

THE DEVELOPMENT OF HALAL LOGISTICS WAREHOUSE: A STUDY AT MASKARGO SDN BHD

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Abstract

Halal logistics plays a vital role of transporting and distributing perishable commodities, raw materials, and food products without contaminating them. It is critical to guarantee that product information is not overlooked and that Muslim consumers only purchase and consume Halalan Toyyan products. By having a well-planned logistics company, they can ensure that Halal freight in the warehousing service is physically isolated from non-halal freight. Hence, the purpose of this research is to review the development of halal logistics implementation in MASKargo, KLIA. Generally, this study was conducted to identify the halal product arrangement procedure at warehouse of halal and non-halal product simultaneously to determine appropriate requirement according to halal standard operating procedure and to examine specific labelling in halal standard operating procedure. The researcher used a qualitative method to obtain data which are interview questions consisting of the feedback of Maskargo Sdn Bhd employees. The result of the study shows that MASKargo company have established dedicated handling and storage area for halal shipment within the cargo terminal. Other than that, the development of halal logistics consists of dedicated Halal zone, labelling, segregation and the most important part is continuing to bring awareness and training to operators. In essence, the researcher hopes that the final result of this research can help future research and academicians to implement several improvements and changes regarding this research topic.

Keywords: Halal logistics, halal storage, halal warehouse, certification

1.0 INTRODUCTION

Traditionally, logistics has originated from the word physical delivery. The objective of logistics management is to maintain consumer loyalty by ensuring that goods or services are made accessible at the right price, in the right quantities, with the right condition and in right quality. In Malaysia, Muslim customers look for a halal label in respect of goods approved by a religious authority in Malaysia before purchasing merchandise. Thus, through building Halal warehouse, MASKargo will achieve comparative edge through taking this opportunity in their own business as the fast growing global logistics provider is generating demand for a logistics infrastructure that is capable of maintaining product integrity right to the point of

consumption. The company should ensure that Halal freight in the warehousing service is physically isolated from non-Halal freight. Moreover, the combination of Halal and Haram products will have an effect on the assurance of Halal products and the desires of Muslim markets. The Halal logo printed on the beef packaging was called into question when the non-halal meat (pork) was claimed to be packaged and branded Halal. The result of this study that has been conducted by the researcher are expected to be used by the company and functional to improve the company's performance simultaneously increase the customer relationship with the company itself.

2.0 LITERATURE REVIEW

2.1 THE GROWTH OF LOGISTICS INDUSTRY

The Halal industry is an emerging field in the logistics and supply chain sectors, and not many articles have been published about it. As there is a lack of literature review on this topic, researchers use papers on other areas related to independent and dependent variables to be analysed as a literature review. The goal of this literature review is therefore to discuss the relevant technical, organizational and environmental structures as exogenous constructions and the implementation of the Halal principle in the logistics industry (Yuserrie Zainuddin et al, 2014). There are four main elements that needed to be highlighted to emphasize the application of halal in logistic field.

2.1.1 Halal Storage and Transportation

Storage is a one of the key components of Halal Logistics besides transportation and warehouse operation. 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 [1] 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 as stated by [2]. However, we believe that, as a business organization, a Halal warehouse is also profit-oriented. Therefore, the halal warehouse focus will be on storing its Halal-ness goods without leaving it behind the cost of optimization. This situation becomes challenging to the halal warehouse operations as the operation process between a Halal warehouse and a conventional warehouse quite similar and more less are the same process as receiving, put away, storage, cross-docking, order picking and shipping.

According to [3] stated that monitoring of Halal performance controls in transport operations and movements by any mode of transport shall comply with the principle of Shariah among the elements of 'Halal' regulation in logistic operations. There is a risk of Halal and Non-Halal cross-contamination during transportation activities. Sharing of containers, low visibility of the inventory in which containers are in transit, the history of immediate manufacturers, the history of immediate operation and the distribution of space in the same containers between Halal and non-Halal goods increased the risk that the credibility of Halal will be compromised. According to [3] said that in the warehousing and transport operations, the halal storage should be permanently and regularly separated in compliance with the Shariah law, where the halal and non-halal products are particularly halal and for the purpose of preventing contamination.

