

The Real existence of State Islamic Religious College in the 4.0 Industrial Revolution

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Abstract. This paper aims to find the reforms needed in the State Islamic Religious College (PTKIN). Reform in PTKIN is needed to create people to become experts in their fields and to answer all the guidelines of the times. This paper explains to provide a solution for PTKIN when the Revolutionary Era 4.0 is happening lately. That can be seen when the era of 4.0 gives a hard influence on every aspect of life. It was proven when PTKIN on 4.0 Era gave a phenomenon of disruption that demanded the world of Education, the world of PTKIN to follow and face the 4.0 era in particular. PTKIN (UIN Malang and UIN Riau) is faced with unprecedented challenges and needs. Innovation system in the management of educational curricula that will be able to create competent human resources in the field of Islam and others in general. If PTKIN ignores and does not follow the development of the 4.0 era, PTKIN will be left behind. Therefore, PTKIN is expected to be able to compete and start taking concrete steps so as to produce people who will become experts in the field of Islam and others in general so that they can compete in an era of disruption. The plan is to disrupt themselves and face this 4.0 era. This study uses a qualitative description method with literature. The results of this study are that PTKIN (UIN Malang and UIN Riau) must prepare for the Revolution Era 4.0.

Keyword. *the State Islamic Religious College (PTKIN), Disruption, 4.0. Industrial Revolution Era.*

Abstrak. Artikel ini bertujuan untuk menemukan reformasi yang diperlukan di Perguruan Tinggi Agama Islam Negeri (PTKIN). Reformasi di PTKIN diperlukan untuk menjadikan manusia menjadi ahli di bidangnya dan untuk menjawab semua pedoman zaman. Artikel ini memberikan penjelasan solusi bagi PTKIN pada Era Revolusioner 4.0 terjadi akhir-akhir ini. Hal ini bisa dilihat pada era 4.0 memberi pengaruh yang besar pada setiap aspek kehidupan. Terbukti ketika PTKIN pada Era 4.0 menunjukkan fenomena yang mengganggu dan menuntut dunia Pendidikan, dunia PTKIN untuk mengikuti dan menghadapi era 4.0 pada khususnya. PTKIN (UIN Malang dan UIN Riau) dihadapkan dengan tantangan dan kebutuhan yang belum pernah terjadi sebelumnya. Sistem inovasi dalam pengelolaan kurikulum pendidikan yang akan mampu menciptakan sumber daya manusia yang kompeten di bidang Islam dan lainnya pada umumnya. Jika PTKIN mengabaikan dan tidak mengikuti perkembangan era 4.0, maka PTKIN akan tertinggal. Oleh karena itu, PTKIN diharapkan mampu bersaing dan mulai mengambil langkah konkret sehingga menghasilkan orang-orang yang akan menjadi ahli di bidang Islam dan lainnya secara umum sehingga mereka dapat bersaing di era yang penuh kekacauan. Rencananya adalah menghadapi kekacauan diri mereka sendiri dan menghadapi era 4.0 ini. Penelitian ini menggunakan metode deskripsi kualitatif dengan literatur. Hasil dari penelitian ini adalah bahwa PTKIN (UIN Malang dan UIN Riau) harus bersiap untuk Era Revolusi 4.0.

Kata kunci. *Perguruan Tinggi Agama Islam Negeri (PTKIN), Gangguan, Era Revolusi Industri 4.0*

1. INTRODUCTION

PTKIN is demanded to be able to face the evolution of Industry 4.0. Including UIN, IAIN, and STAIN which must be able to adjust between the curriculum - the method used - with the climate being faced in that era, where technology and information are developing very rapidly, which certainly can affect individuals or institutions. Therefore, PTKIN is faced with a big challenge. If not faced, it will become an obstacle for the development of PTKIN. UIN, IAIN and STAIN are faced with challenges where they are expected to produce competent human resources in their fields, who will be able to face the growing industrial era with their technology, and be able to adapt to the times. The next challenge that must be faced is the existing curriculum which is not in accordance with the rapid development of the industry. Because at this time, the curriculum must be developed based on the digital era, on which all technology and information are based. Therefore, UIN, IAIN, and STAIN must make preparations to face the Industrial Revolution 4.0 to increase their competitiveness against free market competitors; one of them is by providing curriculum innovation and adapting existing facilities and infrastructure with the latest technology, so that Islamic Higher Education is able to prepare innovative, skilled and competent human resources that can ultimately increase productivity towards industry during the Industrial Revolution 4.0

