

Halal Supply Chain Management Streamlined Practices: Issues and Challenges

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Abstract. The quickly developing worldwide halal in business sector has given a remarkable window of chance, which empowers Malaysia to the renowned halal centre in worldwide (known as Halal-hubs). Malaysia also has proactively taken a lead in halal activities, which is presently considered as the benchmark for a halal framework worldwide. Malaysia also set up the Halal Industry Development Corporation (HDC) which driving a wide range of halal activities since the demand of halal food has increased significantly which is very crucial for a Muslim in ensuring its authenticity and integrity. Even in parallel to this developments, many studies has been conducted because there are many issues still occurs in the food industry. The issue of consumer awareness and understanding the halal principles, mixing of halal and non-halal products, halal certification and logo compliance with Shariah law and lack of regulation and enforcement need the serious attention by all parties along the supply chain. The challenges occur mainly in the halal food segregation and halal traceability of the products. The unit of analysis in this study different halal stakeholders group which are JAKIM, Halal Development Centre (HDC), Raw Material Manufacturers, Retailers and Government Agencies. This paper attempt discusses the issues and challenges occurs in the halal supply chain and faced by the practitioners as well as the relevant parties involved in the industry especially for food products manufacturers. The study would like to give a basic information about the issues and challenges in the contribution of Halal Supply Chain Management (HSCM) as well as for the future studies.

Keywords: Halal Supply Chain Management (HSCM), streamlined practices, halal development corporation (HDC), authenticity, halal food segregation.

1. Introduction

The demand of halal products has seen a significant growth over the past few years by Muslim growth population in the world and at the same time the halal industry also has been evolving and growing at a rapid pace. The industry is not merely about the halal slaughtered animals anymore but it also includes halal food, lifestyle and services [1]. The trade of the halal goods and products is estimated to be worth more than USD 2.1 trillion [2]. Based on the calculation and consumption, the global halal food market size has developed progressively from USD587.2 billion in 2004 to USD651.5 billion in 2010 [3]. There are about 1.57 billion Muslims in the world in 2010, according to the studies



conducted by The Pew Forum on Religion and Public Life. This figure is approximately 23.4% of the total world population of 6.9 billion.

To ensure the credibility and integrity of the halal products, the Malaysian government has set up many agendas toward the development of Malaysia as a world halal-hub. These includes, the establishment of Halal Development Corporation (HDC) in 2006 to promote the overall development of halal industry in Malaysia by the promulgation of halal certifications from JAKIM and the launch of e-halal portal to carter the halal applications, enquiries, recommendations and complaints the issues through online. Government efforts also be seen through researches and innovations with collaboration between higher learning institutions from local universities such as Halal Product Research Institute (Universiti Putra Malaysia, UPM), International Institute for Halal Research and Training (International Islamic University Malaysia, IIUM), Institute of Halal Research and Management (Universiti Sains Islam Malaysia, USIM), Malaysia Institute of Transport (Universiti Teknologi MARA, UiTM) and Universiti Tun Abdul Razak of the established Halal and Halal logistics research centres in Malaysia. The Malaysia Institute of Transport provides consultations and training to industry players and is regarded as a one-stop centre for halal logistics solutions. UIAM collaboration with JAKIM in developing Malaysia as world renowned Halal hub by offering auditing services as well as offering entrepreneurship opportunities, training, research and certification assistant, signifies to the government efforts [4].

Even tough more involvement from various stakeholders such as JAKIM, HDC, Halal manufacturers, raw material suppliers, retailers and etc. is established, the credibility and integrity of halal foods was yet undetermined because the lack of awareness and reaction even the proper guidelines from JAKIM stated that regarding the issues related to quality, safety and hygiene, generic halal conservation covering the aspect of the slaughter, storage, display, and preparation as well as hygiene and sanitation are clearly mention [5]. In view of the fact that halal market are becoming a lucrative new industry mismatch between halal know-how from the manufacturers and the principles of halal products are worrying. Consumers including both Muslim and non-Muslim communities are extremely eager by selective with the range of products offered in the market because the Halal products is the benchmark for the selection as these products offer reliable assurance on higher safety and quality. Therefore, this paper attempts to give a basic information about the issues and challenges in the contribution of Halal Supply Chain Management (HSCM) as well as for the future studies.

