



# Strategies for optimizing traditional food products to improve Halal industry competitiveness and food sustainability

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## ARTICLE INFO

## ABSTRACT

*This article has undergone peer review and was presented at the Islam in World Perspectives Symposium 2024 on August 14, 2024*

### Keywords

*Optimization,  
Halal Industry,  
Competitive,  
Sustainability*

Business opportunities in the traditional food sector in Indonesia are categorized as very profitable opportunities. Public interest in traditional cuisine is very high. Indonesia, with its large Muslim population, has great potential as a key player in the development of the halal industry. Indonesia accounts for around 11,7% of the total Muslim population in the world, with the Muslim population reaching around 242,7 million by 2024. This figure is equivalent to about 87% of Indonesia's total population. In addition, Indonesia ranks 2nd in the category of halal food producers, indicating that the market potential is still very large to be utilized. This research is a literature study that uses secondary data from scientific articles and other relevant documents using SWOT and PESTEL methods. The optimization of traditional food products is important to improving Indonesia's halal industry's competitiveness. With the application of modern technology and innovative strategies, traditional food products can be transformed into products that not only meet halal standards but also support food sustainability. This is in line with global efforts to achieve the Sustainable Development Goals (SDGs), particularly food security and responsible production. Thus, optimizing traditional food products not only supports national economic growth but also strengthens Indonesia's position as a major player in the global halal industry.

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## Introduction

Indonesia, the world's largest Muslim country and a culturally diverse country, has long been recognized for its rich local heritage of traditional products. It has great potential to develop the halal industry as part of economic growth. In recent years, we have witnessed a significant shift in how people view these products, especially as awareness of halal has increased. This phenomenon not only reflects the evolution in consumer preferences but also mirrors the

industry's transformation towards renewal and higher competitiveness.

The demand for halal products from global consumers continues to increase every year. It is estimated that by 2030, the world's Muslim population will reach 2.2 billion, so the economic growth of the halal industry will also continue to grow. Indonesia has a great opportunity to capitalize on this trend by meeting the global need for halal products through exports. The Vice President of the Republic of Indonesia, Prof. Dr. (Hc) KH. Ma'ruf Amin, highlighted this potential in a national strategic webinar organized by the National Committee for Sharia Economics and Finance (KNEKS) some time ago with the theme "Indonesia Towards the World Halal Producer Center."

The optimization of traditional products is becoming increasingly important in the context of globalization and the increasing demand for halal products. The desire to maintain cultural heritage while adapting to the demands of the modern market has encouraged industry players, governments, and local communities to work together to achieve this goal.

Halal certification is no longer just a label, but a critical factor that influences purchasing decisions. Through the observation of real cases in various industry sectors, there is a real effort to modernize traditional products. For example, some local producers are successfully utilizing the potential of technology, packaging design innovation, and more aggressive marketing strategies to make their traditional products more attractive and competitive in an increasingly competitive market.

In the context of food sustainability, it is important to understand that the optimization of traditional food products not only the competitiveness of the halal industry but also the sustainability of the food system as a whole. Food sustainability encompasses sustainable environmental, economic, and social aspects, where each product must be able to support the balance of the ecosystem, reduce negative impacts on the environment, as well as provide economic benefits to local communities (Molina et al., 2024).

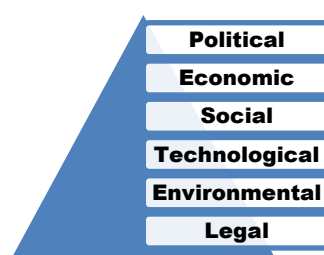
## **Method**

The research method used is qualitative with SWOT analysis and PESTEL analysis. Qualitative research methods are used to gain an in-depth understanding of traditional food product optimization strategies to improve the competitiveness of the halal industry. Qualitative research allows researchers to explore various complex and multidimensional aspects related to traditional food products in the context of the halal industry, such as social, cultural, economic, and regulatory factors.

