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HALAL TRACEABILITY IN ENHANCING HALAL INTEGRITY FOR LOGISTICS INDUSTRY IN MALAYSIA: A REVIEW

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Abstract: *The global acceptance of halal logistics has increased due to the demand for quality control and safety measures in halal-certified products and services. While Malaysia is a leader in the halal industry, there remains a need for improved halal traceability systems to guarantee product integrity throughout the supply chain. This paper aims to explore the principles of halal traceability that enhance halal integrity in halal logistics. A systematic review of articles published between 2013 and 2024 focused on traceability, integrity, and halal logistics, particularly third-party logistics (3PL). From an initial pool of 318 articles, 27 were identified as highly relevant. The study identifies four principles vital to developing an efficient traceability system which are halal certification (HC), documentation and halal policy (DHP), technology management (TM), and human resources (HR). Among the technologies employed, Transport Management Systems (TMS), Warehouse Management Systems (WMS), and blockchain are essential for maintaining traceability. The findings highlight that despite technology and certification risks, success depends on a well-trained workforce to manage the traceability process effectively. Thus, the study emphasises the importance of comprehensive halal certification, documentation, and the role of human resource training in strengthening halal integrity in logistics management.*

Keywords: *Halal Traceability, Halal Logistics, Halal Supply Chain, Logistics Service Providers (LSP), Third-Party Logistics (3PL)*

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Introduction

The global acceptance of the concept of halal has developed due to the quality control and safety measures in processing as outlined in halal standards. Halal certification labeling has also driven demand for and consumption of halal products around the world (Nawi et al., 2023). The concept of halal is not constrained exclusively to manufacturing and packaging processes but requires careful examination during the logistics process until the product reaches the end consumer (Zailani et al., 2017). Malaysia has come out with the Third Industrial Master Plan (IMP3) 2006 – 2020 further to elevate Malaysia's role in halal logistics and business and to become the world-renowned halal hub for the production and trade of halal goods and services (MITI, 2006). Malaysia has been recognized as the leading global halal hub through its advancements in innovation solutions for halal supply chain logistics.

With this significant impact, Malaysia LSP provides innovative solutions for halal logistics ensuring that the movement of goods and services from suppliers to consumers is safe from cross-contamination with non-halal materials or products (Karia & Asaari, 2016). According to Fernando et al. (2022), the probability of contamination is very high during the transportation or storage of products. It may lead to the loss of halal status if cleared out unmonitored after production and distribution. This concern underscores the significance of Halal Supply Chain (HSC) practices. Within the supply chain, logistics plays a vital part in guaranteeing that products stay uncontaminated (Tieman, 2011). However, guidelines on implementing a halal traceability framework, which would serve as a reference for halal industry players, remain minimal (Saifudin et al., 2018). Hence, the objective of this paper is to explore the principles of halal traceability that can enhance halal integrity in halal logistics.

Literature Review

Halal Traceability

Traceability is a system that can trace and track a product with all the related data at each stage of the supply chain. (Zailani et al., 2010). From the point of view of the halal food industry, Rizki et al. (2023) argued that traceability can be used to track the halal status of a particular food product at each stage of the supply chain. This traceability incorporates all data regarding the activities that halal food products have gone through, including the activities involved before producing certain food products, such as material/animal origin. Halal Critical Control Points (HCCP) can be fully monitored by having a traceability system in place. Suppose a product is suspected of being cross contaminated with non-halal components. Detailed information can be retrieved to recognize cross-contamination points and take further action (Zulfakar et al., 2014). According to Rashid and Bojei (2018) and Zailani et al. (2010), halal traceability systems should be set up to increase halal transparency in the production chain. More openness will increase customer trust in the product and increase information on the total supply chain.

A traceability system is adopted to guarantee that information about halal food and products is accessible and can be traced along the supply chain. It includes the information before the production, such as the sources of the raw materials. The implementation of a traceability system is fundamental to meeting the components of halal and *tayyib* (Nazri et al., 2022). According to Tan et al. (2020), application technologies such as data interfaces, electronic data interchange (EDI), radio-frequency identification (RFID), and global positioning system (GPS)

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are the solutions for tracking and tracing within the halal supply chain. Concerning traceability and integrity, the development of halal information technology might influence the decision to adopt a more systematic traceability system, particularly in assisting the trade of halal products and services (Rashid & Bojei, 2020). Rahman et al. (2017) stated that the establishment of a systematic traceability system along the supply chain including halal certification, technology management, and documentation can relieve the risk of non-halal contamination.

