Making Indonesia as Integrated Halal Zone Through the Implementation of Halal Supply Chain

Zulfikar Hasan
Sekolah Tinggi Agama Islam Negeri (STAIN) Bengkalis Riau, Indonesia

Abstract
Halal supply chain management is one of the implementations that has been undertaken by several countries in the world, and even countries with a majority non-Muslim population. The halal sector in the world has developed quite rapidly. It has penetrated all fields, including Islamic banking and finance, which has evolved quite well in helping a country’s economy. The research used in this research is descriptive qualitative research as an illustration in the Halal Supply Chain process that has been used by several states that have successfully implemented this system. This research explains what obstacles are faced by Indonesia in becoming a leading country for the world’s halal sector. Halal Supply Chain is a cycle that has been set by each country and has standards that guide the processing of a product so it reaches the consumer. Indonesia is determined to become the centre of the halal world by implementing the halal supply chain in the form of the Integrated Halal Zone (IHZ). IHZ is aimed to encourage the halal industry to develop and be able to compete with other countries quickly. Additionally, the Indonesian Ulema Council, Halal Product Guarantee Agency (BPJPH), and the Ministry of Religion can easily oversee halal product standards from upstream to downstream. Hopefully, the results of this research will contribute to the academic world and practitioners of Islamic economics.

Keywords: Halal Supply Chain, Integrated Halal Zone, Halal Sector

I. Introduction
Global Islamic Economics 2018-2019 reports that the increasing Muslim population of the world in 2017 was 1.8 billion people. In the same year, the expected payment of Muslims
was around USD 2.1 million a year and extended to rise each year. In 2017, the consumption of Muslims around the world in the lifestyle sector was 2.1 trillion USD. The Islamic financial industry was 2.4 trillion USD, food and drinks were 1.3 trillion USD, clothing was 270 million USD, media and entertainment were equal 209 million USD, tours for 177 USD, and cosmetics and medicine for 87 million USD. The big chance for the halal business is very broad open for each country that produces halal commodities. The potential of halal adorns one of the world’s imperative economic possibilities, forward with the booming need for world halal consumption. Additionally, halal awareness in the world community is increasing demand by non-OIC countries, such as Thailand and South Korea, producing and certifying vast amounts of halal products for domestic and international businesses.

The world's halal industry leader states that regulation and help in the form of government plans for the development of the halal industry is a detail that significantly influences the development of the halal industry in the country. Then what about Indonesia? The House of Representatives of the Republic of Indonesia (DPR-RI) has ratified and issued Law No. 33 of 2014 concerning Halal Product Guarantee. This Law was issued to regulate that products circulating in the community required halal guarantees to meet the consumption needs of Muslims in particular. Further, the Indonesian Ulama Council (MUI), through the MUI Food and Drug Products Guarantee Agency (LPPOM MUI), issued a halal certification scheme on food products, beverages, cosmetics, and medicines. Moreover, the government established the Halal Product Guarantee Agency (BPJPH) from the Ministry of Religion to encourage the halal industry to grow in Indonesia. Besides, the Ministry of Industry is planning to establish a halal industrial area to be completed before 2020. Nevertheless, the Ministry of Industry is not currently undeviatingly developing the industrial property, but by designing an expensive zone as a pilot project to continue to become a halal industrial area. The government support program, as suggested before, has not yet had a critical impact on the development of the halal industry in Indonesia. There is a demand for findings in the form of regulations and policy programs to drive the fast-developing halal sector and compete with other countries.

The halal supply chain is reflected very accurately and compatible in Indonesia. The halal supply chain method can combine with an integrated digital system to expedite the implementation of the halal supply chain in Indonesia. Desegregated digital systems utilize the system of efficiency working digital-based area integration to decrease costs and maximize production and benefits of the company. The supply chain theory, connected with an integrated digital system, will become a halal industrial area where material acquisition, product processing, distribution, and marketing are in one standardized halal area. Fields with a combination of integrated digital systems and Halal Supply Chain Management (HSCM) referred to as integrated halal zones (IHZ). IHZ will assist the rapidly developing halal industry.