Literature Review

1. Islamic Higher Education at Indonesia

Ahmad Tafsir said that Islamic Education is an Islamic-style education. The point is that the education is based on the principles and values of Islamic teachings that are very colourful and underlies the entire process of education undertaken. (Heri Gunawan, 2004: 1). According to Ahmad Tafsir, Islamic Education is an Islamic-style education. The point is that the education is based on the principles and values of Islamic teachings that are very colorful and underlies the entire process of education undertaken. (Heri Gunawan, 2004: 1).

Abdul Majid said that Islamic education is a conscious and planned effort in preparing students to know, understand, appreciate, to believe, fear, and have noble character in practicing the Islamic teachings based on the holy Quran and al-Hadith, through the guidance activities, teaching, training, as well as the use of experience, accompanied by the demands to respect the adherents of other religions in relation to the harmony between religious groups in the community to the realization of national unity. (2012:12)

Islamic education means the effort to bring up the Islamic religion or Islamic teachings and its values so that they become the views and attitudes of a person. From the activity of educating the Islamic religion is aiming to help a person or group of students in instilling or developing Islamic teachings and values to be used as a way of life. (Rahman, 2012:3)

Whereas the definition of Higher Education is the level of education after secondary education which includes diploma programs, undergraduate programs, master programs, doctoral programs, and professional programs, as well as specialist programs, organized by universities based on the culture of the Indonesian nation. (Law No. 2 of 1989, Article 16, Paragraph 1). Higher education is education at a higher level than middle education in the path of school education (Government Regulations No. 30 of 1990, Article 1 Paragraph 1).

2. Objective of Islamic Education at Indonesia

Abdul Majid and Andayani started the objectives of the Islamic Education itself is to foster and improve faith through the provision and fertilization of knowledge, appreciation, experience and practice of students about Islam so that they become Muslims who continue to develop in faith, piety, nation and state, and can continue to the higher level. (2004: 136).

Majid Irsan Al-Kailany stated that the general objectives of Islamic education is described into two things: (a) that the objectives begins in the individual, then ends in human society in general; (b) that the purpose of education starts from the world, then ends in the hereafter, with various techniques (educational methods) that are refined and interrelated. (Heri Gunawan, 12:2014).

3. The Problems Faced by PTKIN at Indonesia

The problems that is faced by PTKIN such as UIN (State Islamic University), IAIN (State Islamic Institute), STAIN (State Islamic College), PTAIS (Private Islamic Higher Education), etc. is actually quite encouraging, or even if not, the quantity is exceeds the requirement so that it has been over production, while other sciences oriented to science and technology are still very rare. Thus, it is logic if there is an assumption that states, "Islamic students are poor of concept, mastering of science and technology, communication, and also politics." It is not wrong to conclude that the ethos of Islamic education nowadays still does not paying attention to the link and match in building its educational system (Priatmoko, 2018:7).

4. The Industrial Revolution 4.0

The definition of Industry 4.0 itself are various. It is because Industry 4.0 is still under development and research. According to German chancellor Angela Merkel (2014), Industry 4.0 is a transformation of technology used for the digital industry and the internet with conventional industries. German Trade and Invest in MacDougall (2014) explained more detail that, "Smart industry or INDUSTRIE 4.0 refers to the technological evolution from embedded systems to cyber-physical system. INDUSTRIE 4.0 represents the coming fourth industrial revolution on the way to an Internet of Things, Data and Services. Decentralized intelligence helps create intelligent object networking and independent process management, with the interaction of the real and virtual worlds representing a crucial new aspect of the manufacturing and production process". According to that explanation, it could be concluded that there are several technologies that support the Industry 4.0. Those technologies are Cyber-Physical System, Internet and Network, Data and Services and manufacturing technology. (Prasetyo, 2017:5)

Minister of Ristekdikti Nasir also stressed that Indonesia's success in leading young human resources to face the Industrial Revolution 4.0 is also determined by the quality of lecturers, teachers and other educators. They should master; (i) Skills (in leadership and teamwork), (ii) Ability to adapt to the new

technologies and global challenges (Cultural Agility), and (iii) have the ability in entrepreneurship, including the mastering of social entrepreneurship (Ministry of Research, Technology and Higher Education, 2018).

