Halal Logistics, Halal Manufacturing, Competitiveness, and Halal Organizational Sustainability: A Conceptual Exploration

¹Khairulazmi Mohamad Karudin, ²Mohd Rizaimy Shaharudin*, ¹Amir Imran Zainoddin, Chanicha Moryadee ¹Faculty of Business and Management, Universiti Teknologi MARA, Segamat, Johor, Malaysia ²Faculty of Business and Management, Universiti Teknologi MARA, Kedah, Malaysia ³College of Logistics and Supply Chain, Suan Sunandha Rajabhat University, Khlongyong Sub-District, Phutthamonthon District, Nakhon Pathom, Thailand kazmi13@yahoo.com, *rizaimy@uitm.edu.my, amirimran@uitm.edu.my_chanicha.mo@ssru.ac.th Corresponding Author: Mohd Rizaimy Shaharudin

Abstract: The Malaysian halal industry, especially in logistics and manufacturing, confronts several challenges due to globalization, including competitiveness issues. As a result, ensuring sustainable competitiveness has become crucial for maintaining compliance with Islamic halal Syariah standards. Preserving the sector's competitive edge while upholding halal management practices is a significant concern for businesses in Malaysia's halal industry. However, many halal companies lack the resources needed to identify the most effective strategies and methods to enhance their performance and competitiveness. This conceptual paper examines the interplay between Halal logistics, Halal manufacturing, competitiveness, and organizational sustainability within the Halal industry. The paper posits that effective integration of Halal logistics and manufacturing practices is not only essential for compliance with religious standards but also for enhancing the competitive advantage and sustainability performance of organizations. By exploring theoretical frameworks and existing literature, this paper highlights the critical role that Halal practices play in driving organizational success and proposes directions for future research in this growing field.

Keywords: Halal Logistics, Halal Manufacturing, Competitiveness, Organizational Sustainability, Halal Industry

1. Introduction

The Halal industry has emerged as a significant global market, driven by the demand for products that comply with Islamic dietary laws and ethical standards. As the industry expands, businesses are increasingly recognizing the importance of not only adhering to Halal standards but also leveraging these practices to enhance their competitiveness and sustainability. This conceptual paper explores the relationship between Halal logistics, Halal manufacturing, competitiveness, and organizational sustainability, proposing that these elements are deeply interconnected and mutually reinforcing.

The Malaysian government has implemented substantial measures to foster the growth of the halal sector by enforcing regulations and promoting halal products and services (Awan et al., 2015; Ambali & Bakar, 2013). As highlighted by Husny et al. (2018), Ali & Suleiman (2016), and Halim and Salleh (2012), the Department of Islamic Development Malaysia (JAKIM) has been designated as the sole authority responsible for maintaining the integrity of halal certification and overseeing all halal-related activities in Malaysia, as part of the Ninth Malaysia Plan (2006-2010). JAKIM is responsible for issuing this certification, and halal items must display the halal logo on products and business premises (Bashir et al., 2019; Ali et al., 2017; Hashim, Hussin & Zainal, 2014).

Malaysia's halal certification covers both local and international standards, extending beyond food items to include beverages, supplements, meals in cafes, restaurants, and hotels, as well as consumer goods. It also encompasses non-food products such as cosmetics, personal care items, pharmaceuticals, slaughterhouses, and halal logistics, including retail, warehousing, transportation, and original equipment manufacturers (Bux et al., 2022; Ezanee et al., 2016; Baharuddin et al., 2015). According to Fajar (2017), the certification process requires strict adherence to halal standards throughout the manufacturing process, including handling, packaging, shipping, and storage. JAKIM is also tasked with enhancing the global reputation and credibility of Malaysian halal certification (Damit et al., 2018; Faul et al., 2016; Nurul et al., 2014). Through the efforts of JAKIM and the Halal Industry Development Corporation (HDC), Malaysia has gained recognition as a global leader in halal certification, one of the few countries with strong government support in developing the halal industry (Daisuke et al., 2018; Zulfakar et al., 2014; Rezai, Mohamed & Shamsudin, 2012).

However, organizations in various industries have often tried to operate independently, but they need to collaborate and share resources to address both current and future challenges (Mitra & Datta, 2014; Narasimhan, Swink & Viswanathan, 2010). As interdependence among organizations grows, effective coordination of resources becomes increasingly important (Shaharudin et al, 2023). Companies must be competitive by providing high-quality products and services (Olhager & Prajogo, 2012; Mollenkopf et al., 2010; Naslund & Williamson, 2010; Stock et al., 2000). Halal manufacturers must ensure their products, whether food or non-food, reach consumers in the same location and timeframe, adhering to halal standards to maintain a competitive advantage in the industry (Manzouri et al., 2013). Resource dependency within halal organizations necessitates strategic coordination to improve performance (Shariff et al., 2016; Latif et al., 2014).

Halal manufacturers are encouraged to leverage their resources in halal logistics to boost competitiveness. Rajeb et al. (2021) and Ririn et al. (2019) suggest halal manufacturers should handle retail, storage, transport, and warehousing with proper segregation to comply with halal Syariah standards. Moreover, they must monitor halal transportation practices across land, air, and sea from their production facilities to the consumer (Mohamed & Hamid, 2015). By integrating halal logistics with organizational resources, manufacturers can strengthen their market position, increase customer loyalty, and boost revenue (Budi & Dika, 2017; Azam & Abdullah, 2020).

