A STUDY ON HALAL TRANSPORTATION UPRIGHTNESS IN KONTENA NASIONAL, JOHOR

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Abstract
The increasing in volume of international trade using containerization lead to the fast growth of usage of containers in Malaysia. With the rapid activities of import and export, there might be a risk of contamination during the process of movement and transportation of the goods to the end destination. The objectives of this study is to determine the factors that influence Halal transportation awareness and operational uprightness in Kontena Nasional Johor and to further investigate the importance of protecting their Halal uprightness in transportation industry. The interview method of qualitative is used by the researchers in collecting the data. The study was conducted in Johor area where the Kontena Nasional Halal services takes place. This research is motivated by the lack of standardization of Halal food transportation and delivery which lead to excessive confusion and issues among customers and Halal retailers. Hence, it is hoped that this study will able to raise awareness on the importance for the LSP to have Halal certificates in transporting the cargoes since the halal certificate is compulsory and comply to the guidelines that provided by the JAKIM.

Keywords-- Containerization, Halal Transportation, Kontena Nasional, JAKIM

INTRODUCTION

A. Introduction
This study investigates the Malaysian logistics industry in response to the halal logistics services for two purposes. First, it is essential to further explore into the customers’ behaviors in response to Malaysia logistics industry which is rapidly growing at the average rate of 12% per year. Second, it is vital to examine the socio-economic factor that contributes to the increasing of awareness for benefits and reasons of halal logistics among Malaysian, with consideration to the government efforts to establish Malaysia as a halal hub for East Asian region and global halal industry. Thus, Halal traceability and tracking system is essential in strengthening the Halal food supply chain for food industry worldwide.

B. Background of Study
Despite the fact that the issue of halal uprightness has been underlined in the current halal industry distributions, the variables influencing the uprightness of halal food flexibly affix yet to be talked about in the present distribution. This paper talks about the variables, for example, distinguishing proof of halal, material dealing with the detail of halal flexible chain and quality assurance in improving the uprightness of halal food gracefully chain in the present food exchange situation. It is trusted that this paper will make and further bring issues to light just as will give a superior comprehension of the significance of ensuring the halal uprightness of the food item.

C. Problem Statement
Lack of proper management in managing the halal logistic supply chain further raise consumer’s hesitation to buy the halal food product as there are issues of cross contamination during the delivery of halal product. Additionally, there are also cases of certain industries imitate the halal logos issued by JAKIM due to their failure to comply the halal authorities guidelines outlined by the JAKIM.

D. Research Objectives
a) To investigate factors that influence the halal transportation awareness and operational uprightness in the Kontena Nasional, Johor.

b) To identify the importance of protecting the halal uprightness in transportation industry.

E. Research Questions
a) What are the factors that influence the halal transportation awareness and operational uprightness in the Kontena Nasional, Johor?

b) What are the importance of protecting the halal uprightness in the transportation industry?

F. Scope of Study
The scope of this study is basically focused on halal transportation uprightness in Kontena Nasional, Johor. This study is specifically focused on the top management of Kontena Nasional responses on the factors in enhancing the uprightness of halal transportation and the importance of protecting halal uprightness in transportation industry.

G. Limitation of Study
a) First limitation, the respondents are mainly among logistics players and may result into business aspects. Therefore, future study should include views from government agencies, Halal authorities, product manufacturers, and consumers to yield greater findings.

b) Second limitation of this study is in term of time constraint. This study needs to be done in one semester which is the researcher has limited time to conduct the research. The researcher is having difficulties to interview the company since time is very limited.
LITERATURE REVIEW

1. Halal

Halal in Islam means legal or permitted. Halal can be defined as permitted and upon which there is no restriction exists and the doings of which Allah has allowed. Halal food supply chain applies the same principles as conventional supply chain with special exception on the type of products that are being handled. Halal food supply chain involves the process of planning, implementing and controlling the efficient flow and storage of Halal certified product from source to demand point. It can also be referred to the process of managing the procurement, movement, storage and handling food products through the organization and the supply chain in compliance with the general principles of Sharia law.