Industry 4.0 has brought so much change in human life. Industry 4.0 has fundamentally changed the way people move and has a big influence on the world of work. The positive influence of industry 4.0 could be felt in the form of effectiveness and efficiency of resources and production costs even though it has an impact on reducing employment. Industry 4.0 requires workers who have skills in digital literacy, technological literacy and human literacy. Vocational education should be able to equip the alumnus with these three literacies through chronosystem revitalization which includes learning systems, educational units, students, educators and the staff (Sakban et al, 2018: 66)

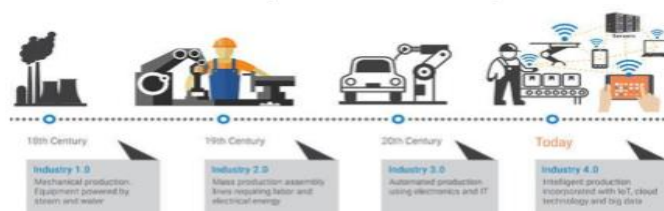


Figure 1. Image accessed from PT. Testindo

The digital revolution and the era of disruption in Ghufon's journal pointed that the technology is another term for industry 4.0. It is called the digital revolution because of the proliferation of computers and the automation of records in all fields. Industry 4.0 is said to be an era of technological disruption because automation and connectivity in a field would make a movement of the industrial world and work competition becomes not linear. (Ghufon, 2018: 333).

The impact of the Industrial Revolution 4.0. is the emergence of the disruptive innovation phenomenon, which spreads in all lines of life; industry, economy, education, politics, etc. The phenomenon has also succeeded in shifting the lifestyle and the mindset of the world community. The disruptive innovation could simply interpret as a phenomenon of disruption of the incumbent industry players by the latest industry players due to the ease of information technology.

5. The Real Existance of PTKIN at Indonesia

In his research, Priatmoko stated that the Islamic education is free to choose an option between two intersection; they may survive or keep up with the development of the Industrial Revolution 4.0. When they choose to survive, the Islamic education should be ready if they getting left behind as the times develop (Priatmoko, 2018:12).

Priatmoko said that Islamic Education in the era of 4.0 needs to disrupt itself if they want to strengthen its existence. Self-disruption means adjusting to the requirements and demands of the community and orienting towards the future. Nowadays, we could see that the existence of Islamic Higher Education in showing itself facing the industrial revolution 4.0 could be seen from the development of Islamic Higher Education which was originally in the form of IAIN and STAIN is now transformed into a State Islamic University (UIN) in the beginning of 2000; where it originally only focused on religious science has now integrated with general sciences. For example; by the establishment of faculties that are integrated with religious and general sciences that are needed by the industry. While Harto in his research on Higher Education, said that in the era of Industry 4.0., lecturers or teachers were able to use or manage a digital-based learning and education reform needed with increased capacity as well as the professionalism of teachers, a dynamic curriculum, reliable facilities and infrastructure, and learning the latest technologies so that the world of national education can adjust to the dynamics of the era (Harto,2018:5).

One of the important factors is the skills and competencies that should be continuously maintained need to be improved as well as the growing needs of the labour market. Therefore, Hanif added that the world of education and industry should be able to develop an industrial transformation strategy by considering the development of the labour sector, because industrial transformation will succeed with the presence of competent workforce. Talking about the issue of improving the quality of Indonesian human resources, developments, mixes, modifications and innovations that led to the birth of the Industrial Revolution 4.0, which occurred 50 years ago, when Indonesia was gave a birth to a combination of technology that blurred lines and forms into digital algorithms. (Iswan et al, 2018:32). One of the important factors is the skills and competencies that should be continuously maintained need to be improved as well as the growing needs of the labor market. Therefore, Hanif added that the world of education and industry should be able to develop an industrial transformation strategy by considering the development of the