One of the usual halal industry development methods deemed valid and effective is the halal supply chain management (HSCM) system. HSCM has been implemented in Malaysia and enables to optimize its halal industry to an excellent standard. HSCM is represented as
a production supply chain with halal certification from fresh materials to available products for consumption. Given the complexity of the halal supply chain and the inadequacy of mistakes in the process (Ali et al., 2013). Halal supply chain management adjusts the supply of fresh materials for production, processing, marketing, promotion until the products are ready for consumption must comply with halal standards. In general, there are four main activities in the halal supply chain: (1) Halal procurement, (2) Halal manufacturing, (3) Halal distribution, and (4) Halal logistics.

Additionally, MUI can easily monitor halal standards from upstream to downstream. The manner of controlling, monitoring, and evaluating can be done expeditiously and does not cost much money. It is time for Indonesia's halal industry to grow and be able to compete with the world's best halal industrialized countries.

Within the context of the supply chain, a halal concept of the community that the value chain from raw materials to consumers must be guaranteed halal, that shows that people need the transparency of information that can ensure that food and drinks consumed not contaminated something unclean or prohibited. In Indonesia, the concept of the Halal Supply Chain is still not going well. According to Tieman's halal evolution table (2011), Indonesia has not yet reached the Halal Supply Chain stage because the authorized institution to provide halal certificates, in this case, BPJPH (Halal Product Guarantee Agency), only issues halal certificates on their products. The halal certification does not cover stages such as storage of the product after producing and distributing until the product reaches the hands of consumers.

However, despite the positive implications of implementing the concept of the Halal Supply Chain as a whole in Indonesia, there are still concerns that may emerge. The increased cost of production may occur due to the increasing prices in halal certification, which will later impact the increased cost of consumption of halal products for consumers. The concept of the Halal Supply Chain emphasizes that Islam takes care of the rights that exist in every human being, in this case, is the consumer. For this reason, improvement of regulations regarding the Halal Supply Chain in Indonesia is necessary, not only limited to certification at the production stage but also all stages of the supply chain so that guarantees for these rights can be maintained. And also, mature regulations and the application of the concept of the Halal Supply Chain as a whole can positively impact every party involved in the supply chain because Islam is a religion of Rahmatan Lil 'Alamin (Grace to all nature).

In addition to guaranteeing consumer rights, the concept of Halal Supply Chain can also open up new types of employment and business opportunities. As in the stages of halal raw material suppliers, job opportunities for certified butchers will emerge. At the distribution stage, there will be a need for the supervisor of freight services. Various forms of work in every process of product movement to reach consumers. The structure of business opportunities that will emerge is also quite varied, as in the manufacturing stage, a halal warehouse service will develop. At the distribution stage, halal logistics services and maintenance of logistical facilities will improve, as well as many other types of
business opportunities that will later adjust to the needs of the Halal Supply Chain concept in Indonesia.

The research that is being carried out needs to get a clear understanding of how the role of the halal sector is to advance the Indonesian economic sector, and so on can increase the interest of the world community to invest in Indonesia in halal industry.

II. Literature Review

Halal Supply Chain Management is a management process in the acquirement, storage, and procurement of materials, food and non-food, and similar information mutually including documentation moving through the organization by general sources of sharia law (Bonne & W, 2008). Supply chain management has a goal, which can be measured by the availability of goods or customer satisfaction. In the implementation of supply chain management, cooperation between organizations must establish. Of course, this cooperation is the outset of the running of the supply chain. In addition to being evaluated from the halal supply chain, the management method is also supervised. Aside from proper management and cooperation to meet the demands of consumers, it is also an indispensable factor in executing supply chain management. Answering market needs is the essence of halal supply chain management so that without sectors of the market, halal supply chain management will not function (Feriyanto et al., 2016)

Some descriptions above are factors that support the constant supply of halal supply chain management. Internal factors in the halal supply chain management, in this case, proceeds from the halal supply chain management players themselves, such as not complying with the contract, incorrect delivery time, and improper delivery (Bernadhetta et al., 2020). In comparison, the outside factor that becomes defective in the halal supply chain management is the lack of awareness of the state and the community towards halal products.

