

Qualitative Research on Critical Issues In Halal Logistics

Mohamed Syazwan Ab Talib^{a*}, Lim Rubin^a, Vincent Khor Zhengyi^a

^a*Faculty of Business and Information Science, UCSI University, 56000 Kuala Lumpur, Malaysia
syazwan@ucsiuniversity.edu.my*

Abstract

Halal is not only restricted to Muslims and is more than a religious matter. Halal is in the realm of business and trade, and is becoming a global symbol for quality assurance and lifestyle choice. Although Halal is booming and on an upward trend, there are very limited studies published on Halal logistics and academic research in this area is highly needed. This study is exploratory in nature and data are collected through series of focus group interviews. Besides that, this study applies purposive sampling and judgement sampling as information are conveniently available from specific target groups. Results obtained from this study uncover the various issues faced by Halal logistics service providers and are categorized into five categories namely general Halal issues (BARRIER 1), integration issues among logistics service providers (BARRIER 2), integration issues between Halal authorities and logistics service providers (BARRIER 3), financial issues and perception of implementing Halal logistics (BARRIER 4) and issues pertaining to government's support and promotion (BARRIER 5). The researcher managed to underline the research limitation such as the lack of empirical evidence, lack respondents from non-logistics companies and the study only focuses on Halal logistics thus ignoring other Halal businesses such as Halal pharmaceutical and Halal tourism. Plus, the issues uncovered open more doors for potential future research on barriers and critical success factors in adopting Halal into logistics management.

Keywords: Halal Logistics; Halal; Logistics Management; Logistics Issues; Islamic Distribution

1. INTRODUCTION

Islam is the official religion in Malaysia and is the fastest growing religion in the world. Major Muslim countries such as Malaysia, Brunei Darussalam, Kingdom of Saudi Arabia and Indonesia as well as in some non-Muslim countries for example Singapore, Thailand and the United Kingdom practices Halal approach in every aspects of their

daily routine from social interaction to food consumption. Presently, Halal is not only abide to Muslims and is more than a religious matter. Halal is in the realm of business and trade, and is becoming a global symbol for quality assurance and lifestyle choice (cited by Lada et al., 2009). Halal in an Arabic word that translates lawful or permitted in English and the opposite of it is Haram which means prohibited or unlawful. According to the Malaysia Investment Development Authority (MIDA) (2012), the global Halal food industry is worth a staggering US\$ 600 billion to US\$ 2.1 trillion. The major factor behind this promising figure is because of rapid Muslim population growth (Adam, 2011), the popularity of Halal food among non-Muslim (Bonne and Verbeke, 2008; Aziz and Vui, 2012) and the perception that Halal foods are cleaner, healthier, and tastier (Burgman, 2007).

Halal does not only concerns about food products and not only matters during point of purchasing or consumption. Halal involves the overall supply chain network right from the origin to final consumption, from farm-to-fork. The logistics activities ranging from transportation, warehousing, material handling, procurement and so forth must also be Halal in order to enjoy a wholesome product or service. According to Tieman (2013), Halal logistics is defined as the process of managing the procurement, movement, storage and handling of material parts, livestock, semi-finished or finished inventory both food and non-food, and related information and documentation flows through the organization and the supply chain in compliance with the general principles of Shariah (Islamic Law). Che Man et al. (2007) and Zulfakar et al. (2012) described Halal logistics as similar to conventional logistics activities, comprising of planning, implementing and controlling the distribution and storage of Halal certified products from the source to the point of consumption.

Furthermore, although Halal is booming and on an upward trend, there are very limited studies published on Halal logistics (Lodhi, 2009; Zulfakar et al. 2012) and academic research in this area is highly needed (Tieman, 2013). However, there are several studies performed on Halal logistics namely (Jaafar et al., 2011; Omar and Jaafar, 2011; Tieman, 2011; Tieman et al., 2012; Talib and Johan, 2012; Kamaruddin et al., 2012; Tieman, 2013). In Malaysia, Halal is under the authority and jurisdiction of Department of Islamic Development Malaysia (JAKIM), a government agency under the Religious Division, Prime Minister's Department Malaysia, and Halal Industry Development Corporation (HDC) under the purview of Ministry of International Trade and Industry (MITI).

