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Halal supply chain industrial park conceptual model

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Abstract--The supply chain network process for food or non-food need to comply with the Shariah principles start from stage of storage management, handling of raw materials, procurement, and until the stage of transportation. The purpose of this article is to understand the issues encountered in halal supply chain industrial parks (HSCIP) and propose a model for HSCIP in particular needed to acknowledge their practices conducted according to Shariah. The data collected based on interviews (preliminary data) and secondary data from academic journal articles, online magazines and websites based on selected keywords. The study contributes toward halal logistics operation areas especially in halal supply chain management. The results were also validated to be genuinely discussed for the aids and future practices of halal concept. The study sheds light into the model of halal logistics practices and the boundaries of halal parks.

Keywords---supply chain, halal logistics, halal supply chain model.

Introduction

In the world of supply chain management, halal factor is now being highlighted and becoming a trend and is a global phenomenon (Ibrahim, Dzulhaizat, Zawahair, & Makhbol, 2018). As for an example, the Southeast Asian region, a country such as Malaysia which Muslims constitute approximately 65 per cent of the total population, there has been increasing awareness from the producers to produce halal foods and the delivering of halal product to the customer (Mohd Nawawi et al., 2019). Other Southeast Asian countries, such as Singapore and Thailand, where Muslims constitute less than 20 percent, are following the the trend of halal food production. This trend is growing stronger because of the increasing demands from highly concerned Muslim consumers and increasing demands of halal-certified products from importers (Omar et al., 2018 ; Amer, A., Mat, M. K., Majid, M. A. A., Jani, S. H. M., & Ibrahim, I., 2019). In order to ensure the truthfulness of halal products, halal logistics plays their role wisely. Some issues that should be concerned with are the products are not only recognized halal at the production process until it has been saturated, but also halal is certify at the point of consumption (Nghah, Zainuddin & Thurasamy, 2014; Amer, A., Siti, S. H., Ibrahim, I., & Aziz, N. A. A., 2019). Essentially, the area of halal logistics industry in Malaysia is still limited, so that any substances concerning cababilities, the knowledge on how and the area publications are quite limited (Talib et al., 2014; Tieman, 2013; Zulfakar et al., 2012).

Despite of the issues pertaining to halal, an investigation will provide valuable evidence to develop a appropriate model of Halal Industrial Parks in logistics supply chain productions. Knowledge of the halal model in supply chain is very important for the producer because it is a prerequisite to contribute to developing halal good systems because application of the model through daily practice can increase attractiveness of the industry as a increasing number of consumers is looking for halal products. This model will not only be used in Malaysia, but at the same time can be applied and simulated in halal parks in other developing countries that share related situation with Malaysia.

Method

An exploratory approach was assumed and justified for this study acceptable to understand the issues. The questions were based on general issues but the researchers coded the data from the issues based on the understanding. The analysis and coding of the data were done manually. Meanwhile, the researchers developed a model using the literature review from online magazines, websites and academic journal articles selected from online database sources such as Science Direct, EBSCO Host, Emerald Library and ABI/INFORM.

An overview of Halal Parks in Malaysia

The introduction of assigned Halal Parks has boosted the growth of Malaysia's halal industry managing various halal products and manufacturing

process. Currently, there are 22 halal parks in Malaysia (HDC, 2018). There are 14 parks from 22 parks certified HALMAS status based on the guidelines by 44 multi-national companies (MNC) and 184 small and medium enterprises (SME) which invest in Halal Park. Among the 778 companies participated in The Malaysia International Halal Showcase (MIHAS), 66% of them are Malaysian companies and 34% of them are from international companies (MATRADE, 2018). The total investment increased RM13.3 billion throughout the year (HDC, 2018). In contrast, the current halal parks are developed using the brand of industrial parks named as “halal park” based on companies that produce halal (certified) products that pressure the issues of halal in their manufacturing process and regularly a mosque. There is a request to extend an advance complete halal bunch for halal parks to make substantial force in the manufacturing process and vocation of halal food for the planet (Tieman, 2015).