Furthermore, Halal manufacturers must ensure their production processes comply with Syariah standards (Talib et al., 2020). This includes product ingredients that must not contain a mixture of Halal and non-halal substances. Suppliers involved in the halal supply chain must align with halal standards and be approved by the manufacturer's control and inspection departments (Tan et al., 2020). Additionally, several critical aspects of halal manufacturing must be adhered to, such as using compliant tools and equipment, sourcing halal raw materials, employing knowledgeable staff, and maintaining hygiene, safety, and security standards in line with the halal tayyiban concept (Mega, 2019; Manzouri et al., 2013). These practices, involving suppliers, internal staff, vendors, and contractors, demonstrate best practices among Malaysian halal manufacturers, contributing to their operational efficiency and enhancing the customer experience.

As emphasized by Tan et al. (2020), enhancing competitiveness in halal manufacturing is vital for improving organizational performance by achieving high standards of safety, security, hygiene, integrity, and customer satisfaction. Halal manufacturing requires the integration of various functional areas and the support of competitive organizational structures, including environmental stewardship, total quality management, and customer relations management, to maximize business success (Bux et al., 2022; Budi & Dika, 2017). Nevertheless, many halal-focused companies in Malaysia struggle to achieve the desired competitiveness, leading to shortcomings in their overall halal performance and sustainability.

In addition, as noted by Talib et al. (2020) and Budi and Dika (2017), many logistics and manufacturing departments in Halal organizations are reluctant to engage in halal logistics activities due to challenges such as the need for specialized machinery, the requirement for segregated storage spaces for halal and non-halal products, and additional costs associated with ritual cleansing (known as simak in Islam), specialized staff, and training on halal logistics (Tan et al., 2020). These factors add to the overall cost of doing business and competitiveness.

The purpose of this paper is to provide a conceptual framework that links Halal logistics and manufacturing with competitiveness and organizational sustainability. By examining these relationships, the paper aims to contribute to the broader understanding of how Halal practices can drive long-term success for organizations operating in this sector.

2. Literature Review

Halal Logistics

Halal logistics encompasses the halal business management to control the flow of halal goods within the halal supply chain and comply with halal standards, ensuring that all processes comply with Islamic law (Shariah). Halal logistics is observed as a continuous enrichment sequenator to mete out halal products as cost-effective, innocuous, earlier, and workable with the latest technology as a constituent of competitive edge for the Halal

practice firm that outdoes with Halal obligation and obliges to halal stakeholders (Wel, Ashari & Ismail, 2022). Furthermore, it has been expansively acknowledged that Halal logistics is a value creation, accomplishment, and part of a competitive feature amongst halal stakeholders in the Halal industry as emphasized by Tieman, Marco & Barbara (2020). Halal logistics is a strategic tool to increase Halal market competitiveness to fulfill religious responsibilities, build Halal consumer trust, and ingrain Halal brand loyalty.

Incontrovertibly, Halal logistics play an important role in Halal practices, and determine competitiveness and sustainability perspective in the Malaysian Halal industry (Jamaludin & Ramli, 2023). Nevertheless, lack of infrastructure and the right method of Halal logistics services affected halal organizational sustainability performance. For instance, the halal manufacturer lacking in suit with a halal logistics company that can offer different modes of warehousing and transportation that comply with sustainability standards (Jaafar, 2024). This consists of the seclusion of halal and non-halal products, the hygiene and purity of transportation, and storing and loading amenities. Besides, the assurance that no cross-contamination arises at any stage is still questionable with several issues of halal meat contamination such an example along the logistics process. In addition, implementing Halal logistics can be challenging due to the additional costs and complexities involved in maintaining strict compliance. These challenges include the need for specialized facilities, trained personnel, and the development of robust certification and monitoring systems. Despite these challenges, companies that excel in Halal logistics are better positioned to capture market share in the global Halal industry (Mohamed et al., 2020).

There are more than a few reasons for Halal manufacturers do not engage with Halal logistics service providers and most are due to the conventional thought of cost apprehension that will distress Halal product's price to be traded to Halal consumers. Based on that situation, as stated by Kamarulzaman and Tarmizi (2020), most of those Halal manufacturers are keen to set up their own logistics units and hire certain project management teams to handle logistics activities. This effort seems like significant cost management in business but it will have a substantial impact and it can be sum on as a competitiveness initiative among Malaysian Halal manufacturers to stay competitive in the Halal industry.

Halal Manufacturing

Manufacturing activity that complies with Islamic law is known as Halal manufacturing. This ensures that Halal products are devoid of any forbidden elements according to Islamic law and that all tools and materials used in production have been aligned with the Halal regulator's certification standards (Ibrahim & Aghwan, 2022). Halal manufacturing is in various sectors including food, cosmetics, pharmaceuticals, and modest fashion where halal customer demand for Halal items with Halal certification endorsement is rising swiftly. Halal manufacturers must adhere to this hall standard criteria to reap future business benefits from a halal sustainability perspective. To ensure the quality and safety of Halal products, strict adherence to Halal criteria is crucial, and fulfilling the demands of an increasing number of ethically concerned customers is just as important to Halal manufacturing as adhering to Syariah requirements. Halal manufacturer can improve their brand image and appeal to a wider market by complying with Halal standards. This includes non-Muslim consumers who identify Halal with ethical and high-quality manufacturing techniques.

From the standpoint of Halal manufacturing, it is evident in the Malaysian context that the notion of sustainability is currently being used in Halal business practices from a social and environmental concept. Halal business management is becoming more mindful of social and environmental issues as a result of growing concerns about its triple bottom-line agenda (Showole & Haruna, 2024). In the meantime, from a social standpoint, it is evident from the human aspect that Malaysian Halal manufacturers have been concerned about the welfare of their employees, the training that they have received that complies with halal standards, the job opportunities that arise from the booming Halal industry, and not only that but also the provision of job security to them, particularly after the outbreak of the global pandemic and world economic turmoil recently (Talib, Ngah & Kurniawati 2022).

