



Halal Product Assurance at Traditional Markets in Luwu Raya Based on Halal Supply Chain Traceability

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Abstract

The purpose of this study is to explore halal products in the Greater Luwu Market using halal supply chain traceability. The research intends to develop practical guidelines and recommendations for market operators and regulators to implement and maintain Halal assurance systems effectively. Ultimately, the goal is to promote consumer confidence in Halal products available in these traditional markets and contribute to the broader objective of standardizing Halal practices in the region. This study uses qualitative research by collecting data in the form of random interviews with economic actors of producers, distribution, and consumers in the Greater Luwu market. The results of the study found that first there are three sources of supply of goods or commodities in the Greater Luwu Market, namely outside the city, collectors of goods and land products themselves. Secondly, the application of halal awareness indirectly in the Greater Luwu community, which in fact is mostly Muslim, makes halal supply management in the Greater Luwu market run according to the provisions even though there is no specific tool to detect supply, so that the availability of halal food ingredients in the Greater Luwu market can be said to be easy to find and still dominant.

Keywords: *Traceability product; halal supply chain; traditional market.*

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1. Introduction

Industrial development has caused an increase in needs, especially food, clothing, and shelter to develop. Even needs can now be met by ordering online, but it still raises the question of the feasibility of consumption, especially Muslims who have halal beliefs or not to consume these substances or objects to meet needs ([Ivanov and Dolgui 2021](#); [S. Khan, Haleem, and Khan 2023](#)). Although the Internet of things provides its own solution to monitor the supply of goods and services individually by means of product traceability indentation, improving supply chain efficiency, facilitating livestock management, authenticating the halal status of food, and monitoring halal certification([Rejeb et al. 2021](#)). In fact, it has not given full confidence regarding uncertain information due to a lack of user reviews([Rejeb et al. 2021](#)). ([Darmawati et al. 2023](#)) The halal industry has become the fastest growing global industry of business and has reached 1.8 billion consumers globally with an estimated value of USD 2.1 trillion. Recent years have seen an increase in awareness of halal food and beverage consumption internationally. This is evidenced by the abundance of research on supply chain management (supply chain management). According to ([Dian Sudiantini, Nana Irvana 2023](#)) Supply Chain Management is a set of approaches to efficient integration of suppliers, manufacturing, warehouses and storage, so that goods are produced and distributed in the right quantity, the right location, the right time, to minimize costs and provide satisfied service to customers.

Brunei Darussalam's steps to include sustainable halal food supply chain management in the SDGs development goals, there are four initiatives carried out in supporting sustainable supply chain management (SSCM) applied to the halal-certified food and beverage business by highlighting several points in the form of responsible resources, namely procurement, environmentally friendly transportation, sustainable packaging, and environmentally friendly purchasing ([Ab Talib and Zulfakar 2023](#)). ([Genovese et al. 2017](#)) states the environment needs to be considered to maintain sustainable food sources and major supply production sites. This is agreed by ([Tu. Y.T 2021](#)) that there are four main characteristics of halal sustainable food supply chains: pre-slaughter, warehousing, halal integrity, and packaging. Of these features, the two most important factors for successful implementation of sustainability in the halal food supply chain are warehousing and packaging. The availability of warehousing for the supply of halal goods must be optimized to ensure the trust of products not contaminated with other non-halal goods([Mohd et al. 2023](#)).

([Kurniawati and Cakravastia 2023](#)) Finding that issues related to sustainable halal supply chains consist of: first is halal integrity to guarantee the halalness of a product. Second, the limited adoption of halal supply chains, and the third issue is the limited number of studies discussing sustainability in halal supply chains. Even halal supply has made MSMEs the most contributing line, one of which is in Malaysia. ([Muhamed et al. 2023](#)) Finding supply chain orientation (SCO) in Malaysia combines three factors in investigating company performance in this case halal-certified MSMEs in the form of management support, commitment, and credibility, for the determination of company performance from 284 responses.

According to ([El Baz and Ruel 2021](#)) French state research even requires risk management in managing supply chains during and after Covid-19, in its implementation a combination of supporting the general principles of RBV and OIP theory is needed. Supply chain management applied in urgent times like this according to ([Queiroz et al. 2022](#)) that is adaptation, digitalization, preparedness, recovery, ripple effects, and sustainability. Research([Chowdhury et al. 2021](#)) revealed that when Covid-19 occurred, many studies suggested food and medicine supply management methods that were urgent at that time so that MSME goods were neglected. The neglect occurred because of the priority of food and medicine that needed to come first so that the distribution process was suspected to occur a mixture of halal and non-halal goods. This is revealed ([Tseng et al. 2022](#)) In his research with the fuzzy delphi method, the results show that the most important indicators for

non-Halal sustainable food supply chains are food consumption, food health, food care, resilience, food waste management. The most important Halal indicators of sustainable food supply chain consist of Halal certification, Halal supply chain trust, Islamic values, halal food safety ([Rejeb, Abderahman, Karim, Zailani, Suhaiza and Kayikci 2022](#)). From this explanation, it can be seen that the understanding of these indicators is not necessarily understood by all market participants.

Research ([El Daouk 2023](#)) The UK recognises that halal supply chain management is the answer to food supply problems due to HCSCM can further alleviate the complexity hampering the UK construction sector at the supply chain level. This is due to the customised ta'rif identification and traceability process, iltizām cross-lateral monitoring process, and sharia-compliant, assured, and verifiable istiḳāmah certification system, all of which complement the UK's existing construction supply chain assurance and control processes. In China's bamboo curtain country, the contribution of the halal food industry to adopt the halal way of working, supply chain management has a positive effect on the company's performance([Usmanova 2021](#)) Likewise Indonesia([Javid and Amini 2023](#)).

Not only for basic needs even supply chain management is also adopted by blockchain in financial services in terms of financial traceability, information security([Asnawi, Mahsun, and Danila 2023](#)). The use of blockchain is expected to make it easier for consumers to make buying decisions and compare and set prices for sellers([Rejeb et al. 2023](#)). Entering the field of research tourism ([Suseno et al. 2023](#)) Finding that the halal supply chain has an effect on the economic growth and halal tourism in Indonesia. On research ([Muhammad Yusuf, Soediantono, and Naval Command and Staff 2022](#)) Supply chain management is even explained to be applicable to the defense industry because it can maintain the amount of supplies, reduce costs, and fast delivery times with smooth information.

