# RAISING COMMUNITY AWARENESS OF HALAL PRODUCT CONSUMPTION AND HALAL LIFESTYLE: A TRIPLE HELIX MODEL

Dien Mardhiyah<sup>a</sup> Imron Mawardi<sup>b</sup> Tika Widiastuti<sup>c</sup> Muhammad Ubaidillah Al Mustofa<sup>d</sup> Syahidah Abdullah<sup>e</sup> Rizky Amalia Sinulingga<sup>f</sup> Errin Dwi Saptowati<sup>g</sup>

<sup>a, g</sup> Management Department, Faculty of Economics and Business, University of Airlangga <sup>b, c</sup> Islamic Economics Department, Faculty of Economics and Business, University of Airlangga <sup>d</sup> Development Studies Department, Faculty of Creative Design and Digital Business, Institut Teknologi Sepuluh Nopember, Indonesia

<sup>e</sup> Centre of Fundamental and Continuing Education, University Malaysia Terengganu, Malaysia <sup>f</sup> Digital Office Management Department, Faculty of Vocational Studies, University of Airlangga, Indonesia

Email: <u>dienmardhiyah@feb.unair.ac.id</u><sup>a</sup>\*; <u>ronmawardi@feb.unair.ac.id</u><sup>b</sup>; <u>tika.widiastuti@feb.unair.ac.id</u><sup>c</sup>; <u>almustofa@its.ac.id</u><sup>d</sup>; <u>syahida.abdullah@umt.edu.my</u><sup>e</sup>; <u>rizkyamalia@vokasi.unair.ac.id</u><sup>f</sup>; errindwisaptowati@gmail.com<sup>g</sup>;

#### ARTICLE HISTORY

Received: 06 August 2023 Revised 22 October 2023 Accepted: 24 October 2023 Online available: 01 December 2023

#### Keywords :

Triple Helix, Halal Lifestyle, Halal Industry, Responsible Consumption, Production

\*Correspondence: Name:Dien Mardhiyah E-mail: <u>dienmardhiyah@feb.unair.ac.id;</u>

#### ABSTRACT

This study formulates a triple helix model for increasing community awareness of halal product consumption and lifestyle. It is essential to increase halal awareness not only as a form of religious obedience but also to provide consumers protection, improve product quality, encourage product innovation, and fulfil international standards. This qualitative study constructs a Triple Helix model using a descriptive analysis technique and the Inputs, Activities, Outputs, Outcomes, and Impact (IAOOI) Approach. The findings indicate that the government is crucial in answering the research question. The government is expected to provide optimal support for creating such an environment through laws, regulations, infrastructure development, and other methods. Academicians are responsible for conducting scientific research in the halal industry and social programs and disseminating their findings to the general public. Practitioners in the halal industry can participate in community-based events to increase public awareness of halal products and lifestyles. This research contributes to developing relevant policies for related stakeholders to increase community awareness of halal product consumption and lifestyle.

#### INTRODUCTION

Improving public awareness regarding the consumption of halal products is a necessary endeavor. Consuming halal products is obligatory for Muslims as a form of religious obedience, as detailed in Surah 2: verse 168, Chapter 5: verse 88, Chapter 8: verse 69, and Chapter 16: verse 114 of the Quran and Narrated Hadist of Muslim 1015 (Al Fattah Al-Qur'an, 2014). Aside from this, halal has become a strategy implemented by companies to provide consumer protection and as a means of ensuring that the products offered meet certain standards, thereby providing quality, clean, and decent products (Wisudanto et al., 2023; Maulan et al., 2016). However, the commands and benefits of consuming halal products do not simply raise awareness of the significance of living a halal lifestyle.

The issue of halal products poses a significant concern for individuals, encompassing not only a limited scope but also entailing the shared obligation of the government and relevant stakeholders. The significance of the government's function as a policy maker, as well as the responsibilities played by other stakeholders, is crucial in effectively guiding business individuals to prioritize this issue.

The halal industry is one of the world's fastest-growing consumer markets. The halal industry has tremendous potential as an alternative driver of global economic growth. According to the State of the Global Islamic Economy 2022, the global consumer demand for the halal industry is consistently increasing. In 2021, Muslims spent 2.02 trillion US dollars on food and beverages, pharmaceuticals, cosmetics, tourism, and hala lifestyles (State of the Global Islamic Economy, 2022). In addition, the contribution of the halal industry to the national economy is growing. In its Indonesia Halal Market 2021/2022 Report, According to Bank Indonesia (BI), it was projected that the sharia-compliant industry might potentially enhance the national GDP by \$5.1 billion through the export of halal goods, the expansion of foreign investment, and the reduction of imports. Consumption of halal products in Indonesian communities, particularly in the halal food and beverage sector, totaled 144 billion US Dollars in 2019, making Indonesia the most significant sector (DinarStandard, 2020; Haspramudilla, 2021). The tourism industry is worth 11.2 billion US Dollars and ranks sixth globally. Indonesia is ranked third in the world in the fashion sector, with a total consumption of 16 billion US Dollars; cosmetics and pharmaceuticals are ranked sixth and second, with 5.4 billion and 4 billion US Dollars, respectively (DinarStandard, 2020). Any business that fails to contemplate catering to Muslim customers is missing out on a substantial chance to boost its sales. (Rahmawati & Fathoni, 2021). Halal branding is now employed as a business tactic by numerous multinational corporations, serving as either an aggressive or protective approach. (Joshi & Garg, 2020).

As a country with a sizable Muslim population, Indonesia should have an abundance of halal-certified products that are suitable for Muslims. In June of 2021, according to available data, 2,310 SMEs were LPPOM MUI halal-certified while data from the Ministry of Cooperatives and SMEs, noted the number of SMEs in Indonesia reached 64,2 million in 2018 (Sasongko, 2020). Obviously, the number of SMEs in Indonesia is negligible compared to the number of halal-certified SMEs. Further, the number of halal-certified SMEs is little compared to the number of Muslim communities in Indonesia. This could be due to low demand for halal goods (Vanany et al., 2019).

