# HALAL LOGISTICS PRACTICES: LOGISTICS SERVICE PROVIDER CASES IN INDONESIA

## Faridatus Saidah

School of Business and Management, Institut Teknologi Bandung Email: faridatus\_saidah@sbm-itb.ac.id

#### Yuliani Dwi Lestari

School of Business and Management, Institut Teknologi Bandung Email: yuliani.dwi@sbm-itb.ac.id

#### Abstract

This study examines critical factors in affecting halal business management, particularly challenges in Halal logistics implementation faced by the logistics service provider as well as its potential and opportunities for Halal based business in Indonesia. An In-depth, semi-structured interview is conducted to deepen the understanding and to provide detailed data of the study. The study found that there are several factors influencing halal logistics implementation. In terms of business strategy, there are external and internal factors that affect halal logistics practices. Such as market-driven, perception benefit of halal logistic certification followed by customer loyalty, challenges in implementing halal logistics, the complexity of operation halal logistics practices. The findings can provide a guideline in how to implement halal logistics practices in logistic service provider business, especially in transportation and warehousing process, along with the expected result for its business performance.

Keywords: Halal certification; Halal logistics; Indonesia; Logistic service provider

# A. INTRODUCTION

Halal logistics practices have grown significantly due to demand from the halal food industry. Halal industry has experienced an increase growth due to the growth of global Muslim population along with the popularity of halal food to the non-Muslim consumer. This result tends to increase market demand for the halal product. Asian and the Middle East countries such as Malaysia, Indonesia, Saudi Arabia, even non-Muslim majority countries like Singapore and Australia have the initiative to take charge in Halal based business as well as Halal logistics. All of those countries are aware of the importance of Halal logistics. Consequently, the promising of the halal market has an excellent impact on the logistics service provider to implement halal logistics service in their business to align with the halal system of the halal product supply chain. Halal supply chain including procurement, manufacturing, warehousing, and transportation activities (Jaafar, Faisol, Rahman, & Muhammad, 2016). The prior reason for this growing halal service practice is to maintaining the halal integrity of the Halal product and minimizing the risk of cross-contamination with the non-Halal product (Ali & Suleiman, 2018; Haleem & Khan, 2017; Zailani, Iranmanesh, Aziz, & Kanapathy, 2017). Halal logistics as one of the criteria of halal supply chain play essential roles in the halal industry along with the strict global standardization in getting halal certification makes it the role key in halal integrity (Abd Rahman et al., 2016; Amir & Tjibtosubroto, 2019; Shariff & Ahmad, 2019). Halal logistics trends are increasing due to halal logistics can provide guarantees outside the product to provide better assurance to consumers (Fathi, Zailani, & Iranmanesh, 2016). So, the unavailability halal logistics can be a main problem when the halal industry is experiencing an increase in growth.

The Indonesian government also captures the condition of Halal Logistic opportunity. Indonesia realized halal logistics is not only a trend but also a necessity. Accordingly, the government of Indonesia made laws under Act number 33 of the year 2014 about Halal Product Assurance (Sekretariat Kabinet Republik Indonesia,

2014). In Indonesia, the idea to oversee the production process from upstream to downstream, especially the distribution process, emerged after the law has been enacted. In provision article 1, number 3 stated that Halal Product regulates several series of activities to ensure the halal-ness of the product, including material procurement, process, storage, package, distribution, and presentation of the product, as well as international cooperation with foreign halal certification bodies. This law also created the Halal Product Guarantee Agency (BPJPH) to oversee the process and provide ongoing certification for products.

#### Halal Logistics Implementation

Halal logistics services are needed to guarantee Halal products and maintain halal product integrity (Tieman, 2011). Halal Logistics has been described as the supply chain management process in accordance with the general sharia principles. The sharia principles generally require technical details of their implementation. In this case, halal logistics is in a strategic position that maintain logistics activities ranging from transportation, warehousing, material handling, procurement, whether the food or products meet the standards of the Islamic sharia principles or not (Tieman, van der Vorst, & Ghazali, 2012; Talib, Hamid, Zulfakar, & Chin, 2015). Halal logistics is similar to general logistics operations, which involves the preparation, execution, and control of the distribution and storage from the source to the point of the consumer (Tieman & Ghazali, 2014; Zulfakar, Anuar, & Talib, 2014).

Halal logistics service also needed in order to stay competitive among the halal based business. Halal logistics be used as a competitive advantage for the process of developing business and expanding business opportunities on an international scale. It is not only necessary for the halal industry, but also it becomes needed to grow the business market worldwide (Tieman & Darun, 2015). Halal logistics is still a growing industry worldwide, and Indonesia is developing a system that is supported by the regulation of the Halal Assurance System. However, there are still not many service providers applying the correct method.

There are two general areas of halal logistics, namely transportation and warehousing. Halal warehouse must ensure that Halal products are separated from non-Halal products. Halal warehouses typically carry out checks on the Halal status of incoming shipments by means of checks on shipping papers, labeling, marking, and packaging status. While transportation is transferring product from the place of origin to the destination by ensuring halal product integrity, segregation of Halal and non-Halal food products must be highly practiced to avoid contamination. Tools that are used to handle the Halal food product must not be shared to handle non-Halal food products by workers as it will cause contamination (Ab Talib, Rubin, & Zhengyi, 2013). However, these practices are still not highlighted by the majority of the industry as Halal and non-Halal products are still being transported in a single truckload or store in the same warehouse (Ab Talib et al., 2013).

In terms of government policy, the Indonesian government has support industries to implement the halal concept in their practices by establishing a constitution. In Indonesia, constitution number 33 of the year 2014 of the first clause concerning the Halal Product Assurance. It is stated that Halal products are products that have been declared halal in accordance with Islamic law (Sharia). It is also stated that halal product process is a series of activities to ensure Halal products covering the equipping of materials, processing, storage, packaging, distribution, sales, and product presentation. The regulations for obtaining halal certification in Indonesia are summarized in the regulations issued in the form of a halal assurance system, namely HAS 23000 by Halal certification body which is Assessment Institute for Foods, Drugs, and Cosmetics Indonesian Council of Ulama or in Indonesia is called LPPOM-MUI (Lembaga Pengkajian Pangan Obat-obatan dan Kosmetika Majelis Ulama Indonesia). Even though the guideline on the logistic process will be summarized in the halal assurance system (HAS) regulation series, precisely HAS 23106 (Guideline for Compliance with the HAS Criteria for Logistics Services). But the technical instructions have not been yet published to the public in general by the regulator. Therefore, halal logistics is still a new thing and not too well understood by many logistics providers.

