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## HALAL FOOD INDUSTRY IN MALAYSIA: KEY CHALLENGES AND THE PATH FORWARD

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### Abstract:

The halal food sector plays a vital role in Malaysia's economy and its position as a global leader in halal certification. Despite its growth, the industry encounters several barriers, including high certification costs, bureaucratic complexities, inconsistent standards and food safety concerns. Therefore, this study aims to identify and analyse the key challenges faced by the halal food industry in Malaysia, particularly focusing on certification processes, food safety, technological integration, and global standardization. This research uses a qualitative approach, relying on a literature review and secondary data to analyse these issues. Content and thematic analysis were employed to identify recurring themes and trends in the industry. The findings highlight that the halal certification process is particularly challenging for small and medium-sized enterprises (SMEs), which face difficulties navigating bureaucratic hurdles and high certification costs. Furthermore, food safety concerns persist, compounded by limited technological adoption, such as blockchain and IoT, which could improve transparency and traceability in the supply chain. The lack of harmonized global halal standards also creates obstacles for Malaysia's halal food exports. The study concludes with recommendations to streamline certification processes, enhance food safety, increase consumer education, and adopt modern technologies to improve the halal food supply chain's

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transparency. Additionally, international cooperation to standardize halal certification is crucial for Malaysia to maintain its leadership in the global halal food market. This research underscores the importance of addressing these challenges to ensure Malaysia's continued success in the global halal food industry and provides practical solutions to overcome existing barriers.

**Keywords:**

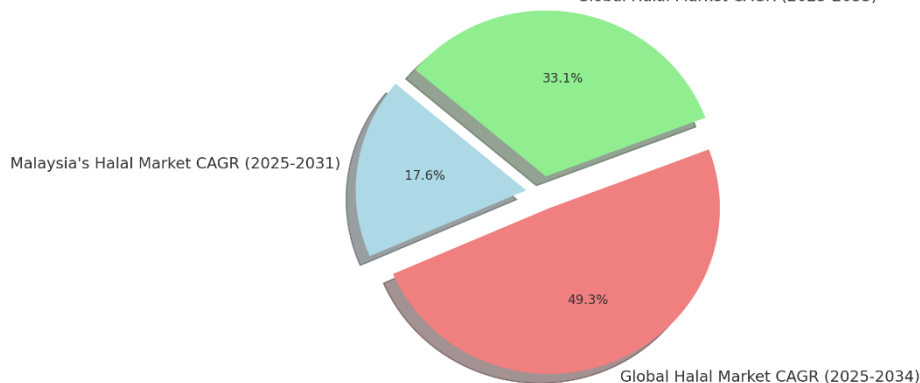
Halal Certification, Halal Challenges, Halal Food, Halal Industry

## Introduction

Malaysia has emerged as a leader in the global halal food industry due to government support, technological innovation and international recognition (Zaid et al., 2024). Malaysia's halal certification is also widely recognized, contributing to the rapid growth of the halal industry (Shahwahid et al., 2017). Malaysia has implemented various strategies to promote the halal food sector, including improving access to raw materials, developing Halal Parks and enhancing research and development activities (Syed Agil & Nor, 2012). Additionally, the Malaysian government has set quality standards to ensure compliance with global market requirements. Collaboration between government agencies, such as the Department of Islamic Development Malaysia (JAKIM) and Halal Development Corporation Berhad (HDC), with private sector entities, has strengthened the halal ecosystem (Zakaria et al., 2022a). However, challenges still exist, including competition from other countries and the need for standardized halal certification (Syed Agil & Nor, 2012; Fatonah et al., 2023).