In accordance with the mechanism/law of supply-demand, a direct relationship exists between the supply and price of a product, meaning that as the product's price increases, the producers tend to earn more profit., thereby encouraging them to increase output. If there was a lack of demand for a product, manufacturers and retailers would reduce production. It was similar to the halal certification in that if fewer customers obliged the companies to certify their products with halal labels, the companies would be less obliged to certify their products with halal labels (Febriyanti et al., 2022). According to the study by Prabowo et al., (2012), halal label in Indonesia was successful as a tool in advertising several companies' products. Many businesses were also aware that advertising their products as halal would increase their market profits (Maison et al., 2019). In this state, the halal label also serves to add value to the intended product so that it is well accepted on the market.

Nevertheless, not all segments of society understood the significance of halal certification. Society from the lower classes and below the poverty line would not care about the halal status of the products they consume. Low awareness of the significance of halal certification in goods and services can be attributed to their purchasing power (Juliansyah et al., 2021). This also occurred in the middle- and upper-class Muslim communities, as not all Muslims in Indonesia adhered to a restrictive lifestyle regarding the consumption of products with certified halal labels. The demand for halal certification on products has decreased due to some Muslim communities lacking awareness that not all products available in the market are guaranteed safe for consumption or have been certified as halal. (Ghifara et al., 2022).

According to the Bank Indonesia survey conducted in 2022, the national index for sharia economic and financial literacy was reported to have attained a mere 23.3% (OJK, 2022). Despite the observed increase in the index from 16.3 percent in 2020 to 20.1 percent in 2021, it is essential to emphasize the ongoing importance of efforts to improve public literacy. Halal literacy and its awareness can be achieved through various means, including education, socialization, outreach initiatives, collaborative endeavors involving multiple stakeholders, and the effective utilization of digital technology.

According to <u>Silalahi et al., (2021</u>), the majority of people need to gain a deeper understanding of halal products and consumption. They continue to believe that all goods sold in Indonesia are halal. The population is predominantly Muslim, consequently, the product's compliance with halal standards has not been assessed before. Further, Communities, especially in the village, have yet to receive adequate socialization regarding the necessity of consuming halal products and how to recognize and distinguish between halal and non-halal products.

Prior scholarly investigations on the subject of halal have not adequately addressed the strategic measures that need to be undertaken by various stakeholders in order to enhance public awareness regarding the use of halal products. Existing literature primarily centers on the construction and measurement of halal literacy and awareness <u>Ambo & Md Sapir, (2020); Malini, (2021)</u>, along with the examination of factors that impact consumer intentions and behaviors in relation to halal product consumption. These factors include variables such as literacy, knowledge, and awareness of halal product consumption, as explored by <u>Kasri et al., (2023)</u>, <u>Maryam & Sumar'in (2022)</u>; <u>Mutmainah (2018); Yunus et al., (2014)</u>. The research conducted by <u>Ab Talib & Wahab (2021)</u>, <u>Ab Talib & Zulfakar (2023)</u>, <u>Al-shami & Abdullah (2023)</u>, and <u>Ziegler et al., (2022)</u> is centered around the examination of challenges and resolutions within the halal supply chain, logistics management, and halal manufacturing framework. These studies employ various methodologies, including SWOT analysis and literature review, to analyze the aforementioned issues.

Moreover, numerous studies have been conducted to examine the significant role played by diverse stakeholders in the development of the halal business. The study conducted by <u>Utomo et al.</u> (2020) examined the contribution of the financial ecosystem in facilitating the growth of the halal business, while also proposing a strategic plan for government-led initiatives in the development of this sector. The study conducted by <u>Bashir et al.</u> (2019) centers on the analysis of the marketing of halal food in South Korea, with the aim of formulating a comprehensive strategy for the development of a multiparty halal business. In their study, <u>Ab Talib et al.</u> (2020) employed a systematic literature review methodology to investigate the government's involvement in the development of halal logistics. The researchers successfully identified six crucial roles that the government should undertake, namely regulation, financial incentives, taxation, infrastructure development, guidance and encouragement, and education and labor supply. Existing literature primarily concentrates on the assessment of halal literacy, the impact of halal literacy and awareness on consumer behavior, and the advancement of the halal industry and manufacturing. Consequently, there is a dearth of research explicitly examining the

Published by University of Airlangga.

involvement of different stakeholders in fostering halal awareness, by employing a specific research framework, such as a Triple Helix model using a descriptive analysis technique and the Inputs, Activities, Outputs, Outcomes, and Impact (IAOOI) Approach

This research aims to construct a model for raising community awareness of halal product consumption and halal lifestyle through a triple helix model and analysis of input, activities, output, outcome, and impact by emphasizing the critical roles of three parties in the halal industry: the government/regulators, academics/universities, and industry/practitioners (Vaivode, 2015). The adoption of the triple helix concept for the purpose of enhancing public awareness regarding halal practices is highly preferred. The contemporary obstacles that impede the progress of the halal industry necessitate a comprehensive solution that spans multiple sectors. This strategy underscores the significance of fostering partnership among academics, halal commercial actors or business players, and the government. This facilitates the resolution of disparities among sectors and fosters the dissemination of ideas and information. The Triple Helix model offers a conceptual framework that facilitates the collaboration of three distinct sectors in order to effectively tackle multifaceted challenges (Sarpong et al., 2017; Zhou & Etzkowitz, 2021; Zhuang et al., 2021).

This paper makes two distinct contributions. First, it is among the earliest attempts to conceptualize the role of each triple helix stakeholder in contributing to the rise of halal awareness and lifestyle. Previous studies have employed the triple helix approach to categorize the functions of different stakeholders in problem-solving, solution determination, and the attainment of a shared objective. For instance, <u>Resdiana & Sari (2019)</u> utilized the triple helix approach to enhance the involvement of each stakeholder in the advancement of tourism in Madura. Similarly, <u>Liu & Huang (2018)</u> underscored the significance of universities in the development of the triple helix model. Nevertheless, the significance of the halal industry in Indonesia has received limited consideration. Secondly, the constructed model is based on a program for community development. This is the initial stage of a series of follow-up research aimed at increasing halal awareness. Thus, a simple model (triple helix) is needed to illustrate the issues and important aspects that need attention. Through this model, policymakers get an initial picture of halal awareness.