2. LITERATURE REVIEW

2.1. Halal Issues in General

According to Kamaruddin et al. (2012), the consumers' consumption trends not only towards Halal products but also Halal logistics. Shafie and Othman (2006) mentioned that the issues of Halal in general are the inconsistent definition of Halal, the introduction of Halal logo by individual firms, rampant use of Arabic or Islamic signalled brand names, widespread use of Quran verses on products and the lack of enforcement by authorities. These issues if not rectified will have severe consequences on the Halal industry, including Halal logistics. Tieman (2011) further discuss the issues encountered in Halal logistics from the context of the logistics company, the Halal products, Halal supply chain and Halal value chain. Tieman express that the issues related with Halal logistics are lack of Halal certification authority, Halal integrity, issues relating to certification process, transparency issues, and lack of certified Halal

logistics service providers. Issues uncovered by both Shafie and Othman (2006) and Tieman (2011) can be supported with the research done by Iberahim et al. (2012).

2.2. Halal Certification and Halal Packaging Issues

Lack of standardized Halal guidelines is one of the major issues and poses constant threat to the Halal industry including Halal logistics. The absence of a worldwide Halal certification such as a universal Halal logo will result into greater difficulties in maintaining Halal integrity throughout the supply chain. Presently, there are more than 122 Halal certifying bodies that comprises governments, government agencies, non-governmental organizations, local mosques or Islamic societies (International Halal Integrity Alliance, 2011). A worldwide Halal logo allows the consumers to have a peace of mind when making purchasing decision especially when it comes to Halal food products. There are cases of misused Halal logo on the packaging, one of the activities in logistics, as reported by Farouk et al. (2006). Talib and Johan (2012) claimed that the issues related with Halal packaging are Halal certification on the packaging, handling methods of Halal products and the packaging traceability. Halal logo on the packaging is important since not only it signifies that the product is Halal but also indicates that the product is safe, clean and not harmful for consumption. Furthermore, Halal logo is perceived to be more trustworthy and important compared to those that are labelled with International Standard of Organization (ISO) certification (Shafie and Othman, 2006).

Another issue in the Halal food supply chain will be Halal packaging. There are concerns on the packaging materials that used in the Halal food products. For instance, food packaging that is made from non-Halal or doubtful substance will be considered as najis (unclean) (Soong, 2007). It is common for producers to use materials such as plastic, paper boxes or microwaveable containers which are considered safe from non-

Halal substance. But there are growing source of porcine contamination for Halal foods as result of the animal fat-based lubricants used in production of some paper-based materials reaching into products (Farouk et al., 2006).

2.3. Halal Warehousing and Transportation Issues

Halal logistics is still a growing industry worldwide and Malaysia is among the pioneer but there are still not many service providers applying the correct method. The best scenario to describe is the transportation and warehousing process. Segregation of Halal and non-Halal food products must be highly practiced to avoid contamination (Riaz and Chaudry, 2004). Tools that are used to handle the Halal food product must not be shared to handle non-Halal food product by workers as it will cause contamination (Talib et al., 2010). However, these practices are still not highlighted by the majority of the industry as Halal and non-Halal products are still being transport in a single truckload or store in the same warehouse.

Transportation activities in Halal logistics plays a vital role and is also the stage where cross contamination between Halal and non-Halal happen. Besides that, during delivery and distribution stage, it is very likely that the Halal chain is easily broken (Jaafar et. al., 2011). Transportation activities is very challenging stage of Halal logistics because there are lack of collaborative efforts among the logistics service providers. One party that practice Halal logistics can rest assured that the activities done are handled according to Shariah law but once the responsibility is passed onto a different party, especially if that party is not practicing Halal approach, it will tempered the Halal integrity.

