Issues in Halalan-Toyyiban Warehouse Implementation

Hezin Shadan, Noor Habibah Arshad

Malaysia Institute of Transport, Universiti Teknologi MARA, Shah Alam, Selangor, Malaysia

ABSTRACT

Recently, more researchers are very keen and interested in Halal logistics research. Warehousing is one of the crucial elements in logistics activities and plays a vital role in preserving the Halal integrity of the products. Unfortunately, there are very limited research have discussed specifically on Halal warehouse topic. The challenge in implementing halalan-toyyiban warehouse should be viewed and examined from various disciplines and numerous issues. The halalan-toyyiban warehouse is about an embracing of the Halal requirement in warehouse activities in order to maintain the halal integrity of the products stored in the warehouse. The main objective of this paper is to determine the major issues in Halalan-Toyyiban warehouse implementation. Major issues are identified and selected based on the literatures and matching input from the subject matter expert. The result of this study revealed that the issues identified will affect the performance of the halal warehouse if not properly planned, monitored and controlled. The issues encountered on Halal warehousing are related to capabilities and awareness, information and financial issues. It is hoped that this paper could be an information resource for the practitioners that seek to implement the Halal warehouse and for the authorities to take an appropriate action in order to strengthen the Halal logistics industry.
KEYWORDS: Halal; Halalan-toyyiban, Halal supply chain, Halal logistics; Halal warehouse

INTRODUCTION

Halal (lawful) and Toyyib (clean and not damaged) are very important in Islam. The halal concept should not only focus on the ingredients and the processing of the products, but also on all activities from the beginning of the production till the final end to consumers[8, 23].Basically, many aspects of supply chain management including logistics, warehouse, maintenance, product quality, standards and integrity efforts are required for the establishment of the Halalan Toyyiban Supply Chain (HSTC) in order to guarantee the halalan and toyyiban status of the products.

The Muslim population is expected to have a higher growth rate at 1.7% as compared to non-Muslim at 0.9% for the period 2010 to 2020[25]. Due to the growth of the Muslim population, the halal food trade is getting more globalized[13], and this industry become a profitable sector with enormous opportunities to support the country's economic growth. Malaysia Halal Export for the year 2011 reported that Malaysia Halal Export Value is RM35.4 billion [3]. According to [8], the halal supply chain concept has been seen as a potential business strategy that would attract a wider market comprises both Muslim and non-Muslim buying the halal products. Moreover, it has influenced other countries including the non-Muslim countries to produce more halal producers [11]. The global halal food market alone has an estimated value of US$580 billion in the year 2014 and is growing rapidly [3].

The halal supply chain is very important to the consumer. Consumers are willing to pay more for halal products that carry the assurance of a halal logistics system[8]. The main principle in halal logistics is the segregation of halal and non-halal goods [5, 6] through the transportation, storage and warehousing, and terminal operations [18]. The storage of goods generally takes a longer time than the movements and transformations of goods. Therefore, implementing the Halalan Toyyiban in warehouse activities is not an easy task. To meet the halal requirements, the output of the processes enabled by the halal warehouse must be controlled.

Recently, researchers have shown an increased interest in Halal Supply Chain and Halal Logistics [5,9,1,17]. Even there are various researches have been done in Halal Logistics, but there is still a lack of research regarding the Halal warehousing. Halal supply chain has various activities such as sourcing, transport, warehousing, product handling and so on but warehousing activities are crucial since all products must go through this stage [10]. Warehousing activity in Halal services plays a vital role and is also the stage where cross contamination may happen between Halal and non-Halal, since Halal and non-Halal products could not even be stored or move out using the same storage, racks or pallets. It also shows how important Halal warehouse services towards helping to preserve the Halal integrity. Since consuming Halal is an obligation for the Muslims to consume and academic research is highly needed in this area [18], it is very important to have

an information regarding the issues of implementing Halal on Halal warehousing activities especially from the perspectives of Halal warehouse service providers.