#### LITERATURE REVIEW

#### The Concept of Halal and Haram

Consumers, particularly Muslims, frequently discuss the selection of halal and decent food (*tayyib*) and the concern about the presence of *haram* elements in food products. The term 'halal' originates from an Arabic term signifying anything that is deemed permissible and justified according to Syariah, which is Islamic Law. While '*haram*'

refers to something that is forbidden. Meanwhile, between the lawful and unlawful are matters of *syubhah* that should be shunned (Jamaluddin, 2014). Three factors determine the halalness of the product: the substance itself, how it is served, and how to get the product. Many scholars agree that the origin of something is legal as long as there is no text prohibiting it. According to the Sharia concept, whatever Muslims consume, both food and non-food, must come from halal sources. Muslims have a religious obligation to consume products that are halal and of good quality (tayyib). In general, all food and drink in this world are permissible unless Allah forbids it, as stated in the Qur'an and hadith of the Prophet Muhammad, Peace be Upon Him (PBUH (Al-Qaradawi, 1994; Rahman et al., 2015). Halal items are also governed by official directives, particularly under the provisions of Law No. 33 of 2014 concerning the Guarantee of Halal Products (JPH). This law mandates that products must obtain halal certification (UU BPJPH, 2014). This law was enacted to ensure halal products are safe for Muslim consumption (Krisharyanto et al., 2019).

#### Halal Literacy and Awareness

Halal literacy is distinguishing between permissible and prohibited goods and services using Islamic law and values as a guide. Low halal literacy automatically leads to low halal awareness in the community (<u>Gunawan et al., 2020</u>). Halal literacy refers to the ability of the community, regulators, investors, and industry players to know, consume, manage, and analyze halal products. Halal literacy is founded on literacy, defined as the ability to read, write, comprehend, and improve halal business operations skills. Literacy within the halal sector encompasses the endeavors and actions taken to acquire comprehension and awareness of the halal market. The literacy process can evolve in tandem with the development of the halal industry, as well as increasing public consumption of halal industrial products (<u>Perbawasari et al., 2020</u>). Further, the presence of halal awareness among Muslim costumers motivates their preference for buying and consuming halal products due to the belief that their consumption is on halal products is obligatory. This inclination stems from the desire to avoid the consumption of haram products and subsequently pushed the transition from non-halal to halal consumptions (<u>Wisudanto et al., 2023</u>).

#### **Triple Helix Model**

The term "Triple Helix" refers to a concept of synergistic cooperation between the government, universities, and industry, in which the government sets policy, the university serves as a hub for research and development, and the sector fills the need for public

Published by University of Airlangga.

service (<u>Chen et al., 2016</u>). This triple helix model is the fundamental framework for dissecting and evaluating each significant stakeholder's contributions to achieving the desired outcome. Collaboration between these related stakeholders is expected to accelerate the efforts to increase literacy and awareness of halal products (<u>Cai, 2022</u>). Furthermore, the government links the supply of knowledge and innovation and the demand for knowledge and innovation (industry and universities). Universities have maintained their traditional teaching and research functions while expanding into new areas such as technology transfer, incubators and science parks, and campus-wide entrepreneurship education. Meanwhile, the industry acts by advising universities on industrial needs, cooperating with universities, seeking knowledge and innovation, and contributing to education by providing funds, training, or internships (<u>Vaivode, 2015</u>).



Figure 1. the interactive triple helix model of innovation

#### **Previous Studies**

Several prior studies have concentrated on the advancement of the halal industry. The research carried out by <u>Bashir et al., (2019)</u> focuses on improving the competitiveness of the halal food sector using a case study approach methodology. The study conducted by <u>Ab Talib et al., (2020)</u> mainly focused on investigating the role of the government in promoting the development of halal logistics by conducting a thorough analysis of the current body of literature.<u>Utomo et al., (2020)</u> emphasized the significance of establishing a robust financial ecosystem to facilitate the growth of the halal industry. Their research aimed to provide a strategic plan for all pertinent stakeholders, particularly the government, to effectively pursue this objective. In addition to this, a significance of halal literacy and awareness in shaping consumer intentions towards the purchase and consumption of halal products. This topic has been explored by various researchers, including <u>Kasri et al., (2023)</u>, <u>Wisudanto et al., (2023)</u>, <u>Maryam and Sumar' in (2022)</u>,

# Mutmainah (2018), and Yunus et al., (2014), Ab Talib and Wahab (2021), Ab Talib and Zulfakar (2023), Al-shami and Abdullah (2023), and Ziegler et al., (2022).

Upon reviewing the existing literature, it is evident that there is a dearth of research specifically addressing the cultivation of stakeholder roles through a comprehensive framework. Consequently, the objective of this study is to construct a triple helix model incorporating the Inputs, Activities, Outputs, Outcomes, and Impact (IAOOI) dimensions.

## **RESEARCH METHODS**

This qualitative research aims to construct a triple helix model of raising community awareness of halal product consumption and halal lifestyle, by employing a descriptive analysis with the Inputs, Activities, Outputs, Outcomes, and Impact Approach (IAOOI). This approach describe stages or processes in achieving the objective. The IAOOI approach is a Logic Model in visual form, presenting the series of interconnected occurrences (such as inputs, actions, outputs, consequences, and influence) that connect the necessity for intentional action or a series of tasks to the intended results and effects. (Kinyuira, 2019). Logic models represent presumptions regarding the necessary resources to facilitate program operations and generate results, as well as the steps and results essential for realizing a program's desired effects (Wholey, 1994). Inputs are resources that are used to create outputs during project activities. Activities are the processes, tools, events, technology, and actions used to achieve the goals. Outputs are the direct results of a project's activities. Outcomes refer to the alterations in particular knowledge, perspectives, actions, or situations that arise due to the implementation of project initiatives. Simultaneously, impact refers to an intervention's long-term, cumulative effect (e.g., the long-term results of participants' activities throughout a project).