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For the sake of welcoming Islamic Education 4.0, all the latent problems above should be resisted. If it is not, it would be difficult if you are reluctant to say that it is impossible to realize contextual Islamic education towards the times. Therefore, as stated above, there are some requirements to reform and renewal all aspects of Islamic education. Citing the quotation of Rhenald Kasali, there are three steps that should be carried out in Islamic education in 4.0. era, they are disruptive mindset, self-driving, and reshape or create (Priatmoko,2018:14)

2. METHOD

This research is a type of library research and uses qualitative methods. Noeng Muhadjir said that the library research requires more philosophical and theoretical preparation than empirical tests (Muhadjir, 1996). The type of literature research almost entirely refers to data taken from the library. So this research is popularly known as qualitative research literature or bibliographic research (Mukhtar, 2016).

The data sources in this research were not only taken from books, they may be taken from other sources such as; magazines, journals, internet, recordings, videos, and so observations on three months at 2019 years, etc. It is justified by what Moh Nazri said, that collecting data in library research is done by conducting studies of books, literature, notes, and reports that should be done with problems solved (Moh Nazir, 2003).

Shank (2002) adds, that qualitative research is “a form of systematic empirical inquiry into meaning”. Ospina (2004) interpreted, “systematically” means “planned, ordered and public”, following the rules that is agreed by members of the qualitative research community. “Empirical” means that this type of investigation is based on theShank (2002) adds, that qualitative research is “a form of systematic empirical inquiry into meaning”. Ospina (2004) interpreted, “systematically” means “planned, ordered and public”, following the rules that is agreed by members of the qualitative research community. “Empirical” means that this type of investigation is based on the world of experience. According to Miles and Huberman's perspective (1994), there are 3 stages of qualitative data analysis; reduction, display, and conclusion / verification.

Thus, in this paper, researcher used data analysis techniques refered to the qualitative methods of Miles and Huberman, whose steps are: (1) data collection, (2) data reduction, (3) data verification and (4) conclusions. In process data collection, the author takes from several trusted sources such as books, journals and some previous research. From these sources, researcher done the analysis by sort out which parts that support the paper argument.

To support the data collection process, researcher only conducted a simple survey some different lecturers and students related to this problem to see how the role of PTKIN (UIN Malang and UIN Riau) in facing the Industrial Revolution 4.0. world of experience. According to Miles and Huberman's perspective (1994), there are 3 stages of qualitative data analysis; reduction, display, and conclusion / verification.

3. RESULT AND DISCUSSION

The real existence of PTKIN (both UIN Malang or UIN Riau) in demonstrating itself in facing Industrial Revolution 4.0. had could be seen in the transformation of the State Islamic Institute (IAIN) into the State Islamic University, where at the beginning of the establishment, the Islamic Higher Education were only focused on the religious sciences. But, when it changed to the University, the Islamic Higher Education began to integrate the religious sciences with general sciences. For example, by the existence of the Faculty of Humanities where integrating Language with the Science of Humanities or the emergence of the Faculty of Science and Technology, shows that PTKIN (UIN Malang and UIN Riau) has ready to face the Industrial Revolution 4.0. For example, faculty of humanities at UIN Malang have aims to prepares students to understand

and apply humane and cultural principles in the workplace and society based on Islamic teachings. Aside from that, the faculty facilitates students to be open-minded and critical intellectuals primarily in the field of language and literature. Fulfilling those qualifications, the graduates have great opportunities to work as educators, translators, journalists, tour guides, novelists, poets, public relation officers, embassy staff, et cetera (website). But in UIN Riau didn't have faculty of humanities. Let's look at the picture on below this:



Figure 2. Faculties at UIN Malang

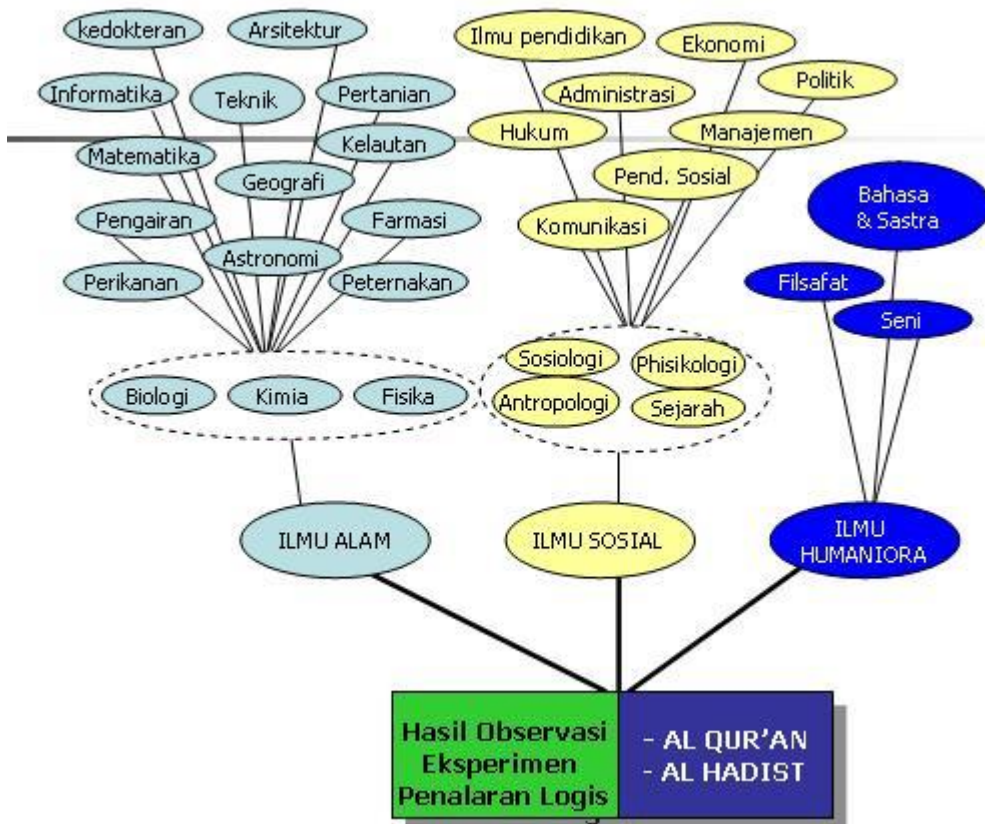


Figure 3. Epistemology of sciences at UIN Malang

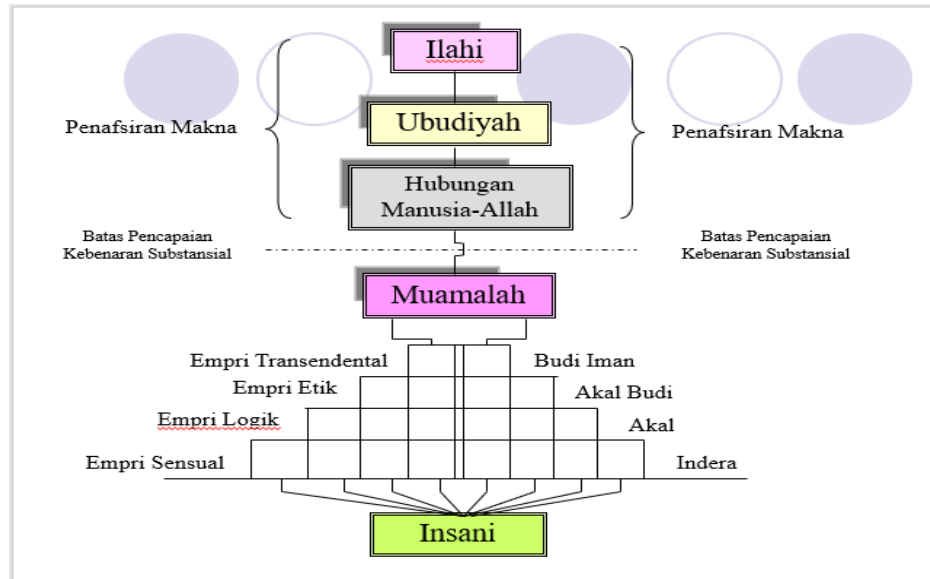


Figure 4. Ontology of sciences at UIN Riau

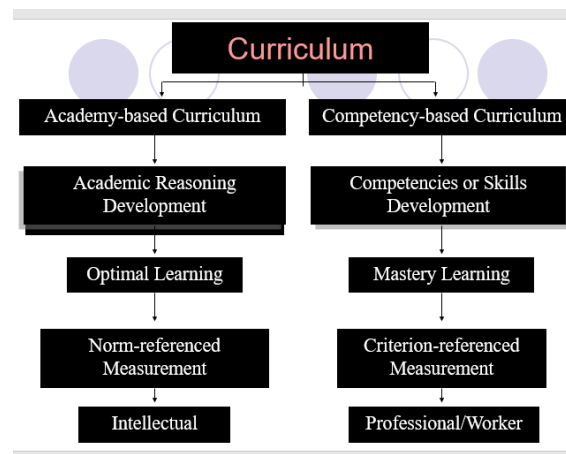


Figure 5. Desain of Curriculum at UIN Riau

In the era of Industrial Revolution 4.0., the institutions, lecturers and students must be based on digital technology. Now, we could see that the academic system of PTKIN has used the Online Based Academic System, where the institutions, lecturers, and students could access the academic requirements in a simple way, such as in making academic letters or in inputting grades and assignments. In UIN Malang, the names of SIAKAD (Sistem informasi akademik), and in UIN RIAU, the name's is iRaise (**Integrated Academic Information System**). In addition, the method used in recent teaching and learning has used the technology that is practical and makes it easier to support the better learning. Lecturers have also done many innovations in the learning system by developing innovative and creative models and learning media that is no longer monotonous, so that the students can understand the material presented.

The preparation of professional human resources and other additional abilities has been prepared by PTKIN (UIN Malang and UIN Riau), where in the curriculum used, there are courses that support the ability of students. For instance, with courses in English, Arabic, Entrepreneurship, as well as Pro Practice Field. The course could help the students to develop themselves to be more compared to other students and experienced in their fields. In addition, the Islamic Higher Education is also prepared the students to become productive and competent by holding courses and training such as the TOEFL Preparation Course, TOAFL, Digital Academic Writing and Information Communication and Technology Training. Therefore, the students can realized that in the recent industrial era, skills and capabilities are very important. UIN Malang and UIN Riau, both use e-learning in their learning systems in all faculties, facilitated by the university (observation).