The success offered by halal supply chain management still has many obstacles. ([M. I. Khan, Khan, and Haleem 2022](#)) Raising barriers to halal supply chain management including demand-related barriers" is the main obstacle, followed by "Barriers to government support", "Resource-related bottlenecks", "barriers related to management support", "Barriers related to halal certification bodies", "barriers related to technology support" and "barriers related to halal supply chain partners. In addition, refer to research ([Azmi et al. 2021](#)) Reveal if the risk in the development of halal supply chain management is hampered by price and cost risks.

In Indonesia itself, the large Muslim population has encouraged the emergence of various discourses and recommendations related to the provision of products that are in line with Sharia rules and norms or halal products. The large level of demand for halal goods and products is due to the rapid growth of the Muslim population and also because of the increasing public awareness in religion. In addition, currently the existence of halal products is not only to fulfill the instinct of needs, but also has been used as a life style, especially for the Muslim community in Indonesia ([Rukiah Lubis et al., 2023](#))

Research related to the Halal industry in Indonesia has been reviewed by many researchers, but there are still many who have not examined the relationship between perceptions and also customer and consumer behavior towards halal goods and products. Studies related to the guarantee of halal goods and products from the aspect of providing halal products are still very rarely studied by researchers. Therefore, this may be caused by the lack of regulatory tools, especially those related to the provision of halal goods and products that must be carried out.

In this country, the set of rules related to the halal industry is Law Number 33 of 2014 concerning Halal Product Assurance. However, this set of rules is still general, unlike the set of regulations that exist in Muslim countries in general, such as the regulations imposed in Malaysia. Malaysia is a Muslim-majority country that is growing rapidly in the halal product assurance sector so that the country has become a world reference in the halal industry. Therefore, there needs to be new regulations and programs that are urgently needed in Indonesia, especially how to compete with

other Islamic countries, especially in terms of how to achieve a good programmatic system to guarantee halal products ([Wulpiah Wulpiah et al., 2022](#))

A complicated and long process of how to provide a product to the hands of consumers, in the study of management science is referred to as supply chain management (Supply Chain Management). In general, supply chain management in a conventional perspective is a system that relates a series of systematic processes in order to fulfill a product for consumers which initially starts from the process of producing, delivering, warehousing, distribution and marketing (sales) until finally the product reaches the hands of the final consumer.

Conventionally, the concept of supply chain management in providing halal-based products has transformed into the concept of Halal Supply Chain Management or HSCM which is essentially the same as the concept of HSCM in general, it's just that the difference lies in the final product produced, and of course in the concept of HSCM produces halal-based products. The concept of HSCM has experienced significant development marked by the birth of various kinds of research results and the availability of a lot of literature related to it ([Aulia and Azizah 2024](#)).

As a system of providing halal products, Halal Supply Chain Management (HSCM) is expected to guarantee customers and consumers that the goods and products produced have been accommodated with halal elements in it so as to stimulate Muslim consumers, especially to use these products based on halal certificates ([Baehaqi, Rizana, and Cahyono 2023](#)). The concept of HSCM itself is a system and method that gives birth to a value flow and also a legitimate supply chain and of course in accordance with the requirements in Islam so that the goods and products born have been guaranteed halal ([Ghazali 2012](#)) ([Harwati and Yunita Pettalolo 2020](#)).

A study conducted by [Yussof et al., \(2015\)](#) found that the HSCM system has become a hot topic with and significant especially in the Muslim community in relation to guaranteeing the need for their halal products. Muslim consumers certainly expect information about how the product is produced, how the slaughter process (if the product is from animals), and also how the production process and storage, packaging, logistics, to the distribution flow so that then provide assurance that the product consumed is really a halal product.

Halal supply chain management as the main research theme has been widely researched by scientists in Malaysia because the growth of Halal Supply Chain Management in Malaysia is very rapid and has been supported by adequate regulations. In the research studied ([Aulia and Azizah 2024](#)) reported that the development of demand for halal products and goods is increasing rapidly globally which is not only needed by Muslims but also for non-Muslims only from the demand side so that an adequate supply chain system (Halal Supply Chain Management) is needed to respond to these demand needs. Concept "Halalan Toyyiban" in the study ([Aulia and Azizah 2024](#)) Not only does it indicate that the products produced have been fulfilled by health elements and also have guaranteed safety, quality, cleanliness, and logistical processes so that not only Muslims need it but extends to non-Muslims.

The emergence of cautious behavior by Muslim consumers towards the goods they consume proves that awareness of the importance of halal products must be prioritized in religion so that a vigilant attitude arises for the Muslim community in general. Muslim customers not only see the appearance of halal labels in the products they use, but also need to want to know and trace the extent to which these goods and products were born and the extent to which these products and goods have gone through a process that is guaranteed halal elements, so as to provide confidence for them in the goods they consume. Therefore, it shows that the HSCM concept is very necessary to really guarantee and ensure that the halal label is not only attached to goods and products but more than that the processes related therein involve all supply chain networks in the HSCM system from upstream to downstream ([Sulaiman, S. et al., 2018](#)).

The implementation of HSCM into a complex system to produce a product and goods that is guaranteed halal requires a standard measure and test equipment to ascertain whether all series of processes have been carried out systematically to produce a product that is truly halal. In order to determine the success of a measurement using the HSCM system, based on a study conducted by [Khan et al. \(2018\)](#) it is necessary to develop measurements using through critical success factors (CSFs) using at least 12 measurement indicators.

The existence of authoritative institutions such as MUI that provide halal certification of goods and products in Indonesia indicates that if a product has a halal label in its packaging, it shows that the goods and products have been guaranteed halal based on the Law on Halal Product Assurance, namely Number 33 of 2014. However, whether all product supply chain flows are really guaranteed and can maintain their halal integrity.

Based on the explanation in the background, therefore a study will be carried out with the title of Halal Product Assurance in Traditional Markets Based on Halal Supply Chain Traceability to answer the anxiety of consumers as users of halal products who question whether the process in order to produce halal products has really implemented the HSCM rules.

2. Literature Review

According to [\(Dian Sudiantini, Nana Irvana 2023\)](#) Supply Chain Management is a set of approaches to efficient integration of suppliers, manufacturing, warehouses and storage, so that goods are produced and distributed in the right quantity, the right location, the right time, to minimize costs and provide satisfied service to customers. While the research argues [\(Sarwar, Zafar, and Qadir 2021\)](#) that to this end, 42 risk factors were resolved using systematic literature and the attention of experts. In addition, these risks have been categorized into seven main aspects: planning-related risks, procurement-related risks, production-related risks, logistics and outsourcing related risks, market-related risks, information technology, and sustainability-related risks.