To construct and develop a model, the research team has carried out a community service program to introduce the concept of halal and haram, explain how to identify halal products through halal certification, and apply halal consumption to the general public (halal lifestyle). This socialization aims to raise the level of public awareness regarding these products. This program was conducted in Sidoarjo in mid-2021. The participants' target audience was Muslim communities taking an active role in Islamic studies (*pengajian*). There are several factors why Sidoarjo is the ideal location for conducting this research. First, Sidoarjo is one of three areas selected by the Indonesian government for the development of Halal Industrial Zones. Modern Cikande Industrial Estate in Serang Banten, Safe n Lock Halal Industrial Park in Sidoarjo, and Bintan Inti Halal Hub in Bintan Regency, Riau Islands are the three Halal Industrial Areas constructed by the government through the Ministry of Industry (Kemenperin). In addition, Sidoarjo is the second largest

Published by University of Airlangga.

contributor to gross domestic regional product of East Java, following Surabaya. The rapid development of the industry in Sidoarjo can be attributed to its strategic location in close proximity to many business hubs of eastern Indonesia. Its advantageous proximity to Tanjung Perak Harbor and Juanda Airport, coupled with the presence of skilled human resources and a relatively stable socio-political and security environment, have collectively served as attractive factors choosing this regency as the location of the study. Moreover, Sidoarjo is a district located in East Java, which happens to be the province with the highest number of Islamic schools including *Raudhatul Athfal (RA), Madrasah Ibtidaiyah (MI), Madrasah Tsanawiyah (MTs),* and *Madrasah Aliyah (MA)* units in the entire country of Indonesia. The following conclusions can be drawn from the findings of the community service program:

- 1. Low understanding of the halal products concept;
- The target Muslim community does not pay much attention to the halalness of a product because they live in a society where most of the population is Muslim;
- 3. There is a need for improvement in the Muslim community's understanding of what constitutes halal products.

On the basis of three findings, a mechanism or model is required to increase awareness of the consumption of halal products in daily life or as a lifestyle. These findings become crucial considerations for the development of the IAOOI model for increasing community awareness of halal products and lifestyles. After analyzing previous literature findings, conducting FGDs, and conducting in-depth expert interviews, the model was developed. The results are then utilized to develop a model.

## **RESULT AND ANALYSIS**

The triple helix model is used, considering the importance of a halal lifestyle and the urgency of implementing a halal lifestyle. Many parties are needed to achieve the implementation of a halal lifestyle. A triple helix model for raising community awareness of halal product consumption and lifestyle begins by emphasizing the critical roles of three parties in the halal industry: the government/regulators, academics/universities, and industry/practitioners. These roles are based on condition findings in community service projects. Each party has a specific role in achieving the same goal: encouraging people to live a halal lifestyle daily. The following triple helix model will explain each party's role (see Table 1).

INPUT	ACTIVITY	OUTPUT	OUTCOMES	IMPACT
ACADEMICIA STUDENTS (FEWER PEOPLE AWARE OF THE IMPORTANCE OF HALAL CERTIFICATION	ANS PARTICIPATED IN COMMUNITY SERVICE RELATED TO THE HALAL	INFORMING SOCIETY ABOUT THE IMPORTANCE OF HALAL PRODUCT		
OF THE PRODUCTS)  LECTURERS  - HALAL PRODUCTS NEEDED BY MUSLIM	INDUSTRY PUBLICATIONS RELATED TO HALAL PAPER	INCREASING THE LITERACY OF SOCIETY ABOUT HOW TO	PUBLIC AWARENESS OF CONSUMING HALAL PRODUCTS	THE APPLICATION OF HALAL LIFESTYLE
AND NON-MUSLIM COMMUNITIES, - PEOPLE THINK THAT ALL PRODUCTS SOLD IN THE MARKET ARE HALAL, REGARDLESS OF THE CERTIFICATION	PROMOTE HALAL PRODUCTS AND INDUSTRY THROUGH SEMINARS.	DISTINGUISH BETWEEN HALAL AND NON-HALAL PRODUCTS		
RESEARCHERS (MANY HOME INDUSTRIES USED RAW MATERIALS FOR THEIR PRODUCTS WITHOUT HALAL CERTIFICATION)	INNOVATION IN RESEARCH FROM THE LABORATORY	KNOW HOW TO MAKE COMPLAINTS ABOUT THE HALALNESS OF THE PRODUCTS.		
GOVERNME	INT			
INDONESIA ISLAMIC LEADERS COUNCIL (MUI) (NO PEOPLE EVEN CARE ABOUT HALAL CERTIFICATION WHEN BUYING STREET FOOD)	ISSUED FATWA ABOUT THE OBLIGATION TO CERTIFY HALAL PRODUCTS	KNOW THAT THERE IS SUPPORT FROM THE GOVERNMENT TO GET HALAL CERTIFICATION		
HALAL PRODUCT ASSURANCE AGENCY (BPJPH)	OFFERS FREE HALAL CERTIFICATION FOR SMES			
(MANY SMES ARE AFRAID TO DO HALAL CERTIFICATION BECAUSE OF THE EXPENSIVE FEE) (MANY BUSINESS OWNERS ARE BLIND WITH WHAT HALAL IS, ITS CERTIFICATION, AND HOW TO CERTIFY THEIR PRODUCTS)	OFFERS FREE CONSULTATION AND TRAINING FOR SMES WITH HALAL PRODUCTS			
INPUT	ΑCTIVITY	OUTPUT	OUTCOMES	IMPACT

 Table 1

 Triple helix model for raising community awareness of halal product consumption and halal lifestyle

