

Halal Supply Chain Framework for Retail Business Focused on Beverage Industry: A Case Study

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Abstract: Today the demand on halal food industry is growing steadily. This growth is followed by anxiety about the food itself. Consumers are questioning about halal status of food products because many halal food producers were from non-Muslim country. It becomes more risky for all parties in halal food industry when there is no unified or standardized regulations on ensuring the halal status is maintained in all processes throughout the supply chain. Therefore, halal supply chain guidelines becomes a necessity for every stage in the halal food industry. At the retail stage, consumers must be ensured the food products displayed are safe, clean and halal. In retail business, there is shortage of research conducted on halal supply chain field. Due to this, there is a need to conduct research on proper halal supply chain framework for retail business. In this study, the researchers have conducted observations and interviews on a retail business selling beverages located in Yogyakarta, Indonesia by assessing whether all processes in the supply chain have complied with the Islamic law. The assessment processes on the beverage product were divided into supplier arrival, receiving, transit, storage and display. Assessment on all the processes was based on the Islamic law to develop an appropriate framework for retail business to ensure halal status of beverage products is maintained.

Key words: Halal supply chain management, retail, beverage, framework, food industry

INTRODUCTION

Halal industry which includes foods, cosmetics and pharmaceutical industry are growing rapidly all over the world. Halal food products are the most recognized components of the Halal industry. Now a days, they have about 16% market share in the world food trade (Zulfakar *et al.*, 2014). It cannot only be viewed as a religious requirements for the Muslim communities but also on the positive attitude of non-Muslims towards the Halal concept and their intention to purchase the Halal food products (Mathew *et al.*, 2014). These demands have become a great opportunity for Halal food producers to widen their market share. In industry, all stages from supplier to customer involved, directly or indirectly, in fulfilling a customer request are called supply chain (Chopra and Meindll, 2013). Supply chain has five main stages which comprise of supplier, manufacturer, distributor, retailer and customer. This supply chain is only used to fulfill the consumer demand and provide profit to all parties in supply chain. Then, related to growing demands of halal food, maintaining halal status in whole process of supply chain becomes necessity, a

halal supply chain management needs to be adopted. Halal supply chain have to ensure halal integrity remains intact throughout the whole process of the supply chain based on Islamic law, besides of making profit and customer satisfaction (Bahrudin *et al.*, 2011). Unfortunately, there is an issue about halal integrity in halal food, consumers currently are anxious about whether the food products are truly produced according to Islamic law principles in this current complex worldwide trade 1. Their anxiety appears when most of these Halal food products, especially meats are exported by non-Muslim countries (Jafari and Sandykey, 2015). This issue can become a threat for halal food producers at their customer stage. There is possibility that their products would not be selling well and affect the company 's sustainability. Food producers and marketers have been indirectly forced to use halal certification as a way to make consumers have a strong preference to deal with the companies (Yunos *et al.*, 2014). Halal certification becomes really important in halal food supply chain management. Halal certification is process of certifying products or services according to Islamic law (Noordin *et al.*, 2014). Halal certification reflects that the

food is permissible to be consumed and indicates the respective food producers or marketers have undergone strict inspection in whole process before the certification is issued (Khalek, 2014). Unfortunately, some Muslim and non-Muslim countries have various Halal authorities or agencies and this resulted in multiple Halal standards that would cause questionable halal certifications. Variations in the definitions of Halal and the inexistence of worldwide Halal standard have caused complexity in Halal food supply chain more. The complexity becomes a problem that has to be solved in worldwide. It is necessary to develop a unified standard to maintain the halal status of food industry in the whole supply chain process and get consumers' trust. Retail, as one of last stages before products are bought by customers has to ensure that products displayed are safe, clean and halal. Unfortunately, there is no guideline to maintain safety, cleanliness and halal status of product remained in whole process of the supply chain, especially in retail. Scarcity of standards for the supply chain on halal food industry makes it necessary for the researcher to develop a new framework on halal supply chain management in order to increase consumers' trust, especially in one of the retailers in Yogyakarta, Indonesia that has halal logo in their products. In this occasion, researchers have focused on one of products in food industry which is beverage. Thus, researcher hopes that the framework could be used as standard in retail stage especially for beverage and increases the company's integrity in providing halal products.