In general, the halal food industry plays a significant role in Malaysia's economy and society. The Malaysia Halal Food Market Outlook (2025-2031) report by 6Wresearch projects a Compound Annual Growth Rate (CAGR) of 5.9% for Malaysia's halal food market over the forecast period from 2025 to 2031. This growth is attributed to the increasing global Muslim population and the rising demand from non-Muslim consumers for halal products, driven by their perceived quality, safety, and ethical standards. Figure 1 is the comparison halal food market CAGR growth for Malaysia and global. The pie chart illustrates the CAGR projections for Malaysia's halal food market and the global halal food industry. Malaysia's halal food market is expected to grow at 5.9% CAGR (2025-2031), reflecting steady but moderate expansion due to a well-established regulatory framework and stable domestic demand. In contrast, the global halal food market is projected to grow at 16.5% CAGR (2025-2034), driven by increasing demand from both Muslim and non-Muslim consumers, technological advancements, and expanding halal supply chains. Another global projection estimates an 11.1% CAGR (2023-2033), emphasizing factors such as investment in halal production, e-commerce expansion, and government support in Muslim-majority countries. While Malaysia remains a leader in halal certification, its growth lags behind the global market, highlighting the need for greater innovation, international collaboration, and streamlined certification processes to remain competitive. Strengthening technological integration and market expansion strategies will be crucial for Malaysia to align with the accelerating global halal industry trends.

Comparison of Halal Food Market CAGR Growth (Malaysia vs Global)  
Global Halal Market CAGR (2023-2033)



**Figure 1: Comparison Halal Food Market CAGR Growth**

Source: 6Wresearch

As the halal food sector continues to expand, Malaysia is poised to benefit from both domestic consumption and growing export opportunities, positioning itself as a key player in the global halal market (6Wresearch, 2025). The industry offers opportunities for economic growth and global market expansion, aligning with Malaysia's aspiration to become the global halal hub (Mohd Fauzi et al., 2020). The industry faces challenges such as unclear guidelines and a lack of international certification, but it also opens opportunities for trade and industrial development (Mohd Fauzi et al., 2020). Consumer education regarding halal products is growing, with programs focusing on industry awareness and practices (Jamaludin et al., 2012). The role of halal executives is crucial in ensuring proper halal management and compliance (Affendi et al., 2022). Research and development within the halal ecosystem contribute to enhancing the competitiveness of Malaysia's halal industry (Zakaria et al., 2022a). The industry also emphasizes food safety and hygiene, in line with Islamic principles and Maqasid al-Shariah (Ramli et al., 2016; Hashim et al., 2023). However, various issues and challenges still exist in managing the halal food industry in Malaysia. Building on these issues, this study aims to identify and analyse the key challenges in the management of the halal food industry in Malaysia.

## Literature Review

### *An Overview of the Halal Food Industry in Malaysia*

The halal food industry in Malaysia plays a crucial role in economic growth and societal development, driven by the implementation of standards like MS1500 (Sari et al., 2021). The industry is characterized by strengths and weaknesses identified through SWOT analysis, highlighting the need for ICT-based strategies to enhance competitiveness (Bohari et al., 2013). Challenges such as ambiguous guidelines and lack of collaboration among agencies hinder progress (Shahwahid et al., 2017; Mohd Fauzi et al., 2020). Despite these challenges, Malaysia's halal certification is recognized globally, contributing significantly to exports, particularly to Islamic countries (Azman & Masron, 2012). The growth of the halal industry is expected to continue, with recommendations for improved cooperation among government agencies and better implementation of halal standards to maintain Malaysia's position as a global halal hub (Syed Agil & Nor, 2012; Asmaria, 2023).

The halal food industry in Malaysia faces numerous challenges, including inconsistent standards, complex certification processes and market competition (Al-Shami & Abdullah, 2023; Saima et al., 2024). Despite its growth and Malaysia's recognition as a global halal hub, issues such as consumer scepticism towards halal certification and the need for improved governance persist (Majid et al., 2015; Shahwahid et al., 2017). Research indicates that enhancing collaboration among government agencies and adopting innovative practices, such as manufacturing execution systems, can address these challenges (Al-Shami & Abdullah, 2023; Majid et al., 2014). Additionally, the role of halal certification in improving food industry performance is emphasized, highlighting its importance for hygiene and marketability (Muda et al., 2020). A bibliometric review reveals Malaysia's significant contribution to halal studies, indicating a need for further research in this evolving field (Darmawati et al., 2023).