Table 1. SWOT Analysis

EXTERNAL	O (Oppportunities)	T (Threats)
INTERNAL		
S (Strength)	S-O	S-T
W (Weakness)	W-O	W-T

Table 2. PESTEL Analysis



## Result and Discussion

### Indonesia's Food Diversity

Indonesia has long been known as an archipelago rich in diversity, not only in terms of local culture and customs but also in the variants of culinary flavors that cover the entire region from Sabang to Merauke. Culinary diversity in Indonesia is influenced by various factors, including cultural factors that play an important role in shaping people's consumption patterns and typical food menus in various regions. Food patterns include the behavior of a group of people in meeting food needs, involving attitudes, beliefs, and food preferences. It is formed as a result of physiological, psychological, cultural, and social influences. Cultural factors, in particular, have been the main driver in creating culinary diversity in Indonesia, resulting in a variety of dishes that reflect the diverse heritage and cultural richness of each region in the country (Sulistyoningsih, 2011).

According to Prof. Murdijati Gardjito, a Professor of Food Technology from Gadjah Mada University in 2015, traditional food can be defined as food prepared from locally produced food ingredients and processed through a process that has been mastered by the local community. The result of this process is a product with a taste, shape, and way of consumption that is known, favored, missed, and can even become the hallmark of a particular community group. (Novitasari & Anggapuspa, 2021).

Indonesia's traditional culinary styles not only reflect the culture and traditions of the archipelago but also play a significant role in enriching national cultural diversity. Today,

Indonesian culinary specialties are gaining worldwide recognition, attracting both local and international tourists. With the growing potential of tourism, it can be strengthened and supported by the richness of traditional cuisine.

### **The Urgency of Halal Certification in Traditional Foods**

Halal is a Qur'anic term that means permissible, permitted, or legal, while haram refers to something that is forbidden, unlawful, or illegal. In the perspective of Islamic law, all aspects of halal and haram, as well as all issues, must refer to the Qur'an and Sunnah. According to MUI (2015), for Muslims, consuming halal, pure, and good food is a religious commandment that must be obeyed.

With the development of the times, the concept of halal has become a lifestyle for most of the Muslim population. Awareness of using halal products is increasing, and this is reflected in data showing an increase in the number of products, halal assurance systems, and companies that carry out halal certification from 2011 to 2018, as reported by the Indonesian Ulema Council. This reflects a change in people's consumption patterns that increasingly prioritize meeting needs by prioritizing halal principles (Rohaeni & Sutawijaya, 2020). Halal certification for typical culinary dishes of the archipelago needs to be continuously improved to strengthen Indonesia's position as the center of the world's halal producers.

### **Potential of The Halal Industry in Indonesia**

Business opportunities in the traditional food sector in Indonesia are categorized as highly profitable opportunities. Public interest in traditional cuisine is very high and easily accessible (Kristiansen & Sulistiawati, 2016). Many individuals choose to do business with traditional food because of its relatively easier production or manufacturing, including selling products on a small scale. Similarly, the marketing method, which is generally reserved for traditional food businesses, is more personalized, often involving direct interaction with customers (Hoogervorst & Jákl, 2020). Not surprisingly, traditional food businesses tend to be held by elderly people, who have inherited expertise in processing and marketing traditional food. As such, traditional markets provide a suitable and welcoming platform for traditional food businesses to thrive (Kristiansen & Sulistiawati, 2016).

Indonesia, as a country with the largest Muslim population, accounts for around 11.7% of the world's Muslim population. With a total population of around 242.7 million, the Muslim population in Indonesia accounts for around 87% of the country's total population (World Population Review, 2024). Therefore, Indonesia has great market potential in the global halal industry. According to the State of the Global Islamic Economy 2023/24 published by Thomson

Reuters, Indonesia ranks 2nd in the category of halal food producers, indicating that the market potential is still huge to be utilized. (State of the Global Islamic Economy Report, 2023).

Food, medicine, cosmetics and personal care are essential daily necessities for modern society. However, for the Muslim population, there are strict rules regarding the consumption and use of these products. Islam insists that food, medicine, cosmetics and personal care must comply with halal and thoyyiban standards. Therefore, Indonesia has a responsibility to ensure that these products meet halal requirements and have quality in accordance with Islamic religious principles. Therefore, it is necessary to guarantee the halalness of the products.

### **Utilizing Local Resources to Enhance Food Sustainability**

Sustainable food involves efforts to produce and consume food in a way that maintains ecological balance by supporting agricultural practices that are appropriate to local conditions. This includes techniques such as crop rotation, use of compost, and selection of local crop varieties that can survive in specific conditions (Pandey et al., 2024). In the context of traditional foods, the utilization of local resources is key to achieving this goal. For example, the utilization of local ingredients that have low environmental impact, as well as the application of environmentally friendly production techniques, can reduce the carbon footprint and improve food security. This is in line with sustainability principles that encourage the integration of traditional practices and modern innovations to create a more efficient and responsible food system (Mietz et al., 2024).