Halal Integrity

The concept of halal logistics was created based on the integrity of halal products. In this concept, the integrity of halal products is impacted by two components; 1) the possibility of product segregation and 2) the logistics system. According to Rusydiana et al. (2021), the integrity of halal products, product segregation, and a good logistics system are components in forming halal logistics so that marketed products can be consumed and not mixed with non-halal products. Halal integrity in halal logistics and the supply chain refers to maintaining the halal status of the foods and cargo, as well as tayyib for how the foods and cargo are handled and delivered along the supply networks by service providers such as transporters, warehouse operators, and retailers, as well as the man himself, are ethical, truthful, and trustworthy in carrying out their operations and systems of work in the halal industry. Protective and preventive measures are necessary to maintain the halal status along the supply chain (Ahmad & Shariff, 2016). Hence, halal supply chain management ensures halal integrity is secured from the origin to consumer purchase.

Mohamed et al. (2022) mentioned that the primary indicator of a successful halal industry is the assurance of halal integrity. The processes along the supply chain include sourcing of ingredients, procurement, manufacturing, and handling of products, storage, transportation, delivery, and distribution which must follow the Shariah principles. For the supply chain to be deemed satisfactory, it must follow all the Islamic laws, and all stages of the supply chain must be strictly regulated to guarantee halal product integrity. However, sustaining halal integrity is a major challenge for all the parties involved in the supply chain (Zulfakar et al., 2014). This is because the possibility of cross-contamination or a tendency of halal products to be handled together with non-halal products is quite high throughout the supply chain.

Rashid and Bojei (2018) stated that control system integrity in the halal industry can be observed through halal certification and logo, halal standards, and halal traceability and tracking activities. Halal certification such as a halal logo or certification of compliance, issued by reputable and accredited agencies shows that the product has sufficiently met the Shariah compliance. Thus, trustworthy organizations' authorized halal logos or certificates may improve integrity and prevent fraud, fake, and misleading logos or certificates. Halal standards and guidelines diverge due to various authorities and agencies in different countries. Zulfakar et al. (2014) mentioned that this has resulted in multiple halal standards that would cause questionable halal certification and consequently affect the integrity.

Halal Logistics

The halal process should be viewed from a supply chain perspective. A halal product could only be produced when entire activities throughout the process are based on Islamic practice rather than only focusing on production. Logistics is a key activity in supply chain management which includes transportation, warehousing, packaging, and inventory management. Logistics

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could be defined as the process of planning, implementing and controlling the efficient, effective flow, and storage of goods, services, and related information from the point of origin to the end of consumption (Ahmad & Shariff, 2016; Rahman, 2019). To ensure no hick in any supply chain activity, LSP needs to constantly maintain and improve the efficiency performance of logistics operations in the business. Jaafar et al. (2016) argued in the halal food industry, the handling of food along the logistics and supply chain process is deemed crucial. This is because *halalan tayyiban* food production will be meaningless if the halalness and cleanliness of the food are not taken care of throughout the delivery process from the source of supply to the final consumers.

Many industry players are involved in the supply chain processes such as the manufacturer, mode of transportation used, warehouse, and client. Third-party logistics are completing each other to harmonize the link of halal status so that it would not be broken until it reaches the customers. Shah et al. (2016) argued that many manufacturers and retailers seek opportunities to outsource logistics activities to logistics service providers (LSP) to deliver products. Their actions seem to impact the trend of businesses using LSP to satisfy the middle between manufacturers and end-users. Due to this, the responsibility to ensure that the halal status of the products remains unbroken until it reaches the customers is now obliged to the LSPs during the logistics activities. Putting aside the value of integrity, the knowledge, and level of halal are also crucial for LSP to consider while doing business in the halal supply chain.