Halal parameters: According to Said *et al.* (2014), Halal means permissible or lawful based on Islamic Law. Then, in order to make good framework in halal Supply Chain Management (SCM) focused on beverage industry, some standards or parameters are needed. Best standards or parameters in Islam can be obtained from Holy Quran and Sunnah. Therefore, researchers attach some halal parameters in halal SCM focused on beverage industry which are explained as follows In Holy Quran, God commands Muslims and all of mankind to eat of the Halal things which are permissible and good for human body "O mankind, eat from whatever is on earth [that is] lawful and good and do not follow the footsteps of Satan. Indeed, he is to you a clear enemy." Halal things that can be eaten by mankind are basically all food products but there are some products or even their substances that are not permissible. "He has only forbidden to you dead animals, blood, the flesh of swine and that which has been dedicated to other than Allah. But whoever is forced (by necessity), neither desiring (it) nor transgressing (its limit), there is no sin upon him. Indeed, Allah is Forgiving

and Merciful." In addition, according to Said *et al.* (2014) Halal concept also relates to word 'good' which means the goodness of things. Halal food and drinks must not contain any forbidden and dirty substance. Food or drinks must be safe and healthy for human body. Also, there are words about "not following footsteps of Satan which mean that how to get food or drink must be legal and permissible based on Islamic Law. Thus, halal parameters in food industry have to be considered not only halal substances but also its goodness and way to get it.

Previous researches: There are only 2 researches that have explained about halal Supply Chain Management (SCM) framework which are divided into technological framework which was done by Bahrudin *et al.* (2011) and conceptual framework which was done by Zulfakar *et al.* (2014). Bahrudin *et al.* (2011) have proposed a technological framework for Halal SCM which is divided into 8 stages. The 8 stages are comprise of raw material, inbound logistics, warehouse, production, storage, outbound logistics, retail and shop and customer service. There are some Islamic laws that each stage has to be fulfilled in order to become halal supply chain management. This proposed technological framework for halal supply chain management will be used as a reference to the current condition of supply chain management at a retail in Yogyakarta, Indonesia in order to develop a framework for halal supply chain management focusing on beverage, especially in retail and shop stage to maintain the freshness, cleanliness and product safety to be sold. The second research was done by Zulfakar *et al.* (2014) which have developed a conceptual framework on Halal SCM in order to assure consumer about halal integrity in the supply chain. They have mentioned some factors that can enhance the halal integrity in halal supply chain. Those factors are halal certification, halal standards, halal traceability, halal dedicated assets, trust, commitment and role of government. This research have also included these factors as parameters when developing the framework for halal supply chain management focusing on beverage to increase the halal integrity on a retail business in Yogyakarta, Indonesia.

MATERIALS AND METHODS

In order to develop a halal supply chain framework based on real situation in retailer, researchers have used the qualitative research. According to Hancock (1998), qualitative research is suitable when researcher concerns with developing explanations of social phenomena. The case study qualitative research was used by the

researchers in this study. Case study helps a researcher to explore the research object or subject more deeply (Creswell, 2003). The case is limited by time and activity and researcher gathers information by using some data collection steps in determined time (Stake, 1995). Then, according to Hancock and Beverley, 1998 qualitative data can be acquired by direct meeting with individuals, one to one interviews or group interviews or observation. In this research, researchers collect the data by doing direct one to one interview and observation. In this research, researchers collect the data by doing direct one to one interview and observation. In this research, researcher collects the data by doing direct one to one interview and observation. First, researchers meet the store manager to ask general conditions on supply chain management in the retail. Next, researchers conducted one-to-one-interviews to every staff in every stage in retail from arrival until display about beverage supply chain. Last, researchers did direct observation to every area in the retail. Then, researchers analyze the result by relating it to Islamic law and previous researches about halal supply chain management framework. Then the new framework was developed based on the analysis and comparison to real situation of supply chain management in retail. This research was conducted at a retailer in Yogyakarta, Indonesia. It provides fresh produce, meat, seafood, groceries, household products and general merchandise.