The real implementation of the principle of food sustainability in traditional food production can be seen in various case studies that show how the utilization of local resources has supported sustainability. One of them is the use of *Kappaphycus alvarezii* seaweed in food production. This seaweed not only reduces pressure on other marine resources but also offers the benefit of being a more environmentally friendly substitute ingredient (Mamat et al., 2024). In Indonesia, the development of traditional food products such as salted fish processed in a way that reduces allergenicity also shows how traditional techniques can be adapted to meet sustainability standards (Palupi et al., 2021). This reflects how innovations in traditional processing can support a more sustainable food system.

Another initiative that supports food sustainability is the development of food hubs and local distribution systems that strengthen local economies and reduce carbon footprints. Food hubs, which connect smallholder farmers with local consumers, have been shown to improve sustainability by reducing transportation distances and supporting local agriculture (SgROI et al., 2024). In addition, the use of analytics technology to ensure the authenticity of halal products also plays a role in improving transparency and sustainability in the food supply chain (Kua et al.,

2022). These initiatives show how local approaches and technology can work together to create food systems that are more sustainable and responsive to community needs.

### PESTEL Analysis and SWOT Analysis of Efforts to Optimize Optimization of Traditional Food Products to Increase the Competitiveness of the Halal Industry

PESTEL analysis (Political, Economic, Social, Technological, Environmental, and Legal) in the traditional halal food industry is very important to understand the factors from various aspects that can affect it. PESTEL analysis is carried out to identify and evaluate factors that have the potential to influence the success of optimization strategies for traditional food products in the halal industry.

#### a. Politik

##### 1) **Strength:** Strategic Partnerships

The government is active in forging strategic partnerships with international institutions to expand distribution networks. Collaborations between the government and international institutions, such as the halal trade fairs organized in Jakarta, help increase exposure to traditional Indonesian food products. These partnerships support efforts for food sustainability by introducing ecological practices in food production.

##### 2) **Weaknesses:** Complicated Halal Certification Process

To obtain halal certification, UMKM must prepare various documents such as company profiles, data on the person in charge, legal aspects, factory data, and others. These documents must be prepared carefully and completely to avoid failure in the certification process (LPH USK, 2022).

##### 3) **Opportunity:** Government Support

The Indonesian government provides various incentives for UMKM to improve the competitiveness of halal products, including support for food sustainability practices through local product development initiatives. The total realization of the National Economic Recovery Program (PEN) to support UMKM in 2021 reached IDR 83.19 trillion, demonstrating the government's commitment to supporting UMKM (Indonesian Ministry of Economic Affairs Coordination, 2022).

#### 4) **Threats:** Policy Changes

Sudden regulatory changes can disrupt the operations of UMKM in the traditional food sector, with many businesses reporting challenges in meeting the new standards set.

### b. **Ekonomi**

#### 1) **Strength:** Diverse Traditional Foods

Indonesia's traditional food products have a diversity of flavors, providing a competitive advantage in the global halal food market. According to a press release from KNEKS, Indonesia's total trade in halal products from January to October 2023 reached USD 53.43 billion, confirming the important role of Indonesian halal products in the global market. This diversity also supports food sustainability by utilizing local raw materials that can reduce the carbon footprint (KNEKS, 2023a).

#### 2) **Weaknesses:** Economic Stability

Reliance on macroeconomic conditions such as inflation and recession can affect business stability and consumer purchasing power. According to BPS, the level of household consumption in Indonesia fell in the first quarter of 2020 compared to the fourth quarter of 2019 since the announcement of the COVID-19 pandemic in early 2020. This suggests that a general decline in purchasing power has occurred, which is likely to affect purchasing power for non-essential food products, including traditional foods (BPS, 2020).

#### 3) **Opportunity:** Growing Market Demand

Muslims spent US\$2.02 trillion in 2019 on various sectors, including halal food (State of the Global Islamic Economy Report, 2020).

#### 4) **Threats:** Economic Fluctuation

Economic instability such as inflation, recession, or changes in fiscal policy can affect consumer purchasing power and production costs. According to the Central Bureau of Statistics (BPS), inflation in Indonesia reached 1.87% in 2021 (BPS, 2021).