Halal logistics requires (as some other logistical model) for key performance indicators (KPI) that must be checked. More checkpoints could be required, to guarantee that everything goes as indicated by a halal standard. For example tracking and tracing could be of extraordinary help (Tieman, 2009).

2. Transportation

Transportation Coyle et al. (2011) defined transportation activities as the movement of goods from the starting point to the described destination that includes time and place utilities, that is, in the context of logistics activities, the movement of goods from the manufacturers until it reaches the customers. The relationships between good transportation system in logistics and supply chain management are interconnected and create not only the efficient and effective logistics system but also can cut down operation costs and upgrade the service quality for overall logistics performance (Tseng et al., 2005).

In short, LSP sits in the center between the manufacturer/providers and the end-user/customers. The greater part of the food manufacturers in Malaysia is that they have their own particular committed transportation in doing supply chain and are very little in presence (Zulfakar, M. H., Anuar, M. M., and Ab Talib, M. S., 2014). This is because of these food producers are normally outsource their logistics activities to the logistics service provider (LSP) or third-party logistics (3PL) services considering the minimal effort activities it brings.

As indicated by Zulfakar, M. H., Anuar, M. M., and Ab Talib, M. S. (2014), there are only a few of LSP in Malaysia that have their own devoted transportation officially guarantee Halal transportation and logistics services to their customers. They are Kontena Nasional Berhad (KN), MISC Integrated Logistics, Century Logistics and the most recent is Nippon Express.

3. Uprightness

Uprightness, as being defined in the Webster's New World 3rd Edition, means the quality or state of being complete; entirety, perfect; and wholeness. In this context, Halal uprightness means that the product remains Halal from the upstream to downstream supply chain, free from any activities that might breached the Halal status, intentionally or unintentionally. The foundation of successful Halal industry, regardless of what type of halal products, is the Halal uprightness. Without Halal uprightness, there is no Halal market, no Halal industry. Ensuring Halal uprightness is the biggest challenge in the Halal industry. Halal uprightness offers reassurance to those of Muslim faith and creates further demand for quality Halal products.

Along these lines, it is a major challenge for every one of the parties required to guarantee the uprightness of the halal product is in place all through the entire supply chain”. Talib et al. (2013) asserted variables hindering halal logistics selection were because of: absence of government support, cooperation issues among logistics service providers, absence of learning on halal issues, for example, proper cleanliness of transport and containers in accordance with Syariah law, and the view of extra and increment in operation costs. Zulfakar et al (2014) proposed seven recognized elements influencing halal uprightness as: 1) halal certification; 2) halal standard; 3) halal traceability; 4) halal dedication assets; 5) trust among supply chain members; 6) responsibility of supply chain members; and 7) the role of government. Nonetheless, each one of these investigations do not address contamination and sources of contamination that influence halal respectability (Mohd Shariff and Ahmad, 2015).

Kontena Nasional Background

Kontena Nasional Berhad (KNB) is Malaysia’s premier and largest logistics company with 40 years of experience in logistics operations with extensive network of agents and international presence in Asia, Europe, America and Australia.

The Factor Influence Halal Transportation Uprightness

It is a major challenge for every party to guarantee the uprightness of the halal product is in place all through the entire supply chain”. Talib et al. (2013) asserted variables that hinder halal logistics selection namely: absence of government support, cooperation issues among logistics service providers, absence of learning on halal issues, for example, proper cleanliness of transport and containers in accordance with Syariah law, and the view of extra and increment in operation costs. Zulfakar et al (2014) proposed seven recognized elements influencing halal uprightness namely: 1) halal certification; 2) halal standard; 3) halal traceability; 4) halal dedication assets; 5) trust among supply chain members; 6) responsibility of supply chain members; and 7) the role of government. Nonetheless, each one of these investigations do not address contamination and sources of contamination that influence halal respectability (Mohd Shariff and Ahmad, 2015).
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**Halal Identification**

Halal food purchasers, as other general food purchasers, started to demand more data with respect to the item they purchase. They are not simply motivated by the availability and the food item choice, they are now requesting for more data, for example, the exercises that happen along the flexibly chain, confirmation on food prosperity and quality, creature government assistance practices and extraordinary condition the board (Department of Agriculture 2000; Schulze, Spiller and Theuvsen 2006).