2.1.2 Halal Facilities Segregation

According to [4] stated that one part of the Halal supply chain is the Halal warehouse where the essential segregation of Halal goods from non-Halal products is a must. Hence, the term of "halal warehousing" refers to the degree of customization and segregation in the warehouse by the realization of the determination and willingness to put only halal products in the warehouse. A strict halal segregation policy for warehouse is committed to the halal zone, pallet, carton box, shelf and racks. For example, the specified warehouse shall have a dedicated halal zone, which is a halal storage area in the warehouse for halal products only [5]. This strict halal warehousing would improve halal-based logistics products performance through service customization and service versatility, ensuring that halal warehousing and related operations using special ULD pallet have a positive impact on the company's results.

2.1.3 Halal Certification and Labelling Process

The Halal logo can be seen on food packaging and has been doubted as there are reports that non-Halal meat is wrapped and branded Halal [6]. However, in Malaysia, Muslim customers are researching for a certified halal logo in prior to purchase items, which indicates goods certified by the religious authority in Malaysia. Department of Islamic Development Malaysia (JAKIM) is an authoritative body of halal assurance that is responsible for halal certification in Malaysia. Every halal products stakeholder should be concerned about a number of issues relating to halal label (logo) and certification. To keep the product safe and presentable, packaging material and containers are required. As stated by [7] packaging for halal food must not be made of non-halal materials, and if it is made of animal-derived raw materials, its halal status is in doubt. Furthermore, many halal product consumers have been duped by the use of invalid halal logos issued by individual companies and the adoption of misleading brand names such as Arabic-sounding or containing Islamic-signature. In a nutshell, the Halal Certification and Labelling Process is a critical practice in maintaining halal integrity throughout the Halal Supply Chain's operations.

2.2 CONCEPTUAL FRAMEWORK

Conceptual framework is used in the research to outline possible action and dependent variables that influence the independent variable. Researcher has done several literature reviews on past existed study relate to this topic and present an approach to researcher's idea or thought that might be suitable for this study in this research framework. The research framework of this research is shown in figure 1.0 and describes the theory that explains why the research problem under this study exists and variables element that can solve it.

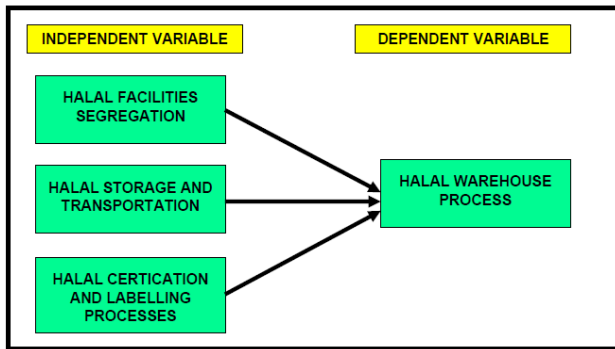


Figure 1.0 Conceptual Framework (Adapted from Adam Mohd Saifuddin (2018), Zailani et al (2017))

3.0 METHODOLOGY

3.1 METHODS OF DATA COLLECTION

The information can be captured through several types of methods which are primary and secondary data for data collection method. Primary data is a type of data gathered directly from the key sources by researchers through interviews, observation, experiments and others. While in secondary data will have method such as journals, articles, and internet. The interview was utilized to confirm the findings from the observations as well. Three respondents were involved in the interview. Several questions were prepared after consultation with the experts in the parts. Observation is another method of data collection for the research. In this study, observation is used for the purpose of obtaining the information about how effectiveness of material handling can give effect in the operation of warehouse among selected respondents.

3.1.1 Primary Data

Primary data are known as original data and gathered the knowledge from experienced workers in the research field (Institute for Work and Health, 2015, and Ajayi, O.V. 2017). The source of primary data is from interview, surveys, questionnaire, and surveys. Primary data help the researcher to gather the data and increase the understanding.

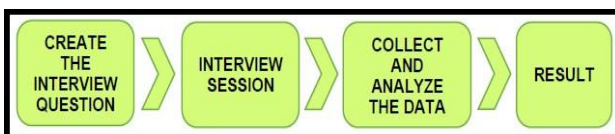


Figure 2.0 data collection process

3.1.2 Procedure to conduct Interviews

The interview is known as a comprehensive source of data. There are few techniques to conduct the meeting, such as voice-to-voice, screen-to-screen, and face-to-face. The question structured focusing on the observation. According to Saunders, B. et al. (2017), the interview question needs to be clear and understandable to get a useful study.