In the implementation of halal logistics, companies, consumers, and governments face many problems and challenges since many companies do not understand how the halal concept is applied in the supply chain (Zailani, Iranmanesh, Aziz, & Kanapathy, 2017). There also some concerns from the industry about how the process of supply chain operations can be performed by separating products, facilities, and the process of distributing halal and non-halal (Ngah, Zainuddin, & Thurasamy, 2014). On the other hand, the obstacles for the industry to implement halal logistics is in the term of perception in implementing halal logistics. Considering it is expensive, lots of rules, not to mention the new regulation is not yet finished (Ab Talib, Rubin, & Zhengyi, 2013). Though, there is already an awareness of logistic service providers and even several companies that already obtained halal logistic certification because they see it as competitive advantage. Thus, there are three general problems for companies to implement halal logistics which are regulation related problems, financial issue and perception. The problem in financial issues and perception is seen today by the industry. It is related to the application of halal logistics concept, which means bringing additional costs such as warehouse separation and product (Lestari, Okdinawati, & Simatupang, 2018). Hence, with a variety of existing problems, this study aims to provide an exploration of a case study from two companies. The aim of this case study is as an example of a success story in the implementation of halal logistics in Indonesia. With the result that, it can be used as a reference for other providers in implementing halal logistics.

In this study, two companies are used as a case study to understand how the implementation of halal logistics process in logistic service providers (LSPs). Those two LPS represent two areas of logistics, namely warehousing and transportation. Firm 1 represents halal cold storage and warehousing, then Firm 2 represents halal transportation in trucking.

There are barriers in implementing halal logistics namely, financial issues, ambiguous standardization guideline, lack of facility, lack of halal training, weak of halal logistics promotion, costly and timely halal certification process and lack of collaboration among logistics service provider (Ab Talib et al., 2013; Ngah et al., 2014; Ab Talib et al., 2015). Tieman (2015) further discuss the issues encountered in halal logistics from the context of the logistics company, the halal products, halal supply chain, and halal value chain. Tieman (2015) expressed that the issues related to halal logistics are lack of halal certification authority, halal integrity, issues relating to the certification process, transparency issues, and lack of certified halal logistics, namely government support and promotion, clear standardization and rule about halal logistics, awareness of the customer, and general issues related to the prerequisite that needed to get halal certification in logistics service. In this study, the focus is on the halal logistics critical success factors that have mention in the Ab Talib et al. (2013) paper findings. The critical factors are shown as follow:

1. General issues encountered in halal industry and are in halal certification because there are no standardized halal guidelines that complied all of the standardization, which can represent a standard worldwide. In order to get logistics service halal certification in Indonesia, there are several prerequisites that must be prepared, from manual procedure to the training about halal logistics knowledge. The main issue is still the lack of logistics service halal standardization and a costly and timely process of halal certification.

2. Integration issues among logistic service providers are needed to maintain halal integrity. The studies from Talib, Rahim, Chin, & Hamid (2017) showed that having dedicated halal facilities and equipment to comply with customers' demands is necessary, but once the products are passed to a different company, chances for broken halal chain and contamination very likely happen. On the other hand, transportation activities in halal logistics play a vital role and are also the stage where cross-contamination between Halal and non-Halal happen (Zailani, Jafarzadeh, Iranmanesh, Nikbin, & Selim, 2018). Transportation activities are a very challenging stage of halal logistics because there is a lack of collaborative efforts among logistics service providers.

3. Integration issues among halal authorities are needed to make all the process in getting halal certification can be done well. The main issue in integration with the authorities is communication of both parties, especially in terms of training and transfer knowledge that needed to made Halal manual standard. According to the study about legal enforcement, Halal certification bodies and customer that applied for Halal certification can

work well if both of them have a similar understanding of opportunity and the benefit of Halal assurance system implementation. If the customers can acknowledge the complex procedure and self-regulatory manual that made by company is to maintain Halal integrity and prevent cross-contamination between Halal and non-Halal product (Ahmad et al., 2018).

4. Financial issues and perception of implementing Halal logistics. Ab Talib et al. (2013) stated that Halal logistics practice would costly, but it is commensurate with the demand in the market, especially in the future. Even though, for some private company, Halal logistics might be a burden to them compared to a state-owned enterprise.

5. Government's support and promotion also becoming a significant role in implementing Halal Logistics (Ngah et al., 2014; Talib et al., 2015). Government support needs to be applied not only on Halal product production but also during storage process, transportation process, and handling process. Therefore, government also need to promote the importance of logistics for Halal products and services to the public to make sure the integrity of Halal product.

# B. METHOD

This study is using qualitative methodology with an interview as a data collection method and case study as technic analysis. Data were collected with an in-depth interview, and a semi-structured format was used to obtain a deep understanding of halal logistics implementation while keeping the answers open-ended. Interviews were conducted, recorded, and transcribed to be further coded and analyzed. In this study, there are two firms from logistic service providers that used as cases give extensive understanding in halal logistics implementation. The logistic service provider represents two different logistic fields one of them (Firm I) focuses on dedicated halal cold storage and warehousing, and the other one (Firm 2) is focused on transportation in terms of trucking. Both logistic service providers have already obtained permits and halal certificates from Indonesian certification body, which is Assessment Institute for Foods, Drugs, and Cosmetics Indonesian Council of Ulama or in Indonesia (LPPOM-MUI), in terms of Halal Assurance System (HAS) status, which refers to HAS 23000. Implementing Halal Assurance System and followed the general guideline of HAS 23000 is a prerequisite programmed for obtaining halal certificate from MUI. Even though the guideline that precisely for logistics service is written in HAS 23106, which is often echoed in the news in Indonesia. But the technical instructions of HAS 23106 have not been yet published to the public by the regulator.

So, halal logistics is still a new thing and not too well understood by many logistics providers. For analysis process, this study is using critical issues Halal Logistics research framework to facilitates the development of a strategy for Halal Logistics implementation in a firm Ab Talib et al. (2013) aligned with Halal Assurance System from Assessment Institute for Foods, Drugs, and Cosmetics Indonesian Council of Ulama (LPPOM-MUI); it can be seen in figure 1. This framework will be given extensive analysis and to construct a model in representing halal logistic implementation in Indonesia, especially in warehousing and transportation logistics activity. Firm 1 representing case study 1 as Halal storage company, while Firm 2 representing case study 2 as a trucking company.