### ***Key Issues in the Management of Halal Food Industry in Malaysia***

#### ***Halal Certification***

Recent literature highlights significant challenges in obtaining halal certification for Malaysian SMEs. These include bureaucratic complexities, high costs and inconsistent standards (Mohd Fauzi et al., 2022; Saima et al., 2024). The certification process is hindered by manpower shortages, auditors' lack of skills, and issues with the MYeHALAL system (Muhammad et al., 2020). JAKIM and HDC play crucial roles, but face competition from foreign certification bodies (Muhammad et al., 2020; Mohd Fauzi et al., 2022). Despite these challenges, over 60% of Korean food operators in Malaysia have successfully obtained halal certification (Amin et al., 2020). To optimize certification, SMEs should focus on management commitment, employee training, and clear financial records (Kristiana et al., 2020). Implementing a manufacturing execution system could improve efficiency (Al-Shami & Abdullah, 2023). Cooperation between private and public sectors is crucial to overcome these challenges (Ali & Ahmad, 2023).

#### ***Food Safety and Quality Control***

Food safety and quality control in Malaysia encounter multiple challenges, including food poisoning outbreaks (Zakaria et al., 2022b) and threats to food safety from multiple angles (Riza et al., 2023). The concept of "halalan tayyiban" is crucial in ensuring food safety and quality (Awang, 2021). Advanced technologies like Geospatial Technology of Quantum GIS (QGIS) are being utilized for spatial visualization of food safety data (Kuan et al., 2023). Online food delivery quality control is an emerging concern (Yuchen, 2020). Malaysia has implemented various guidelines and regulations to address halal food quality (Mokti et al., 2022). Consumer food safety knowledge, attitudes and practices play a significant role in preventing foodborne illnesses (Soon et al., 2020). Quality management practices in food manufacturing companies vary based on company size, with larger companies generally implementing more extensive practices (Kim-Soon et al., 2020).

#### ***Technological Challenges***

Recent studies identify notable technological challenges within Malaysia's halal food industry. Limited adoption of advanced technologies like blockchain, IoT, and AI hinders supply chain efficiency and traceability (Tan et al., 2022; Rui & Kaliani Sundram, 2024). Lack of awareness, high implementation costs and skilled labour shortages impede technological integration, particularly among SMEs (Ahmad Tarmizi et al., 2020; Elfarnawani & Kartiwi, 2024). Certification processes face challenges due to manpower shortages, auditor skill gaps and

system issues (Muhammad et al., 2020). However, blockchain shows promise in enhancing transparency and traceability (Tan et al., 2022). To address these challenges, stakeholders recommend increased awareness, financial support and regulatory alignment (Elfarnawani & Kartiwi, 2024). Collaboration between public and private sectors is crucial in improving halal food integrity (Ali & Ahmad, 2023). Implementing comprehensive tracking technologies could significantly enhance halal product integrity throughout the supply chain (Bahrudin et al., 2011).

### ***Consumer Awareness and Education***

Previous studies underscore the rising importance of halal certification and consumer awareness in the food industry of Malaysia. Studies indicate that halal certification positively impacts consumer purchase intentions and business performance (Muda et al., 2020; Ali & Ahmad, 2023). However, Malaysian SMEs face challenges in implementing halal standards, including inconsistent certification processes, financing issues and innovation deficits (Saima et al., 2024). Halal certification authorities struggle with manpower shortages, skill gaps and system inefficiencies (Muhammad et al., 2020). The integration of halal industry and Islamic finance is seen as crucial for improving halal compliance standards (Noor et al., 2019). Consumer awareness and demand for halal logistics in meat products are also increasing (Nee et al., 2020). To address these challenges, suggestions include enhancing collaboration between agencies, improving halal literacy programs, and leveraging e-commerce opportunities (Mohd Fauzi et al., 2022; Al-Shami & Abdullah, 2023).

### ***International Standardization of Halal Certification***

Many studies draw attention to the considerable obstacles in establishing standardized halal certification practices on a global scale. Disparities in halal standards across countries stem from varying Islamic schools of thought, creating obstacles for regulators, consumers and producers (Akbar et al., 2023). The lack of a universal halal standard hinders industry growth, with differences observed among popular standards like SMIIC, Malaysia, Indonesia and Singapore (Azam & Abdullah, 2021). Efforts to harmonize global halal standards are ongoing, with proposals for unified clauses and recognition of areas requiring further scholarly discussion (Lutfika et al., 2022). Addressing these challenges is crucial for the growth of Islamic marketing and the halal industry (Islam et al., 2023).