Critical Succes Factors (CSFs) developed by [\(S. Khan et al. 2018\)](#) are critical factors in the implementation of Halal Supply Chain Management (HSCM) which consists of 12 indicators as follows:

No	Information	No	Information
CSF 01	Training of Employees	CSF 07	Halal Awareness
CSF 02	Efficient and Effective Communication	CSF 08	Consumer Satisfaction
CSF 03	Dedicated IT Infrastructure	CSF 09	Coordination and Collaboration among Supply Chain Partners
CSF 04	Halal Integrity Assurance	CSF 10	Government Support
CSF 05	Top Management Support	CSF 11	Competitive Advantage
CSF 06	Selection and Adoption of Appropriate	CSF 12	Standardization and Codification

	Technology for Traceability System		
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Source: ([S. Khan et al. 2018](#))

Minimalist knowledge of a Muslim consumer that must be owned and applied based on the table above there are two points, namely CSF 04 halal integrity Assurance or halal assurance, all products and services consumed must be clearly halal or at least consumers know the product is made and taken using goods that are halal and not contaminated non-halal during manufacture and delivery. The second point is CSF 07 halal awareness or halal awareness, this awareness grows from Muslim consumers' understanding of halal food for Muslims that is allowed to be consumed.

Point CSF 04 halal integrity Assurance. According to ([Iskandar 2022](#)) Indicators to measure the halal guarantee of a product first are checking the halal logo on the product, the number of halal products that can be consumed, no usury transactions, the warranty is not mixed with non-halal products. While in CSF 07 Halal awareness or awareness of the importance of halal supply and the need for goods and services in the community, in this case economic actors who become producers, consumers and distribution. This awareness includes economic actors knowing things that are haram and should not be consumed by Muslims and knowing non-halal substances that can be contaminated in goods. So that these parties can prevent the mixing of halal and non-halal goods.

Quote ([Handayani et al. 2023](#)) Modeling of halal supplier flexibility criteria was carried out using a hybrid approach of Interpretive Structural Modeling—Matriced' Impacts Croisés Appliquée á un Classement (ISM-MICMAC) and a dynamic perspective that resulted in 11 halal supplier criteria divided into four levels in the ISM hierarchical structure. The criteria are spread across three quadrants of MICMAC analysis: independent, linkage, and dependent.

Utilizing Blockchain technology and increasing public security and trust in the LPPOM MUI halal certification system. Based on the discussion and analysis of the study, it is known that information on the halal beef supply chain in Medan City uses blockchain technology designed with a data security system using smart contracts, where the information that has been stored cannot be changed by any party. so that there is a guarantee of information security in the beef supply chain in the city of Medan([Hidayati et al. 2023](#)).

Research ([Tumiwa et al. 2023](#)) shows that halal food supply chain management has a positive and significant effect on SME performance, Halal Certification and Traceability have a positive and significant effect on SME performance, Halal Certification and Traceability have a positive and significant effect on halal food supply chain management

Supply chain management (SCM) as defined by ([Hugos 2011](#)) is the coordination of production, inventory, location, and transportation along the supply chain in achieving the best blend of responsiveness and efficiency in the markets served. The purpose of the supply chain is to drive customer satisfaction ([Govil, M. and Proth 2022](#)), maximizing the overall value generated ([Chopra and Peter 2016](#)), and make efficient and cost-effective part of the whole system. Conventional supply chains focus on maximizing profits while meeting consumer demands. Conventional supply chains also have a framework starting with raw materials, inbound logistics, warehouses, production, storage, outbound logistics, and marketing, and ending with sales and customer service ([Martha, Douglas, and Janus 1997](#)).

Halal SCM can be defined as the management of halal networks with the aim of extending halal integrity from source to consumer purchasing points. To ensure that the product is truly halal at the time of consumer purchase, it is very important to define what are the principles in the management of the halal supply chain. ([Tieman and Ghazali 2014](#)) argues that the halal foundation

of SCM is determined by three factors, namely: direct contact with haram (prohibited), risk of contamination, and Muslim consumer perception. In its model, risk is based on product characteristics, such as dry products versus wet products and bulk products versus put products together. Perceptions are based on market requirements, such as madhabs, local fatwas, and local customs.

However, according to the Halal Industry Development Corporation (HDC), the halal supply chain includes all activities, such as procurement, preparation of halal ingredients for manufacturing, and delivery of final products to consumers. The manufacturing process must ensure the separation of halal ingredients from non-halal ingredients, such as pork, alcohol, or related products. The halal supply chain also ensures halal animal feed, animal welfare, and proper separation between halal and non-halal food during distribution in storage, handling, transportation, and retail sales. The slaughter process is based on Islamic rules where Muslims use sharp knives and recite *bismillah* and related prayers before the slaughter process ([Al-Qaradawi 2011](#)).

The main objective of the halal supply chain is to extend the integrity of halal in accordance with Sharia law from source to the point of consumer purchase ([Tiemann, Ghazali, and van der Vorst 2013](#));([Zainuddin et al. 2020](#)). By considering the consumer's point of view, the concept of halal can be considered as a catalyst for changes in the way people live and their ideas and interpretations of quality, safety, health, and environment. This is very important, because Islam commands all mankind to consume only halal, nutritious, healthy, quality food. Therefore, halal food is not only for Muslims; Non-Muslims can also buy and consume halal food.

The halal supply chain model should be adapted from the existing (food) supply chain and the closest model in facilitating the Islamic values of the halal supply chain. SCM models exist such as management paradigm ([de Leeuw, 1988](#)), Integral customer service concept([Bergeaud-blackler 2007](#)), and the SCM framework ([Cooper and Hall 2009](#)). However, there are some examples of more balanced frameworks, such as the conceptual framework of agri-food supply chain performance indicators and various balanced scorecard perspectives ([Aramyan et al. 2006](#)).