Current literary works (Norman, Nasir and Azmi 2008; Norman et al. 2009; Mohd Albakir and Mohd-Mokhtar 2011; Yang and Bao 2011) are in conclusion that each present instruments to follow the Halal status are conflicting, nonappearance of security, not ongoing premise and set aside longer effort to race.

Therefore, it is suggested that existing innovation, for example, Radio Frequency Identification Device (RFID), scanner tag and Internet can be utilized and controlled to build up a solid device for Halal traceability.

**Quality Guarantee**

Nik Muhammad (2009) proposed that Halal affirmation framework, which incorporates Halal certification from applicable specialist body is fundamental in supporting the coordination between supply chain member. For this investigation, affirmation framework can be isolated into two segments which are Halal standard and Halal certification. One of the purposes is to guarantee certainty among Muslim consumers when buying Halal food product is to have the product halal-certified. Next to the Halal traceability system, Halal certification is the sole recognizing imprint or record that tells the products has met the essential Islamic dietary prerequisites, or has been demonstrated Halal by certifying agency.

Muslim buyers effectively look for product with Halal certification, not only during their groceries purchasing activities, as well as when they eat at any eating spot, for example, eateries and takeaway outlets. By showing the Halal certificate or logo, it will further increase the confidence of Muslim consumers with the end products quality which are in accordance with the Sharia law.

**Halal Certification**

Halal-confirmed item is the major clarification for Muslim buyers to purchase Halal food items for ordinary usage. This is a result of the Halal confirmed items bestow the sentiment of sureness and expect that the food item that they purchased go along to Sharia Law. Moreover, as showed by Abdul (2008) and Riaz (2004), Halal accreditation, for instance, Halal logo or testament of consistence, gave by dependable and approved association, exhibits that the item has enough met Islamic dietary.

What’s more, Halal accreditation is in like manner associated for eating outlet, cafés or bistros, as Muslims will look for Halal ensured spots to eat. It shows that Halal affirmation applies to buy goods and eats just as it applies to food specialist co-op moreover. The Muslims will promptly be consoled with no vulnerability that food item has been set up as per Sharia law when the Halal logo or supports is set apart on an item or appeared at any eating premises. As per this, Riaz (2004) focused on that Halal logo or announcements must be affirmed and given by a dependable Islamic affiliation to keep from any coercion, phony and misdirecting logo or supports.

**Halal Standards**

In spite of the way that there is a rising enthusiasm for Halal food items completely, Halal industry is yet feeble in systematized Halal norm, subsequently causing a moderate mechanical improvement as indicated by Wan Hassan (2007). Muslim countries have their own specific gauges and decides that every Halal player need to consider. In addition, some Muslim and non-Muslim countries have diverse Halal specialists or office and lead to different Halal standard confirmation and endorsement that would cause flawed Halal affirmation.

**Halal Material Handling Specificity**

The ideal choice to make sure about Halal uprightness in dissemination methodology of graceful chain especially is by maintaining a strategic distance from mixing the Halal with the non Halal item. Absolute physical confinement of which the Halal item will be put away in another extra space whether in the dissemination community, travel place or in the transportation units. Khan (2009), Lodhi (2009) and Talib (2010) underscored that adequate and appropriate hardware to manage, store and transport Halal food item will help secure the decency of the food items as the food items are disengaged from other potential non-Halal segments that may cross debased it.