Furthermore, green procurement, ecologically friendly manufacturing methods, and societal obligation are only a few of the larger sustainability objectives that are frequently reflected in halal manufacturing activities. This alignment enables businesses to stand out in the market and develop a competitive advantage based on sustainability and Islamic religious conformity. Halal products should be produced and delivered at a lower

cost, with less processing required time, faster turnaround, greater safety measures, and cleaner conditions through continuous development in Halal manufacturing practices. Moreover, as stated it is well known that Halal manufacturing is essential to the Halal industry's growth. Malaysia and other nations across the globe have established halal standards that have had an excellent impact on the Halal industry.

Competitiveness in the Halal Industry

In the context of the Halal industry in Malaysia, Rajeb et al. (2021), stated that competitive advantage is realized in terms of the sources of Halal practices, which are obtained from Halal knowledge, Halal logistics, Halal manufacturing, Halal standards, Halal regulatory, Halal infrastructure, and Halal facilities that have been inaugurated in Halal industry supply chain. Despite the industry's limited actual capacity, Malaysian Halal manufacturers can strive to be competitive by focusing on value-added products and quality assurance adaptiveness that are essential to winning the competition in the halal market. The Halal companies' competitive advantage can be secured from the different palate of Halal knowledge, which is hard to emulate and the specialty of sustainability concept can be transformed as Halal brand image and Halal brand identity that need to be preserved for Halal business sustenance locally and globally (Noorliza, 2020).

The Halal brand as an element to retain competitive ingrains can be gained from the Halal good practices resources namely warehousing management, transportation and freight management, shipping management, and production management. Those competitive edge resources as mentioned by Norazlina et al (2021), are important to be driven by Halal manufacturer business propensity, gradual revenue to be grown, consistency of business net worth, consideration of socio-economic and environmental deprivation impact to Halal stakeholders within the business in the halal industry. Furthermore, for Malaysian Halal manufacturers to be successful, they must have a strong competitive advantage, which is typically based on their capacity to generate a reliable Halal product that contributes to the Halal consumer experience and retain it as Halal products that are difficult to imitate.

On the further pointer, Malaysian Halal manufacturer competitiveness should become as main element to build up the confidence among halal consumers as quoted by Rahmatina et al. (2023), that is substantial to the Halal business profitability, socially responsible activities and environmental stewardship practicality. In other words, it has shown that Halal consumers are self-assured towards Halal products and Halal activities as a source of competitiveness that Malaysian Halal manufacturers have provided. However, pursuing competitiveness in the Halal industry also involves navigating various challenges, such as the complexity of global supply chains, varying Halal certification standards across different regions, and the need for continuous innovation to meet evolving consumer expectations. Companies that can effectively address these challenges are more likely to achieve sustained competitive advantage in the Halal market (Mohamed & Hassan, 2020).

Halal Organizational Sustainability

Organizational sustainability refers to a company's ability to operate in a manner that ensures long-term viability while considering environmental, social, and governance (ESG) factors. In the context of the halal industry, sustainability is closely linked to the ethical principles that underpin halal practices, including fair trade, animal welfare, and environmental stewardship (Othman *et al.*, 2019). Halal organizational sustainability performance has been articulated as a value structure envisioned at the direction of management to transfigure their responsibility for the organization's economic propensity, social responsibly, and environmental stewardship as main elements of Halal organizational achievement (Bux, Rehman & Mohammad, 2022).

Nowadays, it is important to ensure that Halal products are visible for purchasing repetition among Halal consumers (Ngah et al., 2021). Fundamentals of halal activities that suit social obligation such as extra financial contribution to the employee, job opportunities to the locality, a donation to society development, education development programs, and safe and secure working place are playing a vital role as a source of Malaysian Halal manufacturer sustainability development in Halal industry. Moreover, incorporating Halal business with sustainability elements can improve a Halal business's standing and draw in more Halal customers, especially those who value an ethical business approach. Halal businesses can stand out in the market and create a sustained competitive advantage by establishing themselves as leaders in Halal sustainability activities.

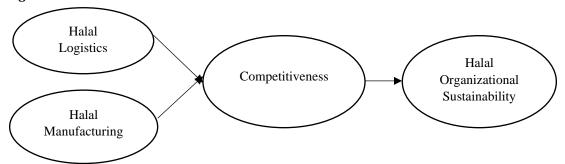
Additionally, Halal products and Halal activities that link with environmental concerns are also important as a source of business sustainability development, particularly in environmental Halal material, eco-design Halal

products, reusable Halal material and products, green Halal warehousing, environmental Halal transportation, and eco Halal terminal. The environmental fundamentals are value-added in Halal services and Halal products and important to ensure repetitive Halal consumers procuring and possibly to increase the Malaysian Halal manufacturer business productivity and possess the business to be more robust, strong, energetic, and vibrant in the long run (Nurul & Nur, 2022). For instance, Malaysian Halal process food manufacturers have enthusiastically veiled locally grown agriculture from local farmers in countryside areas that apply organic farming to manufacture Halal process food and export to the international market and it supports inculcating the notion of Halal economy flow.

3. Theoretical Framework and Hypothesis Development

This paper proposes a theoretical framework that links Halal logistics and Halal manufacturing to organizational competitiveness and sustainability. The framework is based on the premise that Halal practices are not only compliance mechanisms but also strategic tools that can enhance a company's competitive position and long-term sustainability. RDT provides a theoretical foundation in explaining how halal logistics and halal manufacturing will result in competitiveness and successful halal organizational sustainability performance. Competitiveness argues that effective halal logistics is a strong weapon and a crucial element for establishing a unique competitive advantage. Halal producers need a unique approach to achieve better results, which relies on management's backing and employees' participation in halal logistics (Tieman, 2013; Borzooei & Asgari, 2013). According to RDT perspectives, a collaboration between management and employees is necessary for implementing halal logistics to achieve business uniqueness (Mukherje & Romi, 2014). Halal organizations may possess the necessary expertise and skills to address halal logistics challenges in areas like warehousing, storage, transportation, packaging, and retailing. This enables companies to obtain the essential resources to promote sustainable halal organizational performance, including customer satisfaction, operational efficiency, and organizational strengths (Talib et al., 2020; Damit et al., 2018).

