



Halalhub.id: Development of Halal Value Chain (hvc) Ecosystem Based on Digital Platform to Improve Halal Certified Products on Msmes in East Java

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Abstract. Micro Small and Medium Enterprises (MSMEs) have an important role in national economic development, including considering that poverty and unemployment in Indonesia are increasing every year, so with the presence of MSMEs, it can add jobs so that it can reduce the number of unemployed in Indonesia. According to data from the Ministry of Cooperatives and MSMEs of the Republic of Indonesia, from 2015 to 2019 there was an increase in the number of MSMEs. The large number of halal-certified products in the last six years can be compiled into an ecosystem to improve the halal value chain (Halal Value Chain). This research will examine the Halal Value Chain with the use of technology and information. This research was conducted to determine religiosity, needs, efficiency, interests, knowledge, benefits, and convenience for both MSME actors who already have halal-certified products and for Muslim consumers so that an application-based digital platform and HalalHub ID website can be formed to fulfill the halal value chain. For SMEs in East Java. Methods of data collection using interviews and questionnaires. The data analysis used in this study is Structural Equation Modeling (SEM) by first testing its dimensions with confirmatory factor analysis.

Keywords: Halal Value Chain · Halal Product Process Application · Technology Acceptance Model

1 Introduction

The “halal economy” or the shariah economy and finance has been recognized as a significant contributor to achieving Indonesia Maju (Advanced Indonesia) 2045. This is due to the vast global opportunity worth \$1.9 trillion (2020 est.) and the untapped domestic opportunity worth \$184 billion in the consumer spending market. According to [1], there has been a notable improvement in Indonesia’s ranking in the Global Islamic Economy Indicator, rising from 10th in 2018 to 4th in 2020, which is attributed to

the release of the shariah economy and finance blueprint by Bank Indonesia and the Indonesia Islamic Economic Masterplan 2019–2024 by KNEKS. This year, Indonesia ranked second in the halal food indicators list and made it to the top 10 in all halal economy categories, except for media.

As of 2020, Indonesia has the largest domestic halal industry in the world due to its 229.6 million Muslim population. In 2020, the domestic spending by this population on halal goods and services amounted to \$184 billion. It is expected to grow at a compound annual growth rate of 14.96% to reach \$281.6 billion by 2025. Over the last five years, the Shariah economy's share of the overall economy has increased, and it was less impacted by the COVID-19 pandemic compared to the national economy. According to the Shariah Economy and Finance Report 2020 by Bank Indonesia, the YoY decrease for the Shariah economy was -1.70%, whereas it was -2.07% for the national economy. [1].

The COVID-19 outbreak caused Indonesia's GDP to grow at a negative rate for the first time since 1998. The government implemented extensive social restrictions (PSBB) and limitations on community activities in order to slow the spread of the virus (PPKM). These had a big impact on people's lives, which therefore affected the economy as a whole. Along with changing consumer spending patterns, many households saw their incomes fall. Many customers also used e-commerce sites and other digital shopping options.

The improvement in demand and the expansion of supply indicate that Indonesia's economic growth is on the right track. Early 2022 saw a number of improvements in leading indicators, which point to promising future prospects for the Indonesian economy. The Consumer Confidence Index's (IKK) ongoing rise is another sign of the public's confidence in conducting business as usual.

1.1 Sharia Economy

The transition from a pandemic to an endemic state is predicted to aid the global economic recovery trend in 2022, with the International Monetary Fund (IMF) forecasting a worldwide economic growth of 4.4%. The Indonesian government has set a goal for the country's GDP growth to reach 5.2% (yoy) in 2022. International organizations have evaluated Indonesia's resilience to external pressures, with positive results. Despite the challenges posed by global inflation (yoy), Indonesia's inflation in February 2022 remained controlled and below the target range of 2.06%. [2].