RESULTS AND DISCUSSION

Current condition of retail: In this section, researchers explained the current condition of supply chain in the retail business based on observation. Figure 1 shows the supply chain from the beverages arrival from the supplier until it is displayed in store. The retail supply chain shown in Fig. 1 is explained as follows:

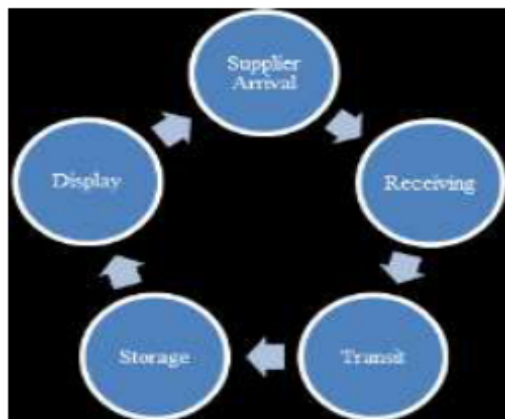


Fig 1: Retail supply chain

Supplier arrival: Suppliers of beverages come from local areas and national areas. There will be waiting a room in front of store for suppliers. Suppliers come when the sales department send orders via email to suppliers based on information from the merchandising department about beverages inventories. At this stage, retail staff does not check the truck or container that brings the beverages whether it is dirty or does not segregate between halal and non-halal products. It can reduce the halal integrity of the beverage products because this behavior does not prevent mixing between halal and non-halal; and it also does not prevent dirt get into the beverages. The retail also does not provide proper waiting room for the supplier. The suppliers should be given a better waiting room to build better supplier relationship management. Good relationship between suppliers and retailers can easily build trust and commitment in providing halal products on whole process of supply chain.

Receiving: In this step, suppliers will be called by officer in the receiving stage to fill the attendance book. Then, the receiving officer will check the goods purchase orders based on its amounts and performances. Unsuitable products will be rejected and sent back to the suppliers. If the suppliers did not collect back the products in 2 weeks, products will be destroyed. In order to increase halal integrity of beverages in the retail business, in this receiving stage, it is better not only checking its amounts and performances, but also include the halal logo and ingredients of beverages. Receiving staff has to make sure the beverages does not contain any forbidden items according to Islamic dietary laws which includes alcohol, pork, blood, carrion and meat of animals that have not been slaughtered according to Islamic rules. For alcohol, the retail business does not sell any alcohol beverage anymore because it is forbidden by government through trade ministry policy number 20/M-DAG/ PER/4/2014 which have banned modern store such as supermarket to sell alcohol beverage without their permission letter. Thus, in 2015, the retail business has stopped selling alcohol but there are some beverages still without the halal logo. It should be reduced to the minimum in order to maintain consumer's trust, especially for Muslim consumers. There are also some ingredients in beverages that the retail business should take into consideration in order to prevent selling non-halal beverages based on Toronto Public Health (TPH, 2004) as explained in Table 1.

Transit: After the goods are accepted, goods (beverages) will be put in the transit area located between receiving and storage. The goods will remain in the transit area if

Table 1: Unpermitted ingredients

Type of beverages	Unpermitted ingredients
Juices	Any vegetables and fruit prepared with alcohol, animal shortening, bacon, gelatin, lard or some margarines which contain monoglycerides or diglycerides from an animal source
Milk and yogurt	Milk and yogurt made with animal rennet, gelatin, lipase, pepsin, pure or artificial vanilla extract or whey
Liquors	Beer, wine, alcohol, liqueur

storage is full. Transit area in the retail business is really messy and dirty because goods are located only on area between vacuum receiving and storage which is also area for walking. It should be well organized and clean in order to maintain the quality of beverages and to prevent any dirt getting into the beverages. It also should be a private area for transit.

Storage: Beverages then will be stored in storage if there is a space there. Beverages with different package will be separated.

There are 3 separations for beverage with paper package, bottle package and cool beverage. Paper and bottle package will be saved in storage, but cool beverage will be put in the freezer. The retail business only divides the bottle paper packaged of beverage in storage without considering whether it is halal or non-halal product. In the freezer, beverages arrangement is even worst. Cool beverages are mixed with meats. Moreover, the retail business also sells non-halal meats. The storage and freezer are also quite dirty and messy. These problems have to be minimized to maintain the products quality and cleanliness.

Display: Beverages in display shelves are arranged daily. Display staff is responsible to ensure that beverages are fully displayed in their shelves every day.