A very limited researchers have discussed specifically on Halal warehouse topic. In the present paper, we are attempting to review the issues facing by Halal Warehouse service providers. Since there is lack comprehensive literature on the subject, this research started by referring to the existing research discussed on issues in halal logistics generally. From the issues identified, this researched then examined either halal warehouse operators facing the same problem. Besides revealing the current scenario of the issues faced by Halal Warehouse service provider, the findings from this study also could provide a new insight into it and also will create a new area to be studied in the future for the sake of Halal industries and also Halal warehouse operators involved in this industry.

LITERATURE REVIEW

Halal and Toyyib, both are Arabic terms. According to Department of Islamic Development Malaysia (Jakim) [26], halal means "allowed or permitted by Islamic Law" and not only encompasses food and drink, but all matters of daily life. Toyyiban is defined as highest quality in the halal concept [14], means "good" "not damaged" or "wholesome". Halalan Toyyiban can be described as something that is not only halal, but also good and wholesome. In [7]explain that the expansion of the halal conceptinto a product has now extended to include the movement of the halal products along the supply chain process. This means that the process of producing halal products does not only involves the production processes, but also involves all supply chain activities comprising source of supply, handling, storage, warehousing, manufacturing and transportation activities. Therefore, Halalan-Toyyiban Supply Chain Management can be defined as the management of a halal network with the objective to extend the halal integrity from the source to the point of consumer purchase [19].

There are three characteristics of halal supply chain reported by [4]. Firstly, halal supply chains must be robust in order to minimize the impact of a possible contamination. Secondly, halal supply chains need to be effective in ensuring the integrity at each link in the chain. Thirdly, halal supply chains need to be efficient in order to avoid higher prices for halal food products.Warehousing is a one of the key components of Halal Logistics besides transportation and terminal operations. In logistics, normally goods will be in storage longer than movements and transformation process. Hence, this is an important argument to address the Halal compliance for storage and warehousing. As described by [24], Halal logistics have similar activities with conventional logistics activities. The difference between them is that the traditional warehouse focuses on cost reduction, whereas Halal warehouse concern on to maintain the Halal-ness of Halal product [10]. However, we believe that, as a business organization, a Halal warehouse is also profit-oriented. Therefore, the halal warehouse focus will be on Halal-ness without leave, it behind the cost optimization. This situation becomes challenging to the halal warehouse operations.

The operation process between Halal warehouse and conventional warehouse quite similar and more a less are the same process (receiving, put away, storage, cross-docking, order picking and shipping). The warehouse operation is crucial in ensuring that the customer gets the right product at the right time with the right condition[13]. In order to fulfill customer satisfaction and retention, in [15] emphasize that warehouse providers have to ensure accuracy, quality and timeliness and cost effectiveness of the processes controlled. There are four categories of warehouse costs which are handling, storage, operations administration and general administrative expenses.

In [20, 22] mentioned that proper handling and storage activities are a fundamental role in protecting the Halal integrity for Halal products. Segregation of Halal and non-Halal food products must be highly practiced to avoid cross contamination [12]. In [2] added that the principle of Halal warehouse is to segregate between Halal and non-Halal throughout warehouse processes namely receiving, put away, storage, cross docking, Value Added Logistics (VAL), order picking and shipping. Tools and materials that are used to handle the Halal food products must not be re-used to handle non-Halal food products as it will cause contamination [16]. According to [10], every goods have their own way of conducting Halal products, depends on what characteristic of goods to be stored. Foods such as meat, pharmaceutical products and cosmetics product have their own characteristics. Therefore, it is a need for a different treatment to maintain their Halal integrity in warehouse activities.