Indonesia's Islamic economy has been expanding and contributing significantly on a global scale. Its growth is vital to the economic transformation of Indonesia into an advanced nation. Indonesia's potential in this area is demonstrated by the increasing sectoral value of the halal industry, which now accounts for around 11% of the global market. This growth is primarily driven by the halal food, fashion, and halal/Muslim-friendly tourism industries. [3].

To boost the growth of the sharia economy in 2022, the government has introduced several policy measures. One of them is to enhance the ecosystem of the halal value chain, especially in the integrated agricultural sector, halal culinary, and Muslim clothing, in order to promote sharia economic growth. The government plans to expand the distribution of Cash-Waqf Linked Sukuk (CWLS), implement sharia creative finance, and provide BP JAMSOSTEK sharia services. Additionally, the implementation of the

halal assurance system will be accelerated. To support the development of digital talent and the digitization of MSMEs, including those operating in the halal sector, the government has implemented various strategies such as the Pre-Employment Card, the National Digital Literacy Movement, the Digital Talent Scholarship, and the Digital Leadership Academy.

2 Literature Review

2.1 Halal Value Chain (HVC) Ecosystem

The sharing economy is a type of economic model in which individuals, organizations, or businesses share their unused physical resources or cognitive surplus through the internet. This allows them to provide services and earn income at a lower marginal cost than professional organizers. [4] The key approach in the Islamic economic master plan is to enhance the entire value chain of the halal industry in Indonesia, spanning from upstream to downstream. This is applicable to all priority clusters and is evaluated in the Global Islamic Economy Report rankings, as well as for clusters and aspects needed by the national economy, such as renewable energy or social security. The primary method for strengthening the halal value chain in Indonesia involves five main programs: [5].

1. Establishing halal hubs in different regions based on their comparative advantages.
2. Developing globally recognized and effective halal standards.
3. Launching a halal lifestyle campaign.
4. Providing incentives for local and global investors to support the development of the halal value chain industry (from raw materials to production, distribution, and promotion).

2.2 Overview of Halal Certification

Halal certification is a validation that a product conforms to the principles of Islamic law, which can be applied when selecting finance, cosmetics, food, clothing, services, and banking products. Halal certification involves the recognition of the entire production or distribution process, along with other management practices, by an authorized official body such as the Indonesian Ulema Council (MUI). The primary objective is to appeal to Muslim consumers who seek products that comply with Islamic regulations and consider them to be blessed by Allah. [6].

As per the JPH Law, halal certification is now required as of October 17, 2019. Stages of certification will take place. At this early level, certification is more heavily weighted toward food and drink. Then it only affected medicines, cosmetics, and medical equipment. BPJPH will be more compelling in its outreach and mentoring of business actors during the course of this five-year term. by giving business people the chance to handle halal certification. Products that do not currently have halal certification will not be penalized right away, but they will still have until October 17, 2024 to qualify for halal certification (CNN Indonesia 2019).

MSME business owners often lack a Halal certification for their products due to a lack of awareness about the significance of such certification and its impact on

their business. Furthermore, the lack of information on the process of obtaining a Halal certificate for their products is another reason for this issue. This has resulted in some MSME entrepreneurs perceiving Halal certification as unimportant. Additionally, MSME entrepreneurs have expressed that the complicated process of applying for Halal certification is also a contributing factor. [7].

The principle of human freedom relates to the dignity and worth of human beings and their quality of life and well-being as individuals or groups. This principle emphasizes the practical application of the freedom of contract to promote social welfare within the community [8]. The presence of Micro, Small, and Medium Enterprises (MSMEs) reflects the national economic system, which promotes economic democracy and can lead to the attainment of welfare and prosperity. MSMEs are a type of economic organization that aligns with the popular economic system. [9].

While many customers are familiar with halal food and cosmetics, it is crucial to understand that the concept of halal extends beyond these areas to encompass aspects of life such as finance, travel, and fashion. There has been a notable increase in awareness and demand for halal goods and services from both Muslim and non-Muslim consumers, leading to a need for market strategies to meet this demand. [10].