3. RESEARCH METHODOLOGY

The research objective for this study is to uncover the issues faced among logistics service providers in implementing Halal logistics. This study is exploratory in nature as not much is known about the issues and challenges encountered in Halal industry, particularly Halal logistics. Since very few studies were conducted on issues in Halal logistics, qualitative studies are deemed necessary where data are collected through series of interviews and focus groups (Sekaran and Bougie, 2009). This study applies purposive sampling and judgement sampling as information are conveniently available from specific target groups. Table 1 indicates that all samples are conveniently chosen to have fair representation of Halal logistics players in Malaysia.

Table 1. Selected Representatives of Logistics Service Providers in Malaysia

Company	Description
Company ABC	Shariah-compliant logistics service provider certified by HDC and JAKIM
Company DEF	Practicing Halal logistics with dedicated warehouse facilities but awaiting certification renewal
Company GHI	The first JAKIM certified and Shariah-compliant logistics service provider
Company JKL	No Halal logistics procedures and practices

Data collected for this study are obtained from primary sources, collected through series of focus group interviews. According to De Ruyter (1996) and Sekaran and Bougie (2009), focus group is a common tool for research discovering new phenomenon and for studies that are exploratory in nature. Furthermore, focus groups allows open, free-flow, spontaneous and in-depth discussion among the groups (Walden, 2006; Sekaran and Bougie, 2009), allowing greater inputs in extracting more issues in Halal logistics.

The researcher's act as a moderator in the focus group. Sekaran and Bougie (2009) stated that the moderator plays a crucial role as he/she is the one responsible for

introducing the topic, throwing the questions, observing, taking notes and recording the discussion. Recoding and transcribing the discussion are required to better analyse the discussion later (Hannabuss, 1996). Additionally, this study applies unstructured interviews as suggested by Sekaran and Bougie (2009) that it allows identification of several critical factors that might be central to the broad problem area. Accordingly, the interview questions are derived and developed from previous literatures discussed above. Although there are scarcity of studies on Halal logistics, the interview questions are designed from the combination of significant information from related Halal literatures. This is done in order to establish validity and to ensure the study covers relevant and important issues.

The participants for this focus groups consists of eight experts as Cooper and Schindler (1998) states that focus group should consists of six to ten respondents, with vast experience in Halal and logistics environment as well as holding respectable positions in their respective companies. Table 2 summarises the respondents' information. In addition, all conversation are in English and are recorded using voice recording devises with the consent from the respondents.

Table 2. Summary of Focus Group Respondents

Company	Type of Company	Position	Years in the Industry
ABC Company	One-stop Logistics Service Provider	Chief Executive Office	12 Years
ABC Company	One-stop Logistics Service Provider	Manager	6 Years
DEF Company	Halal Seaport/Warehouse	Assistant General Manager	18 Years
DEF Company	Halal Seaport/Warehouse	Senior Manager	9 Years
DEF Company	Halal Seaport/Warehouse	Assistant Manager	4 Years
GHI Company	One-stop Halal Logistics Service Provider	Senior Manager	25 Years
GHI Company	One-stop Halal Logistics Service Provider	Assistant Manager	5 Years
JKL Company	Air Freight Cargo Service	Manager	5 Years

The theme for the focus group is critical issues and challenges in Halal logistics and further divided into three subthemes namely, respondents' background, Malaysia's Halal Logistics industry and issues related to Halal logistics. All the questions are designed and arranged from general to specific to invite openness and avoid bias (Grudens-Schuck et al., 2004). Once all the conversation are recorded and information are extracted from the focus group, data are transcribed, analysed (data reduction and data display) and conclusions are drawn (Miles and Huberman, 1994).

4. RESULTS AND DATA ANALYSIS

The issues faced by the respondents from the focus groups were listed, compared and any repeated issues were removed from the lists. Table 3 shows the listing of issues faced in Halal logistics. Based from the list, all issues are coded ISSUE # and categorised into five categories, coded BARRIER #. These categories are shown in Table 4, based on the resemblances of the issues.