GOVERNMENT	
MINISTRY (TONS OF IMPORTED BUFFALOES MEAT FROM INDIA CONSUMED BY INDONESIAN MUSLIMS)	ENACTMENT OF LAWS THAT
	BENEFIT HALAL INDUSTRIES
	BUILD INFRASTRUCTURE FOR
	HALAL INDUSTRIES.
	GIVE SOCIAL AID FOR CAPITAL
	ENCOURAGE INVESTORS TO
	INVEST IN THE HALAL INDUSTRY
INDUSTRY	
SMES	CERTIFY THEIR PRODUCTS TO
(AFRAID OF THE CERTIFICATION'S FEE OF	GET THE HALAL LABEL
HALAL, LACK OF FUNDS BECAUSE THEIR	PROMOTE LOCAL PRODUCTS
SCALE IS SMALL)	WITH HALAL CERTIFICATION
COMPANIES	MASS PRODUCTION OF HALAL
(HIGH DEMANDS FOR HALAL PRODUCTS	CERTIFICATION PRODUCTS
FROM HIGH-CLASS CUSTOMERS)	HIRING HALAL TALENTS
	GIVE LOANS TO SMES AND
INVESTORS	COMPANIES INVOLVED IN THE
(STOCKS FOR HALAL INDUSTRIES ARE	HALAL INDUSTRY
MORE RESILIENT TO ECONOMIC CHANGES	INVEST MORE IN SHARIA STOCKS
THAN ORDINARY STOCKS)	RELATED TO THE HALAL
	INDUSTRY

Source: Authors' Compilation

## The Role of Academicians

Innovation and research are critical to developing an environment that promotes the implementation of a halal lifestyle in Indonesia, including the development of halal business models and processes. Fauziana et al., (2022) also emphasize the critical role of universities, finding that universities have more power to lead to and create synergy and coalitions involving government works and others to maintain synergy between different stakeholders.

Several contemporary issues are currently the focus of research attention, not only in Indonesia but also globally. The concerns revolve around fostering the growth of the halal setting and market, aiming for the adoption of a halal way of living, which is divided into several aspects, including aspects of product development and innovation, technology, Halal Literacy, Halal Awareness, and Halal Certification (<u>Nurdiansyah, 2018</u>). A contemporary issue that has become a concern for researchers in halal product development and innovation is the development of industrial-supporting substitute products that are usually imported, and difficult to ascertain their *halalness*. One notable achievement is the development of Halal Gelatin, a fundamental substance employed in the food, cosmetic, and pharmaceutical sectors. Gelatin is a food raw material used in the food industry to increase the viscosity of food. Gelatin is also a raw material in cosmetics and the pharmaceutical industry, such as manufacturing drug capsule shells. This prompted researchers to create halal gelatin from catfish, seaweed, and other sources. Furthermore, the development of halal products based on Indonesia's abundant natural resources has piqued the interest of several parties.

Regarding technology, various types of halal research centers are taking notice of the technology of testing product *halalness* based on technology 4.0, which can be implemented on smartphone applications and other forms of technology. This technology determines a product's halal status down to the molecular level.

In terms of Halal Literacy, Halal Awareness, and Halal Inclusiveness, it is clear that the Indonesian people's level of Halal literacy remains far below what is expected. Muslim families still have a mindset, culture, and habits when consuming products (as founding the community service program in Bohar village, Sidoarjo), so they tend to overlook the importance of halal certification in a product. The lack of public awareness and knowledge about the *halalness* of a product should be a source of concern for all parties (<u>Perbawasari et al., 2020</u>).

Higher education's importance in developing literacy and awareness about halal products and lifestyles must be developed while considering the potential. According to the study by <u>Muslichah et al., (2019)</u>, universities with laboratories, researchers, and expertise can be pioneers in halal product innovation and research, mainly when supporting the establishment of halal product business incubation for MSMEs. Therefore,

it is envisaged that academics will work with industry participants to integrate the flow of halal business (<u>Borzooei et al., 2016</u>).

Academicians and universities can actively improve the public's understanding of Islamic economics and finance. Finally, academics and universities can contribute to forming the Halal Inspection Agency (LPH). Indonesia has only three LPHs: LPPOM MUI, LPH Surveyor Indonesia, and LPH Sucofindo. As the number of LPHs increases, it is envisaged that the public will find it easier to certify their items as halal (<u>Anggara, 2017</u>).

#### The Role of Industries and Practitioners in the Halal Industry

Information asymmetry always occurs between producers and consumers. Producers, business actors, or practitioners have more information about their products than consumers. Consumers must be informed about the products they will consume. Need to be taught about the significance of consuming halal products, which is also a religious obligation for Muslims who take their faith seriously. Industries and practitioners must continually promote halal products to stakeholders (Asnawi et al., 2018).

Practitioners must adhere to all halal procedures announced by the government and be diligent in renewing halal certification after the validity period expires. In addition, practitioners must work under the supervision of a halal supervisor. This halal supervisor is a halal-certified expert responsible for overseeing the supervisory and audit functions and ensuring that all production processes and activities are halal according to Sharia standards. The management needs to ensure that all products and variants are halal labeled. According to <u>Nugraha et al.</u>, (2022) verify that consumers who are not of the Muslim faith do not appear to be adversely affected by a Halal certification. Regardless of the size of the label, the presence of a Halal certification impacts the choice to buy Halal products positively. That is also the role of the academicians, giving information about research results that benefit the business. In the industry context, the human factor is one of the most critical inputs in achieving organizational goals. Elements such as organizational characteristics and human resources must be examined, particularly in determining the effectiveness of halal quality certification implementation.

## **Role of Government/Regulator**

The most crucial role in creating an environment that supports a halal lifestyle is played by the government/regulator. The government/regulator is expected to support the presence of halal products through laws, regulations, infrastructure development, or other means. First, the Indonesian government has played a role in promoting the development of the halal industry in Indonesia. The government encourages the development of infrastructure and halal industry clusters in a variety of areas, including Halal Modern Valley in Cikande, Banten province, which focuses on businesses of small and medium enterprises, the development of Safe and Lock Halal Industrial Park in Sidoarjo district, which focuses on the electronics industry as well as the food and beverage industry, and the construction of the Bintan Inti Halal Food Hub, in Bintan, the province of Kepulauan Riau which focuses on the Plantation and Export industries (Nafis, 2019).

Thus, the government should also boost halal products' contribution to the national trade balance and economy. Indonesia is still a consumer country with the highest global consumption of halal products. Given the potential of the most significant Muslim population and abundant natural resources, Indonesia could play a significant role in the global halal market (Juliansyah et al., 2021).