### c. **Sosial**

#### 1) **Strength:** Cultural Heritage

Traditional food products are often linked to a community's cultural heritage and traditions, increasing their added value in the eyes of consumers. The DIY Tourism Office emphasizes that culinary tourism has great potential in Indonesia, with traditional food being the main attraction for tourists (Harsana & Triwidayati, 2020).

2) **Weaknesses:** Changes in consumption patterns

Changes in consumption patterns that are more inclined towards fast or modern food. Fast food often hurts the environment. For example, the production of fast food often involves the use of chemicals and processing processes that are not environmentally friendly. For example, 40% of the food produced in the world is lost or wasted, leading to the degradation of agricultural land and water pollution (Intania, 2022).

3) **Opportunity:** Consumer Awareness of Halal Products:

A report from KNEKS shows that Muslim consumer demand for halal products is increasing every year. Various countries have moved to capitalize on this market, including countries with Muslim minorities such as Brazil, Thailand, Japan, and China. (KNEKS, 2023b).

4) **Threats:** Non-Halal Products Dominate the Market

Many non-halal products dominate the market with lower prices and wider distribution, making it difficult for halal products to compete.

#### d. Teknologi

1) **Strength:** Technological Innovation

Some traditional food producers are now utilizing new technologies to improve the taste and quality of their products while maintaining the original recipes. More efficient and eco-friendly technologies allow them to minimize waste, reduce energy consumption, and maximize the use of local, sustainable ingredients (Zheng et al., 2024). This supports food sustainability and ensures a more environmentally responsible production process.

2) **Weaknesses:** High Cost of Technology Investment

The adoption of modern technology often requires a high initial investment, which can be a burden for UMKM with limited budgets. Based on a report from the Ministry of Cooperatives and UMKM, around 70.2% of UMKM experience barriers when trying to transform through the utilization of digital technology (Kemenkop dan UKM, 2022).

3) **Opportunity:** Digital Platforms for Marketing and Sales

Digital technology and e-commerce platforms provide an opportunity to expand the market reach of traditional halal foods with lower marketing costs. eMarketer's report shows that e-commerce growth in Southeast Asia, including Indonesia, reached 14.3% in 2021. By expanding distribution through e-commerce, manufacturers can reduce the need for excessive physical transportation, thereby reducing carbon emissions (eMarketer, 2021).



- 4) **Threats:** Lack of Adoption of Modern Technology
- 5) Many traditional food UMKM still use traditional production methods and lack the adoption of modern technology. A report from Commission XI of the House of Representatives shows that UMKM digitization efforts are urgent and need to be addressed with training, credit-scoring approaches, and easy access to SNI (Suhayati, 2023).

#### **e. Environmental**

- 1) **Strength:** Utilization of Local Resources

Traditional food products often use local raw materials which can reduce the carbon footprint from the transportation of ingredients. As mentioned in the article (Pemerintah Desa Cikoneng, 2024), consuming local food can reduce your carbon footprint by 7%.

- 2) **Weaknesses:** Lack of Recycling Infrastructure

The lack of inadequate recycling infrastructure in some areas of Indonesia can make it difficult to manage environmentally friendly packaging waste. Data shows that only around 10% of waste is recycled, while 60% is transported and landfilled, and the other 30% is not managed properly (Purwanto, 2021).

- 3) **Opportunity:** Innovations in Eco-Friendly Packaging

Opportunities to develop and adopt more environmentally friendly and sustainable packaging systems. According to a report from Green Packaging Market Report, the global green packaging market is expected to grow at a CAGR of 7.04% from 2023 to 2030, reaching USD 557.66 billion by 2030 (Kings Research, 2024).

- 4) **Threats:** Competition with Non-Environmental Products

Cheaper non-environmental products may affect the competitiveness of traditional food products that use sustainable packaging.

#### **f. Law**

- 1) **Strength:** Halal Product Guarantee

The existence of Law Number 33 of 2014 concerning Halal Product Guarantee provides legal certainty and clear standards for products that enter, circulate, and are traded in the territory of Indonesia (Minister of Law and Human Rights, 2014).

- 2) **Weaknesses:** High Certification Costs

Decree of the Head of BPJPH Number 141/2021 states that the regular scheme halal certification service fee for UMK is IDR 650,000, consisting of a registration fee and determination of product halalness of IDR 300,000 and a product halal inspection fee by

the Halal Examining Agency (LPH) of IDR 350,000. The cost of halal certification can be a burden for UMKM, especially for small and medium-scale businesses (Hawari, 2023).

