

Halal Certification and Its Relationship to Business Value: A Perspective of Fish Salting SMEs

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Abstract. Small and medium-sized fish salting enterprises are the focus of this study, which also looks at the benefits and challenges of halal certification and its relationship to business value. Applying the observation method and statistical and descriptive research approaches, the study identifies a lack of knowledge, budgetary constraints, and inadequate aid from stakeholders as the three main obstacles that these small and medium enterprises (SMEs) confront. Despite these limitations, the study highlights the potential of halal certification to improve product quality, boost customer confidence, and increase market competitiveness, particularly in relation to the growing Muslim consumer market. Halal certification can provide significant advantages; not only does it ensure compliance with Islamic dietary requirements and cater to the growing Muslim market, but it also improves product quality, instils consumer trust and loyalty, and boosts market competitiveness. The study's theoretical value enhances the knowledge-attitude-behavior model paradigm. Realistically, it lays out the steps that local SMEs may take to become certified and reap the benefits of doing so. Despite the study's regional emphasis, its suggestions are generalizable to other areas. Future studies should investigate the financial performance of halal-certified and non-certified fish-salting enterprises, for instance.

1 Introduction

The growing global demand for halal products among Muslim consumers is driving the trend towards obtaining halal certification for food products, particularly processed fish [1]. Globally, there is a prevalent prevalence of halal certification in processed fish products [2,3]. These organizations, namely Majelis Ulama Indonesia (MUI), Korea Muslim Federation (KMF), Jabatan Kemajuan Islam Malaysia (JAKIM), and Islamic Food and

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Nutrition Council of America (IFANCA) [4], will enforce and adhere to the regulations and guidelines set by halal organizations in various countries. The significance of halal certification has increased among Muslims, especially in regions with a substantial Muslim populace [5,6]. In recent years, there has been an increasing acknowledgment and demand for halal-certified products in the Muslim consumer market [7]. Consequently, there has been a rise in the utilization of halal certification for salted fish products. Considering the global advantages and disadvantages of acquiring halal certification for processed fish products is crucial. Both frequent and infrequent consumers commonly incorporate salted fish into their diet as a staple food in Indonesia, a practice that remains prevalent [8]. Indonesia is famous for its diverse selection of salted fish, including anchovies, giant catfish, baby sole, and stingrays.

There are several perspectives on the certification of halal products and the benefits it provides. Halal certification guarantees that items are manufactured and managed in strict compliance with Islamic dietary regulations [7]. Small and medium companies (SMEs) in the fish salting sector also have a significant influence on the global halal food market [9]. The importance of product quality in developing competitive strategies, enhancing value creation, and expanding marketing reach cannot be overstated [10]. Halal certificates are crucial for enhancing the market value of salted fish. Consumers, particularly those who follow Islamic dietary guidelines, prefer products that are officially certified as halal [7]. Therefore, acquiring a halal accreditation can increase the value of products produced by small and medium-sized fish salting companies [6]. Obtaining a halal certification not only enhances the reputation of the company and creates new avenues for growth, but it also guarantees that the product or service is genuine and adheres to Islamic dietary guidelines, which is crucial for consumers.

Obtaining a halal certificate is an effective strategy for enhancing the legitimacy and legality of small and medium-sized fish-salting enterprises. To showcase their dedication to manufacturing halal products that are of superior quality, safe, and genuine, small, and medium-sized fish salting firms have the option to obtain a halal certificate [10]. Multiple investigations have identified similarities between this concept and the notion of receiving top-notch cuisine delivered to a specific location [11–13]. Furthermore, the halal certification process enhances the sanitation and cleanliness standards of the fish salting process. Food safety, which is closely linked to food quality [14], is better elucidated by this explanation. SMEs who engage in the sale of salted fish encounter challenges when it comes to the implementation of halal certificates. These firms face multiple challenges in meeting the increasing global demand for halal products [15]. One challenge faced by these firms is the lack of halal certification for their product [6,16]. While some companies may produce fish products that are inherently halal, their absence of official certification may impede their entry into the Muslim consumer market and restrict their ability to exploit potential business opportunities [17]. Additionally, small, and medium-sized companies are facing challenges in meeting the increasing global demand for halal products [7,18]. Given the shortcomings identified in previous studies, particularly the lack of understanding among businesses about the process of halal certification for salted fish products and its potential to increase their value, our research aimed to investigate the barriers to obtaining halal certification and their relationship with the creation of added value.