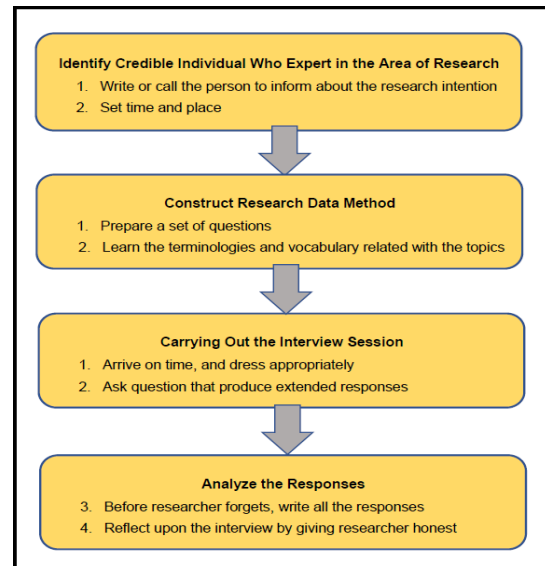


Figure 3.0 Procedure to Conduct Interview

3.1.3 Secondary Data

For other purposes, secondary data are obtained. Secondary data are already accessible data obtained earlier by research organizations. Secondary sources indicate data collected earlier by someone else. Secondary data also information comprises data obtained by a party not connected to the operation but obtained for some other purpose and at certain times in the past. If this data is used by the researcher, it is secondary data for the current users. Secondary data sources include websites, newspapers, books, newspaper articles and internal documents.

4.0 RESULT AND DISCUSSION

4.1 INTERVIEW DETAILS

For this method, the researcher has used interview to collect data from the respondents. During the interview session, the researcher has interviewed the person in-charged in MASKargo Sdn Bhd. The objectives of this interview are to identify the implementation of halal logistics that used in the company. The researcher has collected the needed information by conducting three different interview sessions with three respondents for this research.

4.2 Explanation of the Summary of Findings

Table 1-0 Explanation of The Summary of Findings

NO	Research Objective	Research Question	Findings
1	To Identify the halal product arrangement procedure at warehouse of halal and non-halal product	What are the differences between handling a normal & Halal products cargo in MASKargo?	The researcher able to distinguish the halal product arrangement procedure at warehouse of halal and non-halal product. The process of cargo come in and out can be identify in this interview session.
2	To determine appropriate requirement according to halal standard operating procedure	How MASKargo manage the Halal process?	The respondent is familiar with the process of halal logistics. This shows that, the respondent aware about halal logistics of appropriate requirement according to halal standard operating procedure.
3	To determine specific labelling in halal standard operating procedure	What are the challenges in implementing specific labelling in halal standard operating procedure in MASKargo	The respondent able to recognizes challenges in implementing halal logistics standard operating procedure because the company perform the entire supply chain management in ensuring specific labelling is compulsory.

4.3 DISCUSSION OF FINDINGS

The researcher will discuss and clarify the data collection obtained from the previous interview session with respective respondents based on four themes. The details of the discussion of findings will be explained below.

4.3.1 Theme 1: Halal Facilities Segregation

The MASKargo company operates based on customer's demand. When customers request for shipment especially on halal shipment which they only handle by perishable unit and by only one center that accepts halal products. The involvement of MASKargo company in Halal logistics is due to current global market demand. All sorts of commodities can be transported on airfreight. The halal product is not allowed to mix with other shipments either in storage, trucks or inside ULD. Furthermore, daily checks will be done during acceptance and during storage.

However, the biggest challenge so far is to handle small quantity where they need to avoid with other cargo as the respondent need segregation due to space problem. They also need to avoid maximum or minimum requirement on the services which makes it more difficult to handle using current warehouse system on the storage and also the cargo. But with years has passed, the respondent has stated that they now have a dedicated lot for halal storage meaning that there are other cargoes which the respondent does not handle for example non halal cargoes that have no halal certificate will not be put in the halal dedicated area to prove that there are terms of segregation.