Table 3. Issues Faced in Halal Logistics

Code	Issues Encountered
ISSUE 1	Transition from HDC to JAKIM made certification renewal process more difficult and longer time;
ISSUE 2	There is no standard Halal guidelines;
ISSUE 3	Lack of expertise and knowledge about logistics industry know-how;
ISSUE 4	Too many Halal certification bodies/authorities;
ISSUE 5	Limited Halal products to be exported;
ISSUE 6	Lack of Government's support and intervention;
ISSUE 7	Lack of promotion/understanding among Malaysian regarding Halal and Halal logistics;
ISSUE 8	Standards set by JAKIM are difficult to abide and not cost-effective;
ISSUE 9	Lack communication between JAKIM, HDC and logistics service providers;
ISSUE 10	Lack integration between JAKIM and Halal logistics players;
ISSUE 11	No model/example of successful implementation of Halal logistics as a benchmark;
ISSUE 12	Halal logistics is not cost-effective and involve large capital expenditure;
ISSUE 13	Tractability and traceability issues along the supply chain (drivers' attitudes, handling, wrong approach, etc.);
ISSUE 14	Lack of collaborative efforts among logistics service providers in ensuring unbroken Halal chain;
ISSUE 15	Difficult to expand for private companies as it requires substantial capital/investment;
ISSUE 16	No dedicated Halal assets and facilities;
ISSUE 17	Few Halal training especially on Halal logistics;
ISSUE 18	Lack of information on Halal business and practices;
ISSUE 19	Presence of Haram or doubtful substance on product (ingredients/materials) during logistics activities;
ISSUE 20	Negative perception that Halal service adds in more costs; and
ISSUE 21	Different procedure practiced by different logistics service providers

All issues encountered in Halal logistics industry are then categories into five categories.

The first category is labelled BARRIER 1 consists of ISSUE 2, 3, 4 and 11, indicates the

common issues in Halal business itself such as guidelines and certification issues. ISSUE 13, 14, 16, 19 and 21 are group in BARRIER 2 that specifies the integration issues among Logistics service providers for example traceability issues and lack of dedicated Halal facilities. Issues concerning the lack of collaborative efforts with Halal authorities (JAKIM/HDC) is labelled BARRIER 3 with four issues (ISSUE 1, 8, 9, and 10). The fourth category is labelled BARRIER 4 concerns about financial implication and costs of adopting Halal practices in logistics activities. There are four issues in this category which are ISSUE 5, 12, 15 and 20. Finally, BARRIER 5 is labelled government support and promotion that indicates the weak government supports in promoting Halal logistics among industry players and consumers (ISSUE 6, 7, 17, and 18).

Table 4. Categories of Issues in Halal Logistics

BARRIER 1: Halal industry/business	
There is no standard Halal guidelines;	ISSUE 2
Lack of expertise and knowledge about logistics industry know-how;	ISSUE 3
Too many Halal certification bodies/authorities;	ISSUE 4
No model/example of successful implementation of Halal logistics as a benchmark;	ISSUE 11
BARRIER 2: Integration Among Logistics Service Providers	
Tractability and traceability issues along the supply chain (drivers' attitudes, handling, wrong approach, etc.);	ISSUE 13
Lack of collaborative efforts among logistics service providers in ensuring unbroken Halal chain;	ISSUE 14
No dedicated Halal assets and facilities;	ISSUE 16
Presence of Haram or doubtful substance on product (ingredients/materials) during logistics activities;	ISSUE 19
Different procedure practiced by different logistics service providers	ISSUE 21
BARRIER 3: Collaboration with JAKIM/HDC	
Transition from HDC to JAKIM made certification renewal process more difficult and longer time;	ISSUE 1
Standards set by JAKIM are difficult to abide and not cost-effective;	ISSUE 8
Lack communication between JAKIM, HDC and logistics service providers;	ISSUE 9
Lack integration between JAKIM and Halal logistics players;	ISSUE 10
BARRIER 4: Financial Implication	
Limited Halal products to be exported;	ISSUE 5
Halal logistics is not cost-effective and involve large capital expenditure;	ISSUE 12
Difficult to expand for private companies as it requires substantial capital/investment;	ISSUE 15
Negative perception that Halal service adds in more costs;	ISSUE 20
BARRIER 5: Government Support and Promotion	
Lack of Government's support and intervention;	ISSUE 6
Lack of promotion/understanding among Malaysian regarding Halal and Halal logistics;	ISSUE 7
Few Halal training especially on Halal logistics;	ISSUE 17
Lack of information on Halal business and practices;	ISSUE 18