To measure the performance of the halal supply chain, the most important thing is to measure the perspective of supply chain effectiveness. It will address two main aspects i.e. process quality ([Bonne and Verbeke 2008](#)) and waste ([Abdul-Matin 2010](#)). The quality process discusses the strength/trust of a brand, the credibility of halal certification and consumer complaints received regarding the halal status of a product. Waste handles physical waste in the supply chain, carbon footprint and resources used. Waste occurs in the supply chain as well as by the end consumer. Waste in the supply chain can be avoided or minimized by using transport packaging and environmental controls (temperature and humidity levels)

3. Methodology

This research is a quantitative type by describing the data that has been collected without the intention of drawing a conclusion that can be made generalized (Creswell 2016). The location of this research will be carried out in the Traditional Market in Luwu Raya. The scope of this study is to analyze and make standard measures on the implementation of the Halal supply chain management process in the Traditional Market in Luwu Raya as the main supplier of community needs. In this study, the population is all meat sellers in the Traditional Market in Greater Luwu while the sample is meat sellers in Greater Luwu.

Observation or observation or combination of the two. The method used in collecting data in this study is by surveying by distributing a list of questions. The interview technique is to collect

data by distributing sheets or sets containing statements or questions that must be answered by respondents. The data analysis process carried out in this study follows the following stages;

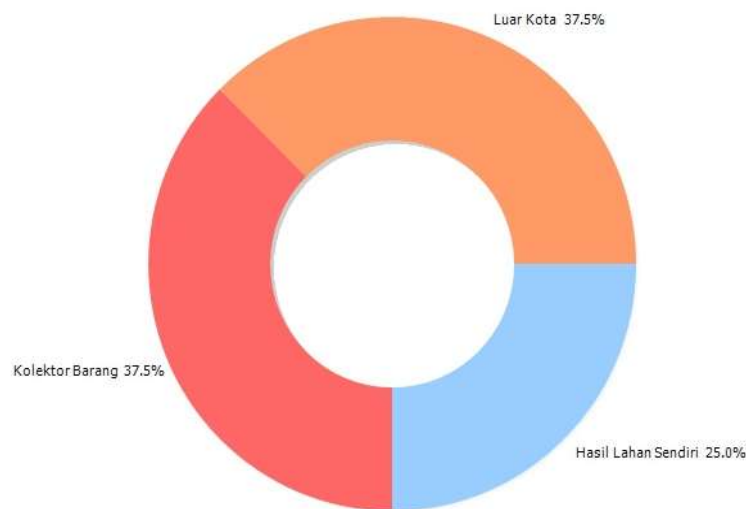
1. The first activity carried out is to collect data needed in research, This research was first conducted from April 2023 to September 2023
2. Determine the implementation of the halal product supply chain by looking at the interview results
3. Describe and analyze the results of the implementation of the halal product supply chain.

The analytical tool used in this study is QDA Miner Lite, by first reducing all interview texts and then drawing conclusions from the most argument tendencies and points explained by the source. QDA miner lite software that displays data based on the most coding with the results of data processing in the form of graphs, and pies, and wordcloud

4. Results And Discussion

1. Origin of Supply in Greater Luwu Market

Frequency of Origin of Goods or Products



QDA Miner late Diagram Pie 1.1

The origin of the existing food supply in Greater Luwu is divided into three based on the source; First outside the city by 37.5%, collectors of goods 37.5% and own land products 25%.

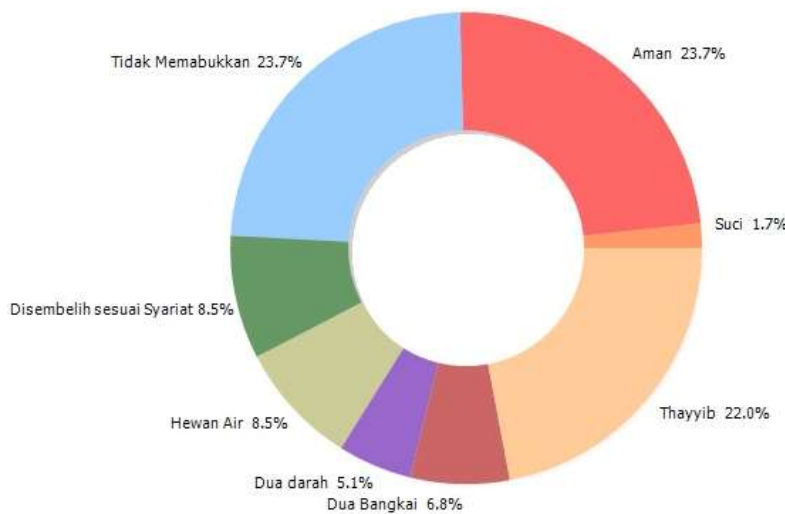
Based on the data above, it is known that the average raw goods mostly sold by Luwu Raya traders come from outside the city by 37.5% where the amount of supply entering Luwu Raya comes from the city of Tana Toraja in the form of tubers such as sweet potatoes and potatoes, and carrots, and brown rice. The capital city of Makassar Province supplies imported fruits such as apples, grapes, and strawberries, and mandarin oranges, and processed crackers while the Pare-Pare, Maros, and Enrekang regions supply various types of rice and sugar.

The supply provider area collected from the activities of collectors of goods amounted to 37.5%, known to be in the Luwu Regency area, namely Lamasi Pantai and Belopa in terms of collectors of vegetable goods in the form of corn, ferns, kale, eggplant, long beans, banana

leaves, bananas, mangoes, papaya, and grain which are the main commodities. As for carrots, potatoes, cayenne pepper, corn, mustard, tomatoes, cabbage from East Luwu, northern Luwu which is famous for its chocolate fruit and in the last year oil palm existed. Palopo City is famous for its fisheries in this case fresh and dried fish, beef from several halal slaughters managed by Muslims and slaughtered conditionally and harmoniously, live and dried shrimp, crabs, squid, and others.

The supply of food sourced from land products or own business by direct traders, both small and party, is known to be 25%. These commodities are in the form of green beans, corn feed which only comes from North Luwu and Luwu because the gardener profession is still a promising livelihood to meet the needs of demand, while the rongkong area is the most consistent vegetable supplier in various markets of Greater Luwu and even strawberries are fruits that are easily found in the region because of the plant cultivation movement that is promoted. Other commodities are local fruits papaya, mango, coconut, and some kitchen spices such as chilies, cayenne, tomatoes, turmeric, galangal, ginger, leeks, basil, lemongrass, and others originating from the latuppa area, plants owned by residents in pots by utilizing the yards of houses around or adjacent to markets in the greater Luwu region.