Figure 1: Theoretical Framework



As illustrated in Figure 1, the theoretical framework is segmented into three components: halal logistics, halal manufacturing as the independent variables, competitiveness as the independent variable, and halal organizational sustainability performance as the dependent variable. These elements collectively influence organizational performance within the halal industry.

The concept of halal logistics is grounded in Syariah compliance within logistics activities and serves as a source of competitiveness for halal organizations (Abdullah & Oseni, 2017; Talib, Hamid & Zulfakar, 2015; Tieman, 2013). The adoption of halal logistics practices helps firms develop strategies that sustain the brand reputation and enhance competitiveness (Latif et al., 2014). Similarly, halal organizations can leverage organizational synergy to strengthen halal practices, such as halal logistics, to achieve a competitive advantage (Tan, Razali & Husny, 2012). Therefore, the following hypothesis is proposed:

H1: There is a positive relationship between halal logistics and competitiveness.

Talib, Chin and Fischer (2017) argued that resources such as halal manufacturing standards, procedures, technologies, Syariah-compliant material sourcing, and adherence to halal supplier Syariah provisions are crucial for fully realizing competitive advantages in the halal industry. Additionally, resources from halal suppliers, regulators, and manufacturing associations can be strategically utilized to sustain competitiveness

among halal manufacturing organizations (Talib, 2020). The effectiveness and efficiency of halal manufacturing management are essential for these organizations to maintain their competitive edge (Suhartanto et al., 2020). Hence, the following hypothesis is proposed:

H2: There is a positive relationship between halal manufacturing and competitiveness.

Competitiveness is influenced by the unique resources and capabilities of an organization, making it difficult to replicate, as elaborated in Resource Dependence Theory (RDT) (Talib, Ali, & Idris, 2014; Peng et al., 2011). Halal organizational sustainability performance is critical in the competitive halal market and is considered a fundamental principle for halal organizations (Bux et al., 2022). Furthermore, Tan et al. (2020) argued that competitiveness plays a key role in determining the effectiveness of halal organizational sustainability performance. According to Budi and Dika (2017), resources in halal organizations must be competitive in terms of knowledge, skills, education, technology, and innovation to achieve halal organizational sustainability performance. Based on this literature, the following hypothesis is proposed:

H3: Competitiveness has a positive effect on halal organizational sustainability performance.

Assessing the competitive edge of the halal supply chain and integrating sustainability dimensions for future growth is pivotal amidst the ongoing global economic downturn and international trade tensions (Shariff et al., 2024). In this case, halal logistics are vital drivers for halal manufacturers, focusing on product segregation in line with Syariah compliance, enhancing consumer confidence, and achieving success in the halal business (Tieman, 2015; Manzouri et al., 2013). They also noted that halal logistics can be an effective tool to increase customer value. Additionally, Ab Talib et al. (2019) argued that Institutional Theory (IT) provides a theoretical foundation to explain how institutional pressure drives halal organizations. For instance, effective cleanliness and high standards of hygiene during storage and transportation, as guided by JAKIM, can lead to better halal business practices and positively impact halal organizational sustainability performance (Latif et al., 2014). Therefore, the study hypothesizes as follows:

H4: There is a positive relationship between halal logistics and halal organizational sustainability performance.

Samson and Terziovski (1999) postulated that quality practices have a significant direct impact on operational performance. Shahin (2011) found evidence that good manufacturing practices significantly influence financial performance. Similarly, Vanichchinchai and Igel (2011) found that manufacturing practices positively impact organizational performance. Consistent research by Hsu et al. (2009) and Lee (2004) also demonstrated that good manufacturing capabilities have a strong positive relationship with organizational performance. Likewise, Lee and Lee (2013) confirmed that quality has a significant positive effect on business performance. Thus, the following hypothesis is proposed:

H5: There is a positive relationship between halal manufacturing and halal organizational sustainability performance.

Fantazy, Kumar and Kumar (2009) examined the relationship between strategy, flexibility, and organizational performance. Information exchange and responsiveness contribute to an organization's market performance in terms of sales growth, product development, and market expansion (Stank, Crum & Arango, 1999). Tummala, Phillips and Johnson (2006) emphasized that improving competitiveness and performance is crucial for successful organizational planning. Competitiveness or competitive advantage as a mediating variable toward organizational performance has been utilized in previous research, such as Graziano et al. (1997). Additionally, Noorliza (2020) and Lestari et al. (2020) stated that strong logistics management and sustainable halal logistics can support the development of sustainable strategies and enhance competitiveness, thereby contributing to halal organizational sustainability performance. Hence, the hypothesis is proposed as follows:

H6: Competitiveness mediates the relationship between halal logistics and halal organizational sustainability performance.

Mega (2019) and Chuah et al. (2016) indicated that competitiveness can be managed through sustainable halal manufacturing practices that emphasize societal engagement, local talent employment, technology transfer, waste management, product recycling, eco-design, and environmental stewardship, all of which contribute to halal organizational sustainability performance. Similarly, Damit et al. (2018) argued that sustainable halal manufacturing, although challenging, is expected to provide a competitive advantage for halal organizational sustainability performance (Fajar, 2017). Thus, the following hypothesis is proposed:

H7: Competitiveness mediates the relationship between halal manufacturing and halal organizational sustainability performance.