### ***Key Challenges Faced by Halal Food Industry in Malaysia***

#### ***Competition and Market Access***

The halal food industry in Malaysia has been identified as a potentially important export sector, with the government aiming to position the country as a global halal hub (Othman & Sungkar, 2009; Syed Agil & Nor, 2012). However, the industry faces several challenges, including competition from other countries, lack of standardization in halal certification, and raw material shortages (Syed Agil & Nor, 2012). To enhance competitiveness, strategies such as improving access to raw materials, developing Halal Parks, and promoting Malaysia's Halal Standard have been employed (Syed Agil & Nor, 2012). Studies have shown that operational strategies, competitive priorities and business networks play crucial roles in the industry's performance (Idris, 2013; Bambale et al., 2021). Issues like trust, commitment and information technology affect the success of business networks (Idris, 2013). Additionally, food manufacturers must comply with international quality standards to ensure the production of quality halal food (Talib & Ali, 2009).



### ***Regulatory and Compliance Challenges***

Key regulatory and compliance issues include a lack of manpower, auditor skills and proper guidelines (Muhammad et al., 2020). Malaysia's halal food industry faces difficulties in standardization, data availability and certification processes (Azam & Abdullah, 2020; Al-Shami & Abdullah, 2023). Ambiguous halal guidelines and insufficient collaboration among governing agencies further complicate matters (Mohd Fauzi et al., 2022). However, opportunities exist in emerging markets and technological advancements. The integration of manufacturing execution systems and IoT technologies offers potential solutions for improving traceability, efficiency and authentication in halal food supply chains (Rejeb et al., 2021; Al-Shami & Abdullah, 2023).

### ***Cultural and Religious Differences***

The halal food industry in Malaysia struggles with navigating the differing cultural and religious perspectives on halal (Majid et al., 2015). The industry's growth is driven by both Muslim and non-Muslim consumers, with the latter attracted by perceived cleanliness and safety (Majid et al., 2015). Religious tolerance is evident in halal dining experiences, fostering harmonious coexistence in Malaysia's multi-religious society (Khalek & Mokhtar, 2022). However, food choices remain influenced by ethnic, cultural and religious considerations (Lee, 2017). Government agencies play crucial roles in developing the halal industry, emphasizing inter-agency cooperation to address challenges (Shahwahid et al., 2017). Consumer concerns about the halalness of labelled products are influenced by factors such as religiosity, education and age (Rezai et al., 2009).

### ***Environmental and Sustainability Issues***

Current studies on environmental and sustainability concerns within Malaysia's halal food industry emphasize several critical themes. Studies emphasize the importance of traceability systems and environmental factors in maintaining halal food supply chain integrity (Ab Rashid & Bojei, 2020). The implementation of sustainable measures, including quality management systems and green practices, is crucial for enhancing economic and environmental performance in halal food supply chains (Abdullah et al., 2018; Abderahman et al., 2021). Researchers note the need for increased awareness and adoption of environmentally friendly food practices among consumers and industry players (Zain et al., 2024). The integration of sustainability considerations into halal supply chain optimization is identified as an emerging area requiring further research (Kurniawati & Cakravastia, 2023). Additionally, blockchain technology is proposed as a potential tool to enhance traceability and sustainability in the halal food industry (Bux et al., 2022).

## **Methodology**

### ***Research Design***

This study adopts a qualitative research design. The qualitative approach is chosen because it enables a deep exploration of the key issues and challenges faced by Malaysia's halal food industry. The research design focuses on understanding the experiences, perceptions and insights of key stakeholders, including industry experts, government bodies and entrepreneurs in the halal food sector. This approach is ideal for examining complex phenomena that involve cultural, regulatory and operational factors.

### ***Data Collection***

Data for this research is primarily collected through a literature review and secondary sources. The literature review includes analysing relevant academic articles journals, proceedings, conference papers, dissertations and theses that focus on the halal food industry in Malaysia. Secondary data from sources such as market reports, government websites, and halal certification authorities provide valuable insights into the current state of the industry, its challenges and growth opportunities. This method ensures a comprehensive understanding of the existing knowledge and the identification of gaps in the current research.