5. DISCUSSION

BARRIER 1 indicates the general issues encountered in Halal industry and as was mentioned by Shafie and Othman (2006), the Halal industry faced problems in Halal

certification as presently there is no standardized Halal guidelines because different countries and certification authorities applies different practices. In order for Halal logistics to be successfully implemented and ensuring Halal integrity throughout the logistics network, a one-size-fits-all rules are needed. This is expressed by the representatives from DEF Company as Halal in logistics is difficult to be practiced since cargos came from various nations and not all Halal certification authorities are recognized by JAKIM. Plus, the lack of standardized Halal guidelines resulted in prolonged process and higher costs. In fact, all respondents agreed that Halal logistics in Malaysia is still in infant stage and there is no logistics company can claimed that they are a model for successfully practicing total Halal logistics, because majority of Halal logistics service providers still lack the knowledge and experts in conducting Halal logistics.

BARRIER 2 discuss the integration issues among logistics service providers. The CEO of ABC Company stressed that the major issue in terms of industry integrative efforts is that there is no operational consensus in handling Halal products. Different service providers applies dissimilar practice. This could be the result of lack of dedicated assets and facilities in handling Halal products. Representatives from GHI Company boast about having dedicated Halal facilities and equipment to cater customers' demand but once the consignments are passed to a different party, chances for broken Halal chain and contamination is very likely if the receiving party did not practice Halal logistics. The scenario described by GHI Company is in line with views from ABC Company and can be supported by Jaafar et al. (2011) and Omar and Jaafar (2011).

Both ABC Company and DEF Company explained that their obligations only concerns on proving Halal storage and handling facilities but not the inbound or outbound delivery. During transportation, it is difficult to track and trace the drivers' attitudes and

procedures practiced at interval stops and this 'grey area' is difficult to control as the delivery of Halal products are done by separate entities. The integration between conventional logistics and Halal logistics service providers are also weak since the presence of Haram or doubtful substances can be found on products during logistics activities but the information are not informed or shared. This was expressed by the Assistant Manager from GHI Company that although there are clear presence of animal gelatines or pig linens, the transporters still insisting in sending, unloading and using the Halal facilities. He added that the product manufacturers or owners themselves are unaware of the importance to maintain the Halal integrity.

BARRIER 3 specifies on collaborative issues between Halal logistics industry players and JAKIM/HDC. Previously, any certification matters such as new application, reapplication, auditing, and so forth are under the jurisdiction of HDC. However in 2011, all the responsibilities shifted to JAKIM and this causes confusion and more difficult process, expressed CEO and Senior Manager of ABC Company and DEF Company respectively. The shift of certification authority resulted into pending application and reapplication requests took longer time and causes disruption onto the applicants' business activities. Furthermore, JAKIM's procedures are difficult to abide and are not cost-effective. For instance, Company DEF claimed that they were ordered to perform samak (ritual cleansing) onto sea vessels and this from the company's view, is ridiculous and not cost effective. Imagine the amount of efforts, manpower, time, money and energy required to perform this orders, expressed the Senior Manager. The CEO of ABC Company stressed that not all logistics service providers can afford to have their own dedicated Halal warehouse or Halal fleet as it will involve substantial capital investment. Therefore, JAKIM's requirement for those logistics companies that wants to venture into Halal business must have dedicated facilities will become a

drawback in the the development of Halal industry. Plus, representatives from DEF Company and JKL Company mentioned that the objective of all logistics service providers are profit maximization and to invest millions into Halal will be difficult for them.

