

# Human Resources In Developing Halal Industry In The Era Of Industrial Revolution 4.0 During The Covid-19 Pandemic

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**ABSTRACT:** The halal industry is one of the most developed industries in the world because it is in line with Islamic principles and requirements. The emergence of this industry aims to meet the needs of Islamic-compliant products and services. Unexpectedly, this industry is flourishing in both muslim and non-muslim countries. This research discusses the development of human resources in the development of the halal industry in the era of the industrial revolution 4.0 which has a significant impact on human life and the world's ecosystem. Therefore, it is very important to manage human resources as the main actor that is related to it. This research method is descriptive-qualitative with the concept of Human Resource Management and the concept of the halal industry in the era of the industrial revolution 4.0. The results of this study indicate that the industry has great potential, so that the management of human resources in the halal industry sector in facing the development and improvement implements its managerial functions, namely: 1) Planning that determines the direction of halal industrial development; 2) Organizing that decides the authorized institutions to run; 3) Briefing that makes instructions, regulations, or socialization to support the planning; 4) Controlling that needs a control and supervision in order to achieve the goal.

## 1. INTRODUCTION

Indonesia with muslim majority population has enormous opportunities in developing the halal industry. One of the objectives is the guarantee of the availability industrial market in Indonesia. *Global Islamic Economic Report 2019/2020* stated that Indonesia was in the fifth rank of the industrial development, it was left behind Malaysia which occupied the first position, from various existing indicators. It makes a challenge for Indonesia to develop the halal industry both in terms of quality and quantity.

Nevertheless, Indonesia does not have a clear vision of its position in the halal industry. This country is still not fully working on the global industry, because of its main purpose to protect domestic consumers. Halal certification in Indonesia is voluntary, meaning that companies on their own ideas (with consideration to meet the demand of the Muslim consumer market) apply for it including the consequences of financing by themselves.

Indonesia will be more focusing on classifying the problems in the certification. This study creates five groups, namely: policy, human resources, infrastructure, socialization, and production.

In this era, the Industrial Revolution 4.0 causes a big change in the way of thought, life, and how human beings interact to one another. The significant change is not only in technology, but also in many aspects. The change also affects human resources because of its results from their contributions in the industry 4.0.

Improving the quality is very important, since Indonesia has not optimized in utilizing new technology. Technological advance is non-negotiable in society, especially in the business field and needs to apply carefully for preparing skilled human resource.

## 2. REVIEW OF THE LITERATURE

### 2.1. *Human Resources*

Human resources are defined as a significant element to enhance the assets of the company and employees to improve their productivities and maintain the competitive advantage. Human resources also refer to the processes related to training, education and other professional initiatives to increase the level of knowledge, skills, abilities, values, and social assets of an employee that will lead to employee satisfaction and performance, and ultimately to company performance. At this time, for entering the globally halal market, the most important principle is the capability of human resources in facilitating knowledge and expertise. Based on this factor, it must invest in the programs to enhance the workforce in field. The investment focuses on providing program for Small Businesses on halal compliance.

Human resources play an important role in industry. Good management of human resources and good utilization will run the industrial operating system to its full potential. The existence of human resource management will have a role in increasing the effectiveness and efficiency of a company. Broadly speaking, human resource management provides the following benefits: 1. *Quality*. The dominant function of human resource management is to build qualified people according to their competence and expertise. Therefore, with the existence of human resource management, it is expected that the workforce will be able to provide benefits to the organization and themselves. 2. *Speed*. A job that is worked by an expert will result an expected output. Likewise, when professionals are required to work quickly, they will be able to do the work with full accuracy and perfection, so that the work can be completed professionally in a relatively short time. 3. *Leadership Cost*. A good human resource management will make a leader have the ability to carry out his leadership in an organization well. Effective leadership is very influential on the need for costs in the organization. The number of costs incurred by organization can be seen from the effectiveness of leadership in carrying out organizational activities. 4. *Adaptive Learning Ability*. The pluralism of human resources in an organization requires a good communication system between management and employees and fellow employees. Therefore, to realize the synchronization of goals between management and employees, human resource management is required.