### ***Data Analysis***

The collected data is analysed using content and thematic analysis methods. Content analysis involves systematically categorizing and summarizing the data to identify patterns, themes and trends related to the halal food industry in Malaysia. Thematic analysis is employed to organize the data into themes that provide an in-depth understanding of the key issues and challenges faced by the industry. This approach allows for the extraction of meaningful insights and the generation of recommendations for addressing the challenges identified.

### ***Validity and Reliability***

To ensure the validity and reliability of the research, several strategies are employed. First, the literature review is conducted using a wide range of credible and up-to-date sources, including peer-reviewed journals and publications. The use of secondary data from reputable sources ensures the accuracy and relevance of the findings. Furthermore, to enhance reliability, the data analysis process is rigorously documented, allowing for consistency and transparency in the interpretation of findings. Cross-referencing different sources helps to verify the information and ensure a balanced view of the halal food industry in Malaysia. Figure 2 represents the methodology flowchart of this study.



**Figure 2: Methodology Flowchart**

Source: Authors' Own

## **Analysis and Discussions**

The halal food industry in Malaysia, as reviewed in the literature, plays a crucial role in the nation's economic growth and global positioning as a leader in halal certification. However, the industry faces several challenges that hinder its further development and efficiency. These challenges range from certification and regulatory issues to cultural, technological and environmental concerns. By analysing the key issues outlined in the literature, this section discusses the major challenges faced by the halal food industry in Malaysia and the potential solutions to address them.

### ***Halal Certification and Bureaucratic Challenges***

One of the most pressing challenges in Malaysia's halal food industry is the complexity and cost of obtaining halal certification, particularly for small and medium-sized enterprises (SMEs). Studies highlight that the certification process is often burdened by bureaucratic complexities, high costs and a shortage of qualified auditors (Muhammad et al., 2020; Saima et al., 2024). The inefficiency of the MYeHALAL system and manpower shortages exacerbate the problem, making it difficult for SMEs to meet the necessary certification standards (Muhammad et al., 2020). While government agencies such as JAKIM and HDC play a crucial role in certifying halal products, the competition from international certification bodies poses another challenge, especially in an increasingly globalized market (Saima et al., 2024). To overcome these barriers, it is essential for stakeholders to implement ICT-based strategies and adopt technologies like Manufacturing Execution Systems (MES) to streamline certification processes and reduce operational inefficiencies (Al-Shami & Abdullah, 2023). Additionally, improving collaboration between government agencies and the private sector could help in simplifying and expediting the certification process, particularly for SMEs (Ali & Ahmad, 2023).

### ***Food Safety and Quality Control***

Another significant issue in Malaysia's halal food industry is food safety and quality control. The occurrence of foodborne illnesses and challenges in maintaining food safety standards has raised concerns in the sector (Zakaria et al., 2022b). The concept of "halalan tayyiban" plays a central role in ensuring that halal food is both safe and of high quality (Awang, 2021). While Malaysia has implemented various food safety regulations and guidelines, there are still ongoing challenges in ensuring consistent quality control across the food supply chain (Mokti et al., 2022). Advanced technologies like Geospatial Technology (QGIS) and blockchain could help address these issues by improving traceability and transparency in food safety management (Tan et al., 2022; Kuan et al., 2023). Moreover, consumer awareness and practices are essential to improving food safety outcomes. Studies suggest that better education on food safety practices and the importance of halal certification can play a vital role in reducing foodborne illnesses (Soon et al., 2020). Increasing the halal literacy rate, especially among consumers, can help prevent misconceptions and misperceptions regarding halal food safety (Amrin et al., 2022).

### ***Technological Integration***

Technological challenges also present a significant barrier to the halal food industry's efficiency and growth. Although technologies like blockchain, IoT and AI have the potential to revolutionize the halal food supply chain, their adoption remains limited, particularly among SMEs. The lack of awareness, high implementation costs, and a shortage of skilled labour hinder the widespread integration of these technologies (Elfarnawani & Kartiwi, 2024; Rui &



Kaliani Sundram, 2024). As blockchain technology has shown promise in enhancing transparency and traceability within the halal food supply chain, it could be crucial in improving food integrity (Tan et al., 2022). To foster technological adoption, Malaysia's halal food industry needs to focus on increasing awareness and providing financial support to SMEs. Public-private partnerships could play a critical role in offering the necessary infrastructure and training for halal food businesses to integrate advanced technologies into their operations (Ali & Ahmad, 2023).