4. Implications for Practice

The conceptual framework outlined in this paper carries significant implications for businesses operating within the Halal industry. The integration of Halal logistics and manufacturing practices into business operations is not merely a matter of compliance with religious standards; it also offers strategic advantages that can enhance competitiveness and sustainability. The following implications provide practical insights for industry practitioners and policymakers.

Businesses in the Halal industry must recognize that Halal logistics and manufacturing practices are strategic assets that can drive both competitiveness and sustainability. These practices should not be treated as separate or ancillary to core business operations but should be fully integrated into the company's overall strategy. For instance, companies should align their Halal practices with their broader business goals, ensuring that Halal compliance supports and enhances their market positioning, brand reputation, and customer relationships A food manufacturing company could integrate Halal compliance into its entire supply chain, from sourcing raw materials to delivering finished products. This would involve working closely with suppliers to ensure that all materials are Halal-certified and implementing robust monitoring and auditing processes to maintain Halal integrity throughout the supply chain. By embedding Halal practices into its operations, the company can position itself as a trusted provider of Halal products, thereby gaining a competitive edge in both Muslimmajority and non-Muslim markets.

To fully capitalize on the benefits of Halal practices, companies should be prepared to invest in the necessary infrastructure, technology, and human resources to maintain rigorous Halal compliance. This includes investing in Halal-certified facilities, training employees on Halal standards, and developing partnerships with credible Halal certification bodies. Such investments, while potentially costly upfront, can lead to long-term benefits, including enhanced market access, increased consumer trust, and improved operational efficiency. A logistics company specializing in the transportation of Halal goods could invest in dedicated Halal-compliant vehicles and storage facilities. Additionally, the company could train its staff on the specific requirements of Halal logistics, ensuring that they understand the importance of maintaining Halal integrity throughout the transportation process. These investments would allow the company to offer premium Halal logistics services, attracting clients who prioritize Halal compliance and are willing to pay a premium for such services.

Halal-certified companies should align their Halal practices with broader sustainability goals, such as reducing waste, promoting ethical sourcing, and minimizing environmental impact. This alignment not only enhances the company's reputation among ethically conscious consumers but also ensures long-term operational viability. By adopting sustainable Halal practices, companies can differentiate themselves in the marketplace and build a loyal customer base that values both religious compliance and environmental stewardship. A Halal cosmetics manufacturer could adopt sustainable sourcing practices by using eco-friendly, Halal-certified ingredients. The company could also implement waste reduction initiatives in its manufacturing processes, such as recycling packaging materials and reducing water consumption. By communicating these sustainability efforts to consumers, the company can strengthen its brand identity as a provider of ethical and environmentally responsible Halal products, appealing to a broader demographic that includes both Muslim and non-Muslim consumers.

Innovation is critical for maintaining competitiveness in the rapidly evolving Halal industry. Companies should continuously seek innovative ways to improve their Halal logistics and manufacturing processes, such as adopting new technologies, enhancing supply chain transparency, and implementing advanced traceability systems. Innovation in Halal practices not only improves operational efficiency but also positions the company as a leader in the Halal market, capable of responding to changing consumer demands and regulatory requirements. A food processing company could implement blockchain technology to enhance the traceability of its Halal products. By using blockchain, the company can provide consumers with real-time information about the origin, processing, and transportation of their products, ensuring transparency and building trust.

This innovation would not only improve the company's operational efficiency but also offer a unique value proposition to consumers who prioritize transparency and accountability in their purchasing decisions.

Halal practices can be leveraged to create market differentiation by offering unique value propositions that resonate with consumers. Companies that excel in Halal logistics and manufacturing can position themselves as premium brands, offering products that meet the highest standards of quality, safety, and religious compliance. This differentiation can be particularly effective in competitive markets where consumers are willing to pay a premium for products that align with their ethical and religious values. A Halal food brand could differentiate itself by not only adhering to strict Halal standards but also by offering products that are organic, non-GMO, and ethically sourced. By marketing these attributes, the company can appeal to a niche segment of consumers who are looking for products that meet both Halal and broader ethical criteria. This strategy could allow the company to command higher prices and build a loyal customer base that values the unique combination of Halal compliance and ethical production.

Policymakers and industry stakeholders must recognize the importance of Halal logistics and manufacturing in driving the competitiveness and sustainability of the Halal industry. Governments and industry bodies should support companies in their efforts to adopt and innovate in Halal practices by providing incentives, resources, and guidelines. Collaboration among industry players, such as forming Halal industry clusters or associations, can also facilitate the sharing of best practices, the development of standardized Halal certification processes, and the promotion of Halal products in global markets. A national government could introduce tax incentives for companies that invest in Halal-certified facilities and technologies. Additionally, industry associations could organize training programs and workshops to help companies understand the latest developments in Halal standards and sustainability practices. By fostering a supportive environment for Halal businesses, policymakers and industry leaders can help drive the growth and global competitiveness of the Halal industry.

5. Conclusion

This conceptual paper has explored the interconnectedness of Halal logistics, Halal manufacturing, competitiveness, and organizational sustainability. The literature review highlights the critical roles of Halal logistics, Halal manufacturing, competitiveness, and organizational sustainability in driving the success of organizations within the Halal industry. The proposed framework suggests that effective Halal practices can drive both competitiveness and sustainability, creating a virtuous cycle that enhances long-term organizational success. Halal logistics and manufacturing are not only essential for religious compliance but also serve as strategic tools that can enhance competitiveness and sustainability. Companies that effectively integrate these practices into their operations are better positioned to achieve long-term success in the rapidly growing global Halal market. As the Halal industry continues to grow, businesses that strategically integrate Halal practices into their operations are likely to achieve sustained competitive advantage and contribute positively to global sustainability goals. Future research should continue to explore the dynamic interplay between these variables and their impact on organizational performance.