Halal Parks Issues

Halmas Status

Currently, a total of 14 HALMAS labelled Halal Parks are offered and each halal park has its particular inimitable value intention to meet the varying desires of possible investors (HDC, 2018). HALMAS is an accreditation given under the HDC nominated Halal Park Development to halal park operators who have well complied with the necessities and recommendations. It is also labelled of distinction for parks that have striking qualities; titled as manufacture of Halal products with the highest quality, safety and integrity in operation (HDC, 2018). The selected operators, industry players and logistics service providers with the given HALMAS will be able to appreciate the incentives to help the existing and would be members of the Halal industry. In order to get HALMAS status, the operators in Halal Industrial Park have to follow the guidelines based on the halal certification, attending the Halal training and Halal integrity (by submitting the detail application form) (HDC, 2018). Halal Park is considered successful if operators get the HALMAS status. However, the issue arises here is the operators admitted that they already succeeded after they sold the land to the investors. The Halal Parks operators take the task to assist the investor to get Halal status in their operation, but in order to ensure whether the investor is following the halal standard or not is based on the monitoring by JAKIM. From the interviews, a manager in one of the Halal Parks said:

“...to get HALMAS status, we should follow guideline. Not partially and technically in Islam requirements only, zoom in halal product in JAKIM also has requirement. The operator itself has to submit the applications not the Selangor Halal Hub. After they could afford to buy the land, then they are happy... from supplier to the operator, we are not related to them. We about the land, how they want to operate, it depends...successful halal park is based on the land sold out, well managed. As developer has done their best. As developer we don't worry actually because the requirement is on the operator. For example: Cadbury. The authority is from JAKIM. Sorry, it is not my office mistake, the payment is already in our account”. (Halal Parks' Manager)

Halal Practices

In doing halal context, most of logistics companies start to discover and advance more halal service in their operations, such as warehousing, procurement, storage and transportation and delivery that specific for halal products (Talib et al., 2013; Jaafar H.S., 2011; Ibrahim, I., Feisal, A., Feisal, M., Amer, A., & Jani, S. H. 2019). However, the numbers of manufacturing companies that are intent to doing halal practice and halal in logistics are not equal. Currently, halal exports was estimated in the first half of last year was esteemed at RM19.5 billion, an increase of 3.6 per cent from the first half of 2014 due to the report by Malaysia External Trade Development Corporation Halal Unit, Malaysia's (New Straits Times, February 2018). When Halal Certification Body was asked about the halal certification in Halal Parks, one of them said: *"...from 1000 companies which were certified halal in Malaysia, 20% of them admitted that their companies do the halal practice but only 5% of them was audited from Halal authority and certified as halal."* (Halal Certification Body). The statement shows that not all operators who are doing halal practice in supply chain, start from farm to fork. Halal practice is not only practiced in the manufacturing process but it is extended throughout the supply chain. Other issues associated in discussion on halal industrial parks are;

Lack of Enforcement

There is major findings are selected in the literatures such as lack of enforcement by JAKIM and no comprehensive halal act (Noordin, N., N.L.M. Noor, M. Hashim and Z. Samicho, 2014), lack of cooperation amongst the halal accreditation specialists, lack of support by associated agencies, and slow method of certification in getting halal (Shahidan and Othman, 2006); information system and inadequate IT provision for record which leads to deficiency of proficiency to execute duties and accountabilities on practice on halal in logistics activities (Hishammuddin, 2007). In addition, the two issues accomplish by Noordin, Norlaila and Samicho in 2014 like inadequacy of halal accreditation practise and the conflict of authority governance between the centralized supervision and the government. They summarize that, since then, many efforts have been taken by the Malaysian government to regard to the issues and challenges in enhance the halal development system and look like one of the biggest constrains in implementing a halal documentation process. In the study by Sham, Rasi, Abdamia and Mohamed (2016), the movements of halal belongings were scanned over their private port where the Department of Shariah was placed in the port itself to patterned on the halal status was proved through a study done in an Islamic country in 2016.

