the golden age in the eighth to fourteenth centuries. In the current era there have been many studies which prove that Islamic Work Ethics has a positive effect on job satisfaction and employee commitment to their work and organization (Hidayat and Tjahjono, 2015; Rohkman, 2010). Research by Hidayat and Tjahjono (2015) revealed that someone who works using Islamic work ethics will get internal motivation from each individual and tend not to be affected by external rewards. Islamic work ethic also makes individuals feel that every job they do has a certain meaning and as a form of worship. So, with that confidence and awareness can provide a strong motivation for them to do the work sincerely without any bonuses. This shows that ethical attitudes that conform to Islamic values possessed by employees can have a positive influence on the company's operational processes along with increasing work commitment, job satisfaction, and their awareness and beliefs about reward or reward as provisions in the next life (afterlife).

In the Islamic Work Ethics shows that every Muslim believes that Allah (the God of every Muslim) is perfect and omniscient, so that every action taken by humans will always be supervised by Allah. Therefore, Muslims always try to carry out everything with the intention of worshiping God, without expecting other rewards other than recognition from their Lord. As stated in Al-Quran Al-Baqarah (2: 216) which means:

"It is obligatory for you to fight, even though fighting is something you hate. You may hate something, even though it is very good for you, and you may (also) like something, even though it is very bad for you; God knows, while you don't know."

3.2. The Role of Islamic Universities in Establishing Ethical Characters

According to Beekun (1997) one of the factors that can influence a person's ethical behavior in Islam is an organizational factor. He explained that in general organizations that move in accordance with Islamic values can encourage a person's ethical behavior through the implementation of Islamic values in their work code of ethics. Islamic University as an educational institution with an organizational environment that implements Islamic values certainly has an important role in shaping the ethical character of its students. This statement was supported by Haningsih (2008) who revealed that Islamic education institutions included Islamic universities had a strategic role in creating generations that not only studied religion but also generations who were aware of the interests of society (ummah).

The existence of Islamic universities in the world of education provides its own uniqueness in conducting teaching activities on campus. Not only science

education is taught to its students, but the cultivation of Islamic values in each student is always emphasized and implemented in academic and non-academic activities. This shows the existence of awareness of Islamic education institutions in order to provide supplies to students, especially in human moral development based on Islamic values. Therefore, Islamic universities have an important role in creating graduates who behave well.

4. Conclusion

The industrial revolution from the initial stage to the latest, namely 4.0 provides an opportunity to create employment opportunities for those who have the skills needed in various fields. The world of work requires people who are not only skilled in general science but also have good moral characteristics. Therefore, it is necessary to prepare young people who will fill various existing professional fields. This is where the role of higher education is needed, especially Islamic universities to answer the needs of the young workforce who are professionally competent and have superior moral characteristics.

Islamic universities in Indonesia have a long history before the proclamation of Indonesian independence. Islamic universities have been established and developed in various regions in the country until now. The main characteristics of Islamic higher education in its early history have focused on teaching religious science to prepare scholars. Along with its development, many Islamic universities have faculties other than religion such as economics, law, engineering, medicine, and others. Therefore, the emphasis of Islamic higher education institutions is currently shifting a little to secular science, but still based on Islamic values and spirit. Islamic college graduates are expected to master the competencies in each field of study taken in addition to having a good Islamic character.

Graduates of Islamic universities will be able to fill the opportunities available in the current 4.0 industrial revolution with their professional competencies. In addition they can also answer the challenges that arise, especially related to the superior characteristics that are currently increasingly degraded. The superior characteristics of graduates of Islamic tertiary institutions are Islamic characteristics which are reflected among them in good work ethics and morals.

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