To enhance the competitiveness of halal MSMEs, various strategies can be implemented, such as boosting the number of halal MSME certifications, enhancing the skills of halal MSME employees, utilizing modern and suitable technology to adhere to halal MSME product standards, building stronger links with the downstream industry, broadening the range of halal MSME products, increasing the involvement of religious and educational organizations in educating the Muslim community about halal MSME products, promoting the role of fintech in financing, certification, and marketing of halal MSME products, collaborating with relevant institutions to foster innovation in halal MSME products, utilizing technology and information media to increase the branding of halal MSME products, and reinforcing the study of jurisprudence to produce more halal MSME products. [11] To expedite the halal certification of all products in circulation in the nation, this five-year transitional phase needs to be used to its fullest potential. Beginning with socializing, particularly for small and medium-sized businesses (MSMEs). Assistance is required to help business actors register their items for certification in addition to socialization activities. In addition, the Government must finish up the unfinished tools for the implementation of the new certification process right now. In terms of certification rates, it is hoped that accurate information will be available soon. The tariff is reasonable and does not put a strain on microbusiness owners. To achieve halal guarantees for the traded goods, cooperation between the government, corporate entities, and the community is required. The government has so fulfilled its obligation to ensure that its citizens' food is halal. Additionally, business actors can broaden their target market, become more competitive, boost production and sales, and boost customer faith in halal goods. In addition, the Muslim community will feel more comfortable purchasing and consuming halal items [12].

Table 1. Percentage of Public Literacy and Preferences for Halal Products in East Java

No.	Literacy and Preference for Halal Products	Percentage
1	General Knowledge of Halal Product Terms	68%
2	General Knowledge of Substances of Halal Products	73%
3	Basic Knowledge of Institutional Halal Assurance Products	83%
4	Preference	70%

3 Research Methods

In order to determine the link between the variables, the sample is measured only once in this study's descriptive quantitative approach. A questionnaire with a Likert scale range of 1–4 with the options Very Understanding, Fairly Understanding, Less Understanding, and Not Understanding was used to collect the results. A total of 45 questions are included, broken down into the following categories: general knowledge about halal product terms (16 questions), general knowledge about the subject matter of halal products (14 questions), fundamental knowledge about halal assurance product (10 questions), and preferences (5 questions) (See Appendix 1). 150 East Java were chosen as samples in this study. The data were then processed using SPSS and Ms. Excel. This study set out to map the literacy levels and the nature of the public's interest in halal goods in East Java (Table 1).

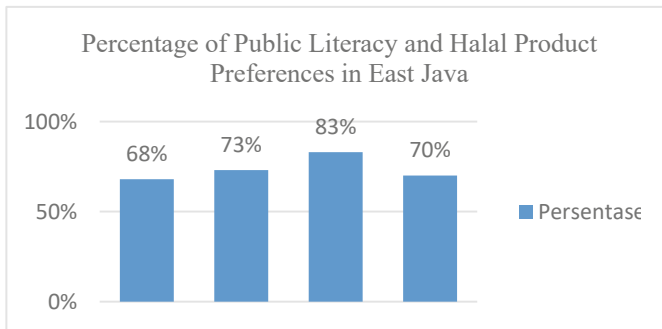
This study employs a descriptive quantitative methodology in which the sample is measured only once to determine the relationship between variables. Utilizing a questionnaire with Likert scale responses of Very Understanding / Fairly Understanding / Less Understanding / Not Understanding, data is collected using this manner. The total number of questions is 45, divided as follows: general knowledge about halal product terms (16), general information about the substance of interest in halal products (14), fundamental knowledge about halal assurance product institutions (10), and preferences (5). (See Appendix 1). The number of East Java residents selected as samples is 150. The acquired data were then analyzed using Microsoft Excel and SPSS. This study's objective was to map East Java's literacy rates and the nature of public interest in halal items (Fig. 1).

