

AWARENESS OF HALAL SUPPLY CHAIN AMONG TRADERS IN FARMERS' MARKET AROUND KLANG VALLEY AREA, MALAYSIA

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ABSTRACT

Supply chain involves the process of managing halal and non halal products from different points of suppliers to different points of buyer, involved multiple parties located in different places, with the aimed of meet the requirements of their customers. The integrity of halal food products must be rigorously secured in every way and all steps must be adhered by all parties involved in the supply chain to avoid contamination with haram item or najis. This paper investigates the awareness of halal supply chain among traders in farmer's market on the areas of halal certification, halal standard, halal dedicated asset and halal assurance system. Respondents are 90 traders of raw materials part in farmer's market within the Klang Valley, Malaysia based on a convenience sampling. This study found that the mean of halal standard are the highest ranking with the score of 3.37. Pearson correlation between awareness of halal supply chain and halal certification is moderate positive. Regression analysis shows a significant positive relationship between the halal certificate and awareness of halal supply chain thus indicating that halal certification is an important area to relate to halal supply chain. Future studies could include big retailers or choose supermarket or grocery store and Islamic regulatory agencies to have a better understanding on the awareness of halal requirement among the traders through initiative campaigns and programmes.

Keywords:

Halal, Supply Chain, Farmer's Market, Integrity, Shariah Compliance, Muamalat

1.0 INTRODUCTION

Halal supply chain is a halal process applied starting from the point of origin to the point of consumption which must follow the element of Sharia law, providing Islamic law is the guideline for a proper halal process [1]. The main goal of Halal supply chain is not only to ensure customers' satisfaction but also to ensure that the Halal status of the food product remains intact throughout the whole process of supply chain [2]. It is also to avoid products misunderstanding and to ensure that the Muslim consumers receive and consume only the Halalan Toyyiban products. The impact of these awareness would assist traders to provide their customers' essential goods in a clear and consistent manner.

This is because Halal food consumers are more aware and concerned about the integrity of halal status and are curious about all the activities involved along the supply chain, whether the products are halal or not. This is supported by an article issued in Berita Harian on September 3, 2017, Sunday, Tamping, "Goat meat, not a pig" [3]. This issue was viral in social media (Facebook) where there was a party accused a shop selling pork instead of a goat meat. The Ministry of Domestic Trade, Cooperatives and

Consumerism (MDTCC) made an immediate inspection and found out that the allegation was incorrect. State MDTCC's Chief Enforcement Officer, Saiful Bahri Abdul Kadir, said the police were inspecting the shop right after the charges were spread on social sites.

"We found that the meat which was alleged as a pig meat is actually a frozen goat meat imported from New Zealand and slaughtered at a slaughterhouse recognized by the party managing halal status in the country," said him. Following that he also advised for those with doubts on a certain matter to channel official complains to the MDTCC as to enable the inspection to be conducted and not to disseminate inaccurate information on social sites.

The scenario above shows that most of the consumer are very concerned with the halal status of the products that they bought. Either the products from abroad or within the country, halal certification is really important especially in Malaysia where known as a Muslim country. Due to that, the awareness towards halal supply chain was very important for consumer. Thus, this study was conducted to identify the level awareness of traders towards halal supply chain in Farmer's Market around Klang Valley and to examine the relationship between halal awareness of supply chain with halal certification, halal standard, halal dedicated assets and halal assurance.

2.0 LITERATURE REVIEW

2.1 Halal Certification

Halal certified products are the main reason behind Muslim buyers to buy Halal food products for daily use [4]. This is because Halal certified products instil confidence and belief that their food products comply with the Sharia Laws. Halal certificates are also used in restaurants or cafes as many Muslims will find for places with halal certificates to eat. Halal certificates are not only used to buy groceries and meat but also used by the food suppliers. Muslims will also be confident in the food products provided in accordance with the Sharia law.

Halal Certificate is used to certify products or services by Sharia law [5]. Halal certification is a way to inform and reassure the consumers that the products sold are halal and sharia-compliant [6]. Halal certification starts in the United States and not in Islamic countries. It is a safety measure needed by Muslims living with non-Muslims. It is also to preserve the identity of Islam and fulfil their religious obligations.

As the business evolved, trust in the supply chain is now based on the Halal logo or certification [7]. According to [8], Department of Sharia Affairs from Ministry of Religious Affairs in Brunei is authorized to handle Halal matters in the country, and is supported by Halal Food Control Division (HFDC). Department of Islamic Development Malaysia (JAKIM), a governing body from the support of multiple government agencies, is responsible for the issuance of halal certificates and to monitor and instil the Halal awareness among food producers, distributors and importers in Malaysia [9].

