

# FUNDAMENTALS OF HALAL TRANSPORTATION

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## ABSTRACT

*The purpose of this conceptual study is to determine the fundamental components of Halal transportation. This study managed to uncover a research gap in Halal transportation as no study ever address the fundamental components of Halal transportation. An archival research method is applied to review related published academic works and tries to identify the key components for Halal transportation. Data are gathered from online databases and results are filtered using keywords such as Halal, Halal logistics and Halal transportation. Therefore, five components are identified as key to Halal transportation. The components are Halal dedicated carrier, Halal-only equipment, Halal-only cargo, Halal-trained drivers and Halal tracking and control. Plus, it is hoped that this study can be used as a platform for many future academic or professional works in the future, and towards the end, future research agendas are proposed.*

**Keywords:** Halal Transportation; Halal Logistics; Islamic Distribution; Halal.

## 1. INTRODUCTION

Halal is an Arabic word, and in English, it translates permitted while the opposite of Halal is Haram (non-Halal) which translate prohibited. The word Halal is referred to Islam and Muslims as the way of life that is in accordance with the Shariah law. Although Halal is commonly associated with food products and consumption, it is essentially incorporated in every aspect of a Muslim's lifestyle that involves behavior, speech, dress, conduct, manner and dietary (Al Jallad, 2008). Furthermore, Halal is a new business phenomenon, and the Halal market is valued at US\$ 2.1 trillion (Ministry of International Trade and Industry, 2006), and it is the fastest growing market in the world. The promising Halal market is contributed by the vast Muslim population (Adams, 2011), wide acceptance among the non-Muslims (Aziz & Chok, 2013), and the perception of Halal as a symbol of quality and safety (Marzuki et al., 2012; Gayatri & Chew, 2013).

The Malaysia Ministry of International Trade and Industry (MITI), in its Third Industry Master Plan 2006-2020 (IMP3), categorize the Halal market into three segments namely food, non-food (pharmaceuticals, toiletries, medical products, medical devices, and cosmetics) and services (logistics, packaging, branding, marketing, media coverage and tourism). Focusing on logistics, a Halal-compliant logistics service is essential in order to protect Halal goods integrity and ensure consumers are protected. The key components of Halal logistics, according to Tieman et al. (2012) and Tieman (2013), consist of Halal transportation, Halal warehousing and Halal terminal. Therefore, the objective of this conceptual study is to determine the fundamental components of Halal transportation.

## 2. LITERATURE REVIEW

### 2.1 HALAL LOGISTICS DEFINED

According to Tieman (2011), Halal does not only matter during point of consumption or purchase, but it matters throughout the whole supply chain. Halal logistics is defined as the as the process of managing the procurement, movement, storage and handling of materials, parts, livestock, semi-finished or finished inventory both food and non-food, and related information and documentation flows through the organization and the supply chain in compliance with the general principles of Shariah (Tieman, 2013). Zulfakar et al. (2012) describe Halal logistics applies the same principles as conventional logistics, but with special exception as it only caters for Halal products. Furthermore, Riaz & Chaudry (2004) acknowledged that during preparation, logistics functions such as packaging and transportation are essential as exposure to non-Halal substances will result into cross-contamination and void the Halal status. This is supported by Tieman (2011) as any presence between Halal and non-Halal, the non-Halal will prevail. The Rise of Halal Logistics

There are many reasons behind the need for Halal logistics. For instance, due to the complex nature of logistics supply chain and concern of Halal integrity (Tieman, 2013), the need for Halal logistics is on the rise and become more important. Besides, Kamaruddin et al. (2012) describe Halal logistics as a lucrative business and demand for Shariah-compliant logistics services is on the rise. Plus, Tieman et al. (2013) discovered that customers are willing to pay premiums for Halal logistics services. In addition, many logistics service providers (LSP) are adjusting and innovating their services to cater for the growing demand, for example, providing Halal warehousing, Halal transportation fleet, Halal-only handling equipment, and ritual cleansing (samak) services (Jaafar et al., 2011).

## 2.2 DESCRIPTION OF HALAL LOGISTICS

Principally, transportation is the act of moving goods or people from an origin to a required destination (Coyle et al., 2011) and transportation is an integral component in logistics and a good transportation system will ensure logistics efficiency, reduce operation costs and enhance service quality (Tseng et al., 2005). For this study, Halal transportation is defined as the act of moving Halal goods from an origin to a required destination, which creates time, place and Halal utility, in accordance to the general principles of Shariah. Additionally, Tieman (2013) expressed Halal integrity is confined to a container or a transport vehicle. In a separate study, Halal transportation activity may differ between Muslim and non-Muslim countries (Tieman et al., 2012; Tieman et al., 2013), and Tieman et al. (2012) stressed that loading and stuffing are the most critical activities during Halal transportation, and constant control is required to ensure seamless operation. Moreover, during Halal transportation activity, complete segregation between Halal and non-Halal product is required in order avoid cross-contamination (Riaz & Chaudry, 2004; Jaafar et al., 2011; Omar & Jaafar, 2011).