A Halal certificate is a guarantee that products or services comply with the Islamic dietary requirements. For Malaysia requirement, a certified halal logistic warehouse provider must fulfill Malaysia Standard MS2400-2:2010 Halalan-Toyyiban Assurance Pipeline (HTAPS)-Management System Requirements for warehousing and related Activities (Part 2). This MS prescribes management system requirements for assurance of the halalan-toyyiban integrity of products, goods and/or cargo during the warehousing and related activities through the entire process from receiving to delivery [27]. There are three principles outlined in HTAPS which are to uphold the halal integrity of goods across the supply chain from farm to fork, avoidance of contamination and ensure consumables are safe for consumption or use [1]. The MS2400-2:2010 outlines the requirements for halal

warehouses include the Shariah requirement adherence in their operation and practices, the responsibility of management and other organizational internal entities, the establishment of warehouse's Halalan-toyyiban management system (procedures, validation and Halalan-Toyyiban risk management plan) and the requirement to provide information and communication systems to support its operations and to interchange information with other service providers. In this research, the requirements of Halal warehouse operation activities and practices are based on this MS2400-2.

In halal warehouse operation, handling activities are very important to ensure the halal integrity of the products is not tempered. Tools and materials must not be re-used to handle non-Halal food products as it will cause contamination [16]. All equipment must be always clean, well maintain and operated accordingly to the Shariah. For storage, to protect Halal integrity in Halal warehouse total physical segregation is required to prevent mixing the Halal with the non Halal products that might allow contamination [21]. The design and layout of the storage location should permit good hygiene practices and can protect the goods against cross-contamination between and during operations. The storage facilities should have adequate maintenance and cleaning program. The product should storage with a good condition, comply with halal principle and product characteristic. Goods compartment must be fully equipped with temperature, humidity and air pressure suit to product characteristic and requirement.

METHODOLOGY

The method used in this paper is started with literature reviews from journal articles, proceedings and conferences, books and online news which are related to the keywords and research area. However, only few researches focused on Halal warehouse and not much paper discussed about the issues faced by the halal warehouse. The study began with a prior reference to the issues that have been identified in the halal logistics and halal supply chain. Since warehousing is one of the components in the logistics. This is because warehousing is part of the logistics activity. Interviews with practitioners from the various warehouse services provider, which apply halal were done to identify and clarify the issues. The interviews were also done by the halal manufacturer to understand the issues from the perspective of halal warehouse's customers. The interview also made with halal manufacturer, which has its own warehouse that linked to its production. Besides, these interviews aimed to find out the issues for a successful implementation of the halalan-toyyiban warehouse. This research was also conducted visits to two warehouses that implement halal. The interviews were done by a key experts who have vast experience in the industry and involve directly in the implementation of halal in their organizations.

FINDINGS AND DISCUSSION

Procedure Less Practical

Certified Halal warehouse in Malaysia is implementing MS2400:2. Compliments to Jakim because Jakim is quite strict and consistent in the policy's implementation. However, from practical aspect, there are few requirements not really practical and should focus into this matter particularly. As for the example given by one of the warehouse service providers, certification is based on the premise (address) which means all warehouse rooms or building under the same premise must implement the halal services. Not same as for the halal transportation requirement which is based on per truck, halal warehouse not qualified for specific dedicated building only.This situation become challenging to the warehouse, especially for crossdocking operation.Crossdocking is the activities to transfer goods from the inbound carrier to outbound carrier, without goods actually entering the warehouse. Renting space out of the warehouse is one of the solution for crossdocking operation of the non-halal goods. However, those incurred high cost (not cost-effectiveness) and not so practical.

Lack the Knowledge and Experts

To support halal warehouse on operation, inspection and supervision, internal knowledgeable and qualified people are needed. Halal warehousing has to be supported by good manpower and resources who not only have robust knowledge in halal, but also in warehouse operation quality and control, product flow systems, cleaning and the proper use of the handling equipment. Furthermore, there is a requirement in the halal warehouse standard for the halal warehouse management to ensure an adequate resources are allocated include appointing a halal committee and provide appropriate provisions to ensure the halal integrity implemented. However, there are lacking of personal knowledge and experts in conducting Halal warehouse in charged. Halal warehousing is considered a green field in halal industry and a halal warehouse expert seems inadequate.