Acknowledgment: The authors would like to express their sincere gratitude to the State Research Committee, UiTM Kedah Branch, for the generous funding provided under the Tabung Penyelidikan Am. This support was crucial in facilitating the research and ensuring the successful publication of this article.

References

- Abdullah, A., & Oseni, U. A. (2017). Towards a sharīʻah compliant equity-based crowdfunding for the halal industry in Malaysia. *International Journal of Business and Society, 18*(S1), 223-240.
- Ali, M. H., & Suleiman, N. (2016). Sustainable food production: Insights of Malaysian halal small and medium-sized enterprises. International Journal of Production Economics, 181, 303–314.
- Ali, M. H., Zhan, Y., Alam, S. S., Tse, Y. K., & Tan, K. H. (2017). Food supply chain integrity: the need to go beyond certification. Industrial Management and Data Systems, 117(8), 1589-1611.
- Ambali, A. R., & Bakar, A. N. (2013). Ḥalal food and products in Malaysia: People's awareness and policy implications. *Intellectual Discourse*, 21(1), 7-32.

- Awan, H. M., Siddiquei, A. N., & Haider, Z. (2015), Factors affecting halal purchase Intention evidence from Pakistan's halal food sector. *Management Research Review*. 38(6), 640–660.
- Azam, M.S.E., & Abdullah, M.A. (2020). Global halal industry: Realities and opportunities. *International Journal of Islamic Business Ethics*, *59*(1), 47-59.
- Baharuddin, K., Kassim, N., & Nordin, S. (2015). Understanding the halal concept and the importance of information on halal food business needed by potential Malaysian entrepreneurs. International Journal of Academic Research in Business and Social Sciences, 5(2), 170–180.
- Bashir, A.M., Abdullah, B., Samuel, O.O. & Zul Ariff, A.B. (2019). Factors affecting consumers' intention towards purchasing halal food in South Africa: a structural equation modelling. *Journal of Food Products Marketing*, 25(1), 26-48.
- Borzooei, M., & Asgari, M. (2013). The Halal brand personality and its effect on purchase intention. *Interdisciplinary Journal of Contemporary Research in Business*, *5*(3), 481-491.
- Budi, I., & Dika, F. (2017). Building competitive advantage in the halal industry: An empirical analysis. *International Journal of Supply Chain Management*, 6(4), 45-55.
- Bux, S. R., Rehman, A., & Mohammad, Z. (2022). The effect of halal logistics on the competitiveness of halal food supply chains. *Journal of Islamic Marketing*, *13*(4), 784-798.
- Chuah, S. H., Marimuthu, M., Kandampully, J., & Bilgihan, A. (2016). What drives Gen Y loyalty? Understanding the impact of travel experience and social media use on well-being and loyalty. *International Journal of Tourism Research*, 19(5), 472-487.
- Daisuke. K., Masato. T., Mituharu, O., Siti, H. R. E., & Mohd, H. A. (2018). A Study on the Halal food supply chain in Japan from an inbound perspective of the international multi. *Conference of Engineers and Computer Scientists* Vol II IMECS. Hong Kong, 14-16.
- Damit, A., Salleh, N. A., & Nor, S. (2018). The credibility of halal certification: Perspectives of halal certificate holders. *Journal of Islamic Marketing*, 9(1), 47-67.
- Ezanee, M., Siti, N., & Adam, M. (2016). Halal awareness and knowledge among Muslim's student entrepreneurship program: A preliminary study. *Paper presented at the 2nd International Conference on Business Global & Social Entrepreneurship*, Koh Samui Island, Thailand, 12-14.
- Fantazy, K. A., Kumar, V., & Kumar, U. (2009). An empirical study of the relationships among strategy, flexibility, and performance in the supply chain context. *Supply Chain Management: An International Journal,* 14(3), 177-188.
- Fajar, K. A. (2017). The development of halal logistics in Indonesia. *Journal of Halal Research*, 2(2), 99-113.
- Faul, F. E. F., Suhaiza, Z., & Mohammad, I. K. K. (2016). Drivers of consumers' willingness to pay for halal logistics. British Food Journal, 118(2), 464-479.
- Graziano, R. A., Horn, P. E., Wechsler, M. R., & Coster, W. J. (1997). Workplace services and organizational performance: A framework for research and practice. *Journal of Applied Behavioral Science*, *33*(1), 58-69.
- Halim, M. A. A., & Salleh, M. M. (2012). The possibility of uniformity on halal standardsin the organization of Islamic countries (OIC) country. *World Applied Science Journal*, *17*, 6 –10.
- Hashim, H., Hussin, S.R., and Zainal, N.N. (2014) Exploring Islamic retailer store attributes from consumer perspectives: an empirical investigation. *International Journal of Economics and Management,* 8(S),117-136.
- Hsu, P. H., Novoselov, S., Wang, S., & Zeng, J. (2009). Production efficiency and stock returns: A quantile regression approach. *Journal of Financial Markets, 12*(4), 604-617.
- Husny, Z. J. M., Tan, M. I. I., Sulong, N., Yusof, N. S., & Mazlan, M. N. A. (2018). Technology requirement for Halal quality control. *Journal of Fundamental Applied. Science*, 10(2), 399-412.
- Ibrahim, K. & Aghwan Z.A. (2022). The effect of Halal awareness and consumer demographics on intention to purchase Halal food: A comparative study between Brunei Darussalam and Uganda Journal of Halal Science and Technology, 1 (2), 22-36.
- Jaafar, H.S. (2024). The Development of Halal Supply Chain Management, presented to the Halal Insight Webinar: Bringing together the realms of "halal"and "standardization" towards global halal, 18 July 2024.
- Jamaludin, M. A. & Ramli, S. N. H. (2023). Smart Food for Future Sustainability: Halal and Tayyib Perspective, Journal of Halal Industry and Services. https://doi.org/10.36877/jhis.a00003095.
- Kamarulzaman, N. H., Tarmizi, H. A. (2020). Inbound halal logistics practices: A case oflocal mosques. *Journal Halal Industry & Services*, 3(1).
- Latif, I. A., Jantan, M., & Mohamed, Z. A. (2014). Halal food supply chain: From halal to the tayyib. *Journal of Islamic Marketing*, *5*(3), 292-304.