### ***Cultural and Religious Diversity***

Malaysia's multi-ethnic and multi-religious society presents another layer of complexity for the halal food industry. The varying interpretations of halal across different Islamic schools of thought and the presence of non-Muslim consumers interested in halal products complicate the halal certification process (Majid et al., 2015). While halal food is generally perceived as being safer and cleaner, consumer scepticism and concerns about the authenticity of halal certification still persist, particularly among non-Muslim consumers (Khalek & Mokhtar, 2022). The halal food industry needs to address these concerns by fostering greater public trust and understanding of halal standards. Collaborative efforts between government agencies, halal certifying bodies, and industry players are essential to ensure consistent and transparent communication regarding halal food practices. Additionally, the government could consider launching public awareness campaigns to enhance consumer confidence in halal food safety and authenticity (Shahwahid et al., 2017).

### ***International Standardization of Halal Certification***

A critical challenge faced by the Malaysian halal food industry is the lack of global standardization in halal certification. As the halal food market grows internationally, disparities in halal certification standards across countries, driven by different interpretations of Islamic law, create obstacles for regulators, consumers, and producers (Akbar et al., 2023). The absence of a universally recognized halal certification standard hampers the expansion of halal food exports and complicates international trade. Efforts to harmonize global halal standards are necessary for the industry's continued growth. Malaysia should play a leading role in these initiatives by working with international halal certifying bodies to align certification processes and standards (Azam & Abdullah, 2021). Scholars propose that a unified global halal certification framework would enhance the efficiency of halal certification processes and facilitate smoother international trade (Lutfika et al., 2022).

### ***Sustainability and Environmental Considerations***

The halal food industry also faces growing pressure to adopt sustainable practices. The increasing importance of environmental sustainability, coupled with concerns over the ecological impact of food production, is a challenge that the industry must address (Abderahman et al., 2021). Traceability and the integration of sustainable practices are necessary to ensure that halal food production meets both environmental and ethical standards (Ab Rashid & Bojei, 2020). Blockchain technology, which has already shown potential in enhancing traceability in the halal food supply chain, could also contribute to sustainable practices by ensuring that products meet environmental standards (Bux et al., 2022). The halal food industry in Malaysia must integrate sustainability into its core business practices by adopting green production techniques, improving waste management and focusing on resource efficiency. Awareness campaigns to educate consumers and industry players on sustainable practices are also essential to drive broader adoption of green practices.

## **Solutions and Recommendations**

The halal food industry in Malaysia faces various challenges, but there are several practical solutions that can address these issues effectively.

### ***Solutions for Certification Issues***

To expedite the halal certification process and reduce costs for small entrepreneurs, Malaysia can streamline the certification process by introducing a more efficient online platform, such as improving the existing MYeHALAL system. This platform would allow businesses to easily submit applications, track their status and receive feedback in a timely manner. Additionally, offering financial support such as subsidies or low-interest loans to assist SMEs with the certification expenses would make the process more accessible. A tiered pricing system based on business size could further help reduce financial burdens, particularly for smaller enterprises. To complement these efforts, training programs could be established for entrepreneurs, educating them on the halal certification process and food safety practices. These initiatives would not only simplify the certification process but also improve halal compliance.

### ***Increasing Awareness and Education***

Increasing awareness and education regarding halal principles is essential for both entrepreneurs and consumers. Public awareness campaigns could play a crucial role in enhancing consumer knowledge about halal food standards. These campaigns could be run through social media, television, and educational videos, emphasizing the importance of halal certification and food safety. Collaborating with religious leaders or influential figures could help reach a wider audience and strengthen the message. Additionally, the government could implement halal literacy programs for businesses and consumers, while integrating halal education into academic curricula, particularly in culinary arts and business programs. This would ensure that future entrepreneurs are equipped with a solid understanding of halal principles.