The expansion of the halal market demands heightened efficiency in the market to be able to balance this growth. One path that can use is supply chain management (Supply Chain Management / SCM). SCM can be used to increase the productivity and profitability of the halal market. Necessary and systemic coordination of marketing purposes in a company is the key to the flourishing implementation of SCM in the company. Traditional SCM can describe the process of transforming raw materials into complete goods for further distribution to the final consumer. In the accelerated development of the industry, exceptionally the development of the halal industry, traditional SCM is inadequate to support market needs. Accordingly, SCM produces by industry demands to become a halal supply chain (Waharini & Purwantini, 2018)

Halal supply chain management required activities to guarantee the quality of the business logistics process. Nevertheless, Marco et al., (2012) argues that the foundation of Halal Supply Chain Management is determined by three factors, notably: direct contact with haram (prohibited), Muslim consumer principles, and risk of contamination. In this case, the risk in these factors is based on product features, such as versus mass products and wet products.
All halal products need to follow sharia law, and the logistics process is no exemption. Hence, it is essential to have a logistics process that involves shariah laws in its implementation. The central policy of halal logistics is to secure the separation between halal and non-halal products. Of all supply chains, logistics service providers play an essential role in ensuring that raw materials, raw materials, packaging, storage, and transportation of halal products are carried out properly so that they are not contaminated with non-halal products (Omar & Jaafar, 2011). According to Marco et al., (2012), there are three bases in halal logistics, namely: direct contact with illicit products, risk of contamination, and perceptions of Muslim consumers. These three things are essential to ensure the integrity of halal products.

The Indonesian Food and Drug Supervisory Agency and the Indonesian Ulema Council (LPPOM MUI) issued halal product certification before 2019. However, after October 2019, all halal products are no longer in the Indonesian Ulema Council (MUI) but under the Ministry of Religion. The validity period of the halal certificate is two. During this period, companies/producers must be able to convince MUI and consumers that the halal level of the products produced will always be maintained. Therefore LPPOM MUI requires each company to create and document Halal Assurance System (HAS) by the needs of each company when they want to apply for product certification. HAS is a system developed, implemented, and maintained by companies that have obtained halal certification. Companies need HAS to keep the halal quality of the production process under the regulations of the LPPOM MUI (Akbarizan et al., 2018).

Halal certification is the process of certification of products or services by Islamic shariah provisions. Halal certification was first carried out in the United States in the 1960s as a guarantee for Muslims living in non-Muslim countries to be able to meet the needs of their religion. Halal is a mandatory requirement for every Product and service consumed by Muslims and is currently considered a product quality standard. Halal quality standards are applied to the process of supplying and producing food, cosmetics, medicines, and medical products and are also used for services related to halal products.

The legal of Halal Logistics is Law No. 33 of 2014 concerning Halal Product Guarantee. (JPH). Article 1: Halal products are products that have been declared halal by Islamic Law. The halal product process is a series of activities to guarantee Product halal includes material procurement, processing, storage, packaging, distribution, sales, and product presentation. Article 4: Products that entered circulate and traded in the Indonesian territory MUST be halal certified. Section 50: JPH supervision carried out on the location, place, storage, packaging, distribution, sale, and presentation of halal and non-halal products (Hassa et al., 2017).

Halal supply chain demands the guarantee of halal products from the initial process up to the hands of producers. This process can be maintained well up to the distributor company. Unfortunately, from suppliers, retailers, to retailers, this process has not been overseen. During this time, the process of certification of new products includes the production process carried out by companies that submit halal certificates. The
distribution process is often carried out by other companies, so it is not involved in the supervision. The idea to oversee the production process from upstream to downstream, especially the distribution process, only emerged after the Halal Product Guarantee Act (JPH Law). Until now, the JPH Law is still being applied voluntarily and will only require in 2019. To implement the halal supply chain until the distribution process, socialization needs to be done first because this process has only begun in the last few years. Until now, there are only five eligible companies with such certification.

