

# The Role Of Implementing Halal Logistics Value Chain On The Business Performance Of MSMEs Food And Beverages In The City Of Bandar Lampung, Indonesia

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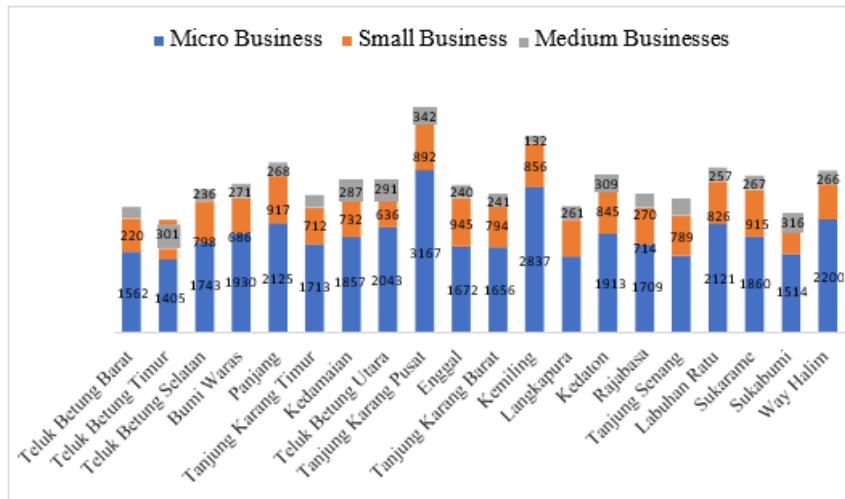
**Abstract.** According to the Global Islamic Economic Indicators, there are 6 indicators of Islamic economic growth in a country, one of which is halal food. The demand for goods and services based on Islamic law is rising along with the Islamic economy's growing significance in the global economy. Halal certification therefore becomes crucial. Indonesia is a nation with a majority of Muslims. For Muslims, halal-labeled food is a must, because in terms of consuming food or drinks it has been regulated and determined by Allah SWT. This is governed in Indonesia by Halal Law Number 33 of 2014, which mandates that all goods coming into, moving through, and being sold within Indonesian borders must be certified halal. However, there are still many business actors does not aware of that. This is evidenced by the fact that there are still many micro, small and medium enterprises that have not been labeled halal. Halal logistics is needed to ensure the end-to-end halalness of products from the basic ingredients at the producer, continuing to the processing process, to the finished product to the consumer. This aims to know the effect of halal logistics value chain (halal in packaging, transporting, warehousing, and managing) on MSMEs Food and Beverages's business performance in Bandar Lampung. This research method analysis uses SmartPLS. The result of this study are halal packaging, halal transport, and halal warehousing do not have impact on business performance of MSMEs FnB Bandar Lampung. Otherwise, halal management system has effect on business performance of MSMEs FnB Bandar Lampung Indonesia.

**Keywords:** Halal Logistics Value Chain, Business Performance.

## 1 Introduction

The development of MSMEs in Lampung Province has a fairly rapid development. Data from Office of Cooperatives and Small and Medium Enterprises, the number of MSMEs in Lampung Province has increased every year. Lampung Province has a capital city called Bandar Lampung.

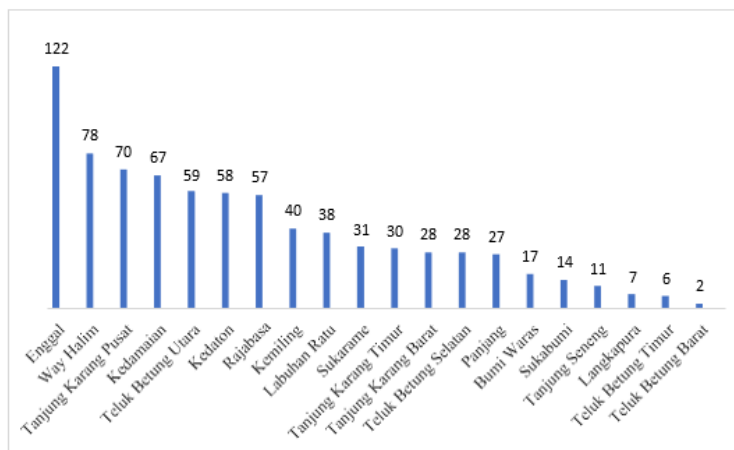
The MSMEs of Bandar Lampung City also always increases from year to year, this is because the role of MSMEs is so large in the national economic movement. The following is MSMEs in Bandar Lampung City based on sub-districts in 2021:



**Fig. 1.** Number of MSMEs in Bandar Lampung by Sub-District in 2021

Data Source: Cooperative and MSMEs Office of Bandar Lampung City

Table above shows the number of MSMEs in Bandar Lampung according to the Office of Cooperatives and MSMEs in 2021 was recorded at 59,488 MSMEs, while culinary MSMEs or the FnB according to the Office of Cooperatives and Bandar Lampung’s MSMEs 2021 was recorded at 790 MSMEs. The following is data on the development of MSMEs FnB in Bandar Lampung City in 2021:



**Fig. 2.** Number of FnB MSMEs in Bandar Lampung 2021

Data Source: Cooperative and MSMEs Office of Bandar Lampung City

The competitive energy of MSMEs in Bandar Lampung City is also very large, it’s proven by many of MSMEs in Bandar Lampung City, especially with many larger companies, as well as more advanced malls, of course making business actors use various methods to introduce and market MSMEs products. MSMEs in Lampung Province have a considerable

ability to develop because Lampung has a lot of superior potential. According to the Lampung Provincial Industry Office in 2018, the advantages such as processed fish, various chips, melinjo chips, and others.

The demand for goods and services based on Islamic law is rising along with the Islamic economy's growing significance in the global economy. Thus, halal certification becomes very important. According to the Global Islamic Economic Indicators, there are 6 indicators of Islamic economic growth in a country, one of which is halal food. Indonesia is a nation with a majority of Muslims. For Muslims, halal-labeled food is a must, because in terms of consuming food or drinks it has been regulated and determined by Allah SWT. Halal is defined as all products and foods that are processed following a series of Islamic laws and regulations. Products and food must be halal and clean, meaning that they are halal or allowed by the law giver (Allah) which covers all aspects of human life including: food, lifestyle, and services [13].

Regulation is necessary to understand halal practices. This is governed in Indonesia by Halal Law Number 33 of 2014, which mandates that all goods coming into, moving through, and being sold within Indonesian borders must be certified halal. The Indonesian Ulema Council (MUI) issues halal certificates through the Indonesian Halal Product Guarantee Agency (BPJPH), which is based on FATWA. As a result, businesses need to establish documented processes for important tasks that can affect halal status and facilities must be able to ensure there is no cross-contamination.

Nonetheless, a large number of business actors continue to be ignorant of the significance of halal certification. This is evidenced by many MSMEs that have not been labeled halal. Halal logistics is needed to ensure the end-to-end halalness of products from basic ingredients in producers, continuing to the processing process, to finished products to consumers. From upstream to downstream, the halal value chain spans multiple industrial sectors and plays a significant role in the development of Indonesia's economy [2]. The process of processing raw materials is known as the Halal Value Chain which are processed into finished goods and then distributed to consumers. The halal process includes the selection of halal raw materials, the process of cooking food ingredients, and serving food. It aims to reduce production costs and maintain and maintain the halalness of the product until it is in the hands of consumers. Halal Value Chain also requires halal policies to control halal logistics, the network structure of the halal product value chain, and halal resources that are managed.

The results of research by [9] shows that halal logistics value chain has an impact on company performance in developing countries. By using halal in packaging, transportation, warehousing, also management will improve company performance.

## **2 Literature Review**

### **2.1 Logistics**

The administration of the movement of commodities from a place of origin to a point of consumption in order to satisfy a particular demand—that is, to customers or businesses—is known as logistics. Physical, tangible items like food, building supplies, animals, equipment, and liquids make up the categories of commodities that are available in the logistics industry. As well as the movement of intangible (abstract) items such as time, information, particles-energy. Information flow, material handling, production, packaging, inventory, transportation, warehousing, and security are all typically integrated into the logistics of physical items. With current simulation tools, logistics complexity may be examined, broken down into a model, visualized, and optimized [10]

The process of organizing, carrying out, and managing the smooth movement and storage of products and services, along with any associated data, from a point of origin to a site of consumption in order to satisfy consumer demands is known as logistics. Inbound, outbound, internal, and external movement, as well as the return of items for environmental reasons, are included in this description. In a competitive market where excellent customer service performance is generally acknowledged, logistics plays a significant role. A key component of a company aiming to enhance customer purchasing behavior is the realization of logistical value based on superior service and cost control [3].