They also provide gateway service to all customers and before the shipment come into the halal section in the warehouse area, the respondent has to

undergo verification first. If the customer uses an agent as an intermediary to handle the cargo, and the agent doesn't want to use halal service need to use normal shipment. Mr. Zulkefly has stated that for Halal cargo the handling must be in compliance with the MHMS requirement as the halal service is only providing for those customers who requested to undergo halal supply chain process in the warehouse. This halal process mustn't be force even though it is originally a halal shipment but doesn't want to go through halal process.

Other than that, based on the Mr. Fairuz explanation, it can be seen that the company have implemented great strategies to ensure the efficiency of halal logistics shipment in MASKargo that the company handle using the dedicated center that handle perishable shipment. Mrs. Siti Zainon have stated that all the Halal shipment is plan from the manufacturer and will be handled by dedicated and staff at specific Halal Zone in MASKargo warehouse. There's a reason that the respondent put their service in this unit so that the types of commodities that they handle for halal is meats, cosmetics, pharma and beverages as an instance can be ships to the customer faster, more secure and most important of all is the halal and non halal shipment are segregated safely in ensuring the integrity of halal is not taken lightly by the staff in MASKargo.

4.3.2 Theme 2: Halal storage and transportation

MASKargo Sdn Bhd decide to improve halal based logistics products performance through service customization and service versatility in ensuring that halal warehousing and related operation would have a positive impact on the company results. Halal logistics service have organized and implement a coordinated flow and storage of halal product such as raw material must be served under appropriate requirement of halal standard operating procedure recognized by food supply chain guidelines. They need to play a crucial role to ensure they don't lose its halal status quickly if contaminated prior to retailing while shipping and storage.

One of the respondents, Mrs. Siti Zainon stated that she has been implementing halal logistics since 2019 as the MASKargo is the main terminal operator in KLIA which offers the needs of the booming halal industry for reliable air cargo handling and other warehouse related activities under the supervision from higher official in maintaining standard operating procedure for shipment such as import export transshipment of halal shipment. There's a need to maintain halal integrity throughout halal supply chain in order to create a competitive advantage for country as to be the main halal corridor and enhance trade networks linking halal business which will provides benefits to manufacturers, retailers and freight forwarders. Mr. Fairuz stated that since 2019 they have officially received halal certificate from IHI as there were strict requirement held by JAKIM, luckily they manage to

fulfil all the criteria needed by JAKIM. Their main target is to meet with the logistics needs by maintaining halal integrity in terms of air service, therefore they need to maintain the halal integrity requirement according to halal SOP and also they want to be part of the change so that's the reason they took seriously in this halal logistic business.

Other than that, MASKargo is the main gateway to all logistics company in terms of air service, their difficulties are that they are trying to match the requirement needed by JAKIM as their warehouse is a transit warehouse under the MS standard. The main thing is there are no airport ground handling officers doing this, that's also the reason they need to give understanding in their operation to get JAKIM authorization in maintaining the standard operating procedure. In order to overcome this situation, the MASKargo company follows basic guidelines that was set by government Syariah law and Fatwa. The respondent indicated that a number of frequency of staff got their awareness training in understanding and have clear explanation on SOP, with that they got verified to get the IHI certificate as they manage to fulfil all the JAKIM's criteria. The respondents also stated that as an airline company they have to follow the guideline that was established by the relevant IATA Cargo regulation and established a dedicated handling and storage procedure area for halal shipment within the cargo terminal. The warehouse logistics management system for inventory control is a system being used to handle the halal products also a part of overcoming the problem and gives solution in creating a highly effective environment towards maintaining halal standard operating procedure over period of years.

4.3.3 Theme 3: Halal Certification and Labelling Processes

The research shows that the purpose of the halal certification and labelling process are very important as Muslim customers are searching for a certified halal logo in prior to purchase items, which indicated the goods are certified by the religious authority in Malaysia which is JAKIM as the authoritative body of halal assurance that is responsible for halal certification in Malaysia. The growth of halal industry is essential particularly in Islamic countries to develop global trends in terms of its future position.