The 2019 Global Islamic Finance Report (GIFR) from the Cambridge Institute of Islamic Finance (IIF) announced that Indonesia was the top-ranked country in terms of global Islamic finance. With a score of 81.93. As it should be, Indonesia is a significant player in the halal industry and the centre of the Islamic world economy. Despite having the largest Muslim population in the world, Indonesia imports a lot of halal products. One of them is food. Quoting the 2019/2020 Global Islamic Economy Report (GIER) report, Indonesia's halal food consumption reaches 173 billion US dollars. This value makes Indonesia the largest halal food consumer in the world. The most prominent exporter of halal food in the world is Brazil, with 5.5 billion US dollars. Indonesia is also not yet a leader in other halal sectors, such as finance, tourism, fashion, media, recreation, cosmetics, and medicine. In GIER 2019 reports, Islamic finance ranks 5, modest fashion ranks 3, and tourism ranks 4. Overall the GIER score of Indonesia is 49 and places it at number 5. With the various achievements above, it is unfortunate because Indonesia has not been able to become the centre of the world's halal sector due to multiple factors and obstacles encountered.

III. Research Method

3.1. Research Design
The data source of this research was secondary data taken from the company and the ministries relating to the halal supply chain, and the type of data was qualitative. The data collection was through the library method by searching for relevant literature, direct field observations, and interviews with competent parties in terms of Halal Logistics activities as informants.

This study used a descriptive exploratory analysis technique, which aims to describe the state or status of a phenomenon. In this study, the author investigated things related to the state of something by defining the research results. Thus, readers can easily understand and get a clear picture of the effects of research. Consequently, the analysis was by conducting direct observations in the field, in-depth interviews, and collecting secondary data. The results of this study illustrate how halal supply chain management truly adheres to the general principles of shariah to ensure the effectiveness of implementing halal supply chains.

3.2. Data and Sample
The data from this study were taken from several government websites, such as the Indonesian Ulema Council, which houses the Halal Product Guarantee Agency. From this data, the writer analyzed how the implementation of the halal supply chain in Indonesia
may affect foreign investment in Indonesia. Apart from using telephone interviews, the data were also from assembled sources for further analysis.

3.3. Data Analysis
The analytical data in this paper was a qualitative descriptive analysis by looking at the website and getting down to see how the optimization of the halal supply chain is in Indonesia. The data were then processed into information so that the characteristics of the data could be understood and were helpful for problem solutions, especially related to supply chain management research. The qualitative analysis technique was a series of systematically searching and compiling data obtained from interviews, field notes, and documentation. Furthermore, the data were organized into categories, broken down into units, arranged into patterns, selected, and concluded.

IV. Results and Discussion
Based on data from Majlis Global, the total global Muslim population in 2012 was 1.8 billion people. By 2030, it is predicted that the world's Muslim population will reach 2.2 billion. Thomson Reuters (2015) predicted that in 2019 the halal food market would be considered at USD2,537 billion (21 percent of global spending), the halal cosmetics market would be USD73 billion (6.78 percent of global expenditures), and halal personal needs would be USD103 billion. Indonesia's consumption sector alone ranks first as the largest consumer of halal products in the food and beverage sector with USD155 billion.

Developing the awareness of the necessity for halal commodities and services in Indonesia by Muslims is further supported by the frequently resourceful halal industry in the nation that supports a halal supply chain ecosystem in Indonesia. Unusually high is the demand for halal products and services in both the world and Indonesia, while the demand for halal products not restricted to food. The sector in the halal industry consists of 10 parts which economically and business contribute significantly to the halal industry: the food industry, tourism and travel, clothing and fashion, cosmetics, financial, pharmaceutical, media and entertainment, fitness, education, and cultural arts. The connection from the world's Muslim population may enrich growth where the significance of the Muslim community of the globe incites a higher need for halal products and services.