Several recent studies from the last ten years have examined halal certification (Table 1), but they have not specifically investigated the correlation between halal salted fish certification and business value. Thus, we anticipate that our research will close the existing divide and improve our understanding of the correlation between halal certification and different food categories.

Table 1. Numerous studies on halal for food products (the last ten years).

| Year | Country | Product | Relationship to halal and business value |
|-----------|--------------|----------------------------------|---|
| 2024 [19] | Not specific | Not specific | The certification of Halal food improves and strengthens sustainability performance by emphasizing their interconnection through a conceptual framework. Numerous studies examine the correlation between Halal food certification and business performance from different angles. However, further study is needed to specifically investigate the relationship between certification and sustainability. |
| 2024 [20] | Indonesia | Not specific | The certification of Halal food improves and strengthens sustainability performance by emphasizing their interconnection through a conceptual framework. Based on a comprehensive analysis of the literature, it has been found that the certification of Halal food has the potential to enhance sustainability in three key dimensions: economic, social, and environmental. |
| 2023 [21] | Indonesia | Not specific | There is a lack of knowledge among food manufacturers regarding the significance of providing foods that are certified as halal. The level of familiarity with halal and perceptions of its advantages have an impact on the level of awareness about halal. In addition, the attitudes towards the production of halal foods and the perceptions of the procedures for obtaining halal certification do not have a substantial impact on the desire to obtain a halal certificate, notwithstanding the favorable benefit of halal awareness. |
| 2022 [4] | South Korea | Kimchi, Soy sauce, and Gochujang | This work employed the dimethyl sulfoxide extraction technique and validated the results using gas chromatography with flame ionization detection to detect and quantify the alcohol content in various forms of Korean traditional fermented foods, including solid, semi-solid, and liquid forms. Analysing the remaining alcohol content in fermented foods is crucial to receiving halal certification. This data is anticipated to be utilized as fundamental research data for the purpose of halal certification and export. |
| 2022 [22] | Indonesia | Not specific | SMEs have many challenges in the halal certification process, such as the financial constraints of certification and compliance with criteria for the halal product guarantee system, particularly those pertaining to materials and traceability. Advocating for the implementation of halal certification among SMEs is a crucial approach to boosting the volume of food exports. Furthermore, the inclusion of Halal certification greatly enhances the market appeal of items produced by SMEs. |
| 2021 [23] | Italy | Not specific | There exists a correlation between the status of a corporation as halal or non-halal and its level of corporate social responsibility (CSR) disclosures. Furthermore, there exists a substantial and favorable correlation between the disclosure index of Halal-certified enterprises engaged in CSR and their return on investment. This study demonstrates that organizations possessing Halal certificates exhibit a higher inclination towards CSR. |
| 2020 [24] | Malaysia | Not specific | Malaysian food and beverage firms have faced numerous instances of non-compliance, leading to the revocation of halal certificates. This study revealed that religiosity has no discernible effect on the adherence to halal standards by Malaysian food and beverage industries. Moreover, the current Malaysian halal management system is likely the primary reason that guaranteees adherence among food and beverage players in Malaysia. |
| 2019 [25] | Malaysia | Diverse | This study showcased that the performance of internal halal management was influenced by the demographics and characteristics of the firms. The harmonious integration of sharia (Islamic education) and technical knowledge (science) is crucial in empowering halal managers to ensure the creation of high-quality and pure products. |