Lack of Use of ICT

Lack of information sharing internally and externally brings a difficulty during warehouse activities. Products information and products activities during logistics is not informed and sharing. For a dedicated halal warehouse, it is very important to determine the halal status of the product before allowing and receiving the products. Without information on halal certification of the products before and during receiving may delay the receiving process of the products until the information received and confirmation made. Halal warehouse should establish the policy and procedures and ensure staffs follow the procedures. All activities must be recorded and the document should be compiled in order. The information should contain all relevant aspectssuch as product identification, loading information, accompanying halal management risk documentation and etc.The information about the products and product activities documentation must be transparent, to be shared, understand and easy to access. Furthermore, foods have a life span and normally the storage is based on FIFO (first-in, first-out) method to ensure that foods are not getting outdated and quality maintained. Therefore, details of the expiry date, batch information and the storage location of the foods are very important to ensure the 'Toyyiban' aspect of the foods being taken care of. Concerning the monitoring Halal integrity of the product is very crucial, it is recommended to use of technology and ICT to improve their activities. However, ICT should not become a threshold for halal warehouses since it may require more cost to implement. Therefore, it would be more important to ensure the quality of procedure and process implementation so that halal-ness objective achieved.

Lack of Management's Commitment

Halal activities are difficult to carry out if the lack of management's commitment such as the budget, marketing, staff development programs requires high commitment and support from the management. Halal warehouse operation requires support from general administrative and management. As for example, the Halal warehouse must ensure equipment, facilities and tools are well maintained and always in a good condition. Therefore, an additional budget may require to purchase additional new and separated tools and this requires approval from the management. Ensuring sufficient qualified resources and constantly improved employees' knowledge and awareness required a high commitment from the management. In Malaysia, warehouse service business was dominated by non-Muslim and profitable become priority in the business. Profitable will be increased with the low cost. The margin should be balanced with the investment. Due to negative perception that halal required higher cost and the owner of the warehouse, especially non-Muslim avoiding implementing halal and give their commitment to achieve halal.

Lack of Staff Awareness

Halal is about trust and responsibility. Therefore, staff awareness, attitude and commitment is required. However, it is not easy to handle peoples attitude. Not all operations staffs able to follow instruction. Non-Muslim staff should learn and knowledgeable about halal concept. The emphasis on the concept of halal, hygiene, safety and instruction of works need to be reminded constantly from time to time so that it can be as a work culture. To ensure awareness and commitment among staff regarding hygiene, sanitation, safety, personal health care and procedure that needs to be followed. It will be more difficult for the non-Muslim and non-local workers. For halal warehouse that provides cold room service as for example, normally will take non-local workers who have body resistance with cold environment. Most of them are not understood English and it will take time to make them fully understand the procedures.

Higher Cost

As a business profit-oriented organizations, financial related matters are very important to the warehouse service providers. Efficiency of halal warehouse is essential in order to ensure costs is minimized, so that will enables affordable price and high accessibility of the halal products.

There are perception that "Halal" may involve large capital expenditure because running separate warehouse facilities, different use of handling equipment and cleaning program will add in more cost. In [15] identified four categories of warehouse cost includes storage, operation administrations and general administrative expenses. All expenses related to product's flow from receiving until loading are considered handling cost. This includes labor, equipment used to handle "halal goods in motion" and also waste/thrash disposal expenses. For halal warehouse activities, extensive training and awareness program is required, that may add in more expenses for the training cost. Handling equipment such as devices, utensils, machines use in the process must be made from halal material, not easy damage and rust, not dangerous (non-toxic) etc. Tools and materials that are used to handle the Halal food products must not be re-used to handle non-Halal food products as it will cause contamination. Providing appropriate equipment is needed. All equipment must be always clean, well maintain and operated accordingly to the Shariah.