Halal logistics operations consist of interconnected components. It consists of four elements namely halal inputs which must comply with Shariah requirements, halal process with added value for logistics activities, services with halalness compliances, and controls deploying both Shariah and technical necessities in the logistics system. All these components have to be integrated with compliance with the Shariah standards (Shariff & Ahmad, 2019). At the same time, halal integrity must be joined into the halal logistics operation with assurance and a preventive system from the possibility of contamination or contaminants such as najs and causing potential precursors. The halal outputs within the supply chain and logistics management rest guaranteed in halalan-toyyiban when the halal inputs, halal processes, and halal controls are in place; with objective documented evidence and illustrated compliances through Shariah-based work practices by the management and the workers in the organization. To stay competitive and economical in business, halal logistics certification is a way forward to raise the reliability of a halal logistics organization offering halal Shariah-based services.

Methodology

This study uses data on paper publications sourced from various journals from 2013-2024 with research on halal traceability, halal integrity, and halal logistics. Data collection was carried out by searching articles indexed by the Google Scholar database. Since the focus of the review is within the scope of halal traceability in enhancing halal integrity for the logistics industry, the most important keywords reflect the scope of the study. The search strings such as “halal traceability” AND “halal integrity” AND “halal logistics” AND “logistics service providers” OR “third-party logistics” OR “3PL” have been implemented. Then selecting papers relevant to the theme of halal logistics research for journal criteria. There are several inclusion criteria such as area of study, the scope of the articles, language, and year of publication.

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The initial search resulted in 318 articles. Next, the focus was on articles that focus on third-party logistics (3PL) that were published in journals. The review filtered these articles and removed 247 articles that do not focus on 3PL. After removal, 71 articles remained. The abstracts of the articles were carefully scrutinized and only full-length papers that were accessible were chosen for the final analysis. Out of the 71 articles that were shortlisted before, 27 articles were fully accessible online and related to the scope of the review. The quality of a literature review and the validity of the review depends on the analysis of articles which completely reflect the contents of the original articles.

Analysis Methodology

There are many types of literature reviews. It depends on the objectives and intentions of the review (Paul & Criado, 2020). Some reviews explore methodologies, specific theories, and the elements related to the theories (Rosado-Serrano et al., 2018). Some reviews aim to develop frameworks and new propositions from existing findings (Paul & Benito, 2018). Recently, thematic analysis has become a more common practice due to identifying prominent or recurrent themes from the collected data of selected previous studies and summarising these data under thematic headings (Braun & Clarke, 2016; Mohamed Shaffril et al., 2021). The current review utilizes the methods of systematic literature review. The systematic literature review is a method that provides a precise framework for the analysis (Linnenluecke et al., 2020). The systematic literature review framework is similar to other reviews with similar objectives.

Findings

The halal product traceability system needs to be systematically developed to meet customer demand as well as coordinate every network involved in the supply chain system. Based on the articles that have been reviewed, the results of the study show that four halal traceability principles have been known and discussed in previous studies in forming a halal traceability system in more efficient and effective. Based on Table 1, the halal traceability principles in enhancing halal integrity for halal logistics consist of halal certification (HC), documentation and halal policy (DHP), technology management (TM), and human resources (HR). Technology management is divided into four sub-themes namely information technology (IT), transport management system (TMS), warehouse management system (WMS), and blockchain (BC). Training and education (TE) are placed under the control of HR. From the 27 papers analyzed, three papers focus on HC, seven papers on DHP, nine papers on IT, two on TMS, four on WMS, seven on BC, and 10 on TE.

Table 1: The Principles of Halal Traceability in Halal Logistics Services

No.	Author(s)	HC	DHP	TM				HR
				IT	TMS	WMS	BC	TE
1.	Fernando et al. (2022)			/				/
2.	Nazri et al. (2022)			/				
3.	Tumiwa et al. (2023)	/						
4.	Ismail et al. (2022)			/				/
5.	Rejeb (2018)		/				/	
6.	Tan et al. (2020)						/	
7.	Ismail et al. (2021)			/				/
8.	Tieman et al. (2019)						/	

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9.	Okdinawati et al. (2021)	/	/		/				
10.	Karia et al. (2015)					/			
11.	Haleem et al. (2021)		/	/					/
12.	Ridhwan et al. (2020)						/		
13.	Abdul Rahman & Abdul (2017)			/					
14.	Tieman & Darun, (2017)						/		
15.	Saifudin et al. (2018)		/	/					/
16.	Alamsyah et al. (2022)						/		
17.	Mohamed et al. (2016)			/					
18.	Yaacob et al. (2018)			/					/
19.	Rizki et al. (2023)		/				/		/
20.	Vatumalae et al. (2020)					/			
21.	Karia & Assari (2015)					/			
22.	Karia (2018)								/
23.	Voak et al. (2023)								/
24.	Bowersox et al. (2013)				/	/			
25.	Tarmizi et al. (2014)		/						/
26.	Mohamed et al. (2022)		/						
27.	Rashid & Bojei (2020)	/							