2.2 Halal Standard

Similarly, the study investigated by [4] stated that Muslim countries have the standards to be followed. Some Muslim countries and non-Muslim countries have various Halal authorities and agencies in which resulted for the Halal certification to be questioned. As stated by [10], in New Straits Times, November 19, 2017 (Sunday) "Malaysia to lead the way in unifying halal standards".

They are lack of synchronicity when it comes to the standards and procedures involved in issuing halal certification, pointing to the disunity in recognizing many halal stamps across the region and the world. Halal Industry Development Corporation (HDC) chief executive officer, Datuk Seri Jamil Bidin said complying with all these standards from multinational certification bodies may be a big challenge but emphasis should be given on how to continue to develop the industry.

Efforts aimed at uniting these countless standards are in progress with Malaysia to lead this initiative. Deputy Prime Minister, Datuk Seri Dr Ahmad Zahid Hamidi in June announced the establishment of the International Halal Board (IHAB) Board, as part of the agenda of the Malaysian Halal Council (MHC) 2018-2020. Zahid, who is also the MHC chair, said the council would also set up a halal international research academy, the first of its kind in the region. JAKIM Halal Hub Director, Datuk Dr Sirajuddin Suhaimiee said IHAB was an initiative aimed at maintaining the state's leading global halal player status. "Currently, JAKIM recognizes 67 halal certification bodies from 41 countries which means all products certified by them can be exported to Malaysia. We welcome the launch of IHAB, which will be a way for all certification bodies to be under one platform, towards the harmonization of halal standards, so products can be transported from one part of the world to another," he said.

Based on Halal Industry Development Corporation, Malaysian Standards for Halal food for production, preparation, handling and storage is MS 1500:2009. It provides practical guidance for the food industry on the preparation and handling of halal food (including nutrient supplements) and to be a basic necessity for halal food products and trade in food or business in Malaysia [11]. This is further supported from the study by [12] which stated that due to various authorities and different Islamic practices, it is challenging for the Halal industry players to have a standard global regulation that can be practiced worldwide.

2.3 Halal Dedicated Assets

Halal dedicated system is a system where it is an ideal choice to protect Halal integrity throughout the supply chain process and during distribution [4]. In other words, Halal products will be isolated and stored in a safe place. In terms of transportation activity, mixing of halal products and non halal products can be reduced by the way the manufacturer sends the product itself to the buyer. This situation is rarely seen in the current supply chain, where most manufacturers will channel their transportation activities to third-party logistics services. This is due to the cheap operating costs and the need to deliver Halal products in every part of the world. Previous research by [13] agree that the Halal integrity of a particular food product is intact as long as the product is in producer custody.

However, when the product moves along the supply chain, the integrity of that product will only intact if the next parties in charge have similar understanding and operational practice of handling the Halal product. From the same journal stated that by creating dedicated team of workers to handle the Halal food products will reduce the possibility of cross contamination to a very minimal level, avoid unnecessary human mistake and thus help to protect the integrity of the Halal supply chain. This dedicated team of workers can be given exclusive training on ways to handle the Halal food products which will cover the different aspects of handling, storage and managing the products.

According to [14], there is a tendency to eliminate side activities by transferring them to the specialized companies. These activities is known as “3PL” services (also referred to as third party Logistics). If any direct contact occurs (between halal and haram products), the halal product will lose it status and no longer to be considered as halal [7]. The products automatically become haram and cross-contaminated. For example, the Department of Malaysian Quarantine and Inspection Service (MAQIS), had found