Table 1. Continued

| Year | Country | Product | Relationship to halal and business value |
|--------------|----------------|---------------------------------|--|
| 2018 [26] | Indonesia | Chicken | According to the policy model, which is based on simulated system dynamics, around 80% of chickens are butchered by uncertified slaughtermen. Consumer awareness directly influences the consumption of halal broiler products. The presence of halal chicken results in an unmet demand for halal broiler consumption. Halal certification enhances the reputation and trustworthiness of businesses. |
| 2017 [27] | South Korea | Soy sauce | It is imperative to develop an accurate technique for quantifying the alcohol content in soy sauce. Halal certification pertains to stringent restrictions regarding alcohol that necessitate the attention of commercial entities. Further, to get entry into the halal market, it is imperative to acquire halal certification. |
| 2017 [28] | United Kingdom | Chicken, Lamb, Mutton, and Beef | Muslims residing in Western countries frequently face significant challenges in locating Halal meals. This situation has caused ambiguity among food establishments and Halal consumers over the authenticity of Halal products. We will analyze the economic significance of the Halal food sector, along with the activities of Halal Certification Bodies (HCBs) and their impact on Halal food businesses in the United Kingdom. |
| 2017 [29] | United Kingdom | Meat | The significance of consumer worries over the origin of food that has been prepared in conformity with religious standards has increased. Specifically, cases of incorrect labelling and distribution of Halal beef products have sparked concerns regarding their genuineness. However, there is a lack of extensive research on the challenges that arise during their production of Halal foods, despite the increasing global demand for them. |
| 2016 [30] | South Korea | Gochujang | The objective of this study was to investigate the use of an electronic nose as the main method for identifying ethanol in gochujang, with the purpose of obtaining halal certification. An electronic nose was used to analyze commercial gochujang products to verify their compliance with the ethanol standard set by the halal certification body. Therefore, it has been verified that the use of electronic nose analysis can serve as an initial screening technique for halal certification. |
| 2015 [31] | Not specific | Not specific | This research seeks to examine, analyze, and integrate the elements that motivate and restrict the implementation of Halal food certification. This study offers a comprehensive analysis of the latest literature on food safety and quality certification. The identified factors can be useful in developing research tools and establishing a basis for future research projects. |
| 2014 [32] | Not specific | Meat | Various religions and societies employ diverse slaughter practices worldwide. The act of halal and kosher slaughter itself does not have a greater impact on meat quality compared to industrial methods. However, certain pre- and post-slaughter procedures associated with these practices can influence meat quality. Additional quality considerations encompass contusions, hemorrhaging, dermal pigmentation alterations, and fractures, specifically in avian species. |
| 2014 [33] | Not specific | Meat | This work analyzes and clarifies the concept of Halal with the goal of uncovering how religious, racial, economic, and ethical-political factors are evident in the material technologies of meat production and the physical practices of religious consumption. The concept of Halal raises significant legal and political problems regarding the challenges of social and gastronomic harmony and cosmopolitanism. On the other hand, global Halal is becoming a new contentious area, marked by intense discussions over the influence of secularism, acknowledgment, and "food diversity" on the worldwide market. |

2 Research Method

This study employs the observation method to gain a comprehensive understanding of the fish salting process (as shown in Figure 1) and the necessary data for subsequent data analysis. Furthermore, this study employed a quantitative approach based on descriptive statistics and included five participants from a small group of fish salting SMEs in Kali Baru Cilincing, North Jakarta. Due to the limited number of business entities of this sort and scale in the area, the researcher engaged with only 5 business actors through both random and targeted outreach. The sampling criteria is established based on a minimum of one year of operational experience in this business. This business entity possesses experience in supplying salted fish to both intermediaries and merchants in traditional markets as well as online platforms. Another requirement is that the business entity lacks a halal certification for the products offered. The participants consisted of one woman and four men. Next, the researchers asked the subjects to respond to the inhibitory variables. Table 2 displays the five criteria for this measurement that the research team developed based on field observations of business actors. On a scale from 1 (strongly disagree) to 5 (strongly agree), the study team developed a short survey to evaluate these factors. We then use the SPSS 23 analysis tool to process the responses we obtain.