The government also has to create a halal assurance system. The government is developing a halal information system to speed up the halal assurance system. For the time being, halal certification can be completed entirely online. Implementing the halal assurance system (online and financial assistance) can be accelerated if it is supported by policies, regulations, and fatwas (Ab Talib et al., 2020). The government's role is also to encourage the development of halal research and innovation with provides various types of research support for Indonesian researchers to develop halal research through various research schemes at the undergraduate, master, doctoral, and even post-doctoral levels (Borzooei et al., 2016).

Furthermore, <u>Ab Talib et al., (2020)</u> argue that the government's role in facilitating the development of halal logistics is divided into six parts. First, through regulation. Second, finance plays an encouraging role by providing fiscal stimulus or financial advantages for companies that adopt halal logistics practices. Third, The government supports the development of halal logistics by facilitating tax payments through the reduction or temporary elimination of both direct and indirect taxes. Fourth, infrastructure refers to the government's role in providing adequate, dependable, and comfortable infrastructures such as ports, roads, warehousing facilities, and information technology facilities. Fifth, the government promotes industrial collaborative work practices for halal logistics actors through guidance and encouragement. Sixth, through specialized training and official training programs, education and labor supply ensure the long-term development of the collection of halal logistics experts.

## CONCLUSION

Using a triple helix model approach, this study seeks to develop a model to promote community awareness of halal product consumption and lifestyle. Academics must concentrate on developing the framework of halal products and related issues through research and community engagement programs. The industries are responsible

Published by University of Airlangga.

for raising awareness by manufacturing halal products worthy of certification and conducting events that raise awareness through corporate social responsibility. The primary factor in driving up the consumption of halal products and fostering awareness about the halal lifestyle in the community is the government's involvement. To achieve this, government regulations and supporting facilities are required, such as halal certification for marketed products, the ease of processing halal certification, and activities that complement the halal certification process, including raising halal awareness through education and socialization.

This research offers valuable practical contributions and policy implications by presenting a comprehensive guideline and roadmap for pertinent stakeholders, including government officials, academics, and participants in the halal business sector. This research endeavours to enhance the existing body of knowledge by introducing an interactive triple helix model based on the Inputs, Activities, Outputs, Outcomes, and Impact (IAOOI) approach. The proposed model aims to comprehensively describe each stage involved in raising halal awareness and developing the halal business. This greatly enhances the process of policy implementation and its associated evaluations.

This study is limited to developing the model based on three dimensions of the triple helix model. This research is the initial stage of a series of follow-up research aimed at increasing halal literacy. Thus, a simple model (triple helix) is needed to illustrate the issues and important aspects that need attention. Through this model, policymakers get an initial picture of halal awareness. Future research can develop the model by applying a more compressive model that involves more stakeholders, such as the Penta helix model.

## ACKNOWLEDGEMENT

The research team would like to thank the Al Mustofa Foundation, the Bohar Village Government, and all of the participants in this event for their involvement in the community service program.

## **AUTHOR CONTRIBUTIONS**

- Author 1: Research Ideas, Literature Management, Analysis.
- Author 2: Research Ideas, Finding.
- Author 3: Research Ideas, Literature Management, Analysis.
- Author 4: Research Ideas, Literature Management, Data Management, Analysis, Finding.
- Author 5: Analysis, Editing.
- Author 6: Data Management, Editing.
- Author 7: Data Management, Editing.

## FUNDING

This work was supported by the Ministry of Research, Technology and Higher Education [grant numbers: 045/PM/2021].

# REFERENCES

- Ab Talib, M. S., Pang, L. L., & Ngah, A. H. (2020). The role of government in promoting Halal logistics: a systematic literature review. *Journal of Islamic Marketing*, *12*(9), 1682–1708. https://doi.org/10.1108/JIMA-05-2020-0124
- Ab Talib, M. S., & Wahab, S. N. (2021). Halal logistics in a rentier state: an observation. *Modern Supply Chain Research and Applications*, 3(2), 155–170. https://doi.org/10.1108/mscra-04-2020-0005
- Ab Talib, M. S., & Zulfakar, M. H. (2023). Sustainable halal food supply chain management in a small rentier halal market. *Arab Gulf Journal of Scientific Research*. https://doi.org/10.1108/AGJSR-11-2022-0251

Al Fattah Al-Qur'an. (2014). *Al-Baqarah:168*. CV. Mikraj Khazanah Ilmu.

- Al-Qaradawi, Y. (1994). Al-Halal wal al-haram fi al-Islam (15th Edition). Al Maktab Al Islami.
- Al-shami, H. A., & Abdullah, S. (2023). Halal food industry certification and operation challenges and manufacturing execution system opportunities. A review study from Malaysia. *Materials Today: Proceedings, 80*(xxxx), 3607–3614. https://doi.org/10.1016/j.matpr.2021.07.331
- Ambo, N. I., & Md Sapir, A. S. (2020). Halal Cosmetic Literacy among Malaysian Muslim Undergraduates Based on OECD's Financial Literacy Framewor. *Albukhary Social Business Journal*, 1(2), 113–127. <u>https://doi.org/10.55862/asbjv1i2a011</u>
- Anggara, F. S. A. (2017). Development of Indonesia Halal Agroindustry Global Market in ASEAN: Strategic Assessment. *Al Tijarah*, 3(1), 65–78. https://doi.org/10.21111/tijarah.v3i1.940
- Asnawi, N., Sukoco, B. M., & Fanani, M. A. (2018). Halal products consumption in international chain restaurants among global Moslem consumers. *International Journal of Emerging Markets*, 13(5), 1273–1290. https://doi.org/10.1108/IJoEM-11-2017-0495
- Bashir, K. M. I., Kim, J. S., Mohibbullah, M., Sohn, J. H., & Choi, J. S. (2019). Strategies for improving the competitiveness of Korean seafood companies in the overseas halal food market. *Journal of Islamic Marketing*, 10(2), 606–632. https://doi.org/10.1108/JIMA-03-2018-0056
- Borzooei, M., in, M. A.-I. J. of A. R., & 2013, undefined. (2016). Establishing a global halal hub: In-depth interviews. *Citeseer*, *3*(10). https://doi.org/10.6007/IJARBSS/v3-i10/288
- Cai, Y. (2022). Neo-triple helix model of innovation ecosystems: integrating triple, quadruple and quintuple helix models. *Triple Helix*, 1(aop), 1–31. https://doi.org/10.1163/21971927-bja10029

Published by University of Airlangga.