As highlighted by the MASKargo respondent named Mr. Zulkefly stated that in the halal business they have undergone a clear guidance on the SOP, training of handling staff and setup of halal committee to monitor the compliance before handling the halal import and export shipment as there have extra measure need to be done in the process which is the prebooking process. Pre-shipment are usually given pre alerts stating the there will be halal shipment will be arriving (export) in the warehouse, after that they will ask for relevance halal certificate from the shipper to clarify it is a halal

goods before undergoing the process of halal regulation and related documentation. The MASKargo employee then will need to verify whether the shipment comes from overseas in order to make sure there aren't any falsifying certification and is approved by halal international body. As to simplify it, they cannot simply accept any goods entering the halal area without proper consent and certification required by the MASKargo in order to keep the integrity of halal scope is purely kept from non-halal shipment.

As stated by Mrs. Zainon there also have periodical inspection at halal zone which means there have procedure and implementation process need to be done as to give awareness to the staff and customer interconnecting to air transport with the benefit of using this service. In essence, there is also different labelling will be printed as to customer who applies halal shipment as to grow the volume further and promote the halal handling service to consumers.

5.0 RESULT AND DISCUSSION

5.1 RESTATEMENT OF THE OBJECTIVE

The restatements of objectives are as below:

I. To Identify the halal product arrangement procedure at warehouse of halal and non-halal product.

In order to complete this research, the researcher needs to know and identify the halal product arrangement procedure at warehouse of halal and non-halal product. The researcher interviewed the person in charge who is experienced with the operation of the warehouse and the data were gathered properly. The data was analysed and the operation of the warehouse in MASKargo Sdn Bhd operated smoothly.

The researcher is able to make a point of the first theme corresponding to the first independent variable which is the halal facilities segregation in achieving the objective of this study. Based on the data collected in the previous chapter, it can be seen that MASKargo has established dedicated

II. To determine appropriate requirement according to halal standard operating procedure

The second objective achieved. The researcher found out about MASKargo got appropriate requirement according to halal standard operating procedure. Those various types of techniques help MASKargo manage the Standard Operating Procedure in various way.

Besides that, the researcher able to highlight that the second theme corresponds to the second independent variable which is halal storage and transportation in achieving the research objective.

Based on the interview session, there are several points that the researcher can emphasize that the MASKargo company has clear guidance on the SOP, Training of handling staff and setup of HALAL committee to monitor the compliance. However, there are some difficulties such as facility limitations, revision to standard Operating Procedures (SOP) and staff training.

III. To examine specific labelling in halal standard operating procedure

The third objective is to determine specific labelling in halal standard operating procedure. The process has been determined by the researchers through interview sessions with the person in charge of the MASKargo company itself. With the challenges that have been analysed by the researcher, hence the third objective has been successfully achieved and answered by the respondents in the third theme corresponding with the third independent variable which is the halal certification and labelling processes.

As highlighted by the company's respondent stated that for Halal cargo the handling must be in compliance with the MHMS requirement. Besides that, they have not just suddenly implemented halal logistics now, as they have been certified under IHH for Halal Logistics for quite some time due to increasing demand and awareness among the consumers. They also have following the

5.2 LIMITATION OF THE STUDY

The problem faced while doing the research is the Movement Control Order (MCO) during Covid-19 pandemic. This research has been impacted by the MCO. The strict movement has made it difficult and limited for the researcher to conduct face-to-face research such as an interview. Most of the companies scale up to receive interviews openly because they prioritize the safety of employees and the researchers. Next difficult thing is getting co-operation and responsive answer from the MASKargo company. After the end of quarantine season, a lot of companies get busy setting up their company. This included MASKargo company. They need to do their works that have been in arrears for several months. With the recent covid-19 vaccines arriving from US and China, they have been busy doing preparation in the matter of documentation, storage, procedure that need to be securely overcome and it requires a lot of work, as they don't have time to accept any interview.