Fig. 1. Observations of the Fish Salting Process.

Table 2. Barrier factors

| No | Category | Indicator | Factor |
|----|--|-----------------------------------|---|
| 1 | Knowledge and awareness regarding halal certification | Knowledge and awareness | There is a dearth of knowledge and awareness regarding halal certification for salted fish. |
| 2 | Benefits of halal certification | Benefits | There is a lack of information regarding the benefits of halal certification for salted fish. |
| 3 | Understanding the steps needed to obtain halal certification | Certification application process | There is a lack of information regarding the benefits of halal certification for salted fish. |
| 4 | Support for processing halal certificates | Support system | I did not obtain support with processing halal certificates. |
| 5 | Concerns over the high costs | Costs | Worries regarding the high costs of seeking for a halal certificate. |

3 Results and discussion

The measurement findings of the barrier factors, as shown in Figure 2, demonstrate that barrier factor 5 or costs (worries regarding the high costs of seeking for a halal certificate) has the highest average score, with a value close to 4.70 and a standard deviation of 0.54. Furthermore, barrier factors 4 or support system (I did not obtain support with processing

halal certificates) and 1 or knowledge and awareness (there is a dearth of knowledge and awareness regarding halal certification for salted fish) have a high average of the same value, and the standard deviation is 0.447. The subsequent two variables, barrier factor 2 concerning benefits and barrier factor 3 about the certification application process, exhibit the lowest average values, each below 0.7.

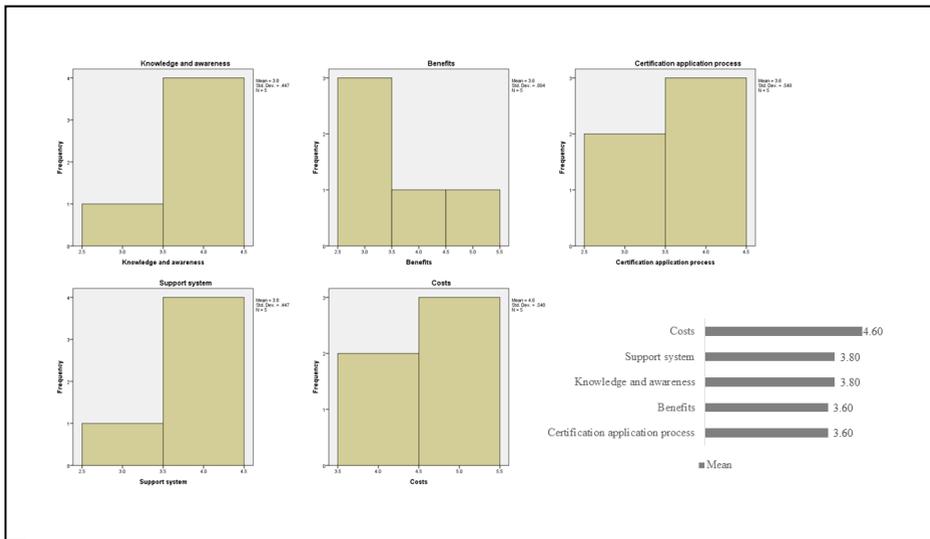


Fig. 2. Results of Measurement of Barrier Factors.

3.1 Perspectives of Fish Salting SMEs on Halal Certification and Business Value

SMEs in the fish salting industry express concerns regarding the exorbitant expenses associated with obtaining a halal certificate for their salted fish products [34]. The low financial resources of small and medium-sized firms are seen as an obstacle to acquiring certification [6]. These SMEs fear that the cost of obtaining halal certification may outweigh the potential benefits it brings to their businesses. Business actors also consider the aspect of mentoring. In this case, the results also suggest that commercial entities view a deficiency in assistance and direction from halal certification bodies as an additional obstacle. The absence of assistance and direction can impede the seamless acquisition of halal certification and pose further obstacles for small and medium-sized fish salting firms [16]. The lack of assistance regarding halal certification is felt by SMEs [35]. The absence of assistance and direction from halal certification bodies poses an obstacle for small and medium-sized fish salting firms in acquiring halal certification for their salted fish products [6]. To surmount these obstacles and enhance the worth of their products, it is imperative for small and medium-sized fish-salting firms to engage in collaboration with pertinent stakeholders. The stakeholders may comprise halal certification agencies, industry associations, and government entities.