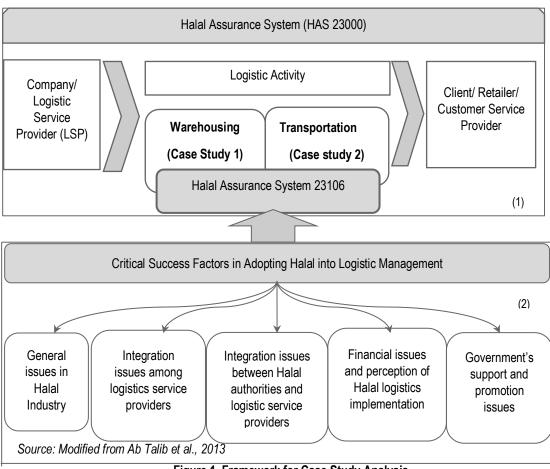


Figure 1. Framework for Case Study Analysis

# C. RESULTS AND DISCUSSION

In this part, it will be explained logistics activities of those two firms related to warehousing and transportation. Both firms have their own flowchart depend on their activities. The main general guideline that they used is the Halal Assurance System (HAS) 23000. Both of firm has already received the Halal Assurance System Certificate.

```
Case Study 1. Warehousing Activities in Halal Logistics:
```

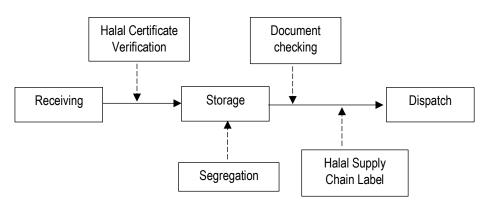


Figure 2. Warehousing Halal Logistics Activities Firm 1

In firm 1, the logistic activities are dedicated to warehousing and cold storage of Halal products (figure 2). The critical activity happens in the first step since the product comes to the warehouse, which is the administrative checking. The staff is checking the documentation of products, including delivery order, packing list, checklist item, manifest of the product, bill of loading, and the Halal status of a product or Halal

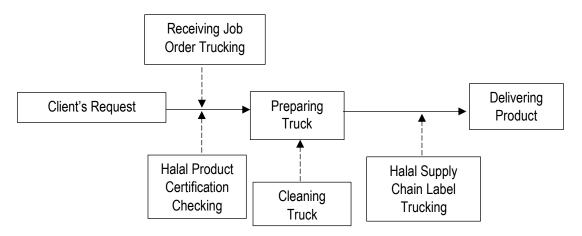
certificate. The staff is authorized to check the physical product and supporting document then verify the completeness of the document. If all of it complete and the product in good condition, then the products can enter the warehouse in accordance with the storage place that has been ordered. But, if there are no Halal certificates or non-halal products, then it cannot be placed in the warehouse to prevent cross-contamination; this in accordance with Indonesian Council of Ulama (MUI) regulations ("Halal Assurance System Provision," 2013). Before the customer picks up the product or before they can show the halal certificate related to their products, thereafter, their products will be stored in a temporary storage area, and an official report will be made about handling non-halal products.

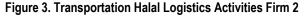
"... When the product enters our warehouse, the product needs to have a halal certificate. If it already has one, we accept the products. While checking the products, and if it turns out that there are non-Halal products or there are products without Halal certificate, we will separate them first. Then, continue to tell consumers that these products (non-Halal) cannot enter our warehouse, and they have to pick the (non-Halal) product on the same day because most of the products that are using our services are a commodity like beef, fish, fruit, and vegetable, which is needed segregation when its storage. For the time being, the products will be temporarily stored in the warehouse aisle..."

In the handling process of product and maintaining the warehouse in the maximum condition, staff and management have a procedure for cleaning process and to keep it at the desired temperature. Every product that enters the warehouse will be checked periodically. The storage process of product is arranged at a certain level and segregates the product to keep its Halal integrity. After that, if the product that is already used warehousing service will be shipped out, the staff will be labeled the product that has met the halal assurance system in terms of warehousing. To maintain its Halal integrity, firm 1 also inspect truck that will be used to transport the product from warehouse. If the transport truck is not in a clean condition, the staff will suggest the cleaning process in advance or replace the truck that will be used to the customer. Firm 1 also provides a place for the cleaning process.

"...Since the product already in the Halal category, when it comes to distribution, we must be sure that the transportation that will be used to this product has passed the cleaning stage. For example, if the transport facility is used for loading and also transport another non-Halal product, then we provide to cleaning place for transportation. A standard operation like that distinguishes this warehouse from ordinary warehouses."

#### Case Study 2. Transportation Activities in Halal Logistics:





In firm 2, Halal logistics activities are dedicated to transportation. Any customer can be used their service and not limited to the halal product. But the product that will be transported is a dry-processed product. If the Halal and non-Halal products transport by the same truck, then there is a segregation process that should be done. The firm will also be asking the client that have the non-Halal product to make sure how their handling their product and packaged their product; if it is no issue, there is no fragile (wet product or solution product), and it will be safe with the company's regulation procedure applied, then the firm will accept client offered. In order to avoid cross-contamination and keep the truck clean. Usually, the Halal and non-Halal product is not placed in the same compartment, but there is a separator that placed even though in the same truck.

"...So, actually halal logistics is not about separating the product by placing in a separate truck. What we do is segregating the halal product from non-halal product in the same truck; But the halal and non-halal products that can be combined is only dry processed products and as long as there is no contamination. If both of the products (halal and non-halal) is dry processed products, it is still permitted, except when it is fresh (product) commodity. It is not allowed by regulators (LPPOM-MUI). So, we can bring dry processed products in the same truck except the fresh and frozen products, ..."

The transportation procedure (figure 3.) of firm 2 is starting from client request then the staff in charge will discuss clausal about how the clients want delivery their product then, firm 2 will check the document and Halal certificate of the product. If the product is Halal there is no issue. Therefore, the staff will prepare to clean the truck that will be used in transport. Thereafter, the product will be loaded to the truck then the truck will deliver the product with label Halal Supply Chain affixed to the transport truck.