Logistics now plays a bigger role than just transporting resources and completed goods; it also helps businesses gain a competitive edge by offering services that satisfy customer needs. In order to increase its national and international connectedness, Indonesia must have competitive logistics services [17]. Because it distributes goods and services from the extraction of raw materials through the production process, marketing, and delivery to customers, the logistics service industry is essential [17].

### **2.2 Value Chain**

According to Porter, there are several activities contained in the value chain in a company:

1. Primary Activities
  - a. Inbound Logistics: an activity related to production inputs.
  - b. Operations: an activity related to converting raw materials into finished materials or goods.
  - c. Outbound Logistics: an activity related to the distribution of products to consumers.
  - d. Marketing and Sales: an activity related to providing a place that can be used by buyers in choosing a product.
  - e. Service: an activity related to the provision of services in increasing product value.
2. Support Activities
  - a. Procurement: an activity that facilitates the acquisition of inputs utilized in the value chain of the business, good purchases will be made by the company in influencing the cost and quality of products purchased and activities related to the receipt and use of inputs, as well as interactions with suppliers or supply.

- b. Technology Development: an activity that consists of a group of technologies used in preparing a finished product to the technologies associated with the products produced.
- c. Human Resource Management: an activity related to resource management that can affect competitive advantage by determining a skill in improving employee motivation and training.
- d. Firm Infrastructure: supporting activities that fully support the value chain and are independent of the firm.

From the explanation above, Halal Value Chain (HVC) is the top order of a product value chain in an industry, the product value chain itself includes input, production, distribution, marketing, and consumption. Nowadays technology plays an important role in producing a product, especially halal products, besides helping to produce halal products that are more hygienic, the production process will be more efficient. With a technology, the packaging of halal products will also be easier so that hygiene is guaranteed and the halalness is better maintained until the halal product reaches consumers.

### **2.3 Business Performance**

State that business performance is the outcome of corporate objectives met by means of successful tactics and methods. Business performance is an important standard used by an economic entity to assess business success. Therefore, each company endeavor has a stake in demonstrating the performance attained in relation to the collected and established achievement standards within the organization. In order to evaluate corporate success, it is crucial to standardize performance measures, standardization of measures is needed as a meter and evaluation material in preparing future plans. Several studies and experts such as according to [11] state that performance of financial, operational also market-based are the metrics of business performance that are most commonly employed in empirical research.

### **2.4 Research Hypothesis**

Kosher management system, kosher storage, halal transportation, and halal packaging are elements that form the dimensions of the value of halal logistics chain. Halal Value Chain (HVC) is the top order of a product value chain in an industry, the product value chain itself includes input, production, distribution, marketing, and consumption. The process of organizing, carrying out, and managing the smooth movement and storage of products, services, and all associated data from a place of origin to a point of consumption in order to satisfy consumer demands is known as logistics. Because it distributes goods and services from the extraction of raw materials through the production process, marketing, and delivery to customers, the logistics services industry is essential [17]. Halal logistics services are essential to maintaining the supply chain's quality or threshold (halal) by ensuring that operations continue. This had to do with growing consumer interest in the halal value chain, specifically with regard to convenience, safety, and welfare throughout the supply chain, including the use of tracing systems to identify the product's origin and track down the source of contamination. Research conducted by [9] stated that there is an influence of halal in packaging, transport, warehousing, and management on umkm business performance. So that here the hypothesis's study:

H1: Halal Packaging affects the FnB businesses's performance in Bandar Lampung.

H2: Halal Transport affects the FnB businesses's performance in Bandar Lampung.

H3: Halal Warehousing affects the FnB businesses's performance in Bandar Lampung.