Among the industries developed in Indonesia, one of them is a creative industry. The development of creative industry in Indonesia has a very significant growth from time-to-time. Based on the survey of creative economy that was conducted by the Central Bureau of Statistics, the data released by Bekraf (Bureau of Creative Economy) stated that there are three biggest contributors of creative economic PDB in Indonesia during the year of 2017, namely: 41.4% of fashion subsector, 17.6% of culinary, and almost 15% of craft. They are the top contributor to Indonesian exports. The Minister of Tourism and Creative Economy, Wisnutama Kusubandio, stated that fashion gets 11,964 million American dollars, craft gets 6 million American dollars, and culinary gets 1,300 million American dollars.

However, behind the rapid development of the creative industry, there are many challenges that must be faced by creative industry players. The challenge is also the strategic issues that will be the focus of the next development. Several strategic issues have been disclosed in the "Creative Economy Mid-Term Action Plan 2015-2019" published in 2014. Recognizing the rapid change of information technology, Government of the Republic of Indonesia has issued a systematic, comprehensive and futuristic national industrial development plan which has been outlined in 2015-2035 National Industrial Development Master Plan (Government Regulation No.14 of 2015). The vision for national industrial development is to become a tough industry with the following characteristics: (1) A national industrial structure that is strong, deep, healthy, and fair; (2) Industry that is highly competitive at the global level, and (3) Industry based on innovation and technology.

The Indonesia human resources have three problems, namely foreign language skill, managerial skill, and lack of understanding related to the information technology.

## 2.2. Halal Industry

The halal industry is often associated with an effort to produce a product (goods and services) that is in accordance with the provision of Islamic religion (sharia). This definition began to emerge recently due to the high demand for halal products and services in the world. Previously, it was known that the halal industry was associated with the halal economy. The term of halal economy was much earlier known than the term of halal industry.

While the language definition consists of two words, namely *industry* and *halal*. According to the Great Indonesian Dictionary, *halal industry* is all forms economic activities that process raw materials and/or utilize industrial resources to produce goods that have added value or higher benefits, including industrial services. To create halal industry, the processed raw materials are materials that are permitted by Allah the Almighty, and the process should comply with the Islamic law. Al Baqarah 2:58 stated:

وَإِذْ قُلْنَا ادْخُلُوا هَذِهِ الْقَرْيَةَ فَكُلُوا مِنْهَا حَيْثُ شِئْتُمْ رَغَدًا وَادْخُلُوا الْبَابَ سُجَّدًا وَقُولُوا حِطَّةً نَعْفِرْ لَكُمْ خَطِيئَتِكُمْ وَسنَزِيدُ الْمُحْسِنِينَ

Meaning that:

“And (remember) when We stated: “Come into this country (Baitul Maqdis), and eat the produce which is abundant and delicious that you like, and enter its gate while prostrating and say: “Free us from sin”, We surely will forgive your mistakes, and later We will increase (our gifts) to people who do good things.”

Halal industrial areas in Indonesia have great potential to be developed as the Muslim population reaches 85.2 percent or as many as 200 people out of a total population of 235 million people who are muslims. With such a population, the food, drinks, medicines, and cosmetics consumed by the Indonesian people are also large. If Indonesia is able to develop the halal industry massively, as conducted by Malaysia, Indonesia will be able to be in the top rank of the halal industry and market in the world. One way to improve halal food products, starting with meeting targets in accordance with Law no.33 of 2014 concerning Halal Product Guarantees, then in 2019 all food circulating in Indonesia already have halal certificates.

The Law No.33 of 2014 concerning on Halal Product Guarantee in article 1 states that products consist of goods related to food, beverages, drugs, cosmetics, chemical products and/or services that are consumed by the society. Halal products are products that have been declared halal in accordance with the Islamic law. Figure 1 shows the coverage of the world's halal industry sectors including 1. Logistics, 2. Fashion, 3. Hotel services, 4. Islamic/Sharia financing, 5. Halal tourism, 6. Cosmetics and personal care, 7. Food and beverages.

Trend of the halal business is a hot topic in the international business world today. The trade of halal products reached \$254 billion and boosted the economy 1-3% of GDP (Gross Domestic Product) in OIC (Organization of the Islamic Conference) member countries (Dinar Standard, 2019). *Global Islamic Economy Report 2019/2020* stated that Indonesia was on the fifth rank in the industry development. It is contrast to the Indonesian condition as one of the largest Muslim population countries which should have great opportunities in the halal business. This is a challenge for Indonesia in developing quality and quantity in the industry.