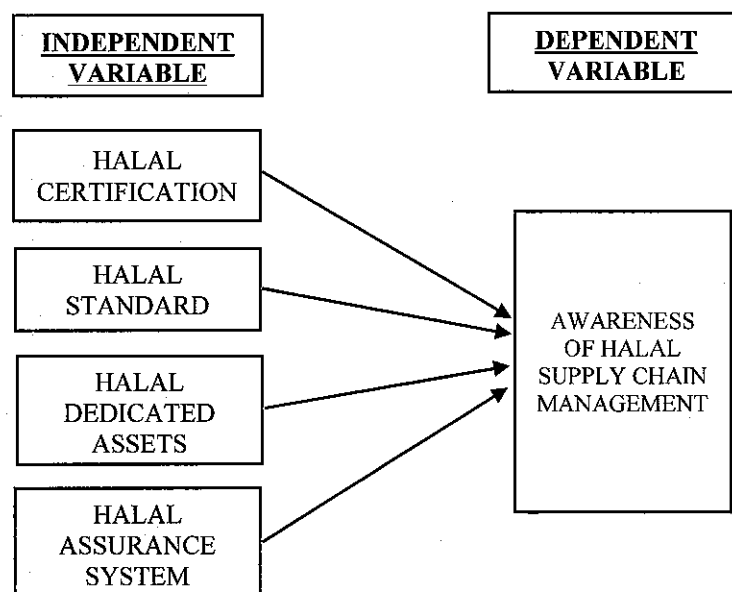
160 packs of pork legs and 116 boxes of animal's internal organs stored inside the four 30-tonnes containers where the lamb halal frozen meats were stored together in the warehouse shipment area [15]. This is a matter with a subtle contempt and betrayal committed by the irresponsible company that granted the halal certificate by JAKIM.

2.4 Halal Assurance System

Halal Assurance System is an important aspect to be considered by logistics companies involved in the Halal sector [16]. The Halal assurance system must be set up for any producer or company who are willing to produce Halal product [17]. It is to ensure that every entity involved throughout the Halal product supply chain meets the requirements of Halalan Toyyiban from all aspects including management system, halal facilities, equipment and infrastructure. This warranty system provides information from the onset of material preparation, manufacturing process until logistics activities are carried out. Therefore, full participation of all stakeholders in the appropriate quality assurance system within the halal food supply chain is required in order to achieve the integrity of the supply chain [18][19].

2.5 Conceptual Framework

Adapted from: Conceptual Framework on Halal Food Supply Chain Integrity Enhancement by Mohd Hafiz Zulfakar, Marhani Mohamed Anuar, Mohamed Syazwan Ab Talib.



3.0 METHODOLOGY

The pilot study was conducted on 30 traders at Farmers' Market in Selangor. The feedbacks obtained from the questionnaires were analysed using SPSS and the reliability coefficient alpha scores for each dimension were presented in Table 1. According to [20], the reliability coefficient of not less than 0.5 is usually acceptable, thus the questionnaires used are considered acceptable in terms of reliability coefficient. The result of reliability statistic from the pilot test shows a score of 0.906 which is acceptable.

Table 1
Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	Number of Items
.906	.909	25

For the research design, the technique used was convenience sampling technique. Convenience sampling depends on the data collected from population members who were conveniently available to participate in the study. The sample was taken from the population member that are easy, available and accessible to reach or to contact. Other than that, this sampling method does not require random samples to be produced as the only criteria was whether the participants were willing to participate.

The target population for this research was the traders at the Farmer's Market around Klang Valley. The total number of respondents for this research was 90 respondents. Sample size were determined by using Roscoe (1975) tables.

Quantitative method was selected as data collection method which was achieved by using questionnaires. Questionnaires was distributed directly to respondents. The data collection process that conducted by the researchers was to distribute the questionnaire to the traders in Farmer's Market around Klang Valley.

4.0 RESULTS AND DISCUSSION

The study registered a positive relationship between the awareness of halal supply chain with halal certificate, halal standard, halal dedicated asset and halal assurance system. The findings show that halal certification is the most dominant variables.

4.1 Respondents' Profiles

Table 2
Demographic Profiles of Respondents

Demographic Profiles	Frequency	Percent (%)
Age (Years)		
18-22	32	35.6
23-27	18	20.0
28-32	22	24.4
33-37	18	20.0
Level of Income (RM)		
Below 1000	35	38.9
1001-1500	25	27.8
1501-2000	24	26.7
2000-3000	5	5.6
3001 and above	1	1.1
Ethnicity		
Malay	83	92.2
Indian	6	6.7
Chinese	1	1.1
Educational background		
SPM	53	58.9
Diploma	34	37.8
Degree	3	3.3

Table 2 illustrated the respondents' demographic profile for this study which consists of the age, level of income, race and educational background. Most of the respondents who answered the questionnaires were aged between 18-22 years with a percentage of 35.6%. Followed by respondents aged 28-32 with a percentage of 24.4%. And the lowest percentage is 20% representing 23-27 years and 33-37 years.