Today's Islamic education is in a fast-paced, high-mobility digital age, access to information is everyone's primary need. In addition, today's society demands to be instant and real-time. Everything needed must be

immediately available. If access to these necessities takes too long, the community will leave and move to another service. In essence, the demand in this disruption era is a response. The quick response will greatly affect the user. This is what is called by Rhenald as a corporate mindset. This mindset needs to be built by Islamic education actors, so that the services provided to users are no longer bureaucratic. Furthermore, Rhenald said that the characteristics of people with a corporate mindset are; first, not bound by time and place. Their work not limited to hours and work space. The people like this have realized that time and place are no longer a barrier to work. Technology has turned it off. The people today can be connected 24 hours, without being bound by time and place. If the mindset is applied in the management of Islamic education institutions, then an effective and efficient managerial system will be formed. Furthermore, in the context of learning, the teacher will be more flexible in carrying out their duties and functions in learning.

4. CONCLUSION

Facing the Industrial Revolution 4.0 era, PTKIN must be more sensitive to what is needed by the community and must be aware of rapid industrial changes. PTKIN (UIN Malang and UIN Riau) must develop and not have to close themselves with technological developments in the world. Because, when PTKIN is closed itself, it will be increasingly abandoned by others. Faced with this, PTKIN (UIN Malang and UIN Riau) must modify the curriculum in accordance with the demands of the existing revolution, must prepare competent and quality Human Resources supported by learning and digital-based systems to facilitate learning. PTKIN (UIN Malang and UIN Riau) must also innovate curriculum in accordance with the demands of the 4.0 industrial revolution, and the learning delivered must also be contextual with developments in the 4.0 Revolution era and other changes.

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