The perceived hurdles are also influenced by a lack of awareness and comprehension of the halal certification procedure and its advantages. In addition, SMEs involved in fish salting consider the expense of acquiring a halal certification to be a major obstacle [10]. It is crucial to acknowledge the possible benefits that halal certification might provide to small and medium-sized fish salting firms [36]. Halal certification can be utilized as a strategic instrument by small and medium-sized fish salting companies to augment the calibre and worth of their products [37]. By obtaining halal certification, small and

medium-sized fish salting firms can access the expanding Muslim consumer market and establish a competitive advantage. According to the research findings by [7], small and medium-sized fish salting firms have multiple obstacles when trying to gain halal certification for their products.

Apart from the perspectives above, a deficiency of knowledge and comprehension regarding the halal certification procedure and its advantages contributes to the perception of obstacles. The industry's limited awareness and education about the significance of halal certification and its ability to enhance the value of their products may account for this lack of information and comprehension [38]. SMEs in the fish salting industry express a sense of inadequacy in terms of information and understanding about obtaining halal certification for salted fish [35]. The absence of information and expertise poses challenges for small and medium-sized fish salting firms in acquiring halal certification, as they may have an incomplete grasp of the prerequisites and procedures involved [6].

In addition, the government has endeavoured to establish uniform protocols for the process of obtaining halal certification. Prior studies have also examined the procedure for obtaining halal certification in Indonesia, as depicted in Figure 3 [22]. The solid line denotes the standard process flow that each stage undergoes. The red dotted line signifies that the process has been unsuccessful and requires repetition for a certain procedure. Additionally, the green dotted line signifies that the final process has been successfully completed and submitted to the applicant. Typically, the application process starts with registration with the *Badan Penyelenggara Jaminan Produk Halal* (BPJPH), or Halal Product Guarantee Agency. Upon meeting the necessary criteria, the agency will issue a *Surat Tanda Terima Dokumen* (STTD), or registration receipt. Subsequently, proceed to enroll at the *Lembaga Pengkajian Pangan, Obat-obatan, and Kosmetika Majelis Ulama Indonesia* (LPPOM MUI) or the Halal Inspection Institute in Indonesia. Registration is completed online through the CEROL SS-23000 platform. Next, at this phase, the suitability of papers and standards for the halal assurance system will be assessed.

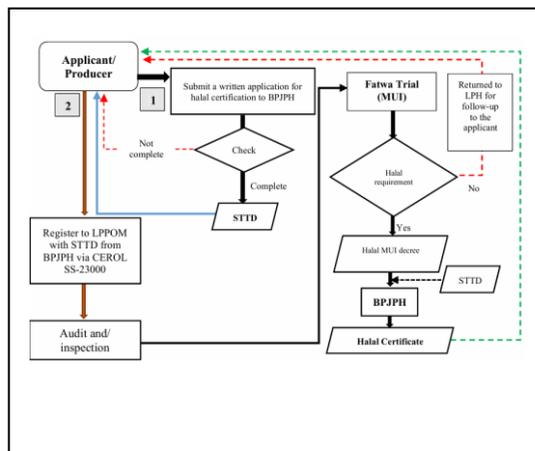


Fig. 3. Indonesia's Application Process for Halal Certification. [22]

Halal certificates are essential for increasing the value of salted fish products. Halal certification offers multiple advantages to small and medium-sized fish salting firms [16,36]. Halal certification ensures that the salted fish products produced by these SMEs comply with Islamic dietary regulations and are therefore permissible for consumption by Muslim consumers. This not only enables SMEs in the fish-salting industry to access the expanding market of Muslim customers, but it also fosters trust and loyalty among this consumer group. They can be assured of the halal status of the items they are buying. Moreover, the acquisition of halal certification can bolster the competitiveness of small and

medium-sized fish salting firms in the market, as stated by [7]. By acquiring halal certification, SMEs that engage in fish salting can distinguish themselves from their rivals and achieve a competitive advantage.