## 2.3. Industrial Revolution 4.0

Globalization is in a new era called the Industrial Revolution 4.0. It means that the world has experienced four stages of revolution, namely: 1) Industrial Revolution 1.0 that was occurred in the 18th century through the invention of the condensation engine, thus allowing goods to be mass-produced, 2) Industrial Revolution 2.0 that was occurred in the 19th to 20th centuries through the use of electricity which decreased the production costs, 3) The 3.0 industrial revolution that was occurred in the 1970s through the use of computers, and

4) the 4.0 industrial revolution that was occurred in the 2010s through intelligence engineering and the internet as the support of the movement and connectivity of humans and machines.

It is undeniable that the quality of workforce is very important for doing the effort of Indonesia in welcoming the all-digital era in the industrial revolution 4.0. This era changes the way of thinking, living, and relating to one another. It also affects human resources (HR), because HR is one of the success factors in the role of industry 4.0.

In facing industrial revolution 4.0, there are two stages that must be taken: First, preparing the implementation of education and human resources and the needs of the times in the industrial revolution era. Second, in addition to prepare the education, human resources that are prepared must also be equipped with education on cultural and human values, so that the use of technology is in accordance with the cultural and humanitarian rules that have been made.

Anyway, there are three things that have to be concerned by all parties. The first is the quality that produces qualified human resources to suit the needs of the digital technology-based job market. The second is the issue of quantity, which is to produce a number of qualified, competent human resources according to the industrial needs. The third is the problem of the distribution of quality human resources which is not evenly distributed.

To get competitive human resources in industry 4.0, the educational curriculum must be designed so that the output is able to master new literacy, namely (1) data literacy, which is the ability to read, analyze, and utilize big data information in digital world, (2) technological literacy, that is to understand how machines, technology applications (coding, artificial intelligence, and engineering principles) work, and (3) human literacy, humanities, communication, and design. But in the challenges of the 4.0 industrial revolution era, it is not enough only with literacy, but also abilities based on reading, writing, and arithmetic.

In Indonesia, from the number of 272.1 millions of the population, the internet users reach 175.4 millions. Surprisingly, the connected smartphones are 338.2 million units. The total is almost twice of the number of the internet users. It means that majority Indonesian people have more than one smartphones, while the numbers of social media's users reach 160 millions.

Comparing with the period of January 2019, in January 2020 the internet users increased 17 percent (increased by 25 millions) from last year. The connected smartphones were increased 15 million units or 4.6 percent, the social media's users expanded 12 millions or 8.1 percent.

### 3. RESEARCH METHODOLOGY

The study used the descriptive-qualitative method that explains the phenomenon of human resources who face the industrial revolution in the context of development of halal industry in many sectors, such as halal food industry, sharia financing, halal tourist, and halal fashion. This research is both primary and secondary data. The data collection used literature review. Data analysis was carried out through data reduction steps, that the data was obtained and selected for the study, then it was presented by displaying the data in the form of sentences, tables, graphs and others, and finally drawing conclusion.

### 4. RESULT AND RESOLUTION

#### 4.1. *Human Resources Potential in 4.0 Industrial Revolution Era*

An escalation of human resources has been very important since Indonesia still has not utilized the latest technologies. Advance of technology is not negotiable in society, especially in business. It must to be handled carefully, because of preparing HR (human resources) to have some skills is considerably important.

Escalation of HR starts from education, training, and HR's guidance. In Industry 4.0, the basic requirements that must be owned are : skill, dexterity, and culture adaptation ability (different culture background yet cooperative). In this case, HR plays as an important role to deal with the Industrial Revolution Era 4.0.

Encountering Industrial Revolution Era 4.0, there are three things that have to be considered by everyone. The first thing is “Quality”, it means there are efforts to produce the qualified human resource, so they can fulfill the job market based on digital technology. The second is “Quantity”, which means there are efforts to build the numbers of qualified human resource that are competent as well. Third, the distribution of the human resource does not spread equally.