**Halal in Islam**

Muslims around the world are demanding for halal food as part of their eating routine. Halal refers to Islamic rule that in line with shariah law and is said in The Holy Quran. Shariah is the set of accepted rules or the lifestyle for all Muslims to follow and applies for each action including eating. Halal is characterized as allowed, permissible and legitimate.

The inverse of Halal is Haram (non-Halal) which implies illegal and unlawful, with regards to Islamic law. Halal is ordinarily connected with food product however it is more than just concerning about food. Halal includes makeup products, pharmaceuticals products, services such as banking and finance and tourism. Each Muslim must adhere to the Islamic standards and each product and services must not include the utilization of non-Halal fixings (remains, blood, substance of the swine, and so forth.), controlling the environment and labor, and not destructive or expected for unsafe utilize.

**Halal Logistics Industry in Malaysia**

At present in Malaysia, there are 31 logistics company that have been certified as Halal Logistics Companies by The Department of Islamic Development of Malaysia (JAKIM) and MS2400:2010 by standard (Halal Development Corporation, 2015). The primary component of administrations offered by the halal logistic service provider are the isolation of halal and non halal food or risky material amid the transportation and storage. The isolation procedure is vital to decrease the risk of cross contamination of the halal food products with non halal products.

The standard of MS2400:2010 of Halal Logistics will give confirmation that the food products are delivered starting with
one caretaker then onto the next are in accordance to Sharia’ rules and regulations. Halal food producers and logistics companies need to comply with the policy as a major aspect of their daily operating and company audit. The rules in the policy give an interrelated standard in term of handling, transportation, storage and specific emphasis on compliance control. Thus, the genuineness of halal food products isn’t just halal at the assembling procedure and bundling yet it must be confirmed halal along the supply chain until the purpose of just utilization.

Traditionally, or before the growing awareness of Muslims toward the Halal status and before the surging demand for Halal products, most of logistics service providers did not segregate the product between Halal and Non Halal. This is simply due to achieve economies of scale in their operations cost dedicated infrastructures such as transportation fleet, warehouses and storage places, handling equipment will avoid the possibility of Halal products are being mixed with non-Halal products, avoid unnecessary human mistake and ensure operations are consistent with the expectations of the Muslim consumers.

Quality guarantee
Nik Muhammad (2009) suggested that Halal assurance system which includes Halal certification from relevant authority body is essential in supporting the integration between supply chain members. For this study, assurance system can be divided into two components which are Halal standard and Halal certification. One of the mean to ensure confidence among Muslim buyers when purchasing Halal food products is to have the product halal-certified.

Presently, there are no standardized Halal standards in the world. Every country has its own Halal standards that need to be followed by the Halal players in that particular country. Some countries, especially non-Muslim countries even have multiple Halal standards due to existence of various Halal authorities. This has led to confusion, misunderstanding and even abuse in the Halal audit and certification process.

RESEARCH DESIGN
The type of research design used for this research is qualitative research design. The main reason in conducting qualitative research design is to determine the relationship between independent and dependent variables by conducting interview with the chosen company.

Sources of Data
Data source is the collection of data that collected by the researcher in order to complete the research which consisted of both primary and secondary data. Both primary data and secondary data are essential in order to have a valid support of data collection for this study. The followings are the explanation of the primary and secondary data that were used in this study.

Primary Data
Interview
The researcher was using survey interview method for the primary data. A set of interview questions were outlined for the interview session with the Kontena Nasional Company. The interviews questions were basically based on the research questions of this study. The result obtained were transcribed, categorized according to themes and qualitatively analyzed.
Secondary Data
Secondary data is an information that gathered using journals, articles and other sources that obtained from past researchers' works that are pertaining to halal transportation and logistics issues. The secondary data was cited to further support the analysis, findings and discussion of this study.