2. Literature Review

Supply chain consists of all parties involved, directly or indirectly, in fulfilling a customer request. In fulfilling demands of halal chicken meats, the processes involved in the supply chain include pre-slaughtering, slaughtering and post-slaughtering process. Pre-slaughtering include process of rearing the livestock (e.g.: breeding, facility and food supply) and post-slaughtering include process of packaging, labelling and transporting the livestock.

During pre-slaughtering phase, halal issues include, among others, the feeding and breeding procedures. The organizations have to ensure that the animals are fed only with the halal food. Non-halal foods including pork, blood, animal carcasses are prohibited and preparation of the animals food need to be done with care to ensure food cleanliness and no contamination of halal and non-halal during preparations. At the later stage of the supply chain, other issues have to be dealt by the organizations to ensure no contamination between halal products with non-halal products. Major concern is that logistic services are often offered by third party logistic provider (3PL) and it is extremely difficult to assure no breakage of halal procedure during transportation of the products.

A fundamental for halal supply chain to be integrated and streamlined towards the best practices is may start from the Halal Assurance Critical Control Point (HACCP). HACCP is a systematic way of analysing the potential hazards in a food supply chain, identifying the critical control points in the supply chain where the hazards may occur and deciding which are critical to food safety. According to [6] stressed that key factors affecting HACCP practices are food regulations, role of the industry which are government policies and interventions, training on food safety and hygiene, and food

contamination or poisoning. Since Halal is extending towards logistics and a new discipline in supply chain management, [7] demonstrates that information, abilities and staff responsibility are basic for a viable execution of HACCP. Similar to a food safety management system with its food safety control activities and assurance activities [8], a halal assurance system is needed with its halal control activities and assurance activities for certain product-market combinations. The halal control activities and assurance activities are fundamental in establishing a robust halal food supply chain that strives for a lower vulnerability to halal contamination [9].

3. Issues

Consumers are more concerned towards food safety, quality, origin and authenticity for the reason of global food safety crises and incidents. From these concerned, Malaysia player have identified various issues resulting from the fragmented development of the logistics and supply chain practices [10].

3.1 Consumer Awareness and Understanding of Halal Principles

Consumer awareness from the perspective of halal can be defined as having a special interest in or experience of something and/or being well informed of what occurs at the present time on halal foods, drinks and products [5]. In addition to the growing Muslim population, previous studies have suggested the growing demand for halal food from the Muslim communities is caused by the fact that Muslims are now more aware of the importance of consuming halal food and are conscious of the halal related issues [11]. The halal consumers, particularly the Muslims, are now more selective in their food purchase, including checking the ingredients of the foods or drinks, to make sure that it does not contain any doubtful or prohibited items that are not halal. This is supported by [12] study that suggests there is increased awareness of Muslims to uphold the tenets of Islam religion through the means of food consumption. An increase in the halal consumers' purchasing power has also resulted in halal consumers placing more demands for foods that are truly halal. A study conducted by [13] indicates that a level of awareness towards halal concept has a positive effect on the consumers' intention to purchase halal product both among Muslims and non-Muslims.

3.2 Trust within the Supply Chain

Trust in supply chain partnership can be defined as the willingness to rely on a trading partner in whom an organization has confidence [14]. Trust requires transparency between supply chain partners, especially with respect to information sharing of firms' guarded information such as sales volume, production planning and cost and processes information. Previous studies suggest that mutual trust and long-term commitment are the integral components for successful supply chain partnerships [15]. When trust is established between supply chain partners, numerous benefits can be gained. Trust can reduce the costs of transactions stimulate intended desirable behaviour, reduce the need for extensive formal contracts facilitate faster dispute resolution and facilitate future organization and supply chain plans [17]. [18] added that the benefits of trust in supply chain relationships include a larger share of business for both parties, more stable business relationships, less organizational conflict, elevated intention of working together in business, and increased referral to potential business partners.