Halal logistics activities in firm 2 emphasize the cleaning process of the transport truck. The management has its own staff and routine schedule to maintain cleanliness of the truck and maintain Halal integrity of the process. The truck will be cleaned before and after transport the product. The firm also has a special cleaning process with regard to Islamic Sharia (using seven times with water and 1 time using and or soil) if there is any incident that needed cleaning process to clean the truck, for example, if there are non-Halal product that was leaking to the surface of the truck. The process used in the standard procedure is aligned with Halal Assurance System. The cleaning process will be verified by staff in charge, and an official report will be made regarding implementation of Halal assurance system, then reported to Assessment Institute for Foods, Drugs, and Cosmetics Indonesian Council of Ulama (LPPOM-MUI).

"...in here, the most important thing is in truck washing process. So, the truck that comes to the pool must be cleaned. There is a staff in charge that do it and every week, inside the truck also will be cleaning again. Then, there is an external cleaning process and an internal cleaning process for cleaning the outside and inside of the truck. Thus, it can be concluded that the most important step in here is, first our halal logistics needed to comply to the Halal assurance system. Second is product segregation. Then the third one here is the cleaning process of transport truck to maintain its cleanliness. The process is according to a halal guarantee system. For non-Halal products, we will see how much non-halal level is. If an incident occurs, we do the cleaning process according to Islamic law. Yes, it is with seven times water and one soil or sand media. Yes, we do it because it's to eliminate impurity. The truck was washed using water and then the ground media...".

The summary of the practical guidelines of those two firms is stated in the table below.

| Table 1. List of Practical Activities in Firm 1 and Firm 2 |                          |  |
|--|--------------------------|--|
| Firm 1   | Firm 2                   |  |
| (Warehousing – cold storage service)                       | (Transportation Service) |  |

| <ul> <li>Checking Halal status by staff in charge to<br/>inspect and handling product</li> </ul>   | <ul> <li>Checking Halal status of the product that will be<br/>delivered</li> </ul>  |
|--|--|
| <ul> <li>Accepting product where all document<br/>complied</li> </ul>  | - Staff is preparing a truck and cleaning process.   |
| <ul> <li>Staff wearing a special outfit while in the<br/>warehouse to maintain hygiene.</li> </ul>   | - Segregate Halal and non-Halal product  |
| <ul> <li>Segregation process of products in the<br/>storage. (segregation halal and non-halal<br/>products)</li> </ul>                               | <ul> <li>Visit customer/client's non-Halal product to ensure<br/>their handling and packaging safety</li> </ul>  |
| <ul> <li>Monitoring and maintaining the warehouse in<br/>good condition</li> </ul>   | <ul> <li>Delivery products to the customer when all<br/>requirement document complete</li> </ul>   |
| - Cleaning processes for warehouse.  | - Scheduled cleaning processes for trucking  |
| <ul> <li>Prepare the cleaning process for a truck that<br/>will be used to distribution Halal product but<br/>have not in clean condition</li> </ul> | <ul> <li>Special cleaning processes for trucking that has<br/>been used for non-Halal product (using water and<br/>even sand or soil regarding to Islamic Sharia)</li> </ul> |
| <ul> <li>Labeling product that will be shipped out as a<br/>product that has met Halal Supply Chain in<br/>term of warehousing</li> </ul>            |  |

The different activities between halal warehousing reside from checking Halal status and labeling Halal supply chain when the product shipped out from the warehouse. Moreover, there also a procedure in cleaning the transport truck that will be shipped in or shipped out from Firm 1 because cleanliness and hygiene are very important in Halal Assurance System. On the other hand, for Firm 2, any customer can be used their service because it is not limited to the halal product. Yet, if there any non-Halal that transport by their truck, then there are several procedures that are needed to practice from segregation until cleaning process, in order to avoid cross-contamination and keep the truck clean.

# General issues in Halal Industry

In this part, it will be explained about general issues founded through the two firms observed in this study, which were conducted through interviews. According to Ab Talib, Hamid, & Zulfakar (2015), Ab Talib, Rubin, & Zhengyi (2013); there are five critical challenges that influence Halal logistics implementation in the firm's management, namely: general issues in the firm, integration issues among LSPs, involvement of many stakeholders, financial perception and government support. Findings below will be described following the framework for case study analysis (Figure 1).

General issues in halal logistic implementation are shown in the following part of the interview:

# Case Study 1: Warehousing

In Firm 1, halal logistics implementation started since the business plan process where the company wants to develop dedicated cold storage and warehouse because of management encouragement in establishing dedicated halal cold storage. It is also one of management the strategy as competitive advantages.

"... Actually, I heard that the beginning of the establishment of the halal logistics was to be like Malaysia, which had its own port. In the interest of, non-Muslim countries usually transit to Malaysia first for the halal certification or label. Well, management sees an opportunity; why doesn't Indonesia make it that way. Start

with making Halal Port, but as management decision is turning into Halal Logistics. To my knowledge, there are other competitors, but outside the port. Cold storage is something new in this area, especially dedicated for Halal product."

In terms of resource management, there is internal Halal training for all staff involved in halal logistics. Other than that, those who are trained are specifically for the Internal Halal Audit Committee and directly related management. All of the staff involved in the cold storage activities have already got training about Halal Assurance System and the personnel in charge in storage room to have their own special suit and jacket to ensure hygiene and to avoid cross-contamination. Related to the cleaning process of the warehouse, it carried out periodically, and checking is carried out by the internal audit team, the internal audit team or Halal.

"...All staff and related management, especially those who directly involved in halal logistics get internal training from the Internal Halal Audit Committee. The training that conducted by the internal audit committee as the result of knowledge transfer from Assessment Institute for Foods, Drugs, and Cosmetics Indonesian Council of Ulama (LPPOM-MUI)..."

The challenges that encounter by Firm 1 is related to the customer awareness of Halal logistics standard. Their customer is using warehousing service because the cold storage facility has the closest distance to the port.

"...The customer concern about Halal product and Halal logistics standards is still lacking. Most of our clients choose our service because it offered cold storage facilities. Even though, the signboard is clearly state that we displayed is Halal cold storage, maybe that because we are the only cold storage near the port."

# Case Study 2: Transportation

On the other hand, the initial factors of Firm 2 in implementing halal logistics are related to customer drivers. The customer needed halal supply chain in terms of transport their Halal products to make it align with their halal system. Therefore, management of firm 2 sees it as an opportunity as well as a competitive advantage.