## 3. METHODOLOGY

Since this study is exploratory in nature, and the aim is to develop the fundamental components of Halal transportation, an archival study is undertaken to seek main variables that are crucial and constantly discussed in previous researches are recorded (Sekaran, 2003). Moreover, secondary data collection is performed, and data are gathered from published academic works, and is derived from several online library databases. The data are filtered using keywords such as Halal, Halal logistics and Halal transportation.

## 4. COMPONENTS OF HALAL TRANSPORTATION

As mentioned earlier, Halal transportation is the act of moving Halal goods from an origin to a required destination, which creates time, place and Halal utility, in accordance to the general principles of Shariah. From the gathered literatures, there are five components fundamental and essential in Halal transportation namely Halal dedicated

carrier, equipment, cargo or shipments, human resource and tracking. The components are explained onwards and Figure 1 illustrate the relation among the components in making a total Halal transportation.

#### 4.1 HALAL DEDICATED CARRIER

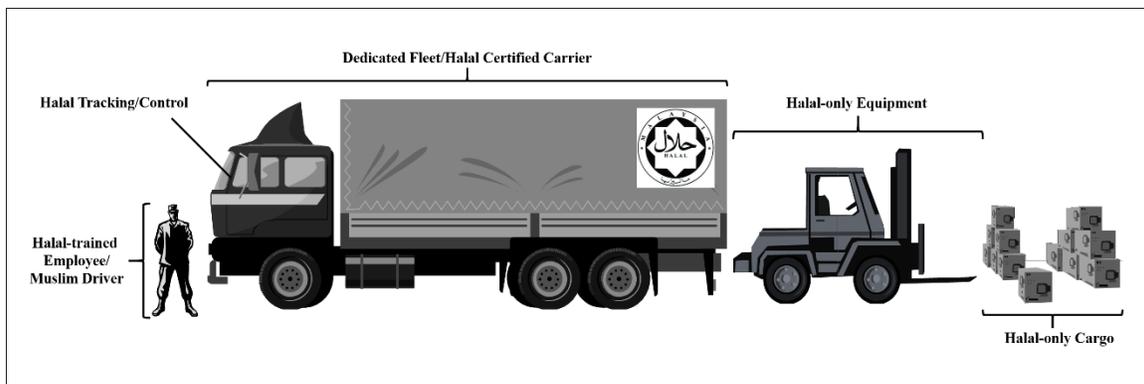
A Halal certified carrier is the most critical component in Halal transportation as without the proper certification, from authorized Halal certification authorities, it will diminish other components. In other words, a Halal certified carrier will set a precedent for other components and eventually achieved the total Halal transportation status. Therefore, endorsement in the form Halal logo or certification by a legit Halal authority is required. According to Riaz & Chaudry (2004), Halal certification is the first segment of Halal setup, and a Halal certification is a document issued by an Islamic organization certifying that the service is in compliant with Islamic guidelines. Furthermore, a Halal certified LSP is an indication that the firm has overcome rigorous inspections, audits and corrective actions, and the logistics operations are deemed clean and safe (Jaafar et al., 2011).

Moreover, Zulfakar et al. (2013) identified Halal certification as one of the critical success factors in Halal meat supply chain, and Tieman et al. (2012) identified Halal certification as a performance indicator in Halal logistics. Furthermore, a Halal transportation signifies that it only caters for Halal shipments, a complete segregation from non-Halal products. This is in accordance with Zulfakar et al. (2012) that specify Halal transportation, one of the components of Halal logistics, is only catered for Halal shipments. In addition, Tieman et al. (2012) and Tieman (2013) stressed that Halal transportation is only confined to the containers, and this shows Halal transportation is able to extend the Halal integrity and maintain a product's Halal status.