In term of competence enhancement and HR productivity, the government needs to make efforts for training, such as certification institute through Job Training Center and digital programs. Problems that occur nowadays cannot be solved as well as the earlier concept, therefore modern problems require modern solutions, especially in this Industrial Era 4.0. Industrial Revolution 4.0 is not able to be encountered by technological development without implicating human resource in it, because they are the actors in the Industry 4.0. According to that, it has purposes, such as : 1. Preparing education implementation and human resources that correspond with the new Industrial Revolution era. 2. Besides that, human resources also must have “cultural-value education” and humanity, in order to get along with the rules which have existed.

According to The State of Global Islamic Economy (SGIE) Report 2020//2021, Indonesia has succeeded to get from the 5th position to 4th rank in 2019, even from 10th place last year. The annual report is the source of information for global Islamic economic development. SGIER 2020/2021 is the 8th edition that was published in the economic slowdown because of the COVID-19 pandemic.



Figure 1. The State of Global Islamic Economy (SGIE) Report 2020/2021

Center for Research and Development of Informatics and Information and also Public Communication Applications (Puslitbang Aptika-IKP) in Workforce Litbang Agency in Ministry of Communication and Information of 2019 stated that Indonesia needed 129,465 human resources in TIK field during 2020. The requirements were in 8 (eight) major Indonesian business sectors.



Figure 2. Result of the study of Puslitbang Aptika-IKP, 2019

Based on the data the following, it is known that the professions required by the industrial world are *Full Stack Programmar* in the average of 35,172 people and *Data Analyst of Big Data Scientist* in the average of 21,705 people.



Figure 3. Result of the study of Puslitbang Aptika-IKP, 2019

The figures above showed that Indonesia requires more human resources for many fields.

#### 4.2. The Development of Halal Industrial

The development of halal industry in Indonesia will focus on mapping the current constraints by grouping 5 aspects, namely:

1. Policies consist of the implementation of halal product guarantee that are not completed yet, the lack of certification and standardization of halal products, and the absence of a roadmap of halal industry development.
2. Human resources consist of many producers who pay less attention to halal products and still lack of knowledge of halal products for small business actors.
3. Inadequate infrastructure mainly due to lack of coordination of institutions that handle infrastructure.
4. The lack of socialization, promotion, education, and information about halal.
5. Some obstacles such as the limited raw materials that meet the halal criteria, there are some sectors that depend on imports and there is no standard definition of halal products.

Besides the human resource, the other constraints are infrastructure and production. Infrastructure becomes a problem in growing the halal industry because it relates on the implementation of JPH, such as rules, systems, procedures, and the number of halal guarantee institutions. The next priorities are policies and socialization. Furthermore, formulation of the strategies in the development of the halal industry based on the mapping of obstacles that have been carried out. It is called the Strategy of Halal Industry Integration which has a purpose to maximize the role of each economic agents. The economic agents are the government, consumers, investors, and industries.

Here is the report of SIEG (State of the Global Islamic Economy) 2019/2020 that stated some Indonesian industries were ranked in the world's top 10. They were sharia finance in the 5th position, halal tourism industry in the 4th position, fashion industry in the 3rd position. However, the Indonesian halal food industry did not get the position. Here we should improve it and solve the problems.

## 5. CONCLUSION

SGIE (State Global Islamic Economy) Report shows that Indonesia has its rapid growth, not only in the halal product consumption but also in finance, fashion, cosmetics and tourism. In addition, according to the report, Indonesia is also reported to have made policies that foster the ecosystem needed to provide opportunities for the growth of the Islamic economy accompanied by various incentives that facilitate industry and investment in halal infrastructure, product, and service.

In the industry, human resources involve the top management, personnel management, financial management, and halal supervisors. The other human resources who have the important role in the chain of providing halal products are halal auditors, slaughterers, product analysts, and tour guides. To provide these resources, the government has provided personnel who have the required competencies through the standards regulated by BPJPH as an institution that has the authority to set standards as enshrined in Article 6 of Law 33 JPH. BPJPH in collaboration with the Ministry of Manpower through the National Professional Certification Agency (BNSP), establishes the Indonesian National Work Competency Standards (SKKNI) to produce professional and competent personnel.

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