This is an open access article under the CC BY license (<u>https://creativecommons.org/licenses/by-nc-sa/4.0/</u>)

Chen, F., Wu, C., & Yang, W. (2016). A new approach for the cooperation between academia and industry: an empirical analysis of the triple helix in East China. *Science, Technology* and *Society*, 21(2), 181–204. https://doi.org/10.1177/0971721816640617

DinarStandard. (2020). *State of the Global Islamic Economy Report*.

- Fauziana, H., Wardhana, A. K., & Rusgianto, S. (2022). The Effect of Education, Income, Unemployment, and Poverty toward the Gini Ratio in Member of OIC Countries. Daengku: Journal of Humanities and Social Sciences Innovation, 2(2), 181–191. https://doi.org/10.35877/454RI.daengku874
- Febriyanti, A. R., Ratnasari, R. T., & Wardhana, A. K. (2022). The Effect of Economic Growth, Agricultural Land, and Trade Openness Moderated By Population Density on Deforestation in OIC Countries. *Quantitative Economics and Management Studies*, 3(2).
- Ghifara, A. S., Iman, A. N., Wardhana, A. K., Rusgianto, S., & Ratnasari, R. T. (2022). The Effect of Economic Growth, Government Spending, and Human Development Index toward Inequality of Income Distribution in the Metropolitan Cities in Indonesia. *Daengku: Journal of Humanities and Social Sciences Innovation*, 2(4). https://doi.org/10.35877/454RI.daengku1092
- Gunawan, S., Darmawan, R., Juwari, J., Qadariyah, L., Wirawasista, H., Firmansyah, A. R., Hikam, M. A., Purwaningsih, I., & Ardhilla, M. F. (2020). Pendampingan produk umkm di sukolilo menuju sertifikasi halalan thayyiban. *Sewagati*, 4(1), 14–19.
- Haspramudilla, D. (2021). *Kejar Peluang, Benahi Strategi, Melejit Lebih Tinggi*. Https://Mediakeuangan.Kemenkeu.Go.Id/Article/Show/Kejar-Peluang-Benahi-Strategi-Melejit-Lebih-Tinggi.
- Jamaluddin, J. (2014). MENGEMBANGKAN TEORI TAFRIQ AL-HALAL'AN AL-HARAM & I'ADAT AL-NAZHAR PERSPEKTIF HUKUM ISLAM. Jurnal Pemikiran Keislaman, 25(2), 261–273. https://doi.org/10.33367/tribakti.v25i2.182
- Joshi, R., & Garg, P. (2020). Assessing brand love, brand sacredness and brand fidelity towards halal brands. *Journal of Islamic Marketing*. https://doi.org/10.1108/JIMA-04-2020-0104
- Juliansyah, A. F., Putri, A. E., Suryadana, M. L., Endyana, C., & Wardhana, A. K. (2021). Global Muslim Response to Bandung Halal Tourism Branding. International Journal of Applied Sciences in Tourism and Events, 5(2), 197–206. https://doi.org/10.31940/ijaste.v5i2.197-206
- Kasri, R. A., Ahsan, A., Widiatmoko, D., & Hati, S. R. H. (2023). Intention to consume halal pharmaceutical products: evidence from Indonesia. *Journal of Islamic Marketing*, 14(3), 735–756. https://doi.org/10.1108/JIMA-06-2021-0192
- Kinyuira, D. K. (2019). Social performance rating in co-operatives. *Corporate Governance* and Sustainability Review, 3(2), 18–25. https://doi.org/10.22495/cgsrv3i2p2
- Krisharyanto, E., Retnowati, E., & Hastuti, N. T. (2019). Regulation and Provisions for Supervision of Halal Products in Indonesia. *Journal of Legal, Ethical and Regulatory Issues*, 22(1), 1–10.
- Liu, Y., & Huang, Q. (2018). University capability as a micro-foundation for the Triple Helix model: The case of China. *Technovation*, 76–77(February), 40–50.