- Lee, P., & Lee, J. (2013). The impact of TQM on organizational performance in the context of social capital. *Journal of Manufacturing Technology Management*, 24(6), 785-807.
- Lee, S. M. (2004). Quality management and organizational performance: A review of some key issues. *International Journal of Quality & Reliability Management, 21*(8), 1007-1020.
- Lestari, P., Haryadi, S., & Zainuri, A. (2020). Halal logistics and sustainable development: A mediation role of competitiveness. *Journal of Islamic Marketing*, 11(5), 1057-1073.
- Manzouri, M., Rahman, M. N., & Arshad, H. (2013). Developing strategies for supply chain sustainability: A case study in the Malaysian automotive industry. *International Journal of Sustainable Development & World Ecology, 20*(2), 111-124.
- Mega, P. A. (2019). The importance of halal food in the global economy. *Journal of Halal Research*, *2*(1), 12-19. Mitra, S., & Dattaa, P. P. (2014). Adoption of green supply chain management practices and their impact on performance: an exploratory study of Indian manufacturing firms. International Journal of Production Research, 52(7), 2085-2107.
- Mollenkopf, D., Stolze, H., Tate, W. L., & Ueltschy, M. (2010). Green, lean, and global supply chains. *International Journal of Physical Distribution & Logistics Management*, 40(1/2), 14-41.
- Mohamed, S., & Hamid. A. B (2015). Halal supply chain critical success factors: a literature review. *Journal of Islamic Marketing*, 6 (1), 44-71.
- Mohamed, M., & Hassan, M. H. (2020). Halal supply chain: A review of the literature. Journal of Islamic Marketing, 11(1), 209-231.
- Mukherjee, S., & Romi, S. (2014). Global Halal: Meat, money and religion. *Religions*, 5(1), 22–75.
- Narasimhan, R., Swink, M., & Viswanathan, S. (2010). On decisions for integration implementation: an examination of complementarities between product-process technology integration and supply chain integration. *Decision Science*, 41(2), 355-372.
- Naslund, D., & Williamson, S. (2010). What is Management in Supply Chain Management? –A Critical Review of Definitions, Frameworks and Terminology. *Journal of Management Policy and Practice*, 11(4), 11-18.
- Ngah, A.H., Gabarre, S., Han, H., Rahi, S., Al-Gasaweh, J.A., and Park, S.H. (2021). Intention to purchase Halal cosmetics: do males and females differ? A multigroup analysis. MDPI Cosmetics, 8(19). Retrieved from https://doi.org/10.3390/cosmetics8010019
- Norazlina, A.A., Siti, S.S., Muhamad, A.R., & Ku, M.A.K. Y., (2021). Malaysian Is the Covid 19 Vaccine Halal, Revisiting the Role of National Pharmaceutical Regulatory Agency (NPRA) and JAKIM. *Journal of Social Science and Humanities*, 6(10), 413-428.
- Noorliza, K. (2020). Sustainable halal logistics: Creating competitive advantage for halal businesses. *Journal of Islamic Marketing*, 11(6), 1415-1430.
- Nurul, A., A., A. & Nur, A., T. (2022). Halal cosmetics: A Review on Halalan Toyyiban Concept in Soap. *IIUM Press*, 2(2), 86-93.
- Nurul Aini, M., Nathasa, M.R., Sumaiyah, A.A., & Nor Asiah, Y. (2014). Integrating IslamicFinance and Halal Industry: A Survey on Current Practises of the Selected Malaysian Authority Bodies. *Asian Social Science*, 10(17), 120-126.
- Olhager, J., & Prajogo, D. (2012). The impact of manufacturing and supply chain improvement initiatives: a survey comparing make-to-order and make-to-stock firms. *Omega*, 40(2),159-165.
- Othman, N. A., Shaarani, S. M., & Bahron, A. (2019). Halal logistics: A marketing mix perspective. Journal of Islamic Marketing, 10(2), 394-406.
- Peng, M. W., Sun, S. L., Pinkham, B., & Chen, H. (2011). The institution-based view is the third leg of a strategy tripod. *Academy of Management Perspectives*, *25*(3), 66-81.
- Rahmatina, A. K., Azizon, A., Nadira, A., Adela, M. Y. and Karina M. (2023). Opportunities and Challenges for Developing Halal Pharmaceuticals Industry. *International Journal of Halal Research*, 5(1), 1-12.
- Rajeb, A., Rajeb, K., Zailani, S., Treiblmaier, H. and Hand, K.J. (2021). Integrating the internet of things in the halal food supply chain: a systematic literature review andresearch agenda. *Internet of Things*, 13, 100-361.
- Rezai, G., Mohamed, Z., & Shamsudin, M. N. (2012). Non-Muslim consumers' understanding of Halal principles in Malaysia. *Journal of Islamic Marketing*, 3 (1), 3346.
- Ririn, T. R., Sri, G., Sylva, A. R., & Ari, P. (2019). Halal Food Certification to Improve the Competitiveness of East and Middle Business in Indonesia. *KnE Social Sciences*, 1044–1056.
- Samson, D., & Terziovski, M. (1999). The relationship between total quality management practices and operational performance. *Journal of Operations Management*, *17*(4), 393-409.