3) **Opportunity:** Government Initiatives for Halal Promotion

The Indonesian government is active in promoting halal products through various initiatives, such as exhibitions and marketing campaigns. According to a report from Didi Sumedi, Director General of National Export Development, Indonesia's halal product exports have huge potential. Indonesia ranks as the 4th largest Sharia economy after Malaysia, Saudi Arabia, and the United Arab Emirates (Indonesian Ministry of Trade, 2023).

4) **Threats:** Lawsuits

Increased lawsuits related to halal claims or non-compliance with standards can result in financial and reputational losses for businesses. This may affect consumer confidence and reduce demand for products (Omar et al., 2019).

## 1. PESTEL Analysis and SWOT Analysis of Efforts to Optimize Optimization of Traditional Food Products to Increase the Competitiveness of the Halal Industry

Table 3. Strategies for Optimizing Traditional Food Products to Improve Halal Industry Competitiveness and Food Sustainability

	Opportunities	Threats
<b>Strength</b>	<p>Politics</p> <p>Leverage international partnerships and government support to improve the competitiveness of halal products.</p>	<p>Politics</p> <p>Leverage international partnerships to anticipate regulatory changes.</p>
	<p>Economy</p> <p>Capitalize on the diversity of flavors and increased global demand to expand export markets.</p>	<p>Economy</p> <p>Product and market diversification to reduce the impact of economic fluctuations.</p>
	<p>Social</p> <p>Integrating cultural values and traditions in marketing strategies to increase the attractiveness of halal products.</p>	<p>Social</p> <p>Emphasize the cultural uniqueness and added value of halal traditional food products, which are not possessed by non-halal products that are claimed to be cheaper.</p>
	<p>Technology</p> <p>Using digital technology and e-commerce to expand the market with cost-efficiency.</p>	<p>Technology</p> <p>Increase the adoption of modern technology to compensate for technological backwardness.</p>
	<p>Environment</p> <p>Encourage the use of local raw materials and eco-friendly packaging to reduce environmental impact.</p>	<p>Environment</p> <p>Educate consumers about the long-term benefits of environmentally friendly products, including their impact on sustainability and health.</p>

	Law	Optimize halal standards and leverage government promotions to increase exposure in export markets, particularly in Muslim-majority countries.	Law	Improve compliance with halal standards to reduce the risk of lawsuits.
Weaknesses	Politics	Leverage government support to overcome cumbersome certification processes.	Politics	Accelerate Halal certification processing to mitigate the impact of policy changes.
	Economy	Optimizing global halal market opportunities to counter domestic economic instability.	Economy	Optimizing Resources and Establishing Partnerships to Cope with Economic Fluctuations.
	Social	Highlighting the health and sustainability aspects of traditional foods in their marketing strategies to counter the changing consumption patterns.	Social	Exploring the Unique Value of Traditional Products to Face the Domination of Non-Halal Products.
	Technology	Using e-commerce to overcome high technology investment costs.	Technology	Utilize government assistance programs or private institutions that provide subsidies or loans for technology, to Address Technology Investment Costs and the Lack of Adoption of Modern Technology.
	Environment	Develop environmentally friendly packaging systems	Environment	Improving Recycling Infrastructure and

	with support for recycling infrastructure.		Educating Consumers to Address Competition with Non-Environmental Products.
Law	Capitalize on government initiatives in promoting halal products to address the high cost of halal certification.	Law	Minimize Legal Risk by accelerating legality through halal certification.

The optimization of traditional food products is becoming increasingly important in the context of globalization and the increasing demand for halal products. The desire to preserve cultural heritage while adapting to the demands of the modern market is driving industry players, governments, and local communities to work together to achieve this goal. Through the right strategies, traditional food products can be optimized to meet halal standards while increasing competitiveness.

## Conclusion

Indonesia's culinary richness, reflecting its diverse cultures and traditions, is a valuable asset that provides great potential in the global halal industry, given its significant Muslim population and growing demand. Halal certification plays an important role in meeting the needs of consumers who are increasingly aware of Sharia compliance and will strengthen Indonesia's position as a center of halal production. In addition, the implementation of sustainability principles in traditional food production through the utilization of local resources and environmentally friendly techniques not only supports food sustainability but also reduces the carbon footprint. Integrating traditional food diversity, halal certification, and sustainability practices will strengthen Indonesia's position in the global market, ensure food products meet halal standards, and contribute to overall environmental sustainability.

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