https://doi.org/10.1016/j.technovation.2018.02.013

- Maison, D., Marchlewska, M., Zein, R. A., Syarifah, D., & Purba, H. (2019). Religiously permissible consumption: The influence of the halal label on product perceptions depending on the centrality of religiosity. *Journal of Islamic Marketing*. https://doi.org/10.1108/JIMA-07-2018-0119
- Malini, H. (2021). Small and Medium Enterprises Halal Literacy Measurement During Covid-19 Pandemic. *Journal of Islamic Economics and Finance Studies Volume*, 2(2), 110–121.
- Maryam, A., & Sumar'in, S. (2022). Analysis of Halal Literacy Level on Halal Awareness and Use of Halal Products. *IQTISHODUNA: Jurnal Ekonomi Islam*, *11*(1), 85. https://doi.org/10.54471/iqtishoduna.v11i1.1004
- Maulan, S., Omar, N.A. and Ahmad, M. (2016), "Measuring halal brand association (HalBA) for Islamic banks", Journal of Islamic Marketing, Vol. 7 No. 3, pp. 331-354.
- Muslichah, M., Abdullah, R., & Razak, L. A. (2019). The effect of halal foods awareness on purchase decision with religiosity as a moderating variable: A study among university students in Brunei Darussalam. *Journal of Islamic Marketing*. https://doi.org/10.1108/JIMA-09-2017-0102
- Mutmainah, L. (2018). The Role of Religiosity, Halal Awareness, Halal Certification, and Food Ingredients on Purchase Intention of Halal Food. *Ihtifaz: Journal of Islamic Economics, Finance, and Banking*, 1(1), 33. https://doi.org/10.12928/ijiefb.v1i1.284
- Nafis, M. C. (2019). The concept of halal and thayyib and its implementation in Indonesia. *Journal of Halal Product and Research*, 2(1), 1–5.
- Nugraha, W. S., Chen, D., & Yang, S. H. (2022). The effect of a Halal label and label size on purchasing intent for non-Muslim consumers. *Journal of Retailing and Consumer Services*, 65. https://doi.org/10.1016/j.jretconser.2021.102873
- Nurdiansyah, A. (2018). Halal certification and its impact on tourism in Southeast Asia: a case study Halal tourism in Thailand. *KnE Social Sciences*, 26–43. https://doi.org/10.18502/kss.v3i5.2323
- OJK. (2022). Siaran Pers: Survei Nasional Literasi dan Inklusi Keuangan Tahun 2022. Ojk.Go.Id. https://ojk.go.id/id/berita-dan-kegiatan/siaran-pers/Pages/Survei-Nasional-Literasi-dan-Inklusi-Keuangan-Tahun-2022.aspx
- Perbawasari, S., Sjuchro, D. W., Setianti, Y., Nugraha, A. R., & Syamsu, Y. (2020). Information Literacy in Halal Tourism in Bandung Regency, West Java, Indonesia. *Talent Development & Excellence*, 12(1).
- Prabowo, S., Rahman, A. A., & Rahman, S. A. (2012). *Halal culinary: Opportunity and challenge in Indonesia*. 4–5.
- Rahman, A. A., Asrarhaghighi, E., & Rahman, S. A. (2015). Consumers and Halal cosmetic products: knowledge, religiosity, attitude and intention. *Journal of Islamic Marketing*, 6(1), 148–163. https://doi.org/10.1108/JIMA-09-2013-0068
- Rahmawati, R. T., & Fathoni, M. A. (2021). The Effect Of Advertising And Product Quality On The Purchase Decision Of Halal Cosmetics With Online Consumer Reviews As Mediation Variables. *STUDIES AND SCIENTIFIC RESEARCHES. ECONOMICS EDITION*,

Published by University of Airlangga.

34.

- Resdiana, E., & Sari, T. T. (2019). Penguatan Peran Triple Helix dalam Pariwisata Segitiga Emas di Pulau Gili Labak Madura. *Journal of Governance Innovation*, 1(2), 1–16. https://doi.org/10.36636/jogiv.v1i2.342
- Sarpong, D., AbdRazak, A., Alexander, E., & Meissner, D. (2017). Organizing practices of university, industry and government that facilitate (or impede) the transition to a hybrid triple helix model of innovation. *Technological Forecasting and Social Change*, 123, 142–152. https://doi.org/10.1016/j.techfore.2015.11.032
- Sasongko, D. (2020, August 24). UMKM Bangkit, Ekonomi Indonesia Terungkit. Https://Www.Djkn.Kemenkeu.Go.Id/Artikel/Baca/13317/UMKM-Bangkit-Ekonomi-Indonesia-

Terungkit.Html#:~:Text=Hal%20ini%20bisa%20dipahami%20karena,Jumlah%20pela ku%20usaha%20di%20Indonesia.

- Silalahi, S. A. F., Fachrurazi, F., & Fahham, A. M. (2021). Factors affecting intention to adopt halal practices: case study of Indonesian small and medium enterprises. *Journal of Islamic Marketing*. https://doi.org/10.1108/JIMA-05-2020-0152/FULL/HTML
- State of the Global Islamic Economy Report. (2022). In Salaam Gateway Global Islamic Economy Gateway. https://salaamgateway.com/specialcoverage/SGIE22
- Utomo, S. B., Sekaryuni, R., Widarjono, A., Tohirin, A., & Sudarsono, H. (2020). Promoting Islamic financial ecosystem to improve halal industry performance in Indonesia: a demand and supply analysis. *Journal of Islamic Marketing*, *12*(5), 992–1011. https://doi.org/10.1108/JIMA-12-2019-0259

UU BPJPH, UU NO.33 (2014).

- Vaivode, I. (2015). Triple Helix Model of university–industry–government cooperation in the context of uncertainties. *Procedia-Social and Behavioral Sciences*, 213, 1063–1067. https://doi.org/10.1016/j.sbspro.2015.11.526
- Vanany, I., Soon, J. M., Maryani, A., & Wibawa, B. M. (2019). Determinants of halal-food consumption in Indonesia. *Journal of Islamic Marketing*, 11(2), 516–530. https://doi.org/10.1108/JIMA-09-2018-0177
- Wholey, J. S. (1994). *Practical Program Evaluation* (1st Edition). Wiley & Sons, Incorporated, John.
- Wisudanto, Widiastuti, T., Mardhiyah, D., Mawardi, I., Robani, A., & Al Mustofa, M. U. (2023). The motivating factors for switching intention to use halal cosmetics in Indonesia. *Journal of Islamic Accounting and Business Research*. https://doi.org/10.1108/JIABR-08-2022-0220
- Yunus, N. S. N. M., Rashid, W. E. W., Ariffin, N. M., & Rashid, N. M. (2014). Muslim's Purchase Intention towards Non-Muslim's Halal Packaged Food Manufacturer. *Procedia Social and Behavioral Sciences*, 130, 145–154. https://doi.org/10.1016/j.sbspro.2014.04.018
- Zhou, C., & Etzkowitz, H. (2021). Triple helix twins: A framework for achieving innovation and un sustainable development goals. *Sustainability (Switzerland)*, *13*(12). https://doi.org/10.3390/su13126535
- Zhuang, T., Zhou, Z., & Li, Q. (2021). University-industry-government triple helix relationship and regional innovation efficiency in China. *Growth and Change*, 52(1),

349-370. https://doi.org/10.1111/grow.12461

Ziegler, Y., Uli, V., & Tatari, M. (2022). Implementing halal logistics in a non-Muslimdominant environment: a proposal for reengineering the business processes in two stages. Business Process Management Journal, 28(8), 48–65. https://doi.org/10.1108/BPMJ-12-2020-0593