Following is the summary details of data source; both primary and secondary data used for this study:

Table 1. Interview Plan

<table>
<thead>
<tr>
<th>Organization</th>
<th>Position</th>
<th>Respondent Name</th>
<th>Date and Place</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kontena Nasional</td>
<td>Head of Johor Branch</td>
<td>Mazlan bin Md. Zahid</td>
<td>20/9/2018 Meeting room</td>
</tr>
<tr>
<td>Kontena Nasional</td>
<td>Senior Executive</td>
<td>Asfandi bin Kassan</td>
<td>9/10/2018 Call interview</td>
</tr>
<tr>
<td>Kontena Nasional</td>
<td>Senior Executive</td>
<td>Hamdan bin Husin</td>
<td>12/10/2018 Call interview</td>
</tr>
</tbody>
</table>

Sample Size
KNB is Malaysia’s first JAKIM halal certified logistics provider offering a full range of halal logistics services including halal transportation, halal warehousing and samak services for containers. By conducting an interview with Kontena Nasional Berhad, researcher can explore the Kontena Nasional Berhad experience on their principle, ways and method that they utilize in their operation.

Themes for Interview
For data collection for this study, researcher decided to use interview method with Kontena Nasional Berhad as this already well established and recognized in the industry. The main themes for the interview are as follows:

Table 2. Interview Themes

<table>
<thead>
<tr>
<th>No</th>
<th>Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The Halal transportation awareness and operational uprightness.</td>
</tr>
<tr>
<td>2</td>
<td>Importance of protecting the halal uprightness</td>
</tr>
</tbody>
</table>

All the themes above were adopted during the interview question design. During the interview session researcher, ask the question to respondents based on the themes above. The themes above are aligned with research questions of this study.

Interview Questions Based On Objectives
The following is the table of interview question related to the research questions of this study.

Table 3. Interview Summary

<table>
<thead>
<tr>
<th>No</th>
<th>Objective</th>
<th>Question number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>To investigate the factor that influence the halal transportation awareness and operational uprightness in the Kontena Nasional, Johor.</td>
<td>1, 2, 3, 4, 5, 6, 8, 9, 10, 11, 12</td>
</tr>
<tr>
<td>2</td>
<td>To identify the important of the protecting the halal uprightness in the transportation industry.</td>
<td>7, 13, 14, 15, 16, 17, 18, 19, 20</td>
</tr>
<tr>
<td></td>
<td>Total question</td>
<td>20</td>
</tr>
</tbody>
</table>

For this study, the respondents that were chosen for the interview is based on their expertise and knowledge on the research area. Rubin and Rubin (1995) emphasized that for the selection of the respondents for the interview session, researcher should opt for individuals who are knowledgeable about the subject of the interview, who are open to talking, and who represent range of perspectives.

Selection of the new interviewees should continue, if possible at least until the saturation point is reached. The process of data analysis involves making out of collected textual data. It involved preparing data for analysis, conducting different analysis, moving deeper and deeper into understanding the data, representing the data and making interpretation of the large meaning of the data (Creswell, 2009).

Procedures to Conduct Interview
Halim, 2010 had outlined four (4) stages of interview procedure. The first stage involves researcher to identify the credible individual or organization who is expert in the area. Second stage is involving a preparation to design the interview question. The third stage involves interview session and the last stage is analyzing the data into meaningful information.
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RESEARCH METHODOLOGY

Interview Appointment

In order to gain a reliable and up to date data, three (3) respondents were selected for the interview session. The respondents’ details, venue, data and time of the interview session are as follows;

<table>
<thead>
<tr>
<th>Responde nt name</th>
<th>Designati on</th>
<th>Organizati on</th>
<th>Venue</th>
<th>Date and time</th>
</tr>
</thead>
<tbody>
<tr>
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<td>Hamdan bin Husin</td>
<td>Senior Executive</td>
<td>Kontena Nasional</td>
<td>Interview call</td>
<td>12/10/2018</td>
</tr>
</tbody>
</table>

Data Analysis of Interview

Interview was conducted with top management of Kontena Nasional, Johor. Kontena Nasional Berhad is Malaysia’s first JAKIM halal certified logistics provider offering a full range of halal logistics services. The interview is to identify the factors in enhancing operational uprightness of halal transportation and the importance of protecting the halal uprightness in the Kontena Nasional, Johor.