- Shafie, S., & Othman, M. N. (2006). Halal certification: An international marketing issues and challenges. Paper presented at the 5th Int. Conference on Islamic Marketing and Branding, Kuala Lumpur, Malaysia.
- Shaharudin, M. R., Iranmanesh, M., Zailani, S., Tan, K. C. and Ghobakhloo, M. (2023). The impact of supply chain integration on reverse supply chain adoption. *Kybernetes*, *52*(11), 5730-5751.
- Shahin, A. (2011). Classification and ranking of the measures of university quality based on Kano model: A case study. *International Journal of Productivity and Quality Management, 7*(4), 484-503.
- Shariff, D. N., Jayaraman, K., Shah, M. Z., & Saharuddin, A. H. (2016). Service quality determinants of the container haulage industry: An empirical study in Malaysia. *International Journal of Shipping and Transport Logistics*, 8(1), 66-80.
- Shariff, D. N., Abdullah, D., Bakar, A. A., Shaharudin, M. R., & Ngelambong, A. (2024). Analyzing Halal Integrity and Sustainability Nexus in an Emerging Halal Supply Chain Ecosystem (HSCE). *International Journal of Research and Innovation in Social Science*, 8(7), 1489-1504.
- Showol, R., K. & Haruna, B., J. (2024). The impacts of supply chain integration on halal SMEs supply chain performance: The Mediating Role of Innovativeness. *IIUM Press*, 4(1), 48-54.
- Stank, T. P., Crum, M. R., & Arango, M. (1999). Benefits of interfirm coordination in food industry supply chains. *Journal of Business Logistics*, 20(2), 21-41.
- Stock, G. N., Greis, N. P., & Kasarda, J. D. (2000). Enterprise logistics and supply chainstructure: the role of fit. *Journal of Operations Management*, 18(5), 531-548.
- Suhartanto, D., Dean, D., Ismail, T. A., & Wibisono, N. (2020). The influence of store atmosphere on customer loyalty: The role of shopping experience. *Journal of Business Research*, 120, 160-167.
- Talib, M. S. A. (2020). Halal certification on Malaysia's global halal hub status. *Procedia Economics and Finance,* 35, 373-381.
- Talib, M. S. A., Ali, M. H., & Idris, F. (2014). Halal supply chain critical success factors: A literature review. *Journal of Islamic Marketing*, *5*(3), 386-408.
- Talib, M. S. A., Chin, T. A., & Fischer, J. (2017). Linking halal food certification and business performance: The role of trust. *Journal of Islamic Marketing*, 8(3), 372-391.
- Talib, M. S. A., Hamid, A. B. A., & Zulfakar, M. H. (2015). Halal supply chain critical success factors in Malaysia: A literature review. *Journal of Islamic Marketing*, *6*(3), 324-344.
- Talib, M. S. A., Ngah, A. H., & Kurniawati, D. A. (2022). Theories in Halal Logistics and Supply Chain Management Research. Halal Logistics and Supply Chain Management, 32–44. https://doi.org/10.4324/9781003223719-5.
- Tieman, M. (2011). The application of Halal in supply chain management: In-depth interviews. Journal of Islamic Marketing, 2(2), 186-195.
- Tieman, M., Vorst, J. G. A. J. V. D., & Che Ghazali, M. (2012). Principles in Halal supply chain management. Journal of Islamic Marketing, 3(3), 217-243.
- Tieman, Marco, and Barbara Ruiz-Bejarano. (2020). Halal Retailing: Closing the Last Mile in an End-to-End Halal Supply Chain. Islam and Civilizational Renewal. Kuala Lumpur. 11(1), 148.
- Tan, K. H., Razali, M. A., & Husny, N. S. (2012). The roles of halal practices to build a competitive advantage in Malaysia's halal industry. *International Journal of Business and Management*, 7(4), 100-111.
- Tan, K. H., Ali, M. H., & Makhbul, Z. K. (2020). Halal logistics: A Malaysian perspective. *International Journal of Logistics Research and Applications*, 23(4), 358-377.
- Tieman, M. (2013). Establishing the principles in halal logistics. *Journal of Emerging Economies and Islamic Research*, 1(1), 1-13.
- Tummala, R., Phillips, A., & Johnson, M. (2006). Assessing supply chain management success factors: A case study. *Supply Chain Management: An International Journal*, *11*(2), 179-192.
- Vanichchinchai, A., & Igel, B. (2011). The impact of total quality management on supply chain management and firm's supply performance. *International Journal of Production Research*, 49(11), 3405-3424.
- Well, C. A. C. Ashari, S. N. A. & Ismail, M. F. (2022). The Influence of Halal Certification, Halal Logo, Halal Assurance, Safety and Purity on Customer Purchase Intention. *International Journal of Academic Research in Business and Social Sciences*, 12(1), 1212-1227.
- Wilson, J. A. J., & Liu, J. (2010). Shaping the Halal into a brand? Journal of Islamic Marketing, 1(2), 107-123.
- Zailani, S., Jafarzadeh, H., & Iranmanesh, M. (2017). The impact of Halal logistics on the market performance of Halal food companies in Malaysia. *Journal of Islamic Marketing*, 8(4), 1033-1050.
- Zulfakar, M. H., Anuar, M. M., & Abdul, T.M. S. (2014). Conceptual framework on halal foodsupply chain integrity enhancement. *Procedia-Social and Behavioral Sciences*, *121*, 58-67.