2. Frequency of Types of Halal Food Available in the Market



Based on the results of processing interview text data on traders, distributors, and consumers, the average stock of halal raw food ingredients available in Luwu Raya according to the categories of non-intoxicating

23.7%, safe 23.7%, holy 1.7%, two blood 5.1%, two carcasses 6.8%, tayyib 22%, slaughtered in accordance with sharia 8.5%, aquatic animals 8.5%.

Knowledge of halal awareness known by economic actors from producers, consumers, and distribution based on the provisions of the Qur'an about things that can be consumed from research (Hidayatullah 2020) suggests that in the criteria of products and services consumed by Muslims should be; not intoxicating, safe, holy, two bloods, two carcasses, tayyib, slaughtered according to Shari'a, Aquatic animals. In this study, researchers traced the raw goods consumed by the people of Luwu Raya ranging from kitchen spices, vegetables, fish, beef, and rice.

The criterion of non-intoxicating raw goods was found in the Greater Luwu Market at 23.7%. A number of raw goods sold in Pasar Luwu Raya do not contain alcohol, angciu, or some substances that are non-halal that can be used for preservation or contact with raw goods during the distribution process. This is claimed because the distribution process of raw goods is often only carried out specifically one type in one container, and distributors do know in general if the mixing of halal and non-halal goods in one place during distribution can leave marks or strong aromas so that non-halal goods even though they are not mixed directly make halal goods not halal.

The criteria for safe raw goods found in the greater Luwu market are 23.7% in terms of goods that are believed not to use preservatives that threaten health if consumed such as kitchen spices, and fruits. This thing. The criterion for sacred raw goods found in the greater Luwu market is 1.7%, this is because raw goods often cannot be consumed directly on the spot unless imported fruit types have packaging. Another reason is because in the process of picking, distributing until the time of colonization to consumers, almost all raw goods will definitely be contaminated ole najis indirectly on unclean objects, mud or dust, flies, and other substances because most traditional market goods do not have packaging on raw goods.

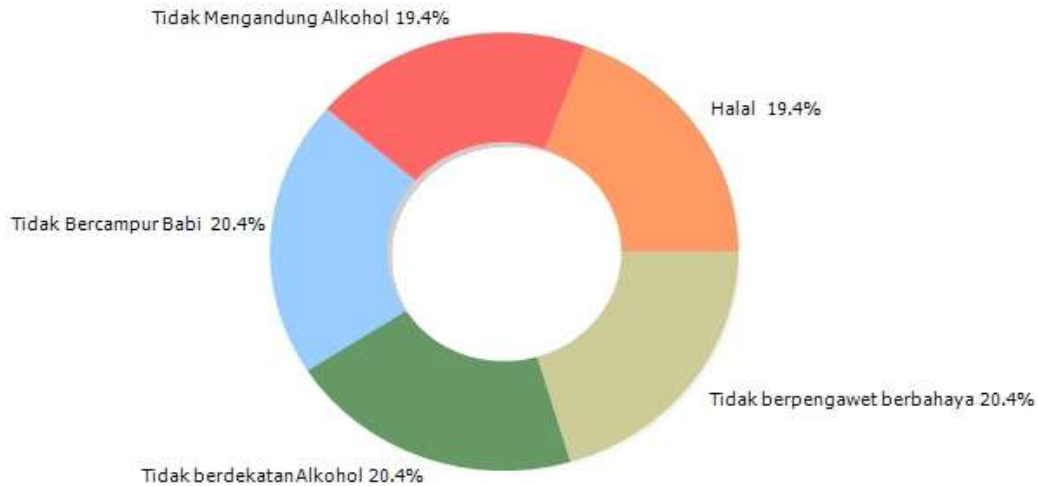
The criteria for raw goods of two bloods found in the Greater Luwu market are 5.1%, namely liver and abundance. Although classified as part of the animal that is less noticed, the chicken and meat sellers claim that the organ sells well and is sought after by meatball and street swallow traders. The criteria for raw goods of two carcasses found in the Greater Luwu market amounted to 6.8%, namely fish and locusts. However, the supply calculated in this figure is fish carcasses or dried fish that are never empty of enthusiasts and even the price can be above than fresh fish.

The criteria for tayyib raw goods found in the greater Luwu market is 22%. This means that raw goods that are recommended for consumption and good for health reach that number, but because this survey is only for raw food supply, the reference is only imported and local fruits, other raw goods are still recommended but after cooking or processing first.

The criteria for raw goods slaughtered according to Sharia law are found in the Luwu Raya market by 8.5%, meaning that slaughterers for animal consumption are chicken and beef, which is very difficult to find goat, the slaughterhouse claims that animal meat can only be found at certain times such as Eid al-Adha, Eid al-Fitr or distribution opposition from the farmer for restaurant needs. While the criteria for raw aquatic goods found in the greater Luwu market is 8.5%, this is because the amount of fish distributed to the market from fishermen is divided into traders in the market and the number of traveling traders is not detected in any area.

3. Frequency of Business Awareness and Distribution about Halal Product Categories

The halal definition of raw goods such as fish, shrimp, crab, vegetables, fruits, chicken, and meat according to slaughterers, producers, distributors, and consumers in Pasar Luwu Raya



based on halal categories 19.4%, non-preservatives 20.4%, non-adjacent alcohol 20.4%, not mixed with pork 20.4%, and does not contain alcohol 19.4%.

The halal category of 19.4% means from the opinions of producers, distributors, and consumers who are met claiming halal goods found around Luwu Raya which can be claimed because the product is from first hand and not parties that require distribution or to other dilution traders. But the goods or products are grown, and sold directly by traders who own land and stalls in the market at once.

The number of halal goods traded in the Luwu Raya market according to producers, distributors, and consumers found to be non-preservative, 20.4% of which are fish purchased in the morning directly from fishermen preserved only with ice cubes, chicken and beef meat directly purchased and taken directly from farms. While the number of halal goods traded in the Greater Luwu market according to producers, distributors, and consumers found not adjacent to alcohol 20.4% of them are fruit and vegetable products that only carry one kind of commodity without any other commodities.

Halal goods traded in the Greater Luwu market according to producers, distributors, and consumers found who are not mixed with pork 20.4% of the guaranteed goods come from areas with Muslim populations and do not raise non-halal animals. While the guaranteed goods do not contain alcohol amounting to 19.4% comes from commodities that cannot be preserved with a mixture of certain substances such as kitchen spices and local fruit.