Most of the traders who answer the question earned below RM1000 which is 38.9% and the lowest is 1.1% with income of RM3001 and above. Malays are the largest respondents with a percentage of 92.2% followed by Indian (6.7%) and Chinese (1.1%). SPM has a high percentage among other respondents which is 58.9%. Followed by Diploma (37.8%) and Degree (3.3%).

4.2 Descriptive Analysis

Table 3

Descriptive Statistics

Variables	Mean	Std. Deviation
Awareness of Halal Supply Chain	3.1378	.53350
Halal Certification	3.3333	.51929
Halal Standard	3.3733	.46563
Halal Dedicated Assets	3.3289	.46283
Halal Assurance System	3.2511	.54839

Table 3 provides the descriptive statistics for key variables used in the study. The mean score were obtained by averaging the respective scores for the questions. The result shows that the mean score for awareness of halal supply chain, halal certification, halal standard, halal dedicated assets and halal assurance system are 3.13, 3.33, 3.37, 3.32 and 3.25 respectively.

4.3 Pearson Correlation Analysis

Table 4

Pearson Correlation Analysis

Variables	Awareness of Halal Supply Chain	Halal Certification	Halal Standard	Halal Dedicated Assets	Halal Assurance System
Awareness of Halal Supply Chain	1				
Halal Certification	.583**	1			
Halal Standard	.464**	.651**	1		
Halal Dedicated Assets	.339**	.595**	.600**	1	
Halal Assurance System	.347**	.498**	.583**	.583**	1

** . Correlation is significant at the 0.01 level (2-tailed).

Based on the result for Pearson correlation analysis in Table 4, the correlation between the awareness of halal supply chain and halal certification is 0.583, while the correlation for halal standard is 0.464 and followed by halal assurance system with the correlation of 0.347 and the correlation of halal dedicated asset is 0.339. The findings show that halal certificate, halal standard, halal dedicated asset and halal assurance system has a solid correlation and positive significant relationship with the awareness of halal supply chain. Based on our finding of this research, we can conclude that the result for Pearson correlation analysis for this research is moderate as showed in Table 8 above.

4.4 Multiple Regression Analysis

Table 5
Multiple Regression Analysis

	B	Std. Error	Coefficients	t-Value	sig. Value
(Constant)	0.966	0.383		2.527	0.013
Halal Certification	0.523	0.125	0.509	4.168	0.000
Halal Standard	0.176	0.146	0.153	1.199	0.234
Halal Dedicated Assets	-0.103	0.140	-0.089	-0.732	0.466
Halal Assurance System	0.055	0.112	0.057	0.493	0.623
Model F-statistic	11.814				
p-Value	0.000				
R-Square	0.357				
Adjusted R-Square	0.327				

The multiple regression in Table 5 depicts that halal certification is the only variable that may explain the awareness of halal supply chain management at the coefficient of 0.509, $t = 4.168$, $p = .000$, thus indicates a significant positive relationship between the halal certificate and awareness of halal supply chain. The positive coefficient for halal certification at 0.509 signals that the higher the existence of halal certificate, the higher the awareness of halal supply chain.

For the halal standard variable, the result shows that there is no effect between the halal standards and awareness of the halal supply chain, where the coefficient for halal standard is 0.153, $t= 1.199$, $p= 0.234$. Followed by halal dedicated assets which is insignificant with the awareness of halal supply chain, where the coefficient for halal dedicated assets is -0.089, $t= -0.732$, $p= 0.466$. Meanwhile, the coefficient for halal assurance is 0.057, $t= 0.493$, $p= 0.623$, where $p>0.05$ thus indicates that halal assurance system has no effect on the awareness of halal supply chain.

In overall, only halal certification has a significant positive relationship with the awareness of halal supply chain, thus indicating that halal certification is a significant variable to relate to the awareness of halal supply chain.

5.0 CONCLUSION AND IMPLICATIONS

The study registered a positive relationship exist between halal certificate, halal standard, halal dedicated asset and halal assurance system with the awareness of halal supply chain. The findings show that halal certification is the most dominant variable as it is the only variable that has a significant positive relationship with the awareness of halal supply chain management.