After implementing Halal assurance system, firm 2 also offered consultation services for those who need Halal assurance system support, but there is the risk faced by Firm 2. It is related to the number of transportations that used in the business process while still ensuring Halal standard of the business process.

"We can only control the number of vehicles while ensuring that the business processes. It accordance with the standard halal rules."

Another issue that has a significant effect on industry is government support. Even though halal certification is not hard to get but support in terms of regulation that mentions Halal logistics is still lacking. As well as awareness from the market has not been evenly distributed. Despite, a client request is still high.

"...Our awareness is still low. As long as the certain products is labeled Halal, we immediately believe it. even though we did not see the process"

There is a positive response from the client that used logistics service from both firms but both firms also aware of the market awareness in halal logistics is a term of halal integrity has become an important factor. Yet, the end customer still has not aware of the existence of a Halal logistics service provider.

#### Integration issues among logistics service providers

In terms of integration with other logistics service providers, the two firms are fully aware that transportation and storage facilities must be maintained halal from the manufacturing process, storage process, along with distribution process.

## Case Study 1: Warehousing

Firm 1 has integrated its warehousing process with other logistics service providers in a way labeling the product with Halal supply chain. So, the following logistics activities are expected to continue maintaining the Halal of the product. The firm is also mentioning to make a system that Halal label of the product can also trace Halal logistics. So, Halal integrity will be implemented.

"It is expected that in the future Halal label of the product will be integrated with the Halal logistics."

### Case Study 2: Transportation

Firm 2 is also trying to integrate their transport system to other activities as well, such as warehousing and freight forwarding. The firm wants to maintain the Halal-ness of the product not only in transportation process but in whole supply chain process.

"Well, that's actually I'm slill learning. I wonder, we have to integrate the Halal process from the port handling side, trucking side, and later on from the end-user side of the customer. That is what we are studying, for market development to maintain that have a halal guarantee system."

#### Integration issues between Halal authorities and logistic service

The process of obtaining Halal certification or more precisely Halal Assurance System for halal logistics services begins with registering the company in Assessment Institute for Foods, Drugs, and Cosmetics Indonesian Council of Ulama (LPPOM-MUI). Assessment Institute for Foods, Drugs, and Cosmetics Indonesian Council of Ulama (LPPOM-MUI) have general guideline about Halal service but the technical guideline in logistics service has not been shared with public. The firm needs to followed Halal Assurance System (HAS) 23000. Implementation of Halal Assurance System (HAS) 23000 is a prerequisite process for obtaining halal certificate from MUI.

#### Case study 1: Warehousing

Firm 1 is a subsidiary company on one of the state-owned enterprises in Indonesia. This firm establishes to support Indonesian Halal Hub likes in Malaysia. Indonesia wants to have its own port and attract other countries who want to transit through Indonesia to get their Halal certificate. Even the non-Muslim majority country also see the opportunity in Halal based business, especially in terms of Halal Supply Chain. The management of the parent company then establishes Halal logistics that dedicated to Halal cold storage in 2015. And the firm got its first Halal Assurance System Status in 2017. The collaboration made by management and Assessment Institute for Foods, Drugs, and Cosmetics Indonesian Council of Ulama (LPPOM-MUI) in terms of training and workshop of Halal Assurance System. The standard and regulations about Halal logistics and storage are arranged by the company after getting directions and consultations from the Malaysian team.

"...The market opportunity seen by management of parent company is then consulted with the Indonesian Council of Ulama (MUI), and they respond positively. The Assessment Institute for Foods, Drugs, and Cosmetics Indonesian Council of Ulama (LPPOM-MUI) is checking our halal standard in the

form of services. Our facility then being audit by them. We were also assisted by a consultant team regarding directions for handling and washing standards from Malaysian consultants. Assessment Institute for Foods, Drugs, and Cosmetics Indonesian Council of Ulama (LPPOM-MUI) and the consultant that we were hired have almost the same standard. Even, I heard that standards in Indonesia are stricter; many standards for halal certification bodies abroad have not been met by their requirements."

The important thing that should be done first in the Halal Logistic implementation is arranging a manual halal assurance system by the HAS manual team. So, there is a management representative and team. The team has a task in arranging Halal policy, then signed by the directors of the company. They were then implementing it according to the halal manual (HAS 23000). The firm also needs to establish an internal audit in their system in charge of making a report and give it to Assessment Institute for Foods, Drugs, and Cosmetics Indonesian Council of Ulama (LPPOM-MUI) periodically.

# Case Study 2: Transportation

Firm 2 is trucking transport company that handles customers from retail to Fast Moving Consumer Goods (FMCG) who already have Halal certification. The main reason firm 1 wants to implement Halal logistics is due to their customer recommendation. To maintain the Halal integrity of customer's product, especially when customer is being audited then asked about their transportation system, it will be easier if the trucking company, they used also have Halal assurance system. The firm took initiative to consult with Assessment Institute for Foods, Drugs, and Cosmetics Indonesian Council of Ulama (LPPOM-MUI) to know how to get Halal certification in terms of transportation. Therefore, there are several parameters that must be met by logistics companies to be able to have Halal transportation status. So, based on these parameters, the Assessment Institute for Foods, Drugs, and Cosmetics Indonesian Council of Ulama (LPPOM-MUI) compiled the assessment material to use for audit list. So, Halal certificate can be obtained by transportation company.

"... We have the initiative to get halal certification because our customers require their products to have Halal assurance system; they only say to us, if we have halal certification, it will be good. The customer also does not force us to have halal certification but only recommend it. We think it's good too. We see it as momentum to develop our business. Actually, our customers mostly restaurants or FMCG. They already have Halal certification for their product, but when they need to audit, the auditor asking for their transportation system whether it meets the Halal assurance system 23000 or not. So, if their trucking system also has Halal assurance system, then the Halal system will be aligned."

In implementing Halal logistics, the first thing to do is arrange a manual for Halal Assurance System (HAS) according to HAS 23000. The manual is compiled by Halal assurance system team as well as management representative and internal audit that in charge of compiling Halal policy for the business process of the company. After the Halal Assurance system procedure was made, it must be signed by the directors. Then' Halal logistics can be implemented it according to the halal manual. With the commitment of management in implementing halal logistics, the process of obtaining Halal assurance system status can be done very well. They obtained Halal assurance status from Assessment Institute for Foods, Drugs, and Cosmetics Indonesian Council of Ulama (LPPOM-MUI) in 2015, and it is continued to maintain. The management feels that Halal certification process is not too difficult. Even they feel the process is similar to obtaining ISO, so they are used to it.