Discussion

Management of halal supply chain according to (Tiemann and Ghazali 2014) determined by three factors, namely: direct contact with haram (forbidden), risk of contamination, and Muslim consumer perception. Based on known findings The origin of the existing food supply in Greater Luwu is divided into three based on the source; First outside the city by 37.5%, collectors of goods 37.5% and own land products 25%. For the source of supply of collectors of goods and land itself, of course, direct contact with haram goods and the risk of contamination can be overcome by the government

and the understanding of collectors and first-hand traders who are average in Luwu Raya Muslim not to combine commodities with one another, especially non-halal goods. What is still very doubtful is the out-of-town supply of 37.5%, but this can still be avoided with the understanding of halal guarantees applied by market participants. According to ([Iskandar 2022](#)) Indicators to measure the halal guarantee of a product first are checking the halal logo on the product, the number of halal products that can be consumed, no usury transactions, the warranty is not mixed with non-halal products.

Just like other traditional markets, Luwu Raya market has business actors including producers and first-hand traders, fishermen and first-hand traders, distributors, wholesalers, dilution traders, slaughterhouses, meat sellers as well as ranchers, and consumers. From the results of the interview, it was found that halal awareness is understood that the product or commodity being traded must be Halal, not preservative, not adjacent to alcohol, not mixed with pork, and does not contain alcohol. This is according to research (S. Khan et al. 2018) which states the halal awareness of market participants about the basic things understood.

Knowledge of halal awareness known by economic actors from producers, consumers, and distribution based on the provisions of the Qur'an about things that can be consumed from research ([Hidayatullah 2020](#)) suggests that in the criteria of products and services consumed by Muslims should be; not intoxicating, safe, holy, two bloods, two carcasses, tayyib, slaughtered according to Shari'a, Aquatic animals. In this study, researchers traced the raw goods consumed by the people of Luwu Raya ranging from kitchen spices, vegetables, fish, beef, and rice, and all aspects above were found in commodities in the Luwu Raya market. This means that halal supply management in the Greater Luwu market has been running according to the provisions even though there is no specific tool to detect supply, so that the availability of halal food ingredients in the Greater Luwu market can be said to be easy to find and still dominant.

Implementing Halal Product Assurance at traditional markets in Luwu Raya based on Halal Supply Chain Traceability involves a multifaceted approach to ensure the integrity of Halal products from source to consumer. The first step is to engage stakeholders, including traders, vendors, local authorities, and consumers. Education and training are essential for market traders and vendors to understand and comply with Halal standards, while collaboration with local government and certification bodies will help establish clear regulations and monitoring systems. Implementing a robust certification process is crucial, ensuring that all products sold are certified Halal, which includes adhering to Standard Operating Procedures (SOPs) for handling and selling these products. Leveraging technology is another vital component; the use of QR codes, blockchain, or other traceability software will track products throughout the supply chain, ensuring transparency and accountability. Infrastructure improvements, such as creating dedicated Halal sections and proper storage facilities, will prevent cross-contamination and maintain compliance with Halal standards. Regular training workshops and seminars will build the capacity of traders and vendors, ensuring they are well-equipped to maintain Halal integrity. Continuous monitoring and evaluation through routine inspections and feedback mechanisms will help identify and address issues promptly. Finally, promoting Halal products through marketing campaigns and consumer education will raise awareness and drive demand, supported by policies and incentives from local authorities to encourage compliance. By following these steps, traditional markets in Luwu Raya can enhance the trust and confidence of consumers in the Halal integrity of the products offered, fostering a robust and reliable Halal supply chain.

5. Conclusion

Based on the results and discussion above, several conclusions can be drawn. The source of supply of collectors of goods and land itself is of course direct contact with haram goods and the risk of contamination can be overcome by the government and the understanding of collectors and first-hand traders who are average in Luwu Raya Muslim not to combine commodities with one another, especially non-halal goods. uncontrollable out-of-town supply can be overcome with an understanding of halal guarantees applied by market participants. In the form of checking the halal logo on the product, the number of halal products that can be consumed, no usury transactions, the guarantee does not mix with non-halal products. The application of halal awareness indirectly in the Greater Luwu community, which in fact is mostly Muslim, makes halal supply management in the Greater Luwu market run according to the provisions even though there is no specific tool to detect supply, so that the availability of halal food ingredients in the Greater Luwu market can be said to be easy to find and still dominant.

References

- Ab Talib, Mohamed Syazwan, and Mohd Hafiz Zulfakar. (2023). *GreenDeen: What Islam Teaches About Protecting the Planet*. Berrett-Koehler Publishers, Inc.
- Al-Qaradawi, Yusuf. (2011). *The Lawful and the Prohibited in Islam: Al-Halal Wal-Haram Fil Islam*. United Kingdom, London: Dar Al Taqwa Ltd.
- Aramyan, Lusine, Christien J.M. Ondersteijn, OLAF VAN KOOTEN, and Alfons Oude Lansink. (2006). "Performance Indicators in Agri-Food Production Chains." *Quantifying the Agri-Food Supply Chain*, 49–66. https://doi.org/10.1007/1-4020-4693-6_5.
- Asnawi, Nur, Moch Mahsun, and Nevi Danila. (2023). "Industrial Halal Blockchain: The Great Potential of The Digital Economy in Indonesia." *IQTISHODUNA: Journal of Islamic Economics* 12 (1): 223–40. <https://doi.org/10.54471/iqtishoduna.v12i1.1876>.
- Aulia, Vira, and Nur Azizah. (2024). "A Historical Review on Halal Industry in the World: Challenge and Improvement Opportunities." *Multidisciplinary Reviews* 7 (1): 1–11. <https://doi.org/10.31893/multirev.2024020>.
- Azmi, Fadhlur Rahim, Haslinda Musa, Boon Cheong Chew, and Indira Priyadarsini Jagiripu. (2021). "Supply Risk Management: A Case Study of Halal Food Industry in Malaysia." *Uncertain Supply Chain Management* 9 (2): 501–12. <https://doi.org/10.5267/j.uscm.2021.1.001>.
- Baehaqi, Muhammad, Dani Rizana, and Ragil Setyo Cahyono. (2023). "The Acceptance Model of Halal Food Products Toward Indonesian Non-Muslim Customers." *ICONOMICS Journal of Islamic Economics and Business* 7 (2): 257–82.
- Baz, Jamal El, and Salomé Ruel. (2021). "Can Supply Chain Risk Management Practices Mitigate the Disruption Impacts on Supply Chains' Resilience and Robustness? Evidence from an Empirical Survey in a COVID-19 Outbreak Era." *International Journal of Production Economics* 233 (4): 1–12. <https://doi.org/10.1016/j.ijpe.2020.107972>.
- Bergeaud-blackler, Florence. 2007. "Determinants of Halal Meat Consumption in France." *British Food Journal* 109 (5): 367–86. <https://doi.org/10.1108/0070700710746786>.