3.2 Halal Certification Readiness for Salted Fish SMEs

The findings of this study effectively elucidated the significance of awareness and knowledge in influencing intentions and preparatory behavior, particularly in relation to seeking halal certification. Nevertheless, due to the multitude of sectors within the processed food industry, it is important to do additional studies or research to acquire a comprehensive and precise comprehension in the future. Hence, this study proposes a conceptual framework that prioritizes business value, intentions, and behavior by assessing awareness, knowledge, and dimensions of religiosity, as depicted in Figure 4.

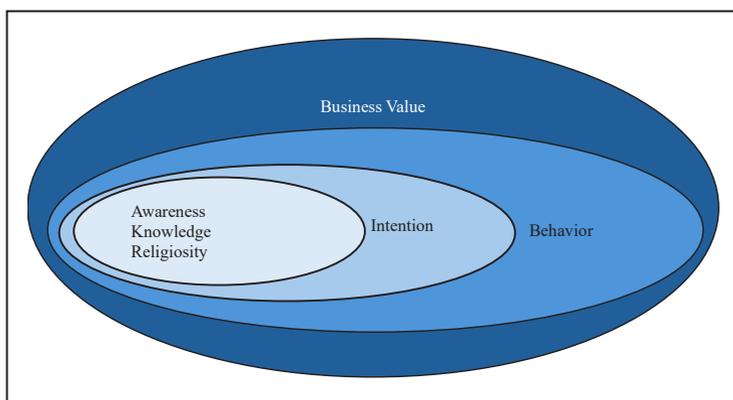


Fig. 4. Proposed Conceptual Framework.

4 Conclusion

Halal certification can offer substantial benefits to small and medium-sized fish-salting operations. It not only guarantees adherence to Islamic dietary regulations and serves the expanding Muslim market, but it also enhances product quality, fosters consumer confidence and loyalty, and enhances market competitiveness. In addition, obtaining halal certification might create prospects for exporting to markets that have a strong demand for halal products. To optimize the advantages and prospects associated with gaining halal certification, fish-salting SMEs should overcome obstacles and difficulties, such as insufficient knowledge and support, that hinder their certification process

4.1 Implications

This finding has significant consequences in both theoretical and practical contexts. In theory, the findings of this study enhance the knowledge-attitude-behavior model paradigm, which has been explored in other previous studies [39–41]. According to this paradigm, the process of expanding consumer knowledge results in the development of attitudes, which then impact behavior. Within the realm of religiosity, gaining a deeper understanding and awareness of items that align with one's religious beliefs can foster favorable attitudes towards these things, ultimately impacting consumer behavior and influencing purchasing decisions, especially salted fish. Essentially, the results of this study can be used as a

reference for SMEs involved in fish salting in similar situations to adopt halal certification and gain its advantages.

4.2 Limitations and recommendations

This study has several constraints and suggestions for improvement. A constraint lies in the fact that the study largely concentrated on the salting enterprises of small and medium-sized fish in a confined geographical region, thereby restricting the applicability of the results to different settings. Hence, future research endeavours may investigate the influence of halal certification on the augmented worth of SMEs engaged in fish salting across various areas or nations. In addition, further research might explore the difficulties encountered by SMEs involved in fish-salting when seeking halal certification and suggest tactics to overcome these obstacles. One further recommendation for future research is to carry out a comparative examination of the financial success and market penetration of fish-salting firms that are halal-certified vs. those that are not halal-certified. This would offer further perspectives on the potential economic advantages of obtaining halal certification for SMEs involved in fish salting.

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