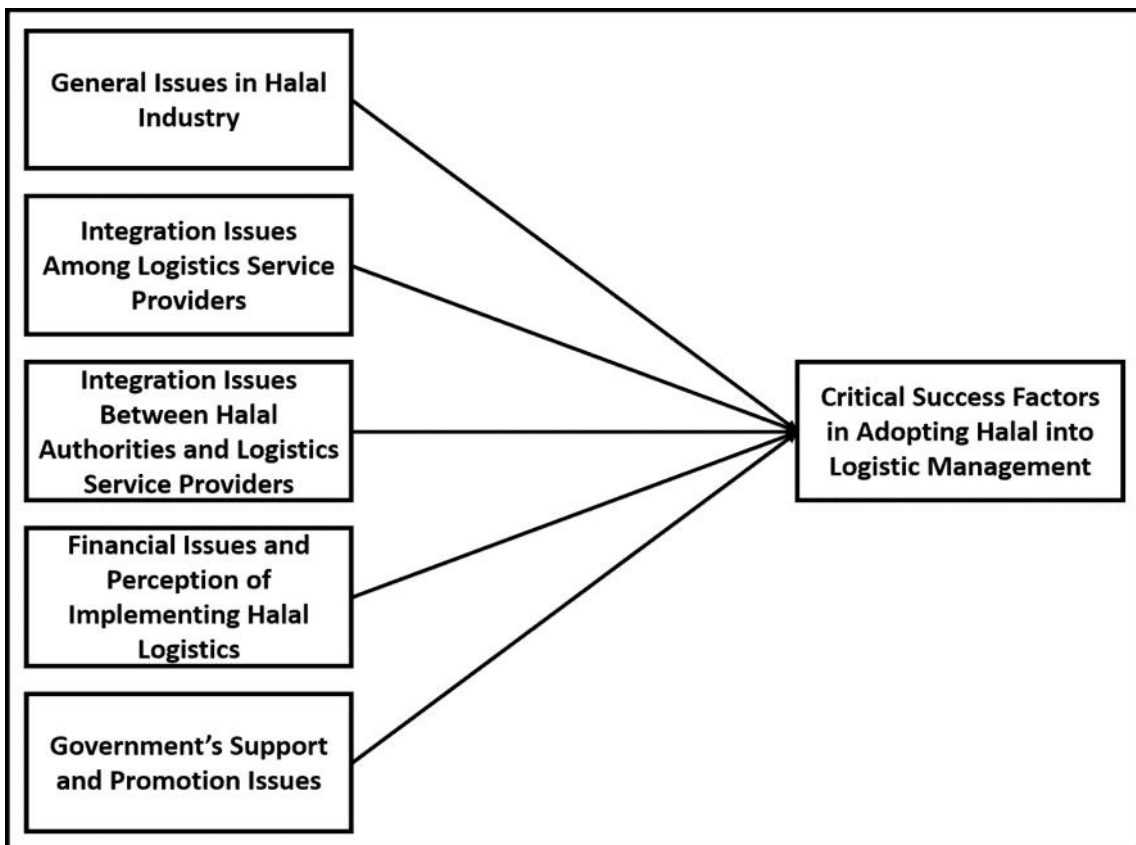
BARRIER 4 covers the financial issues and perception of implementing Halal logistics. ABC Company claimed that although they practice Halal logistics and caters for Halal demand in the market, Halal business unit is not their main source of revenue. This reflects on the limited number of Halal products to be handled, which DEF Company agrees that conventional logistics is still the main source of revenue. In addition, to expand logistics business into Halal will require significant investment that will deemed difficult to cater to. JKL Company representative states that for government-link corporation (GLCs) ventures into Halal logistics is not a burden to them compared to private companies. Running conventional logistics services already requires huge capital expenditure and investment and to add Halal business branch will resulted into severe financial implication. Moreover, all respondents agreed that the perception and mentalities that Halal add in more cost because running separate warehouse facilities, different use of handling equipment and operating dedicated transport fleets will eventually affect the overall logistics costs and charges. These negative perceptions on implementing Halal logistics is viewed as an issue among the respondents because it will hinder more industry players to venture into Halal logistics and eventually poses more risks in broken Halal chain. Plus it will have negative impact onto the overall development of Halal and Halal logistics business.