For beverages' display, they are grouped into juice, tea and coffee, carbonated soft drinks, root beer, isotonic drinks, vitamin drinks, healthy drinks, energy drinks and mineral waters. Based on Burhanudin *et al.* (2011) in making halal supply chain management, retail business has to maintain freshness, cleanliness and product safety to be sold. Unfortunately, researchers find a dirty beverage on the display shelf that has fly on its top in the retailer business. It can happen because previous processes do not provide quite well organized and clean place for beverages and the workers that organize the beverages in display shelves did not check the products cleanliness. It should be reduced to the minimum by always maintaining the product performance based on its cleanliness, freshness, halal logo and safety in order to make a proper halal supply chain management.

Framework: In halal supply chain management, retail, as one of last stages before products especially beverages are sold to customers has to ensure that products which are displayed there are safe, clean and halal. Then, the previous processes in retail from the arrival until storage should also take a part to maintain the safety, cleanliness and halal status of beverages. These processes must be clean, segregated from non-halal and other products that have strong smell, well organized and following Islamic law in order to prevent decline in terms of safety, cleanliness and halal status of beverages. It can be easily done, but there are some retailers that do not follow these processes although most of their customers are Muslim. Thus, researchers have developed a halal framework for supply chain management in retail focusing on beverage as a guideline to maintain safety, cleanliness and halal status of beverages intact throughout the whole process of the supply chain. Table 2 shows the proper framework in retailer that focuses on beverage.

This new framework may help retailer to maintain the halal integrity by following what Holy Quran said "O mankind, eat from whatever is on earth (that is) lawful and good and do not follow the footsteps of Satan. Indeed, he is to you a clear enemy". This framework also becomes a big development to previous framework conducted by Burhanudin *et al.* (2011) that only mentioned about halal requirements in retail are to maintain the freshness, cleanliness and product safety to be sold. The framework shown in Table 2 is divided into 5 stages. First stage is the supplier arrival where the retailer has to check whether the truck or container of supplier is clean and well separated from non-halal products and also to gain good relationship with suppliers by giving them comfortable waiting room and good service. The second stage is receiving where retailer checks goods' amount, performance, halal logo and ingredients to ensure halal status of product. Retailer has to make sure that there are no alcohol, animal shortening, bacon, gelatin, lard, monoglycerides or diglycerides from an animal source, animal rennet, gelatin, lipase, pepsin, pure or artificial vanilla extract or whey, beer, wine, alcohol, liqueur and chocolate liqueur (made from alcohol) in their beverages. Third stage is transit where retailer has to make a clean, well-organized and private area for goods transit. Fourth stage is storage where retailer has to make sure beverages storage is clean, well-organized and well-separated from any non-halal products and other products. Fifth stage is display where retailer has to display fresh, clean, safe and halal beverages on display 5 shelves. Thus, hopefully, this framework can make a contribution in making halal standard on food industry especially in beverages.

Table 2: Halal supply chain management for beverage in retail

Stage	Requirements
Supplier arrival	Clean truck/container Separation between halal and non halal beverages Good SRM
Receiving	Check amount, performance, halal logo, and ingredients
Transit	Clean and well organized Proper place in private room
Storage	Clean and well organized Separate halal and non-halal product Separate beverages from other products
Display	The display must contain fresh, clean, safe, and halal beverages

CONCLUSION

Consumer demand for products and value will not be fulfilled to the maximum when there is no innovation in supply chain management. A clear and precise guideline on halal supply chain management is a form of innovation that is needed, especially in the halal food industry which has a 16% market share on today world food trade. It should be considered by all parties in business industry who run the supply chain process a chance to widen the market share. In this research, researchers have focused on how to make halal supply chain management in beverage industry especially in retail stage. Retailer, as one of last parties before beverages were bought by the customers becomes an important part in ensuring the halal integrity of beverages in whole process of supply chain itself. After doing observation and looking at halal parameters from previous researches, researchers have developed a framework for halal supply chain focusing on beverage in the retail business. The framework is divided into 5 stages which comprise of supplier arrival, receiving, transit, storage and display. These 5 stages have to ensure safety, cleanliness and halal status of beverages in order to maintain the halal integrity to consumers. Researchers then suggests other researchers to continue developing and improving halal supply chain management framework in order to ensure a proper global standard in halal supply chain management.

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