Storage expenses are related to the cost of occupying a facility. These costs are normally accumulated each month and storage is expressed as a monthly cost [15]. These costs would be incurred whether or not any product ever moved. The unutilized space of storage due would be considered cost to the warehouse. Therefore, increasing sales by maintaining and getting more customers are very important in supporting the operation costs. The design and layout of the storage location should permit good hygiene practices and can protect the goods against cross-contamination between and during operations. This may require a renovation of the warehouse premise that will also require more expenses.

Lack of Halal Manufacturers Awareness

It is very important to the manufacturers to maintain the Halal integrity in throughout the supply chain as a fundamental effort to prevent consumer fraud regarding Halal quality of the products. The formation of Halal warehouse is to cater this needs. The awareness among Halal manufacturers to use halal supply chain services including warehouse services is important, since is the only approach that could confirm Halal product integrity throughout the supply chain. If there is a lack of intention among Halal manufacturers to adopt Halal supply chain services, that means there is something that hard to be understood since they are the one who create the demand for the services. However, not all of Halal manufacturers are aware of the importance to maintain the Halal integrity by choosing certified Halal warehouse service providers and taking the issue as a serious matter. Since their products already certified as Halal by Jakim, most of the manufacturers are not concerned about how their products are being moved and stored. If Halal manufacturers did not use their services, non of other manufacturers would use it since all of the activities are customized to suit their needs. Besides that, as a customer of halal warehouse, the commitment from them is required to follow procedure and requirement especially during receiving process. Complete information about the company's and product information can help the halal warehouse accelerate the receiving process.

Higher Service Prices

Due to the large capital for investment, the service price charged to the customer is also relatively higher. As mentioned before, since no enforcement for the halal manufacturer to use halal warehouse and lack of awareness among the halal manufacturer to maintain halal integrity of the product by using halal warehouse, it is hard for the halal warehouse to get new or retain existing customers. However, this issue not a problem for establishing halal warehouse that already hasan existing customer from major companies which have high awareness in regards to the halal integrity. Even, the halal criteria itself is the priority and important matters to the customer.

Lack of Halal Retailer Awareness and the Commitment

Beside the manufacturers, retailers as the customer's role is very important. At first, retailers are very close to the consumers and they are intermediate between the consumer and the warehouse service provider. If the retailers aware the importance of halal and implement halal in their operation and activities, retailers can put the clear requirement for manufacturers to use the halal warehouse service and have a proper contract with warehouse service provider to fulfill halal requirement. Indirectly, this will enforce halal manufacturers to use halal warehouse. Unfortunately, there are very few retailers implementing halal and moreover certified with the MS2400:3 (Malaysia halal standard for retailer).

Lack of Consumer Awareness

Even though the awareness concern on consuming halal increasing among the Muslim and non-Muslim, but they only more focus on the ingredients and the product processing. However, there are lack of consumer enlightenment on how the product brought in and storage. Consumer power is very important role to enforce and ensure that the halal warehouse services adopted by halal manufacturers and halal retailers.

CONCLUSION AND RECOMMENDATIONS

The implementation of Halal logistics is still green field, especially for Halal Warehouse. Not many warehouses ready to implement halal principle in their daily activities, also very less manufacturers and suppliers recognized Halal approach as their priorities. The issues identified in this paper will be a threat to the performance of the organization if not properly managed. As a profit-oriented organization, performance normally referred to the cost minimization, profit maximization and customer satisfaction. Large expenses spent without proper planning to fulfill halal requirements may lead to a perspective that the implementation of halal warehouse is not cost-effectiveness. Management may decide to offer a service at higher price in order to gain more margin. Consequently, it will decrease customer satisfaction due to this unreasonable price. Worse yet, if consumers have to pay more unjustified price to get halal food. At the end, more manufacturers reluctant to use halal certified warehouse service and falling of interest towards the implementation of halal within warehouse provider are very much expected.