Halal Models for Industrial Parks

The halal supply chain model should be modified from current (food) supply chain models that most thoroughly facilitate the Islamic principles of halal supply chains. The present supply chain models are like supply chain organization framework (Cooper et al., 1997), and supply chain reference-model processes (Supply Chain Council, 2011). Halal model (van Amstel and van Goor, 2001) and the structure for chain expansion supply chains for food (van der Vorst and Beulens, 2002) provide many commercial components (Ibrahim, I., Rahmat, A. K.,

Fadhiha Mokhtar, N., Amer, A., Halin, I. A., & Ratna Masrom, N., 2020). Even though the above models do not deny Shariah law (Islamic law), halal in the intention and performance and dimension of halal supply chains are not mentioned in these models. The fundamental of the supply chain model is revised from the framework to linkage development for food supply chain networks, which was developed by van derVorst and Beulens (2002), due to Cooper's supply chain management framework (Cooper et al., 1997). This model offers a sound basis, which has been further edited for the halal supply chain model. Besides, none of the above declared models were established based on studies in developing countries especially Malaysia. Then, none of the studies elaborate the industrial parks. Hence, an emerging of halal supply chain model for halal parks is the contribution of this study. This is where this research subsidizes to the body of knowledge of halal operation especially in Malaysia in addition to other developing countries.

Developing Halal Supply Chain Model: Logistics for Halal

The traditional supply chain and halal supply chain are seen to have no significant difference, but both are different in which the traditional supply chain aimed to reduce the cost whereas halal supply chain distresses to keep the halalness concept of halal product (Johan, Z. J., Ibrahim, I., Jamil, N. A., Tarli, S. M. M., & Amer, A. 2019). Among this two methods, supply chains could look similar, but paradoxically, they are different because of the changes in their objectives. In terms of packaging, the products should be clean and permitted from any non-halal ingredient. In order to escape cross contamination, the tools to handle the packed food products must should not mutually with the one exhausted for non-halal products (Talib et al., 2014). A dedicated and committed group of workers should holder the halal food production to decrease and minimize the failure of cross-contamination between halal and non-halal products and keep away from any human mistakes (Jaafar, 2011). In storage and material handling, the non-halal products must be labelled as non-halal under the regulation of the government. Non-halal products must not arrive the same product area as halal products unless whole segregation of the products can be attained and is recognized (Fernando, 2010; Sundram, V. P. K., Ibrahim, I., Esa, M. M., & Azly, N. N. M. 2019). To ensure segregation the wet materials become risky whereas in the dry environment. The segregation process between halal and non-halal is mainly based on insight (preferred) (Tieman et al., 2014).

Besides that, the use of keen transportation is fully submitted by Syariah Transportation, in which physical segregation is acute, where for Muslim countries, no involvement of halal and non-halal products in a container or transport is essential (Fernando, 2010; Omar et al., 2011; Tieman, 2017) in order to avoid contamination. For non-Muslim countries, under assured circumstances, this can be common as long as they are not assorted on the same pallet or load shipper and clean it before it is being stuffed or loaded. Halal performance reins in transportation activities and the activities by any type of transportation manners must fulfill with the Syariah principle (Fernando, 2010) and a fully dedicated transporter would provide a dedicated transportation as it reduces the risks of probable contamination (Omar, Jaafar & Osman, 2012). The issues in warehouse logistics should be non-dedicated halal warehouses for every part of

activity. In overall warehouse process, need to certify an effective physical segregation between halal and non-halal products (Tieman, 2017). The environment in dry, segregation views between halal and non-halal products is mostly based on perception (ideal) in wet area. In a study by Ngah and Thurasamy (2014), halal warehouse sources said the implementation rate of their services is not rising as fast as estimated. Then, Othman et al. (2016) stressed that, even amenability with the halal necessities is risk for hazard, but as a business prospect. Moreover, as a basis of taking the benefits (Zailani et al., 2011), halal and non-halal livestock are essential to be segregated (Tieman et al., 2014), but common of halal operators are quiet hesitant to assume halal warehouse to their operation process.