Discussion

The adoption of the traceability system would help to identify the occurrence of cross-contamination along the supply chain process (Yaacob et al., 2018). The increase of halal certification in logistics management plays a crucial role in ensuring traceability and preserving product integrity throughout the supply chain. Halal traceability guarantees that products are handled according to Shariah requirements and fulfil all the technical aspects, from product processing, storage, and transportation to final delivery through all the information that has been recorded. The traceability system consists of halal certification, documentation and halal policy, technology management, and human resources is vital to minimize the risk of cross-contamination between halal and non-halal products in maintaining the purity of halal products. As global demand for halal products rises, halal certification becomes a significant tool for enhancing market competitiveness and consumer trust.

Halal Certification

Attention and understanding of halal certification in logistics management among consumers have increased (Selim et al., 2019). Halal certification adds value to 3PL companies in offering halal logistics services to manufacturers, consumers, and parties involved in the supply chain. Okdinawati et al. (2021) stated that the certification indicates that 3PL transportation and warehousing companies are committed to maintaining the halal status of products during the storage and distribution processes. According to Tumiwa et al. (2023), the halal certification is a fundamental part of traceability procedures in halal logistics to ensure product quality in the supply chain, thus protecting consumers' rights, especially Muslim consumers.

Halal certification is a recognition given to a company for providing halal products and services as well as guaranteeing consumers, especially Muslim consumers that the products are produced based on Shariah requirements. Compared to other countries, halal certification in Malaysia is controlled and issued by the government while in foreign countries, halal

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certification is only certified by the Islamic institutions of a country itself (Matulidi et al., 2016). Until the year 2024, there are 88 foreign halal certification bodies recognized by JAKIM consisting of 49 countries(JAKIM, 2024). Halal-certified products and services have been processed in compliance with standards from the aspects of hygiene and safety clearly as set by the halal certification body (Tumiwa et al., 2023).

A halal certificate in halal logistics is a cornerstone for ensuring the traceability of halal products. It verifies that transportation, storage, and handling procedures adhere to Islamic dietary laws, becoming one of the factors in maintaining the product's halal integrity (Zulfakar et al., 2014). This certification fosters trust, transparency, and accountability within the supply chain, facilitating market access and mitigating risks associated with contamination and non-compliance. According to Rashid and Bojei (2020), halal-certified products and services encourage a sense of confidence and trust among customers that the halal products they purchased are Shariah compliant. Thus, halal certification is one of the principles for enhancing the halal integrity of halal logistics.

Documentation and Halal Policy

The foundation of a successful halal industry, regardless of the types of halal products, is halal integrity. In Malaysia, all halal LSPs are certified by the JAKIM and have also applied for halal logistics standard that covers transportation, warehouse, and retailing (Zailani et al., 2017). Halal product integrity is the result of various activities along the supply chain. This implies that every activity along the supply chain is important for halal integrity to be preserved from the point of origin to the point of consumption. Various parties involved in the supply chain face the challenge of sustaining halal product integrity. This is due to the likelihood of cross-contamination or the high tendency of halal and non-halal products to get mixed during handling (Mohamed et al., 2022).

The empowerment of the halal traceability system can be further increased through management policies on supply chain management. In halal logistics services, segregation of products between halal and non-halal goods during logistics during the transport and warehousing process needs to be emphasized to comply with the standards outlined in the Malaysian Halal Certification Procedure Manual (MPPHM), Malaysian Halal Management System (MHMS), MS2400-1:2019, and MS2400:2-2019. According to Okdinawati et al. (2021)Whether certification, policies, or halal standards are the basis of halal logistics and become a high recognition of the quality of halal logistics services.

Validated halal logistics systems should be able to prevent contamination from occurring, proactive corrective measures will need to be defined to mitigate or at least minimize the risk of contamination on halal products (Voak et al., 2023). According to Saifudin et al. (2018) traceability procedures in halal logistics services must be complemented with other traceability procedures such as those found in food products and matched with a Hazard Analysis Critical Control Point (HACCP). For halal logistics services, a halal policy that explains the critical points in halal logistics activities needs to be formed by 3PL companies to explain where the risk of contamination of halal products can occur during logistics operations.