We believe that the key to the success of the implementation of halal warehouse are the awareness, commitment and support from all the internal and external stakeholders of the warehouses includes management, workers, customers (halal manufacturers and retailers), authorities, Shariah experts/scholar and even the halal consumers. Halal execution in Malaysia based on a voluntary basis, which there is no enforcement for the manufacturers or retailers using halal warehouse services. Therefore, consumer awareness should be increased thru campaign, explanation and full support from 'Alim Ulama' (pious man).

Proper planning must be addressed and any policy or procedures to be implemented should be considered holistically. In Malaysia, as a Muslim majority country, issues related to cost-effectiveness should not be so much critical if the warehouse providers implement a dedicated warehouse. It means the warehouse only accepts Halal products only. By this practice, the control of halal goods done during receiving process. Then, the other processes will be not much critical. The focus will be on the "Toyyiban" aspect. The expenses will be slightly significant during the startup point only and it will be returned gradually along more customers they have gained. Meanwhile, the performance of halal warehouse should be viewed more than just profitability perspective. Apart from the point of measuring profitability, the priority should be also looked at how the achievement of the quality of halal-ness service. Since halal warehouse provides a service not a product, the halal-ness quality needs to be seen in many aspects especially on the commitment and integrity of the management and workers where it is started from the knowledge and awareness. Management should organize related program and creates halalan toyyiban as work culture and work ethic in the company.

This performance of halal-ness quality might be difficult to be measured directly. However, with the high achievement of this quality, it will boost the productivity and create more profit. For Muslims, the benefits will be translated in terms of the 'barakah' (blessed). Halal is about commitment, trust, sincerity and integrity. Therefore, the adoption of halal warehouse should be maintained as a voluntary basis. Awareness among employees should always be emphasized, so that any mistake that can affect the halal quality of the products is not occurring.However, there is a need, a proper procedures and policies that are practical to execute and reasonable in cost without jeopardizing Halal integrity itself. During this term, standard or procedure that already been introduced should be investigated from time to time especially on practical and technical meet in the Shariah-law. The procedure must be updated and construct from all the stakeholders and 'Alim Ulama'

One way that can be introduced is thru halal logo label on the products. Indications that shows either the product have used the halal warehouse service or not is displayed in product code or halal certification reference number. This is easier for consumers to know whether the product using the halal warehouse service or not. However, this matter needs details investigation based on suitability and practicality. ICT usage should strengthen to let the information shared by consumers in an easy way and fast. To summarize, an issue faced by the halal warehouse or the warehouse in implementing halal should well prevented to ensure the industry expandable and not jeopardized the company's reputation.

ACKNOWLEDGEMENT

REFERENCES

1. Latiff, M.A., 2012. Malaysia standards on halal logistics. Retrieved from http://www.hdcglobal.com/upload-web/cms-editor-files/21bc5b40-5eff-40e8-b4ff-5b6a20931fed/file/2_Malaysia%20Standards%20on%20Halal%20Logistics_MARIAM.pdf.
2. Bahrudin, S.S.M., M.I. Illyas and M.I. Desa, 2011. Tracking and Tracing Technology for Halal Product Integrity over the Supply Chain. In the Proceedings of the 2011 International Conference on Electrical Engineering and Informatics, pp: 1-7.
3. Ismail, C.A.C., 2012. Innovations in halal logistics. Retrieved from http://www.hdcglobal.com/upload-web/cms-editor-files/HDC-122/file/Paper6_Azizuddin.pdf.
4. Global Islamic Finance Report, 2013. Global halal industry: An overview. Retrieved from http://www.gifr.net/gifr2013/ch_13.PDF.
5. Global Islamic Finance Report, 2013. The challenges of trading halal food: The logistics and the law. Retrieved from http://www.gifr.net/gifr2013/ch_15.PDF.
6. Tan, M.I.I., R.N. Razali and M.I. Desa, 2012. Factors Influencing ICT Adoption in Halal Transportations: A Case Study of Malaysian Halal Logistics Service Providers. International Journal of Computer Science Issues, 9 (1): 62-71.