H4: Halal Management System affects the FnB businesses's performance in Bandar Lampung.

### 3 Research Methods

#### 3.1 Research Population and Sample

Participants in this study were MSMEs involved in the food and beverage industry in Bandar Lampung City. Random sampling, which gives every member of the population an equal chance of being chosen as a sample member, is the sampling strategy employed in this investigation, both individually and collectively.

To determine the research sample, the Slovin formula was used:

$$n = \frac{N}{1 + N(e)^2}$$

Keterangan:

n : Number of Samples

N : Population Level

e : Margin of Error

The error rate in this study is 10%, which is a guide to determine the minimum error. The population as a reference for the calculation that will be used is 790 MSMEs. The population as a reference for calculations to be used is 790 MSMEs, with the following calculations:

$$n = \frac{790}{1+790(0,1)^2} = 88.76 \text{ rounded to } 89 \text{ MSMEs}$$

Then the minimum sample size used in the population is 89 MSMEs Food and Beverages.

#### 3.2 Types of Data and Data Collection Techniques

Primary data is the sort of data used in this study. In the data collection method that will be used by researchers, namely field studies, where it will be carried out include interviews and questionnaires.

1. Interviews to obtain fact about the dimensions of the halal logistics value chain and business performance. This interview was addressed to food and beverage business people in Bandar Lampung.
2. Questionnaires containing statements related to question items regarding the dimensions of the halal logistics value chain and business performance were distributed to food and beverage MSMEs players in Bandar Lampung who were the research sample.

### 3.3 Variable Operationalisation

One independent variable, product innovation was employed in this study, one intervening variable, namely competitiveness, and one dependent variable, namely MSMEs going upmarket. Table 3.1 shows the dimensions for measuring halal logistic value chain and business performance. chain and business performance.

**Table 1.** Variable Operationalisation

Variable	Dimension	Indicators
Value Of Halal Logistics Chain	Halal Packaging	<ol style="list-style-type: none"> <li>1. Our company is committed to making sure that no non-halal components, animals that have not been killed in compliance with Sharia law, or alcoholic beverages are included in the packaging of our products.</li> <li>2. Our business believes maintaining a hygienic working environment will increase profits</li> <li>3. Our employees/workforce know the Islamic requirements in halal products/services.</li> <li>4. Our business is committed to a safe also environmentally harmless packaging procedure.</li> </ol>
	Halal Transport	<ol style="list-style-type: none"> <li>1. Our business is committed to ensuring the products/services we sell are clean, quality and safe</li> <li>2. Our business believes that ensuring a safe, comfortable, also clean environment is crucial for the Warehouse</li> <li>3. Our employees/workforce know the process for handling the storage of halal products/services</li> <li>4. Our business is committed to keeping the warehousing area clean and follows a sanitisation schedule to avoid pollution and contamination of air, water, sound</li> </ol>
	Halal Warehousing	<ol style="list-style-type: none"> <li>1. Our business is committed to ensuring all goods stored in transport must be halal products.</li> <li>2. Our business believes by emphasising on strategic location plan will save cost-energy.</li> <li>3. Our employees/workforce are skilled in their responsibilities in transportation</li> <li>4. Our business believes that strict separation between halal-haram products during halal logistics services will reduce transport and energy costs.</li> </ol>
	Halal Management System	<ol style="list-style-type: none"> <li>1. If the warehouse and transportation are discovered to be contaminated with goods classified as najis mughallazah (the dirtiest of impurities), our company will make sure that shariah ceremonial cleansing is carried out.</li> <li>2. Our business believes logistics businesses or services should implement traceability systems.</li> <li>3. Our employees/experts are provided adequate training in handling halal products/services</li> <li>4. Warnings about advanced information systems helping to improve the quality of our earth 4.</li> </ol>

Variable	Dimension	Indicators
Business Performance	Business Performance	<ol style="list-style-type: none"> <li>1. Our business shows improvement in profit</li> <li>2. Our business shows an increase in the average return on investment owned</li> <li>3. Our business is showing an increase in the average return on assets held</li> <li>4. Our employee/workforce headcount continues to increase</li> </ol>

### 3.4 Test Hypothesis

This research hypothesis test uses data analysis techniques using smartPLS software. The PLS method was used in this study for several reasons, namely this research is predictive where the research is used to predict endogenous variables that are influenced by several exogenous variables, PLS has the ability to conduct research with a predictive orientation conduct research with a predictive orientation. PLS is used in addition to measuring relationship between exogenous and endogenous variables, PLS can also measure the relationship between each indicator and its components so that it can describe the model (outer) and (inner) more accurately.