"For the process, it's actually not too difficult because we just need to follow the system clause of HAS 23000 on the product section. In fact, it is similar to ISO; there is MR, there is SOP, there is documentation, there is management review, there is an audit, just like that. Because previously we are already documented ISO 9001 then It is not that difficult. The most difficult thing for us is in term of report online to the regulator. If we have to fill it online, wait for verification; if it's confirmed, then it will work. But if not, it is rather difficult

to do. In fact, Halal Assurance System (HAS) logistics, especially trucking or transportation is not difficult. But if, for example, logistics plus food production is can be difficult. Because we are not only register HAS for logistics, we must also register the assurance system of the halal product production process."

#### Financial issues and perception of Halal implementation logistics

Another factor that important and becoming a consideration for implementing Halal logistics is in terms of financial perception. Both firms see cost that is spent on this certification is part of an investment.

# Case study 1: Warehousing

Firm 1 has already realized even though the cost that they believe that the costs now incurred are an investment in the future, especially if more and more people are aware of Halal logistics. They believe the trend of Halal products is more about cleanliness, safety, and hygiene.

"... There is no difference in terms of cost. The initial intention of management for halal logistics is because we are the largest Muslim country. Even in overseas, halal food product is known for its cleanliness. So, our concern is in that direction. Thus, in designing cost, we believe that we are still competing with competitors. We know that the cost for certification is high, we are afraid of being certified, and even though there is not many customers yet. Hence, we believe that if in the future many consumers concern about Halal logistics, then we can certainly compete in the future. This certificate is in term of investment costs. It is not only about the calculation of profit or loss..."

### Case Study 1: Transportation

On the other hand, for firm 2, there are no differences before and after getting certified. The benefit from Halal logistics implementation can be seen from increasing client and loyalty of the client is using their transportation service. By carrying out the concept of Halal Logistics, management feels that certainty, continuity, and trust from clients will be obtained. But, for financial benefit, it is not significant. Halal certification is seen as a form of investment. To compete with the competitor, they also provide consultation activities to the customer with competitive prices. Management believes that the market for halal logistics is very large following the increase in the number of industries in the food and beverage sector as well as increasing Halal certified products. Halal logistics has become a trend even in the future will become the needs of many people.

"So, there is no direct financial impact on the business processes that we run. However, in terms of certainty, continuity, and trust from the customer level is relatively high. We also offer solutions to customers not just to keep the product safely to its destination but also to offer consultation services. If another LSP only sell their trucking facility, what we sell is how long the lead time will take, how do we control it, how do we complete the transport with GPS. Well, we have Halal Logistics, logistic solution, measurement of lead time. We get the immaterial thing from customer; there is trust, which means trust in business; it can be a business certainty that strengthens us. But in terms of pricing, there is no additional cost after getting Halal certification or Halal transport. Food and beverage related industries have grown, and it will be our potential client. The captive market that we take still small. But, our ability to provide logistics transportation will be an advantage. So, every year we have one additional customer becomes a user of our service, and our income even increases, although not extreme. But, it continues routinely, and the customer increased 10% per year because our ability to provide halal transportation for them is important."

#### Government's support and promotion issues

#### Case study 1: Warehousing

Government support is the key to success in implementing halal logistics. Thus, there are many countries that are concerned about halal status of a product and have implementing Halal logistics in their logistics activities. Malaysia, as one of the pioneers in Halal logistics practices, has full support from their government in terms of promoting their Halal product and application of Halal logistics. Even some countries that are not included in the majority of Muslims. For example, Singapore, Japan, and Korea already aware of Halal logistics.

"...Even Japan, which wants to host the Olympics where many participating countries come from Muslim-majority countries such as the Middle East countries, in order to gain the trust of consumers, Japan government concern Halal-ness of food that will be present to the athlete..."

Halal logistics is still a growing industry worldwide, and Malaysia is among the pioneer and has been trusted by many countries as a place to get Halal certification.

"It turns out that Malaysia is used as transit warehouse when livestock products come from Thailand, or products from Brazil, Vietnam. After getting a certificate from Malaysia, then all products are distributed to other countries. So, will we just wait for government policy and become a spectator to another country, or we take part in this Halal logistics business opportunity."

In terms of regulation, there are general regulations related to halal logistics already exist, but no technical guidelines have been published to the public. Besides, there are still many people who are not aware of Halal logistics. So, implementation of Halal logistics for industry is still challenging.

".... From the customer perspective in Indonesia, they have already begun to realize the problem of certification. But, if there is no support from the government, the Halal industry will not develop rapidly. We also hope that scientists and academic community will strengthen the public understanding of halal logistics. Even though the law related to Halal Assurance system has been made but regulation related to Halal logistics has not been made."

In terms of promotion, government can promote Halal product supply chain process as an integrity process that must be done from raw material until end customer. The purpose is to make public understand the importance of Halal. Halal-ness is not only finish product but also might become a way to increase Halal service industry, especially Halal logistics. With the increasing public awareness of halal logistics, the demand for halal logistics services will also increase.

"Government support can be done in terms of driving people to do some Halal related process as obligatory. ..... even though the most important thing is that the awareness of the public community is well distributed. So, the industry in Halal logistics services will definitely get a positive impact."

#### Case Study 2: Transportation

Regulations that clearly explain that Halal logistics is mandatory in maintaining the integrity of halal products is very necessary. Besides, awareness of public community about Halal logistics is much more influence the development of Halal logistics.

".... then from the external side, actually there is no clear and strong regulation from the government, that Halal logistics is mandatory. So, the challenges are actually more than external challenges that come from public perception of Halal logistics. Because the public has not seen this as the same need. So, the role of Indonesian government is not only to accommodate, facilitate, but also echoing the perception of Halal food is more about healthy, hygiene, and free from cross-contamination."