BARRIER 5 express the issues pertaining to government's support and promotion. Although this issue might be contradicting with the research's opinion, it still an issue among the respondents. ABC Company and DEF Company claimed that the weak

government support and intervention in promoting Halal logistics is the cause of previously mentioned and discussed issues. Although government supports the growth of Halal industry, the main attention is given towards product manufactures and small-medium enterprises (SMEs). It was also recommended that the support should also be focused on Halal logistics as well because Halal does not only matters during production or purchasing stages but also the delivery, storage, distribution and handling stages. Furthermore, it is depressing that the consumers does not know or understand the need and importance of logistics for Halal products or services. In addition, despite the need to educate and train the logistics service providers about Halal logistics, the efforts are still limited and insufficient. Besides that, some logistics companies deemed trainings for Halal logistics organized by Halal authorities are insufficient, not progressive, or irrelevant to their business.

6. CONCLUSION AND LIMITATION

Therefore, it can be concluded that there are five critical issues encountered in Halal logistics namely general issues (BARRIER 1), integration issues among logistics service providers (BARRIER 2), integration issues between Halal authorities and logistics service providers (BARRIER 3), financial issues and perception of implementing Halal logistics (BARRIER 4) and issues pertaining to government's support and promotion



(BARRIER 5). These issues opens potential future research on barriers and critical success factors in adopting Halal into logistics management. Research framework are generated and shown in Figure 1.

Figure 1: Critical Issues in Halal Logistics Research Framework

Although the research managed to uncover the critical issues faced in Halal logistics, there are several limitations need to be addressed. Firstly, this study requires more empirical evidence to establish stronger findings on the major issues encountered. Future study are required to rank the discussed issues or to unearth new and additional issues. Secondly, the respondents are mainly among logistics players and may result into biasness. Therefore, future study should include views from government agencies, Halal authorities, product manufacturers, and consumers to yield greater findings. Finally, this study only focuses on Halal logistics and neglect other Halal businesses such as tourism, food products, pharmaceuticals, healthcare, cosmetics and banking. Research on other Halal business are needed to have greater views of the issues faced in Halal industry.

REFERENCES

- Abdul Aziz, Y., & NyenVui, C. (2012). The Role of Halal Awareness and Halal Certification in Influencing Non- Muslims' Purchase Intention. *In Proceedings of the 3rd International Conference on Business and Economic Research (3rd ICBER 2012)* (pp.1819-1830).
- Adams, I. A. (2011). Globalization: Explaining the dynamics and challenges of the al 1 food surge. *Intellectual Discourse*, 19(1), 123-145.
- Bonne, K., & Verbeke, W. (2008). Muslim consumer trust in halal meat status and control in Belgium. *Meat science*, 79(1), 113-123.
- Burgmann, T. (2007). Halal Flexes Its Marketing Muscle. *The Star*. Retrieved from <http://www.thestar.com/business/article/238551>
- Che Man, Y., Bojei, J., Sazili, A. Q. & Abdullah, A. N. (2007). Malaysia Halal Hub Opportunities. *In 4th Asian Livestock & Feed Industry Conference*.