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Technology Management

The production of halal products, from the slaughtering process through the handling, processing, packaging, and warehousing of raw materials to the final product's distribution, is a more visible instance of technology in supply chain operation. This shows how technology is employed in the halal industry for manufacturing, other services, and logistics management. Technology is one of the vital elements in the traceability system. Zaidi (2020) mentioned that these elements directly impact the halal industry and are an important resource for the services of LSP companies that create conducive competition to provide the best halal logistics services to consumers. According to Yaacob et al. (2018), halal 3PL transport providers are still lacking in installing a comprehensive tracking system.

Without a proper tracking system, it becomes challenging for companies to track the status of product movement and help avoid product recall crises. The traceability system in halal logistics services has become easier and faster with the advancement of information and communication technology (ICT). Abdul Rahman and Abdul (2017) explained that traceability is a system that can be verified, used consistently and fairly, practiced practically, and complied with rules or policies. An impractical system will increase the company's operating and financial costs. Technology in the traceability system can be used by providing information in real-time, facilitating access, and providing documentation processes more quickly.

According to Fernando et al. (2022), tracking technology will help LSP monitor and control logistics activities to improve halal logistics performance. In addition, the implementation of traceability technology allows LSP, especially 3PL to identify actions that may affect the halal status of the products carried and stored by 3PL. Information technology also helps to improve halal integrity in the supply chain, strengthen the transparency and traceability of products, and make logistics activities more controlled to maintain halal status. LSP's technology to support transport planning and control consists of TMS and GPS to control daily delivery, select transport modes, monitor transport locations, etc. As for warehouse management, the technology used by most LSPs to support warehouse planning consists of WMS (Okdinawati et al., 2021).

During the transportation process, less than a truckload (LTL) has a high risk of cross-contamination compared full truckload (FTL) due to mixing other goods in one container and this affects the halal traceability system (Okdinawati et al., 2021). Therefore, TMS is used to identify and evaluate strategies and appropriate transportation methods for product delivery, consolidate shipments, plan transportation routes, and ensure efficient use of transportation capacity (Bowersox et al., 2013). Tan et al. (2012) argued that although TMS was initially used in conventional logistics management systems, the system is now implemented in halal logistics management and has become a part of principles in halal traceability systems to plan and manage transportation in and out of warehouses. Besides, WMS is also being used in halal logistics focusing on warehouse management.

WMS is database-based computer software designed to enhance warehouse performance efficiency by focusing on inventory storage through current transaction records within the warehouse, and they function to unify work procedures and facilitate warehouse management (Bowersox et al., 2013). According to Vatumalae et al. (2020) there are four stages required in warehouse operations, starting from the receiving process, storage, picking, and delivery of

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goods to customers and the tracking process can be observed through cargo movement records. WMS can also control and oversee stock capacity based on real-time data through Auto-ID Information Capture (AIDC) innovations such as barcode scanners, wireless Local Area Network (LAN), and RFID to efficiently monitor and manage the movement of products while in the warehouse. These strategies ensure that stock records align with client requests. Adding inventory to the warehouse can cause operational issues if procedures are not properly followed (Bowersox et al., 2013).

Although 3PL companies have used TMS and WMS to update data on the products transported and stored, Rejeb (2018) expressed that these systems have not adequately demonstrated transparency and reliability regarding data trade between parties in the supply chain. Therefore, previous studies highlighted blockchain technology to strengthen the traceability system in halal logistics (Rejeb, 2018; Ridhwan et al., 2020; Rizki et al., 2023; Tieman et al., 2019). According to (Tan et al., 2020), blockchain is a database technology that collects and protects data confidentiality for all parties on the same network from being manipulated by unauthorized entities. The main elements of blockchain consist of smart contracts and a distributed ledger shared among users within the 'block'.