With the halal supply chain, the expectation of quality patterns, product quality, and halal product and service services can satisfy, integrated from an input, production, distribution process, marketing, and consumption. For illustration, food products in their information must guarantee halal quality from farming, animal feed, fertilizer, and applied chemicals.

4.1. Principles in Halal Logistics
Therefore, the application of halal supply chain management is required to guarantee the halal quality of a product and service. The product approach needs further distribution between halal and non-halal, and the process must be safeguarded from upstream to downstream. The theory of halal logistics must be rapidly uncovered and implemented by all industry players in the halal supply chain, not only limited to halal food.
Then throughout the production process, the slaughtering process must abide by sharia laws. Also, the operation and distribution of halal systems must be guaranteed, including warehousing, packing, cooling rooms, and food processing. After that, marketing must emphasize the value of shariah, both when it is taken to supermarkets and groceries to consumers in restaurants, hotels, and food trucks, free from improper stuff. Finally, the financing should apply Islamic finance and shariah insurance or takaful facilities to mitigate business uncertainties.

![Figure 1. Principles in Halal Logistics](image)

In the context of the supply chain management system, the halal product process encompasses activities: production, processing and packaging, storage, and retailing of products to the customer. The halal product process requires that the location, place, and processing equipment of halal products must separate from the location, place, and material for slaughtering, processing, storing, packaging, distributing, selling, and presenting non-halal products. Besides, the Law requires that the location, place, and means of processing halal products: be kept clean and hygienic, free from unclean, and free from non-halal materials. Halal activities will control the halal logistics process in warehousing, transportation, and depots.

### 4.2. Implementing Halal Supply Chain Management

Halal supply chain management regulates the supply of raw materials for production, processing, marketing, promotion until the products are ready for consumption must comply with halal standards. In general, there are four main activities in the halal supply chain, namely:
The halal supply chain is very appropriate and compatible if implemented in Indonesia. The halal supply chain system can be integrated with an integrated digital system to facilitate the implementation of the halal supply chain in Indonesia. The integrated digital system uses the principle of efficiency using digital-based area integration to reduce costs and maximize company output and income. The supply chain concept combined with an integrated digital system will be like a halal industrial area where material procurement, product processing, distribution, and marketing are in one standardized halal area. The sector with an integrated digital system and HSCM alloy is called the integrated halal zone (IHZ). IHZ will encourage the rapidly developing halal industry. Also, MUI can easily monitor halal standards from upstream to downstream. The process of controlling, monitoring, and evaluating can be done quickly and does not cost much money. It is time for Indonesia’s halal industry to rise and be able to compete with the world’s best halal industrial countries.

**Figure 2.** Main Activity in the Halal Supply Chain

- **Halal Product Procurement:** Halal product procurement is the method of procuring halal raw materials which consist of embroilment in activities that focus on maintaining halal integrity throughout the supply chain. The evaluation of halal raw materials is not only from the halal products, but the sources and payment systems are also halal.

- **Halal Manufacturing:** Halal processing is the process of transforming raw materials into products with procedures by halal standards. The processing process becomes the phase that has the highest risk of causing non-halal. Therefore, it is necessary to strengthen the implementation of sharia systems in processing companies.

- **Halal Distribution:** The halal distribution consists of packaging and containers of halal products. The main characteristic of halal packaging products is that the packaging materials must be halal and suitable. One of the issues raised in halal packaging is the certification of the packaging.

- **Halal Logistics:** Logistics include organizing, protecting, and identifying products and ingredients before they reach consumers. Halal status does not only consider the product; the distribution and marketing process also included in the halal product supply chain.
Cooperation and synergy from all parties, starting from industry players, the government, and supervisors, all the above challenges can be immediately overcome so that the opportunities for the halal industry can realize for the Indonesian economy.