4 Findings and Discussion

East Java residents have a general understanding of halal guarantee products, including the provisions of the halal product guarantee agency, principles, and prohibitions in halal products, according to data collected from multiple cities. However, it is probable that the low percentage of consumers who understand halal product phrases is attributable to the employment of uncommon words in daily activities. Although the term "halal tourism" was first popularized at the Indonesia Halal Expo (INDHEX) in 2013 and the Global Halal Forum, held from October 30 to November 2, 2013, at the Commerce Center Building, JIExpo (PRJ), Jakarta, it is now being used formally for the first time.

Table 2. Statistical Analysis Results

		Statistics			
		General Knowledge of Halal Product Terms	General Knowledge of Substances of Halal Products	Basic Knowledge of Institutional Halal Assurance Products	Preference
N	Valid	150	150	150	150
	Missing	0	0	0	0
Mean		43,82	40,90	33,15	14,03
Median		44,00	40,00	33,50	14,00
Mode		36	42	40	14
Std. Deviation		8,786	6,382	5,677	2,357
Minimum		16	22	19	8
Maximum		63	55	40	20
Sum		6573	6135	4973	2104

**Fig. 1.** Percentage of Public Literacy and Halal Product Preferences in East Java

According to Muhammad Munir Chaudry, the president of the Islamic Nutrition Council of America, halal tourism is a new concept in the tourism industry that is distinct from Umrah and Hajj. Halal tourism caters to the needs and preferences of Muslim travelers, such as offering hotels without alcohol and with separate men's and women's swimming pools and spa facilities.

The dependent variable used in this study is East Java Community Preferences, while the independent variables are General Knowledge of Halal Product Terms, General Knowledge of Substances of Halal Products and Basic Knowledge of Institutional Halal Assurance Products. The results of descriptive data processing can be seen from the following table:

The aim of the normality test was to determine whether the residual values followed a normal distribution. In order to confirm this, the residual data was subjected to the one-sample Kolmogorov-Smirnov test, which provides more detailed statistics to determine if the regression equation used satisfies normality requirements. A regression equation is considered to meet the normality assumption if the significance value of the Kolmogorov-Smirnov test is greater than 0.05. The normality test was conducted, and the results indicated that the data was normally distributed with a significance value of 0.821,

which is greater than 0.05. Based on analyzed, it can be seen that the tolerance value > 0.10 or VIF value < 10 , then there is no multicollinearity.

After analyzing the table, it can be observed that the probability value exceeds 0.05. As a result, it can be concluded that the variables suggested in the research do not exhibit heteroscedasticity.

The results of the multiple linear regression analysis indicate that the adjusted R square, which represents the proportion of variation in the dependent variable explained by the independent variables, is 0.371. This suggests that the independent variables have a collective impact of 37.1% on the dependent variable, while the remaining 62.9% of the variation is likely influenced by other factors that were not included in the research model.

The test results of multiple linear regression analysis showed that there was a significance value of 0.000 ($0.000 < 0.05$). This value can prove that the hypothesis is accepted, which means that “There is a simultaneous influence of General Knowledge of Halal Product Terms, General Knowledge of Substances of Halal Products and Empathy on Preferences”. The test results of multiple linear regression analysis showed that there was a significance value of 0.006 ($0.006 < 0.05$). This value can prove that the hypothesis is accepted, which means that “There is a positive and partially significant effect between the variables of General Knowledge of Halal Product Termson Preferences.” The results of multiple linear regression analysis test indicate that there is a significance value of 0.000 ($0.000 < 0.05$). This value can prove that the hypothesis is accepted, which means that “There is a positive and partially significant influence between the variables of General Knowledge of Substances of Halal Products on Preferences”.

The test results of multiple linear regression analysis showed that there was a significance value of 0.010 ($0.010 < 0.05$). This value can prove that the hypothesis is accepted, which means that “There is a positive and partially significant influence between the variables of Basic Knowledge of Institutional Halal Assurance Products on Preferences”.

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