Information contained in a data 'block' cannot be altered by other users, but information sharing between users can be executed over the network within the same block. Tieman et al. (2019) argued that the blockchain system can prevent companies within the halal supply chain from committing fraud during the distribution and storage of halal goods. This is because information about the goods or products handled by parties within the chain is displayed openly. Ridhwan et al. (2020) stated that the implementation of blockchain technology in the halal industry benefits halal logistics by enhancing transparency and traceability through the use of a secure, fast, and reliable system. It can also assist authorities during the auditing process within the supply chain. Hence, it can be seen that smart contracts and ledgers distributed to users in the blockchain system can strengthen the transparency and traceability of the halal supply chain.

Human Resource

The use of technology does not have a positive effect if there are no human resources to handle it. Haleem et al. (2021) showed that untrained and unskilled workers are an obstacle to ensuring halal products' integrity in the supply chain. To remain competitive in the global halal market, there is a need to educate and train the workforce of halal LSPs to create a LSP with integrity during the handling process of halal products. The continuous growth in the transportation sector impacts human resources development in the logistics industry and requires specialized training programs on halal logistics management. In developing halal logistics, Yaacob et al. (2018) emphasized that company management and logistics operators must fully understand halal operating procedures. Training is essential to maintain halal integrity throughout the supply chain, in line with the global demand for halal products, particularly in foods and beverages.

To maintain halal status and minimize the risk of contamination of halal products; infrastructure, equipment, warehouses, trucks, and containers must be properly segregated and handled by trained personnel. Continuous training on halal procedures for staff, especially

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drivers and warehouse operators, should be conducted to enhance knowledge and practices in handling halal products during logistics (Yaacob et al., 2018). According to Ismail et al. (2022), training is crucial to educate staff with knowledge and SOPs for handling halal products during logistics. Insufficient knowledge about halal processes is a limitation in implementing halal logistics and will break the supply chain. Monitoring compliance with halal logistics management requires an efficient workforce, especially in addressing the risk of contamination.

Voak et al. (2023) laid out two dimensions in creating a framework for human resource development in dealing with halal supply chains; 1) assurance systems and 2) technical and operational aspects. This system is a reference for assessing and building workforce knowledge to achieve halal industry objectives. Strengthening the assurance system can be seen through improving regulatory compliance among trained workers to adhere to both domestic and international halal guidelines. Strong and transparent quality control measures are significant in guaranteeing the reliable quality of halal products. From a technical and operational viewpoint, Voak et al. (2023) stated that Shariah-compliant production and handling processes are vital in maintaining halal integrity. Employee's knowledge of the separation between halal and non-halal products helps reduce the risk of contamination. Furthermore, training on traceability procedures makes LSP employees more knowledgeable in recognizing, evaluating, and managing the segregation process during transportation and storage.

Training and exposure to traceability procedures developed by LSP, especially 3PL companies should be provided to staff handling halal products. The implementation of halal standards for a product does not end once the product is produced; it must be maintained throughout the supply chain, as the halal status of a product can be compromised if contamination occurs during transportation and storage. Fernando et al. (2022) explained that training on halal management systems can address this issue and enhance the performance of 3PL companies in handling halal products. Therefore, the manufacturing sector and LSPs must understand the halal logistics process and traceability procedures implemented within the supply chain (Rizki et al., 2023).

The capability of LSPs to build a halal network can be seen through the provision of traceability systems using the latest technology, which makes a positive impression on customers. Logistics Information Technology (LIT) benefits LSP companies by helping them remain competitive in controlling huge freight volumes, strengthening traceability systems, and speeding up delivery times across the supply chain. However, the advancement of halal tracking technology is difficult to achieve if employees are not prepared with satisfactory education and training (Karia, 2018). Karia (2018) believed that LSP companies implementing information technology (IT) is risky and involves high costs if employees lack a comprehensive understanding of IT.

Conclusion

In conclusion, integrating a traceability system within halal logistics plays a pivotal role in maintaining product integrity throughout the supply chain. The halal certification serves as a critical measure for ensuring compliance with Islamic laws, fosters consumer trust, and

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enhances product transparency. Technology advancements, such as the implementation of TMS, WMS, and blockchain, have significantly improved the traceability, monitoring, and overall management of halal logistics operations while addressing risks of contamination. However, the successful adoption of these technologies is contingent on trained human resources equipped with knowledge of halal processes and regulatory requirements. Therefore, continuous workforce training is essential to sustain halal integrity and meet the growing global demand for halal products. The synergy between technology, certification, and skilled worker underscores the importance of a comprehensive approach to halal logistics, ensuring that halal products maintain their status from production to consumption.

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