## 4 Results and Discussion

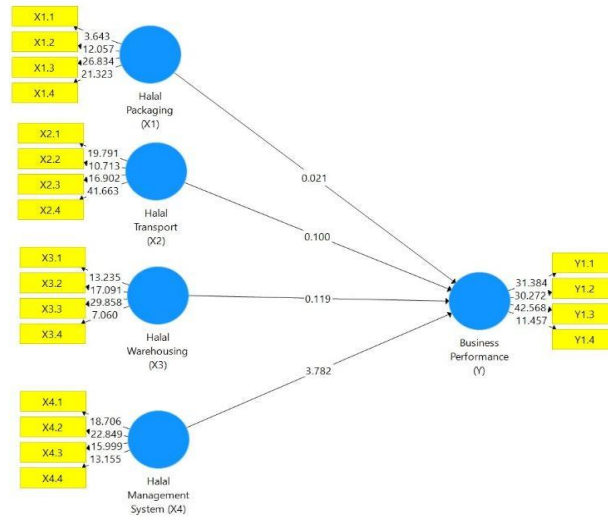
The average variance exprected (AVE) value in this study is  $> 0.5$ , which means it shows that it has good convergent validity. Likewise, the value of Composite Reliability  $> 0.7$ , which means that the construct has high reliability.

**Table 2.** Validity and Reliability of Constructs

	Composite Reliability	AVE
Halal Packaging	0.882	0.654
Halal Transport	0.910	0.717
Halal Warehousing	0.888	0.666
Halal Management System	0.899	0.691
Business Performance	0.913	0.726

Figure 3 illustrates this research model, explaining how the independent variables affect the dependent variable.





**Fig 3.** Results of SmartPLS 3.0 Data Processing

Table 3. P Values of halal packaging on business performance of 0.983 or 98.3%, which means that halal packaging has no significant effect, because P Values > 0.05 or 5%. Thus, H1 in this study is not supported. This means that the existence of halal packaging on a product does not affect the FnB MSMEs's business performance. It support study's [9] that shows packaging is a value creation instrument value creation instrument, it has a small contribution to company performance.

**Table 3.** Path Coefficient

	T Statistics	P Values
Halal Packaging > Business Performance	0.021	0.983
Halal Transport > Business Performance	0.154	0.920
Halal Warehousing > Business Performance	0.119	0.906
Halal Management System > Business Performance	3.782	0.000

H2 in this study is also not supported, because it has P Values > 5%, which is 92% (Table 3). This means that halal transport has no significant effect on business performance. So, halal transport on a product does not affect the FnB MSMEs's business performance. So, it support previous studies which also reveal that transportation is the lowest contributing halal logistics value creation instrument in improving company performance [9].

Halal warehousing have no significant impact to business performance, because it has a P value of 90.6% (Table 3), which means that H3 in this study is not supported. This means that halal warehousing of a product does not affect the FnB MSMEs's business performance. It support previous studies, that found warehousing is a logistical halal value creation instrument can improve company performance [9].

H4 in this study is supported, because it has P Values  $<0.05$ , it is 0%. This means, the better the halal management system provided will improve the business performance of MSMEs. The findings of this study corroborate those of earlier studies that demonstrated the management system is a tool for halal logistics value generation that can enhance hotel performance [20].

## 5 Conclusions

The conclusion is that halal packaging, halal transport, and halal warehousing have no significant effect on the Bandar Lampung FnB MSMEs's business performance. The existence of halal packaging, halal transport, and halal warehousing does not affect the business performance of FnB MSMEs in Bandar Lampung. Otherwise, Halal management system has a significant effect on the business performance of FnB MSMEs in Bandar Lampung. The existence of a halal management system makes the business performance of FnB MSMEs in Bandar Lampung, Indonesia getting better.

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