- Bonne, Karijn, and Wim Verbeke. (2008). "Religious Values Informing Halal Meat Production and the Control and Delivery of Halal Credence Quality." *Agriculture and Human Values* 25 (1): 35–47. <https://doi.org/10.1007/s10460-007-9076-y>.
- Chopra, Sunil., and Meindl Peter. (2016). *Supply Chain Management: Strategy, Planning, and Operation*. Sixth Edit. Boston: Pearson Education, Inc.
- Chowdhury, Priyabrata, Sanjoy Kumar Paul, Shahriar Kaiser, and Md Abdul Moktadir. (2021). "COVID-19 Pandemic Related Supply Chain Studies: A Systematic Review." *Transportation Research Part E: Logistics and Transportation Review* 148 (August 2020): 102271. <https://doi.org/10.1016/j.tre.2021.102271>.
- Cooper, Chris, and C Michael Hall. (2009). *Philosophical Issues in Tourism*. Bristol UK: channelviewpublications.
- Creswell, John W. (2016). *Research Design Qualitative, Quantitative, and Mixed Methods Approaches*. 4th ed. Vol. 6. London: Sage Publications.
- Daouk, Mohamad El. (2023). "Introducing Halal to Construction Supply Chains in the UK's Construction Sector." *Journal of Islamic Marketing* 14 (10): 2385–2403. <https://doi.org/10.1108/JIMA-01-2022-0016>.
- Darmawati, Dian Hardiana, Dedy Mainata, and M. Birusman Nuryadin. (2023). "Halal Industry: A Literature Bibliometric Analysis on Halal Studies." *Mazahib Journal of Islamic Legal Thought* 22 (1): 175–211. <https://doi.org/10.21093/mj.v22i1.5477>.
- Dian Sudiantini, Nana Irvana, M.Basofi Fitra W. (2023). "The role of supply chain management in the company's production and operation systems." *Journal of Accounting Economics, Management* 2 (2): 91–107.
- Genovese, Andrea, Adolf A. Acquaye, Alejandro Figueroa, and S. C.Lenny Koh.(2017). "Sustainable Supply Chain Management and the Transition towards a Circular Economy: Evidence and Some Applications." *Omega (United Kingdom)* 66 (2): 344–57. <https://doi.org/10.1016/j.omega.2015.05.015>.
- Ghazali, Marco Tieaman; Jack G.A.J.van der Vorst; Maznah Che. (2012). "Principles in Halal Supply Chain Management." *Journal of Islamic Marketing* 3 (3): 217–43. <https://doi.org/DOI.10.1108/17590831211259727>.
- Govil, M. and Proth, J. M. (2022). "DEFINITION OF A SUPPLY CHAIN." In *Supply Chain Design and Management*, 6–15. Published by Elsevier Inc. <https://doi.org/10.1016/B978-0-12-294151-1.50002-3>.
- Handayani, Dwi Iryaning, Ilyas Masudin, Aries Susanty, and Ika Deefi Anna. (2023). "Modeling of Halal Supplier Flexibility Criteria in the Food Supply Chain Using Hybrid ISM-MICMAC: A Dynamic Perspective." *Cogent Engineering* 10 (1): 1–28. <https://doi.org/10.1080/23311916.2023.2219106>.
- Harwati, and A. N. Yunita Pettalolo. (2020). "Halal Criteria in Supply Chain Operations Reference (SCOR) for Performance Measurement: A Case Study." *IOP Conference Series: Materials*

Science and Engineering 505 (1): 1–12. <https://doi.org/10.1088/1757-899X/505/1/012020>.

Hidayati, Juliza, Rini Vamelia, Jihaad Hammami, and Endri Endri. (2023). "Transparent Distribution System Design of Halal Beef Supply Chain." *Uncertain Supply Chain Management* 11 (1): 31–40. <https://doi.org/10.5267/j.uscm.2022.12.003>.

Hidayatullah, Muhammad Sharif. (2020). "Halal Certification and Labeling on Food in the Perspective of Islamic Law (Ayat Ahkam Perspective)." *JUDICIARY: Journal of Legal Thought and Islamic Law* 11 (2): 251. <https://doi.org/10.21043/yudisia.v11i2.8620>.

Hugos, Michael H. (2011). *Essentials of Supply Chain Management*. Petra Books. 3rd ed. Vol. 38. Wiley. <https://doi.org/10.1007/bf03399229>.

Iskandar, Oky. (2022). "Halal Business Management of Food Products at PT Ngabar Mandiri Sejahtera."

Ivanov, Dmitry, and Alexandre Dolgui. (2021). "A Digital Supply Chain Twin for Managing the Disruption Risks and Resilience in the Era of Industry 4.0." *Production Planning and Control* 32 (9): 775–88. <https://doi.org/10.1080/09537287.2020.1768450>.

Javid, Negar Jahanbakhsh, and Mahyar Amini. (2023). "Evaluating the Effect of Supply Chain Management Practice on Implementation of Halal Agroindustry and Competitive Advantage for Small and Medium Enterprises." *International Journal of Computer Science and Information Technology* 15 (6): 8997–9008. <https://ssrn.com/abstract=4348136>.

Khan, Mohd Imran, Shahbaz Khan, and Abid Haleem. (2022) "Analysing Barriers towards Management of Halal Supply Chain: A BWM Approach." *Journal of Islamic Marketing* 13 (1): 66–80. <https://doi.org/10.1108/JIMA-09-2018-0178>.

Khan, Shahbaz, Abid Haleem, and Mohd Imran Khan. (2023). "Risk Assessment Model for Halal Supply Chain Using an Integrated Approach of IFN and D Number." *Arab Gulf Journal of Scientific Research* 41 (3): 338–58. <https://doi.org/10.1108/AGJSR-09-2022-0160>.