### ***Use of Technology***

Adopting modern technology is another effective solution to enhance halal food verification and transparency. Blockchain technology, for instance, can improve the traceability of halal products by recording each step in the supply chain, from production to retail. With the implementation of blockchain, consumers would be able to scan a QR code to verify the halal status of products, boosting their confidence in the certification. Furthermore, IoT technology can improve food safety by using sensors to monitor the conditions in which halal products are stored and transported. This ensures that halal products remain within required safety standards throughout the supply chain.

### ***Strengthening Enforcement***

To strengthen enforcement and monitoring, Malaysia can implement real-time monitoring systems using technologies like blockchain or IoT, enabling authorities to track halal products as they move through the supply chain. Random audits and inspections could be conducted to ensure compliance, with penalties for businesses found to be violating halal standards. Strengthening cooperation between government agencies, such as JAKIM and the Ministry of Health, could lead to more efficient enforcement, as shared resources and data would allow for more coordinated actions against non-compliant businesses.

### ***Harmonizing Halal Standards***

Lastly, harmonizing halal standards internationally is crucial for ensuring that Malaysia maintains its leadership in the global halal industry. Malaysia can take a leadership role by working with other countries and international bodies such as the Standards and Metrology Institute for Islamic Countries (SMIIC) to develop a unified halal certification framework. By collaborating with ASEAN countries, Malaysia could also create a common certification framework that would help address discrepancies in halal practices across the region, making it easier for businesses to enter international markets. Additionally, the formation of a global halal certification council could be an essential step toward creating universally accepted halal standards, thus facilitating smoother global trade in halal products.

### **Conclusion**

The halal food sector in Malaysia plays a pivotal role in the nation's economic development and global leadership in halal certification. This study examined the challenges and opportunities within the industry, particularly certification complexities, food safety concerns, technological limitations, and the need for global standardization. Despite these challenges, the industry continues to expand, fuelled by domestic demand and growing international interest, particularly from non-Muslim consumers who perceive halal products as safer and of higher quality. The findings underscore the importance of enhancing certification processes, raising consumer awareness, and leveraging modern technologies like blockchain and IoT to improve transparency and traceability in the halal food supply chain. Additionally, fostering collaboration between government agencies, industry stakeholders, and international bodies is crucial for harmonizing halal certification standards and strengthening Malaysia's global halal market position.

This study has successfully achieved its objectives by identifying key issues in Malaysia's halal food industry and providing insights into certification challenges, regulatory barriers, technological integration, and consumer awareness. Furthermore, the research highlights strategic recommendations for enhancing halal food governance, adopting innovative technologies, and strengthening international standardization efforts. From a theoretical perspective, this study contributes to the body of knowledge on halal food management, particularly in addressing regulatory inconsistencies and technological gaps. In terms of practical implications, the study offers actionable strategies for halal certification bodies, policymakers, and industry players to streamline certification processes, promote compliance, and integrate emerging technologies. The study also has policy implications, emphasizing the need for a unified global halal certification framework and stronger regulatory enforcement to maintain Malaysia's competitiveness in the global halal industry.

However, this study is not without limitations. First, the research relies primarily on secondary data, which restricts first-hand insights from industry stakeholders, businesses, and policymakers. Future research should incorporate primary data collection through interviews and surveys to obtain real-world perspectives from halal certification bodies, food manufacturers, and consumers. Second, the literature review is limited to studies in English and Malay, which may exclude relevant research from other regions. Expanding the scope of sources could provide a more comprehensive global perspective. To address these limitations, future studies should focus on empirical research using quantitative methods to assess the effectiveness of various strategies, such as the impact of digital platforms, e-commerce, and consumer education on halal compliance. Moreover, exploring the integration of halal practices

with sustainability initiatives is essential, especially as environmental concerns gain prominence among consumers and industry stakeholders. Further research could also examine the harmonization of global halal certification standards, particularly through collaboration between Malaysia, ASEAN nations, and international halal certification bodies.

Overall, this study highlights the urgent need for innovation, stronger policies, and global cooperation to address the challenges in Malaysia's halal food industry. By embracing technological advancements, improving regulatory frameworks, and fostering international collaboration, Malaysia can maintain its leadership in the global halal market and ensure sustainable growth. Continued engagement between government agencies, industry stakeholders, and academic researchers will be key to advancing the halal food industry and enhancing Malaysia's role as a global halal hub.

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