- Cooper, D. R. & Schindler, P. S. (1998). *Business Research Methods*. McGraw-Hill, Singapore.
- De Ruyter, K. (1996). Focus versus nominal group interviews: a comparative analysis. *Marketing Intelligence & Planning*, 14(6), 44-50.
- Farouk, A., Batcha, M. F., Greiner, R., Salleh, H. M., Salleh, M. R., & Sirajudin, A. R. (2006). The use of a molecular technique for the detection of porcine ingredients in the Malaysian food market. *Saudi Medical Journal*, 27(9), 1397-1400.
- Grudens-Schuck, N. (2004). Focus group fundamentals. Iowa State University, University Extension.
- Hannabuss, S. (1996). Research interviews. *New Library World*, 97(5), 22-30.
- Iberahim, H., Kamaruddin, R., & Shabudin, A. (2012). Halal development system: The institutional framework, issues and challenges for halal logistics. In *Business, Engineering and Industrial Applications (ISBEIA), 2012 IEEE Symposium on* (pp. 760-765). IEEE.
- International Halal Integrity Alliance (2011), "Halal in a Box", available at <http://www.ihialliance.org/hiab.php>
- Jaafar, H. S., Endut, I. R., Faisol, N., & Omar, E. N. (2011). Innovation in logistics services—halal logistics. In *16th International Symposium on Logistics (ISL)*, 844-851.
- Kamaruddin, R., Iberahim, H., & Shabudin, A. (2012). Halal compliance critical control point (HCCCP) analysis of processed food. In *Business Engineering and Industrial Applications Colloquium (BEIAC), 2012 IEEE* (pp. 383-387). IEEE.
- Lada, S., Tanakinjal, G. H., & Amin, H. (2009). Predicting intention to choose halal products using theory of reasoned action. *International Journal of Islamic and Middle Eastern Finance and Management*, 2(1), 66-76.
- Lodhi, A. (2009). *Understanding Halal Food Supply Chain*. London. HFRC UK Ltd.
- Malaysia Investment Development Authority. (2012). *Industries in Malaysia: Food Industry*. Retrieved from <http://www.mida.gov.my/env3/index.php?page=food-industries>

- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook*. Sage Publications, Incorporated.
- Omar, E. N., & Jaafar, H. S. (2011). Halal supply chain in the food industry-A conceptual model, In *2011 IEEE Symposium on Business, Engineering and Industrial Applications (ISBEIA), Langkawi, Malaysia, 25-28 September 2011*, IEEE, Langkawi, 384-389.
- Riaz, M. N. & Chaudry, M. M. (2004). *Halal Food Production*. Florida. CRC Press LLC.
- Sekaran, U. & Bougie, R. (2009). *Research Method for Business, a Skill Building Approach*. Wiley, Singapore.
- Shafie, S., & Othman, M. N. (2006). Halal certification: an international marketing issues and challenges. In *Proceeding at the International IFSAM VIIIth World Congress*, (pp. 28-30).
- Soong, S. F. V. (2007). *Managing Halal Quality in Food Service Industry*. (Unpublished Master Dissertation). University of Nevada Las Vegas, Singapore.
- Talib, M. S. A., & Johan, M. R. M. (2012). Issues in halal packaging: a conceptual paper. *International Business and Management*, 5(2), 94-98.
- Talib, Z., Zailani, S., & Zanuddin, Y. (2010). Conceptualizations on the Dimensions for Halal Orientation for Food Manufacturers: A Study in the Context of Malaysia. *Pakistan Journal of Social Sciences*. 7(2), 56-61.
- Tieman, M. (2011). The application of Halal in supply chain management: in-depth interviews. *Journal of Islamic Marketing*, 2(2), 186-195.
- Tieman, M. (2013). Establishing the principles in halal logistics. *Journal of Emerging Economies and Islamic Research (JEEIR)*, 1(1), 1-13.
- Tieman, M., van der Vorst, J. G., & Ghazali, M. C. (2012). Principles in halal supply chain management. *Journal of Islamic Marketing*, 3(3), 217-243.
- Walden, G. R. (2006). Focus group interviewing in the library literature: A selective annotated bibliography 1996-2005. *Reference services review*, 34(2), 222-241.

Zulfakar, M. H., Jie, F. & Chan, C. (2012). Halal food supply chain integrity: from a literature review to a conceptual framework. In *10th ANZAM Operations, Supply Chain and Services Management Symposium*. Melbourne, Australia. 14-15th June 2012.