7. Jaafar, H.S., I.R. Endut, N. Faisol and E.N. Omar, 2011. Innovation in Logistics Services-Halal Logistics. In the Proceedings of the 2011 16th International Symposium on Logistics, pp: 844-851.
8. Jaafar, H.S., N. Faisol, A.R. Rahman and A. Muhammad, 2014. Halal Logistic vs Halal Suply Chain: A Preliminary Insight. In the Proceedings of the 2014 International Halal Conference, pp: xxx.
9. Kamaruddin, R., H. Iberahim andA. Shabudin, 2012. Willingness to Pay for Halal Logistics: The Lifestyle Choice. Procedia-Social and Behavioral Sciences, 31: 722-729.
10. Karia, N., M.H.A.H. Asaari, N. Mohamad and S. Kamaruddin, 2015. Assessing Halal Logistics Competence: An Islamic-Based and Resource-Based View. In the Proceedings of the 2015 International Conference on Industrial Engineering and Operations Management, pp: 1-6.
11. Ngah, A.H., Y. Zainuddin and R. Thurasamy, 2014. Adoption of Halal Supply Chain among Malaysian Halal Manufacturers: An Exploratory Study. Procedia-Social and Behavioral Sciences, 129: 388-395.
12. Omar, E.N. and H.S. Jaafar, 2011. Halal Supply Chain in the Food Industry-A Conceptual Model. In the Proceedings of the 2011 IEEE Symposium on Business, Engineering and Industrial Applications, pp: 384-389.
13. Omar, E.N., H.S. Jaafar, M.R. Osman and N. Faisol, 2013. Halalan Toyyiban Supply Chain the New Insights in Sustainable Supply Chain Management. In the Proceedings of the 2013 5th International Conference of Logistics and Transport, pp: 5-8.
14. Mian N. Riaz and Muhammad M. Chaudry, 2003. Halal food production. CRC Press.
15. G. Richards, 2011. Warehouse management: A complete guide to improving efficiency and minimizing costs in the modern warehouse. Kogan Page Publisher.
16. Speh, T.W., 2009. Understanding Warehouse Costs and Risks. Ackerman Warehousing Forum, 24 (7): 1-6.
17. Talib, M.S.A., L. Rubin and V.K. Zhengyi, 2013. Qualitative Research on Critical Issues in Halal Logistics. Journal of Emerging Economies and Islamic Research, 1 (2): 1-20.
18. Talib, Z., S. Zailani and Y. Zainuddin, 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.
19. Tarmizi, H.A., N.H. Kamarulzaman, I.A. Latiff and A.A. Rahman, 2014. Factors Behind Third-Party Logistics Providers Readiness Towards Halal Logistics. International Journal of Supply Chain Management,3 (2): 53-62.
20. Tieman, M., 2013. Establishing the Principles in Halal Logistics. International Journal of Computer Science Issues, 1 (1): 1-13.
21. Tieman, M., 2012. Principles in Halal Supply Chain Management. Journal of Islamic Marketing, 3 (3): 217-243.
22. Tieman, M., 2006. From Halal to Haram. Halal Journal,November-December.
23. Zailani, S., Z. Arrifin, N.A. Wahid, R. Othman and Y. Fernando, 2010. Halal Traceability and Halal Tracking Systems in Strengthening Halal Food Supply Chain for Food Industry in Malaysia (A Review). Journal of Food Technology, 8 (3): 74-81.
24. Zulfakar, M.H., M.M. Anuar and M.S.A. Talib, 2014. Conceptual Framework on Halal Food Supply Chain Integrity Enhancement. Procedia-Social and Behavioral Sciences, 121: 58-67.
25. PewResearchCenter, 2015.Muslim population by country: Overview. Retrieved from http://www.globalreligiousfutures.org/religions/muslims.
26. JAKIM, 2016.Main. Retrieved from http://www.halal.gov.my/v4/index.php/my/.
27. Halal Industry Development Corporation, 2013. Halal standards. Retrieved from http://www.hdcglobal.com/publisher/gw_halal_standards.