## Factors Determinant in Halal Logistic Implementation

From the interviewed result, it also can be concluded that there are several factors determinant in influencing the implementation of Halal logistics. The factors are divided into internal and external drivers. Table 2. shows the summary od factor determinants as well as challenges and the benefit of Halal Logistics implementation in business process.

|  | External<br>Drivers  | Internal Drivers   | Issues   | Business<br>Performance                                   |
|--|--|--|--|---|
| Firm 1<br>Logistic<br>Services<br>(Warehousing<br>and Cold<br>Storage) | <ul> <li>Regulation of<br/>Halal<br/>certification</li> <li>Market<br/>Awareness</li> <li>Support from<br/>Halal<br/>Certification<br/>bodies</li> </ul> | <ul> <li>Management<br/>Leadership</li> <li>Investment for<br/>future trend</li> </ul>   | <ul> <li>Uncertain<br/>customer</li> <li>Lack of awareness<br/>of Halal Logistics<br/>in Indonesia</li> </ul>  | <ul> <li>Brand Image</li> <li>Customer Loyalty</li> </ul> |
| Firm 2<br>Logistic<br>Service in<br>Transportation                     | <ul> <li>Market-Driven</li> <li>Customer Need</li> <li>Regulation</li> </ul>   | <ul> <li>Competitive<br/>Advantage</li> <li>Management<br/>Initiative</li> <li>Commitment<br/>Management</li> <li>Investment for<br/>future trend</li> </ul> | <ul> <li>Halal Logistic<br/>Regulation<br/>enforcement</li> <li>Lack of Halal<br/>Logistic Guideline<br/>policies</li> <li>Customer concern</li> </ul> | <ul> <li>Brand Image</li> <li>Customer Loyalty</li> </ul> |

#### .. ..... ----

This study is using case study as a system analysis approach. This study is also trying to explore the implementation of Halal logistics of logistics service providers in Indonesia. There are two different services of the two logistic service providers company offered. The first one offered service in warehousing, and the other one offered transportation service despite the difference in scope, organizational structure, location, and resource. The factors determinant in implementing Halal logistics remains the same for both logistic service provider companies. Through the analysis of data collected from a semi-structured interview and supporting documents as well as secondary data related to regulation, this qualitative study provided an indepth view of how the implementation of the halal logistics involved in logistics provider business process.

The findings of this study shows that both firms implementing Halal logistics is to increase the number of customers, maintaining brand image and customer loyalty and using halal logistics as a part of competitive advantage for the company. It is the same with the previous findings that mention brand image can be acquired through implementing halal logistics as a competitive advantage (Abd Rahman, Singhry, Hanafiah, and Abdul, 2017; Lestari et al., 2018). In terms of service offered by the two firms, creating a supportive

environment along with structured, standard manual operation procedures that complied with the Halal Assurance System 23000 is a must to do to their practical activities before getting Halal certification.

Both firms also mention there is an absence of regulation or decree about Halal logistics from the government as a challenge in implementing halal logistics. In term of regulations, the regulations for obtaining halal certification in Indonesia are summarized in the regulations issued by *Indonesian Council of Ulama* MUI's LPPOM in the form of a halal assurance system, namely HAS 23000. But the technical instructions are not very clear, and the guideline for logistics service HAS 23106 still has not yet been published to the public by the regulator. Hence, the lack of halal logistic guideline policies also becoming a barrier in implementing halal logistics practice. It is similar to the previous study that mention the lack of proper guideline is the major barrier in adopting halal logistics (Ab Talib et al., 2013; Haleem, Khan, and Ngah, 2018). At the same time, support from the government is critical factor in implanting halal logistics (Ab Talib et al., 2013; Stefano Bresciani and Alberto Ferraris, 2016; Ab Talib et al., 2015). So, the support from government indeed needs to increase the public knowledge of Halal integrity system as well as helping the Halal-based business in Indonesia.

For financial perception, the problem is seen today by the industry is related to the application of halal logistics concept, which means bringing additional costs such as warehouse separation, segregation according to the nature of the product, and others (Lestari et al., 2018). Even though both firms that have been interviewed did not see financial as a problem. It is different with previous study that mention by Zailani, Iranmanesh, Aziz, & Kanapathy (2017) that financial is a barrier in adopting halal logistics. In this study, both firms see the cost that the companies pay for implementing halal logistics are a form of long-term investment and experience. So, they one step ahead of other firms.

These findings can be used as an example to whom interested in implementing Halal logistics service in their business process. Other than facility and standard procedure, the important thing that has to do is maintaining quality system including a human resource management system. Both firms have their own internal audit halal committee to ensure their staff has a good standard of Halal knowledge, especially in practicing Halal logistics. This system covers all internal and external training for the staff. So, the the desired quality level can be achieved and the requirement to ensure Halal quality in their business process can be accomplished.

# D. CONCLUSION

The external driven factor, in this case, is market-driven as prior factors as driven factors in implementing halal logistics practices. Halal certification body also has an impact on the willingness of a firm to implement halal logistics. Thus, government support plays a big role in drive the market to use halal logistics services. The findings can provide a guideline in how to implement halal logistics practices in logistic service providers is, especially in transportation and warehousing process. The halal certification in Indonesia process is still evolving and focusing on halal certification for Food and Beverage products instead of Logistics. If Indonesia has to compare to other Muslim countries such as Malaysia, Indonesia is way too far behind Malaysia because Malaysia has already operated halal activities in all sectors. Hence, with a variety of existing problems, this study aims to provide an exploration of a case study from two companies. This case study is an example of a success story in the implementation of halal logistics in Indonesia. So, it can be used as a reference for other providers in implementing halal logistics.

# E. ACKNOWLEDGMENT

The authors would like to extend their gratitude to the Ministry of Research, Technology, and Higher Education of Indonesia for the provision of the research grants. The authors would also like to extend their appreciation

to Logistic Service Providers who willing to contribute to this research. As well as to the Assessment Institute for Foods, Drugs, and Cosmetics Indonesia Council of Ulama or LPPOM MUI for the support.