5.3 RECOMMENDATION

Based on the research regarding the development of halal logistics, several recommendations can be improved halal logistics in our company. In implementing Halal logistic, logistic provider must well recognize with the requirement set up by the Halal agencies. The requirement outlines are based on the

Halal principle and requirements to ensure the Halal integrity in the process of handling Halal products. There are some possible recommendations that can help logistic provider to become familiar and getting involve in Halal logistic. Among the recommendations that researchers suggest are:

I. Enhancing the coordination among agencies involved in the development with the logistic provider.

To promote the development of the Halal logistic, coordination among the Halal agencies with the logistics provider must be developed and mutually support each other. Therefore, the government agencies which are involved in promoting Halal services should be more aggressive in promoting these services to Halal agencies as they must know the challenges faced by the logistics provider and able to consult and well trained them to encourage their involvement in Halal logistics industry. The great cooperation between Halal agencies and logistic provider company can be achieved through greater collaboration with the relevant service providers to facilitate the development and promotion of Halal-compliant services and providing support to ports and companies which develop Halal-compliant logistics.

II. Role of Government in promoting halal service.

Less demand from customers to adopt Halal warehouse is also a challenge for this warehouse to develop halal service. Food manufacturers were unaware of the availability of these services. Most of them are still not adopting Halal warehouse services for their products due to their unawareness of who the providers are. They actually do not know where to get the services. Due to lack of demand for their services, the cargo hardly finds any customers of having the appropriate need of halal procedure.

Therefore, government must play a serious role in order to enforce the warehouse providers to bring awareness as this company is in compliance with halal standard operating procedure. This is not only to educate them, but also to promote Halal services to Halal food manufactures in order to assure the Halal status is secured along the food supply chain. Finally, as there is limited literature regarding the differences between halal certified for noncertified warehouses, academicians could embark on these findings to expand further in this area of study. For future research, the scientific measurements of the food products that are stored in the warehouse can be conducted in order to ensure its Halal status from unloading to storage activities in the warehouse.

III. The needs for Halal logistics training.

To be competitive in the global marketplace, a well-educated and trained workforce require specialized

and affordable training regarding Halal technical area such as fundamental, knowledge, service and skills. The step that can be taken by the organization are by review the type of Halal program, the appropriate provider and evaluate what is the best fit and how the training program can support organization's future strategy and objective and also can improve the performance productivity of staff and ensure they have the skills that industry needs.

The training needs in Halal logistics industry are very vital now as the industry now keeps pace with the global demand for Halal product and services. In logistics, the products and services must be handled with high supervision to avoid the Halal product and services become Haram due to logistics process.

Acknowledgement

First of all, I would like to record my thankfulness to Allah S.W.T for give a chance to complete the Final Year Project successfully. I am also very grateful for the help of the Almighty God for giving me a strength and patience to complete this project from time to time.

Besides that, I would like to dedicate my thankfulness and appreciation to my supervisor Dr. Sunitawati Binti Karim for her valuable advice, guidance and support especially during my difficult times. She also is very helpful in giving me an ideas and comments for the improvement and ensure that I was able to deliver it well. This has given a space for me to complete this research.

I also would like to express my special thank for my beloved mother Ramlah Binti Mohd Kunju for providing me with the comfort and moral support such as financial support and so on to me all the time until I were able to finish this research.

References

- [1] Syazwan Ab Talib, M., & Bakar Abdul Hamid, et al. 2014. Halal logistics in Malaysia: a SWOT analysis, Volume 5 Issue 3, Journal of Islamic Marketing, ISSN: 1759-0833, 2014
- [2] 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. 2015
- [3] Rohana Sham., Raja Zuraidah Rasi., Noranita Abdamia (2017), Halal Logistics Implementation in Malaysia: A Practical View, International Research and Innovation Summit, Page 226, 2017

- [4] Nurul Farahanim., Ahmad Radzi., Aida Firdaus Muhammad Nurul Azmi (2016). Halal Food Warehouse: Challenges and Solutions. Malaysian Institute of Transport and Logistics, Universiti Teknologi Mara. Journal of Applied Environmental and Biological Sciences, Pg 80-85. 2016
- [5] Karia, N., & Asaari, M. H. A. H. (2016). Halal value creation: its role in adding value and enabling logistics service. Production Planning & Control, 27(9), 677-685. DOI: 10.1080/09537287. 2016.
- [6] Hong, L. (2007). NTUC Fairprice to File Police Report for Tampering of Pork Packet. Channel News Asia. 2007
- [7] Mohamed Elias, Ezanee (2019), Applying the theory of the planned behaviour on halal logistics services adoption among food & beverages small and medium enterprises, international journal Supply Chain Management vol-8, no-4, ISSN:2050-7399 (2019)