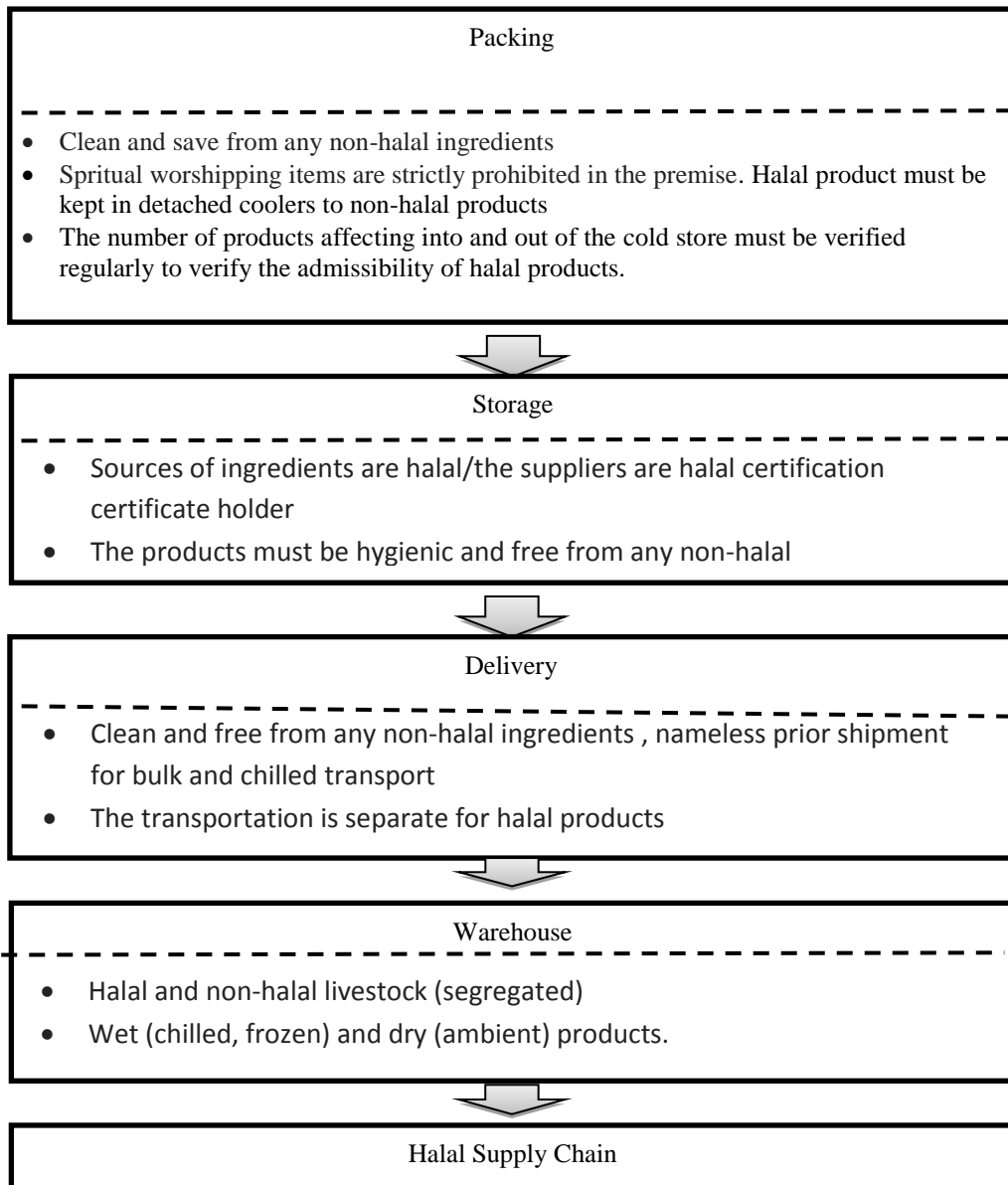


Figure 1. Halal Parks Supply Chain Model
Sources: Adapted and adopted by the authors from HDC, 2018

Conclusion

This paper was exposed to discover some existing issues encountered among the halal logistics areas in the Halal Parks in Malaysia. The important issues enlarged mainly from the interviews respectively from one of Halal Parks manager, one Halal Certification Body, and one Halal Promoting Body. The issues are; HALMAS status, certified cleaning/cleanliness, halal practices and halal enforcement. Most of the halal acts should be supported by government, especially the investor in Halal Parks plays the role of adopting halal logistics in their operation and operate their production based on Syariah compliance. By taking recompenses of halal infrastructures, Halal logistics and supply chain network in worldwide will focus more efficiently. At the end, the study developed a model using the guidelines for halal supply chain. The author found four elements need to be improved in supply chain logistics. The elements found were storage and material handling, transportation, warehouse and packaging. The results were also endorsed to be genuinely discussed for the reliefs and doing halal in future practices in their operations in considerate the halalness model.

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