### References

- Ab Talib, M. S., Hamid, A. B. A., & Zulfakar, M. H. (2015). Halal supply chain critical success factors: A literature review. *Journal of Islamic Marketing*, 6(1), 44–71. https://doi.org/10.1108/JIMA-07-2013-0049
- Ab Talib, M. S., Rubin, L., & Zhengyi, V. K. (2013). Qualitative research on critical issues in halal logistics. *Journal of Emerging Economies and Islamic Research*, 1(2), 131-150.
- Abd Rahman, A., Singhry, H. B., Hanafiah, M. H., Abdul, M., Karia, N., Asaari, M. H. A. H., ... Samah, A. A. (2016). Halal value creation. *Food Control*, 6(S1), 268–291. https://doi.org/10.1080/10454446.2014.921869
- Abd Rahman, A., Singhry, H.B., Hanafiah, M.H. and Abdul, M., 2017. Influence of perceived benefits and traceability system on the readiness for Halal Assurance System implementation among food manufacturers. *Food Control*, 73, pp.1318-1326.
- Ahmad, F., Hussein, M.Z., Husny, Z.J., Yazid, M., Mazlan, Z., Rayner, T., A.R, F., Zani, M., & Adnan, N. (2018). Halal Logistics: Halal Integrity and Legal Enforcement Challenges. *International Journal of Supply Chain Management*, 7, 42-47.
- Ali, M. H., & Suleiman, N. (2018). Eleven shades of food integrity: A halal supply chain perspective. *Trends in Food Science and Technology*, 71(April 2017), 216–224. https://doi.org/10.1016/j.tifs.2017.11.016
- Amir, A. S., & Tjibtosubroto, W. (2019). The Creating of Halal Value Chains : A Theoritical Approach, *10*(1), 14–22. https://doi.org/10.9790/5933-1001011422
- Fathi, E., Zailani, S., & Iranmanesh, M. (2016). Drivers of consumers ' willingness to pay for halal logistics, 118(2), 464–479. https://doi.org/10.1108/BFJ-06-2015-0212
- Halal Assurance System Provision. (2013, March 31). Retrieved April 30, 2020, from http://www.halalmui.org/images/stories/pdf/kebijakan/2. HAS Provision (SK13).pdf
- Haleem, A., & Khan, M. I. (2017). Towards successful adoption of Halal logistics and its implications for the stakeholders. *British Food Journal*, *119*(7), 1592–1605. https://doi.org/10.1108/BFJ-12-2016-0637
- Haleem, Abid, Mr Mohd Imran Khan, M. S. Khan, and A. Hafaz Ngah. "Assessing barriers to adopting and implementing halal practices in logistics operations." In *IOP conference series: materials science and engineering*, vol. 404, no. 1, pp. 12-20. 2018.
- Jaafar, H. S., Faisol, N., Rahman, F. A., & Muhammad, A. (2016). Halal Logistics Versus Halal Supply Chain: A Preliminary Insight. In *Contemporary Issues and Development in the Global Halal Industry* (pp. 579–588). Springer Singapore. https://doi.org/10.1007/978-981-10-1452-9\_52
- Lestari, Y. D., Okdinawati, L., & Simatupang, T. M. (2018). Halal logistic business model development in Indonesia. *International Journal of Supply Chain Management*, 7(3), 238–250.
- Lppom MUI | Lembaga Pengkajian Pangan Obat-obatan dan Kosmetika Majelis Ulama Indonesia. (n.d.). Retrieved April 2, 2020, from https://www.halalmui.org/mui14/main/page/persyaratan-sertifikasi-halalmui
- Ngah, A. H., Zainuddin, Y., & Thurasamy, R. (2014). Adoption of Halal Supply Chain among Malaysian Halal Manufacturers: An Exploratory Study. *Procedia - Social and Behavioral Sciences*, 129, 388–395. https://doi.org/10.1016/j.sbspro.2014.03.692
- Sekretariat Kabinet Republik Indonesia | Law Number 33 of 2014: Government Must Establish Halal Product Guarantee Agency. Retrieved March 30, 2020, from https://setkab.go.id/en/law-number-33-of-2014government-must-establish-halal-product-guarantee-agency/
- Shariff, S., & Ahmad, N. (2019). Contemporary Management and Science Issues in the Halal Industry. Contemporary Management and Science Issues in the Halal Industry. Springer Singapore. https://doi.org/10.1007/978-981-13-2677-6
- Stefano Bresciani and Alberto Ferraris. (2016). Can Halal Certification Influence Logistics Performance? Baltic Journal of Management, 11(1), 108–130. https://doi.org/10.2139/ssrn.2874560
- Talib, M. S. A., Hamid, A. B. A., Zulfakar, M. H., & Chin, T. A. (2015). Barriers to Halal logistics operation: Views from Malaysian logistics experts. *International Journal of Logistics Systems and Management*,

22(2), 193–209. https://doi.org/10.1504/IJLSM.2015.071545

- Talib, M. S. A., Rahim, M. A. R. A., Chin, T. A., & Hamid, A. B. A. (2017). Logistics service providers perceptions on halal logistics certification. *International Journal of Logistics Economics and Globalisation*, 6(4), 311-331.
- Tieman, M. (2011). The application of Halal in supply chain management: In-depth interviews. *Journal of Islamic Marketing*, 2(2), 186–195. https://doi.org/10.1108/17590831111139893
- Tieman, M. (2013). Establishing The Principles In Halal Logistics. *Journal of Emerging Economies and Islamic Research*, Vol.1, 1–13. Retrieved from http://www.jeeir.com/index.php/jeeir/article/view/32
- Tieman, M. (2015). Halal clusters. *Journal of Islamic Marketing*, 6(1), 2–21. https://doi.org/10.1108/JIMA-05-2014-0034
- Tieman, M., & Darun, M. R. (2015). A Supply Chain Approach toward Halal. *Journal of Halal Research*, 1(1), 15–18.
- Tieman, M., & Ghazali, M. C. (2014). Halal Control Activities and Assurance Activities in Halal Food Logistics. *Procedia - Social and Behavioral Sciences*, 121(September 2012), 44–57. https://doi.org/10.1016/j.sbspro.2014.01.1107
- Tieman, M., van der Vorst, J. G. A. J., & Ghazali, M. C. (2012). Principles in halal supply chain management. *Journal of Islamic Marketing*, 3(3), 217–243. https://doi.org/10.1108/17590831211259727
- Zailani, S., Iranmanesh, M., Aziz, A. A., & Kanapathy, K. (2017). Halal logistics opportunities and challenges. *Journal of Islamic Marketing*, 8(1), 127–139. https://doi.org/10.1108/JIMA-04-2015-0028
- Zailani, S., Jafarzadeh, S., Iranmanesh, M., Nikbin, D., & Selim, N. I. I. (2018). Halal logistics service quality: conceptual model and empirical evidence. *British Food Journal*, 120(11), 2599–2614. https://doi.org/10.1108/BFJ-07-2017-0412
- Zulfakar, M. H., Anuar, M. M., & Talib, M. S. A. (2014). Conceptual Framework on Halal Food Supply Chain Integrity Enhancement. *Procedia - Social and Behavioral Sciences*, 121, 58–67. https://doi.org/10.1016/j.sbspro.2014.01.1108