Khan, Shahbaz, Abid Haleem, Mohd Imran Khan, Mustufa Haider Abidi, and Abdulrahman Al-Ahmari. (2018). "Implementing Traceability Systems in Specific Supply Chain Management (SCM) through Critical Success Factors (CSFs)." *Sustainability (Switzerland)* 10 (1). <https://doi.org/10.3390/su10010204>.

Kurniawati, Dwi Agustina, and Andi Cakravastia. 2023. "A Review of Halal Supply Chain Research: Sustainability and Operations Research Perspective." *Cleaner Logistics and Supply Chain* 6 (1): 100096. <https://doi.org/10.1016/j.clscn.2023.100096>.

Lubis, R., Rusydiana, A., Nasirin, W. K., & Kartikawati, D. R. (2023). Human Development Index and Halal Tourism Performance: Case Study of The Country with The Lowest Safety for Muslim Tourists. *Amwaluna: Jurnal Ekonomi dan Keuangan Syariah*, 7(2), 243-257.

Martha, C. Cooper, M. Lambert Douglas, and D. Pagh Janus. (1997). *Supply Chain Management: More than a New Name for Logistics*. *The International Journal of Logistics Management*. Vol. 8.

Mohd, Muhammad Shukri, Ashmir Wong, Zatul-Illia Hussin, Shofiyyah Moidin, Academy of

Studies, Contemporary Islam, University of Technology, Mara 40450, and Shah Alam. (2023). "Implementation of Halal Logistics in Halal Pharmaceutical Industry: A Study on Halal Warehouse System in Pharmaniaga Lifescience." *Global Journal Al-Thaqafah* 13 (I): 90–103. www.gjat.my.

Muhamed, Ariff Azly, Norhuda Salim, Mohd Nizam Ab Rahman, Firdaus Mohd Hamzah, and Mohd Helmi Ali. (2023). "Effects of Supply Chain Orientation on Firm Performance: Insights from a Malaysian Case Study of Halal-Certified Small and Medium-Sized Enterprises." *Journal of Small Business and Entrepreneurship* 35 (6): 927–43. <https://doi.org/10.1080/08276331.2020.1848328>.

Muhammad Yusuf, Andi, Dwi Soediantono, and Naval Command and Staff College. (2022). "Supply Chain Management and Recommendations for Implementation in the Defense Industry: A Literature Review." *International Journal of Social and Management Studies (Ijosmas)* 3 (3): 63–77.

Queiroz, Maciel M., Dmitry Ivanov, Alexandre Dolgui, and Samuel Fosso Wamba. (2022). *Impacts of Epidemic Outbreaks on Supply Chains: Mapping a Research Agenda amid the COVID-19 Pandemic through a Structured Literature Review*. *Annals of Operations Research*. Vol. 319. Springer US. <https://doi.org/10.1007/s10479-020-03685-7>.

Rejeb, Abderahman, Karim, Zailani, Suhaiza and Kayikci, Yasanur. (2022). "Knowledge Diffusion of Halal Food Research: A Main Path Analysis." *Journal of Islamic Marketing* 14 (7): 1–40.

Rejeb, Abderahman, Karim Rejeb, Steve Simske, and John G. Keogh. (2023). "Exploring Blockchain Research in Supply Chain Management: A Latent Dirichlet Allocation-Driven Systematic Review." *Information (Switzerland)* 14 (10): 1–33. <https://doi.org/10.3390/info14100557>.

Rejeb, Abderahman, Karim Rejeb, Suhaiza Zailani, Horst Treiblmaier, and Karen J. Hand. 2021. "Integrating the Internet of Things in the Halal Food Supply Chain: A Systematic Literature Review and Research Agenda." *Internet of Things (Netherlands)* 13 (2021): 100361. <https://doi.org/10.1016/j.iot.2021.100361>.

Sarwar, Adnan, Aqsa Zafar, and Alia Qadir. (2021). "Analysis and Prioritization of Risk Factors in the Management of Halal Supply Chain Management." *Discover Sustainability* 2 (1): 1–10. <https://doi.org/10.1007/s43621-021-00039-6>.

Suseno, Bambang Dwi, Sutisna, Syamsul Hidayat, and Basrowi. (2023). "Halal Supply Chain and Halal Tourism Industry in Forming Economic Growth." *Uncertain Supply Chain Management* 11 (4): 1433–40. <https://doi.org/10.5267/j.uscm.2023.8.003>.

Tieman, Marco, and Maznah Che Ghazali. (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, Marco, Maznah Che Ghazali, and Jack G.A.J. van der Vorst. (2013). "Consumer Perception on Halal Meat Logistics." *British Food Journal* 115 (8): 1112–29. <https://doi.org/10.1108/BFJ-10/2011-0265>.

Tseng, Ming Lang, Hien Minh Ha, Thi Phuong Thuy Tran, Tat Dat Bui, Ming K. Lim, Chun Wei

Lin, and Mohd Helmi Ali. (2022). "Data-Driven on Sustainable Food Supply Chain: A Comparison on Halal and Non-Halal Food System." *Journal of Industrial and Production Engineering* 39 (6): 430–57. <https://doi.org/10.1080/21681015.2022.2040622>.

Tu. Y.T, Azhar. A. (2021). "The Investigation of Key Factors for Successful Implementation of Sustainable." *Food Research* 5 (6): 221–28.

Tumiwa, Ramon Arthur Ferry, Gumoyo Mumpuni Ningsih, Arina Romarina, Setyadjit, Bejo Slamet, Eliyunus Waruwu, Mei Ie, and Yuana Tri Utomo. (2023). "Investigating Halal Food Supply Chain Management, Halal Certification and Traceability on SMEs Performance." *Uncertain Supply Chain Management* 11 (4): 1889–96. <https://doi.org/10.5267/j.uscm.2023.6.003>.

Usmanova, Kamila. (2021). "China' s Halal Food Industry : The Link Between Knowledge Managemet Capaity , Supply Chain Practices , and Company Performance." *Interdisciplinary Journal of Information, Knowledge, and Management* 16 (1): 285–306.

Wulpiah, W., & Rusydiana, A. S. (2022). perception and attitude toward the development of halal tourism in Bangka district Indonesia. *Amwaluna: Jurnal Ekonomi dan Keuangan Syariah*, 6(2), 324-339.

Zainuddin, Nizamuddin, Adam Mohd Saifudin, Norita Deraman, and Azim Azuan Osman. (2020). "The Effect of Halal Traceability System on Halal Supply Chain Performance." *International Journal of Supply Chain Management* 9 (1): 490–98.