4.3. Analysis

To explain this hurdle, companies require to recognize the importance of the concept of Halal supply chain management. In the supply chain means the overall activities of the entities involved along the supply chain from upstream to downstream apply the idea according to Islamic Law, starting from the selection of suppliers, production processes, storage, to distribution (separating the room and shipping of halal products to avoid contamination). Indonesia, as a country with a Muslim majority population, aspires to be the centre of the world’s halal products. Moreover, Indonesia, Malaysia, and Japan are also interested in growing a centre for halal products. That can see from the improvement of the concept provided by Malaysia through the "Halal Master Plan" with a focus on knowledge, human capital, production, and investment by co-operating, including various stakeholders.
Halal has enhanced concern for Muslims in running their lives. The quantity of Muslims every year is increasing. Some necessities need to stand on the expectations. For example, in consuming food, Muslims are banned from eating pork and dogs. Therefore, the need for halal food becomes very important. For this idea, according to Tieman, companies demand to realize the importance of completing the halal product supply chain management.

Habitually, people will buy their halal products at Muslim markets. That bestows the belief of consumers to purchase products based on the knowledge that the commodity will not sell prohibited products. But, many non-Muslim companies sell halal products. And, in Islam, there is no prohibition on buying products from non-Muslims as long as the product is halal. To guarantee that halal products will consume there must be certified, and consumers can find out whether the product is halal based on the label on the packaging. Through distributors or restaurants in hotels who want to get halal certification from the MUI, they must register the company. Then, MUI will carry out production checks to investigate without notice. If the product has been declared halal, it will get a halal label from MUI. To ensure halal supply chain management is by standards set by the government in this case, the Indonesian Ulema Council (MUI), there are several standards so that consumers do not hesitate in consuming relevant products. This halal certification is received from supply chain partners, especially distributors, manufacturers, logistics, retailers, and others that comply with the standards of the Indonesian Ulema Council. Such that from upstream to downstream must be genuinely halal. From the logistics side, halal product purchases must order from illicit products. That done to circumvent contamination of these illegal products.
4.4. Halal Parks Supply Chain Model

Based on the figure above, for Indonesia to be able to make Halal Integrated Zone, it needs to clarify various regulations from the government. Besides, the Indonesian Ulema Council also required as a basis in providing sharia-based rules, which will strengthen Indonesia's position in forming the Halal Integrated Zone and ambition as the world's halal centre.

Countries in the world that have successfully implemented halal supply chain management are Malaysia and Japan. The country can say to be very successful in implementing halal supply chain management and making it a source of state revenue, such as tourism, food and beverage, medicine, and other sectors. Perhaps Indonesia can learn a lot from these two countries so that it can better implement the halal industry and be integrated with other sectors. This is because Indonesia has a big chance, considering that Indonesia is one of the countries with the largest Muslim population in the world.

V. Conclusion

From the various explanations about Halal Supply Chain in Indonesia, there are several obstacles to implementation, such as the absence of an agency that oversees the manufacturing process to the consumer. The Indonesian Ulema Council only gives a halal label on the product but does not reach the entire manufacturing process to the consumers.

However, the duties and authority of the Indonesian Ulema Council have been taken over by the Ministry of Religion as monitoring and policymakers regarding the halal supply chain. In making Indonesia the world's halal centre, various steps and efforts are needed, one of which is to make Halal Integrated Zone (HIZ) an effort to make a place in implementing Halal Supply Chain Management. It hoped that the government could map
the most suitable locations throughout Indonesia, such as the province with the most potential in developing the halal supply chain.

This research can see and describe how the halal supply chain for Indonesia to gain recognition by the international community. Because the scope of this halal supply chain is extensive, if Indonesia can take advantage of this strength, Indonesia may be increasingly recognized as the world's halal center. Hopefully, there will be a continuation to research on the halal supply chain, considering that the halal sector continues to grow in the world economy as it is today, which not only focuses on the goods and services sector but also on the halal sector of food, and beverages, and medicine. The author also hopes that there will be other more in-depth halal supply chain researches for other beneficial results.

References