As the supply chain management growth widely in Malaysia, the traders must be aware with the halal supply chain system in Malaysia. The recommendation could help the traders, JAKIM, FAMA and third party logistic to improve their service in halal supply chain management. These are the recommendation on how to manage and improve the awareness of halal supply chain system:

i. Halal certification

Make sure that the workers are Muslim. They also must practice and followed the Sharia that according to SOP that stated by JAKIM. JAKIM should organize series of lessons about Halal certification to traders.

ii. Halal standard

JAKIM should tighten and always monitor third party logistic that are responsible to that. Other than that JAKIM also should make an improvement and always keep update about the rules and regulation to the traders.

iii. *Halal dedicated asset*

Third parties logistic company should monitor process and procedure alongside the process of delivery that involve when it across the continent. JAKIM should generate electronic system bar code like Radio-frequency identification (RFID) at the container or the goods itself to make it easy to identify the goods is Halal or not.

REFERENCES

- [1] Omar, E. N. & Jaafar, H. S. 2011. Halal Supply Chain in the Food Industry – A Conceptual Model. Paper presented at IEEE Symposium on Business, Engineering and Industrial Applications (ISBEIA), Langkawi, Malaysia.
- [2] Bahrudin, S. S. M., Illyas, M. I., & Desa, M. I. 2011. Tracking and tracing technology for halal product integrity over the supply chain, Bandung, Indonesia.
- [3] Tuah, I. T. 2017. *Daging kambing, bukan babi*. Retrieved from Berita Harian: <https://www.bharian.com.my/berita/kes/2017/09/320915/daging-kambing-bukan-babi>
- [4] Mohd Hafiz Zulfakar, M. M. 2014. Conceptual Framework on Halal Food Supply Chain Integrity Enhancement. *Procedia-Social and Behavioral Sciences* 121: 58-67.
- [5] Nurulhuda Noordin, N. L. 2014. Strategic Approach to Halal Certification System: An Ecosystem perspective. *Procedia - Social and Behavioral Sciences* 121: 79-95.
- [6] Shafie, S., & Othman, M. N. 2011. Halal Certification: An International Marketing Issues and Challenges. *International Marketing and Service*.
- [7] Tieman, M. 2015. Halal Cluster. *Journal of Islamic Marketing*. 2-21.
- [8] Ismail. 2011. 'Halal Standards in Brunei'. Paper presented at *MTCP Training Program on Halal Standards and Conformance Infrastructure for OIC Countries, Nilai, Malaysia, 21st July 2011*. Nilai, Malaysia.
- [9] Mohamed, Z., Rezai, G., Shamsudin, M. S., & Eddie Chiew F. C. 2008. Halal logo and consumers' confidence: What are the important factors? *Economic and Technology Management Review*, 3: 37-45.
- [10] Laili, I. 2017. Malaysia to lead the way in unifying halal standards. Malaysia.

- [11] Rasi, R. Z., Omar, S. S., Nor, R., & Ahmad, M. F. 2017. Designing Halal Supply Chain: Malaysia's Halal Industry Scenarios. Paper presented at MATEC Web of Conferences
- [12] Evans, A. 2011. Towards a Halal Economy: The Power of Values in Global Markets. *The Halal Journal*, 26-28.
- [13] Jaafar, H.S., Endut, I.R., Faisol, N & Omar, E.N., 2011. Innovation in Logistics Services: Halal Logistics. Paper presented to 16th International Symposium on Logistics (ISL), Berlin, Germany, 10-13 July
- [14] Nijolè Batarlienè, A. J. 2017. "3PL" Service Improvement Opportunities in Transport Companies. *Science Direct*, 67-76.
- [15] Said, H. 2017. Maqis seizes containers of unseparated halal, non-halal meat at Tanjung Pelepas. Johor, Iskandar Puteri, Malaysia.
- [16] Hazwani Ahmad Tarmizi, N. H. 2014. Factors influencing readiness towards halal logistics among foodbased. *International Agribusiness Marketing Conference 2013, IAMC 2013* (pp. 42-49). Kuala Lumpur: UMK Procedia 1.
- [17] Muhammad, N. M. N., Isa, F. M., & Kifli, B. C. 2009. Positioning Malaysia as Halal-Hub: Integration Role of Supply Chain Strategy and Halal Assurance System. *Asian Social Science*, 5(7): 44-52.
- [18] Samsi, S. Z., R. Tasnim, & Ibrahim, O. 2011. Stakeholders' Role for an Efficient Traceability System in Halal Industry Supply Chain. Paper presented at Annual International Conference on Enterprise Resource Planning + Supply Chain Management, Penang, Malaysia.
- [19] Per, E. 2009. Food product traceability and supply chain network integration. *Journal of Business & Industrial Marketing*, 24(5): 421-430.
- [20] Nunnally, J. C. 1978. Psychometric theory (2nd Ed.). New York: McGraw Hill.