3.3 Lack of Consistent Halal Understanding

One of the major issues that have been mentioned in the literature that can provide hindrance to the halal food industry, even among the Muslim countries, is about the understanding of what exactly does halal means [18]. It includes the requirements that need to be fulfilled by the manufacturers, service providers and consumers in order to preserve the halal status of the products. [18] mentioned that the most common misunderstanding of halal by the consumers and non-Muslim manufacturers is they tend to define halal simply as a religious requirement for the Muslims and they also thought that as long as there is no presence of pork meat or alcohol, it is considered as halal. [19] supports this argument by indicating that some Muslims followers were forced to purchase food products despite not being 100% sure that the product is truly halal. The study elaborates the discussion by giving

example of fruits and vegetables. Fruits and vegetables are by nature halal, but if the food production of these products involves any alcohol and/or harmful substance, the final output of the food production is no longer considered halal.

3.4 Lack of Halal Regulation and Enforcement

While the above issues are commonly found in halal food industry in both Muslim and non-Muslim countries, there are issues that are more prevalent in the non-Muslim countries. For example, issues regarding halal regulation and enforcement. Unlike in the Muslim countries, whereby matters pertaining to halal are under the jurisdiction of the ruling government, halal governance in the non-Muslim countries are under the supervision of private entities [20][21]. In Europe and the UK particularly, this has led to the existence of multiple bodies providing halal certification services. Due to the absence of halal regulation in the non-Muslims countries, any organization is able to provide or claim to provide halal certification and inspection services for those food manufacturers that want to enter the halal market. These various certification bodies have different halal guidelines and charge varying fees for their halal certification services, which often confused the food manufacturers [22]. This has led to the growing scepticism among the halal consumers and manufacturers whether these certification bodies are trustworthy.

In the Muslim countries like Malaysia, enforcement issues are often caused by the conflict of authority and governance between the relevant halal authorities [23]. For example, recent raids conducted by four enforcement agencies in Malaysia including the nation's top religious and halal authority, Jabatan Kemajuan Islam Malaysia – JAKIM (Department of Islamic Development) at several local chicken abattoirs, various violations were found such as employment of unaccredited slaughter men, usage of blunt knife, knives were not sanitized between the slaughter and the chicken that have been slaughtered are being piled on the dirty floor. Despite these violations, the department was unable to press charges as the abattoirs are not under their legal jurisdiction. This is because the abattoirs have not applied for any halal accreditation and never claimed that they are supplying halal chicken. This incident is alarming since it happened in Malaysia, a country where the majority of its population is made of from Muslim followers and Malaysia has been viewed as the leading role model in championing the halal food industry. This situation proves that it is fundamental to have clearly defined roles and responsibilities of the various supply chain stakeholders, particularly pertaining to the halal governance, to protect the image of the halal food industry and the consumer's interest and well beings [24][25][26].

3.5 Mixing of Halal and Non-halal Food

Mixing of halal and non-halal food can be divided into two aspects. The first aspect is the mixing of non-halal ingredients in the halal food production [12] [27]. This includes substitution of non-halal meat such as replacing halal meat with pork, undeclared blood plasma and the usage of prohibited ingredients. This might be associated with the lack of proper halal principles understanding. Then, mixing also refers to putting halal and non-halal meat together, either in the same storage container, transport or the retail shelf [25][27]. For example, [28] pointed out that halal meat products in Tasmania are sold alongside other non-halal meat in the display space. [29] also claimed that halal foods and pork meat in some of food processing factories were stored together in a cold storage in Malaysia. This practice increases the possibility of cross contamination as physical contact, especially if there is no proper packaging, between these two types of meat will result in the halal meat losing its halal status. Subsequently, this casts doubts on whether the status of the product produced and sold by these premises is in fact halal in the first place.

4. Challenges

Despite the abundance of interest and studies in this particular field in the past ten years, there are limited studies that have examined the challenges in Halal Supply Chain Management to the success of them in industries and halal food supply chain.

4.1 Halal Food Segregation

One of the most mentioned factors for a successful implementation of the halal food industry and halal food supply chain is to avoid direct contact of halal food with any non-halal elements in halal segregation. This can be achieved by means of physical segregation in which halal foods should not be in direct contact or be mixed with other non-halal products or elements during the supply chain process to preserve its halal status. Halal products such as meat, particularly those without the proper packaging, are very vulnerable and have the highest risk to be contaminated if it is not handled separately during the production, transportation and storage activities. Previous studies [30][20] as well as various halal standards repeatedly pointed out the need to physically segregate halal products to prevent any intentionally or unintentionally, direct contact with elements that can taint the halal status. [30][31][32] studies in Malaysia, China and the Netherlands (2013, 2012, 2011) suggest that there is a different preferred level of halal food segregation between Muslim and non-Muslim countries. A higher level of segregation is preferred in a Muslim country context. According to his studies, segregation in Muslim countries should cover: prevention from direct contact with haram, risk of contamination and the perception of the Muslim consumers. In non-Muslim countries, however, the focus is only to avoid direct contact with haram elements.