#### 4.2 HALAL-ONLY EQUIPMENT

The loading process is critical during Halal transportation operation (Tieman et al., 2012) and handling equipment, such as forklifts or pallet jacks, must be free from any contact with non-Halal products. Thus, the handling of Halal products must be handled using Halal-only equipment (Halaseh & Sundarakani, 2012). However, if equipment must be shared between Halal and non-Halal products, the equipment must be thoroughly cleaned and free from any foreign materials (Riaz & Chaudry, 2004). This procedure is explained by Jaafar et al. (2011) that if non-Halal is in direct contact with equipment and handling facilities, a samak exercise must be performed. Additionally, to extend the Halal integrity through the use of Halal-only equipment, employees must be trained to handle the shipment using Halal-only equipment.

**Figure 1:** Fundamental Components of Halal Transportation.



### 4.3 HALAL-ONLY CARGO

To achieve a total Halal transportation operation, it is fundamental that the operation is dedicated towards distributing Halal-only cargo. Hence, only Halal labelled products can be carried by Halal transportation, and products that are not Halal certified but conform to other form of standards, such as Hazard Analysis Critical Control Points (HACCP) or ISO22000 Food Safety Management should be physically segregated within the carrier/container. In the event of transporting livestock, no mixing of Halal and non-Halal livestock (Tieman *et al.*, 2012). Besides, a Halal transportation carrying Halal-only cargo will strengthen the Halal logistics chain and improve the Halal integrity. Therefore, it signifies Zulfakar *et al.* (2012) description that Halal logistics is only catered to Halal products.

### 4.4 HALAL-TRAINED DRIVER

The presence of Halal-trained driver during Halal transportation operation is fundamental. Riaz & Chaudry (2004) highlighted that during product preparation, including transportation, at least two Muslim employees, the drivers, must be involved. If the drivers are not Muslims, they should have undergone Halal training and is supervised by a Muslim supervisor. In addition, the drivers are not allowed to bring along non-Halal foods or beverages while performing their duties. Besides, as Halal practice is known to protect animal welfare, Miranda-de la Lama *et al.* (2010) points out that proper livestock handling during transportation depends on the driver's attitude. Hence, to ensure Halal transportation operation is successful, the drivers must receive proper training.

Jaafar *et al.* (2011) stated that to ensure Halal integrity during Halal logistics services, such as Halal transportation, the training of employees is important. Training may involve basic knowledge on Halal, proper handling techniques, scheduled maintenance or customer care. Training is highly needed in logistics, and it is vital in Halal transportation as the industry is growing and consumers' interests must be protected (Kamaruddin *et al.*, 2012; Pahim *et al.*, 2012a and 2012b).

### 4.5 HALAL TRACKING AND CONTROL

Halal tracking and control are essential for Halal transportation as logistics operation is very complex (Tieman, 2011) and controlling the process is vital to avoid threats (Tieman *et al.*, 2012). Furthermore, tracking in Halal transportation can be performed both upstream and downstream, and controlling activity happens during loading/unloading, cleaning, and labelling (documentation) (Tieman *et al.*, 2012). The tracking of Halal transportation is made easier with the use of information technology (IT) such as Global Positioning System (GPS), Radio Frequency Identification (RFID) or Transportation Management System (TMS) (Tan *et al.*, 2012). Moreover, many benefits are gained by applying tracking and controlling activities in Halal transportation, for example, preventing product recall (Shafii *et al.*, 2013), protecting a firm's image and increasing customers' confidence (Kher *et al.*, 2010; Tan *et al.*, 2012).

## 5. CONCLUSION AND RECOMMENDATION

This conceptual study is the first attempt to determine the fundamental components of Halal transportation. Although previous studies have discussed Halal transportation (Tan *et al.*, 2012, Tieman *et al.*, 2012; Tieman, 2013) in the form of IT application and supply chain, none managed to tackle the basis of what constitutes a Halal transportation. Hence, this study managed to find a gap in the field of Halal transportation and logistics research, and therefore presents a significant contribution to the field of Halal and appraise the Halal logistics knowledge. Plus, it is hoped that this study can be used as a platform for many academic or professional works in the future.

Since this study is a concept, future work and more research are highly welcome. Firstly, this study is non-empirical as data are gathered through archival method and informations are scanty and limited. Therefore, future study should try to undertake qualitative approach by including industry experts' views to further understand and uncover new key components in Halal transportation. Secondly, it is recommended for future studies to view Halal transportation components and initiatives from separate entities, namely between government's and firms' initiatives. This will further extend the understanding on the role of stakeholders' role in achieving a successful Halal transportation operation. Finally, future studies should try to narrow the Halal transportation scope into specific modes either road, rail, air or water transportation as each mode have different processes, requirements and operations, and the degree of difficulty to attain total Halal transportation is different among all four mode of transportation.

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