Coding Interview Transcript

The method used to code the interview transcript in order to get the result from interviewing the company. The theme and description is presented in a table form. Which the evidence from the top management were compiled based on the theme.

The evidence column contains the coding structure that provides the descriptive evidence that support the theme of the research. The structure of the coding is as follows:

\[ T \times P \times L \]

Where:
\[ T \] = Transcription Module each operator
\[ P \] = Page
\[ L \] = Line

Figure 4.1 shows the evidence of Halal transportation Flow among Logistics Service Provider that highlight the comparison between conventional flow and Halal compliance; which the current practice in conventional flow is follow the normal procedure and the Halal perspective will be conducted based on customer requirement only. The Halal procedure is emphasizing more on the container hygiene.

In current practice for conventional flow of containerization, it is normal procedure of the mixing of goods especially in Less Container Load (LCL) because of the cost. LCL concept is not practice for specific goods in one container, because it involves the space. It will lead the mixing of goods in a container. For Halal compliant is more emphasized on the hygiene in container to avoid pollution and health problems.

Conventional Current Practice

Conventional flows starts from port of consumption, import goods from other countries to port in Malaysia. The laden of container goods discharging activities monitor by port authority, and container discharge to trailer. In the port area, once container discharge, it is the responsible of shipping liner during the trip and proceed move to warehouse for unload and unstuffing activities. In warehouse area, container is normally cleaned before proceed to load into trailer, but if any requirement from customer to do the ‘Samak’ process, shipping liner will act to proceed with Samak. If there is no requirement from customer, it will proceed for the usual next procedure as they assume that the container is pure and hygiene. Next, the empty container will move to the port by transporter to load the new items.

Halal Compliant

In Halal compliant flow starts from port of consumption, during the laden container discharging, shipping liner has identified the goods that have been brought. If the goods are non-halal such as alcoholic goods or pork, they will not accept. If shipping liner has identified that goods free from non-halal, the procedure will continue to move the container to warehouse by transporter. Arriving at the warehouse, unloading activities will be done and will proceed with the cleaning process. Although the shipping
Before the transportation operator of halal LSP will inspect the cargoes to make sure that cargoes is halal. When the operator satisfied with the condition of cargoes, the container that are used to transport that cargoes will be pasted with halal logo. The halal of product from origin until arrive at destination must be maintained to ensure that the customers do not hesitate to use the product.

Uprightness
Uprightness, as being defined in the Webster’s New World 3rd Edition, means the quality or state of being complete; entirety, perfect; and wholeness. In this context, Halal uprightness means that the product remain Halal from the upstream to downstream supply chain, free from any activities that might be breached the Halal status, intentionally or unintentionally. To maintain the uprightness of the cargoes that Kontena Nasional are handling, KN must be complied with rules and regulations set by JAKIM. Other than that, KN also provides training to their worker to ensure their worker can perform their task accordingly and adhere to the guidelines and requirement set by JAKIM.

Recommendation and Suggestion for Future Study
In Malaysia, the majority of citizen is Muslim. The halal product is essentially important and crucial in their daily life and the aspect of life that they need to comply. Therefore, it is recommended that all LSPs must have the Halal certificate from JAKIM for transporting the cargoes. This is to ensure and increase the consumer’s confidence in using the product. Additionally, it is recommended for the LSP to and not to breach the rules and regulations that have been outlined by the JAKIM in order to ensure the high quality and cleanliness of the end product plus to avoid any contamination.

REFERENCES
pers/618002/Stakeholders_Role_for_an_Efficient_Traceability_System_in_Halal_Industry_Supply_Chain>.


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