4.2 Halal Traceability

Traceability is a process which allows the tracing of relevant information related to the product its origin to the point of sale. This provides the ability to track and trace food, feed, ingredients and packaging through all stages of production, and records the processes applied along the way, by who, where, when and how [33]. Meat traceability refers to the ability to maintain a credible identification and information trail for animals or animal products through various phases within the food chain [34]. [35] also shared a similar definition of the traceability process in the agricultural context. The definition emphasizes that traceability provides the necessary guarantee to the stakeholders on the origin, location and life history of a product and plays a significant role in helping the investigation in the event of the safety and quality breach. Halal traceability systems will increase the halal transparency in the supply chain. The ability to trace halal product movements has also been suggested as one of the key factors in ensuring the halal integrity and successful implementation of halal food supply chain [20]. It can be used to trace potentially non-halal ingredients as well as validate and authenticate that the product is indeed halal [26] [20]. This will subsequently lead to the increase of consumer trust in the halal industry due to the increased amount of information that the consumer can obtain [36].

Even though traceability system allows people to trace the necessary information related to the subject matter, it does not mean that the audit and inspection process can be neglected or abandoned. Traceability system will help to complement and further strengthen any inspection system that is already in place [33]. A good traceability system will further help the audit and inspection process, especially in relation to the process of attaining relevant certification. In this case, traceability will complement the halal certification application process. Other than that, traceability in the halal supply chain will provide benefits such as facilitate foreign trade, increase the competitive advantage of a company, enable product differentiations, ensure premium access to halal market, ensure and authenticate halal product integrity and good record keeping.

5. Methodology

This study aims to examine the best practices all the stakeholder in integrated and streamlined halal supply chain in Malaysia from an operational aspects in industry, stakeholders' practices and many things rather than social and cultural processes. According to [37], there is an increased trend of adopting case study approach in the supply chain management research area. Within this case study, there are more detailed examinations of best practices across all the stakeholders in Malaysia. Case study investigates a contemporary phenomenon within its real-life context is the best way to generalize using empirical enquiry, especially when the phenomenon and context boundaries are not clearly

defined. [28] mentioned that a case study approach is appropriate when the research is relying on multiple sources to gather information and evidence in describing the phenomenon and context.

The unit of analysis in a case study can be in the form of person, enterprise, institution, program, responsibility or a population. The case in this study is the current halal practices in Malaysia for example a single case study with more than one unit of analysis (respondent). The participant were chosen to represent different halal stakeholders group hopefully give the effective information collection and direct communication which are JAKIM, Halal Development Centre (HDC), Raw Material Manufacturers, Retailers and Government Agencies. Since halal supply chain is a new approach in the supply chain industry and the numbers of providers also limited and this research will interview halal supply chain stakeholders and the companies of stakeholder will be identified through purposive sampling method.

6. Conclusion

There are lot of things to do in manner to promulgate halal food industry in Malaysia as the benchmark worldwide. Since, Malaysia has a lot of initiatives to develop this title, stakeholders and other Malaysia players should be collaborate each of their efforts. From the literature review, it is clear stated that many issues and challenges occur in the food industry because there is no integrity in halal practices. Issues and challenges are highly occurs all industries in Malaysia within it is come from workers or management itself.

Competition in the global halal industry has also stiffened. This was due to other countries especially from the Asia Pacific like Thailand, Philippines, Brunei, Singapore and China have begun mounting serious challenge to supply the growing halal market by introducing various initiatives and capitalizing on existing advantages. Several of the initiatives have been similar to the ones offered by Malaysia in the trade and investment promotion, strengthening halal certification bodies and Research and Development (R&D) and help the halal certified food industry to move towards becoming full on halalan-toyyiban. The finding from this study should be a base information to have an understanding about the issues and challenges for further academic research and perspectives.

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