

Strengthening Halal MSMEs through Triple Helix Collaboration: A SWOT-Based Analysis in Yogyakarta

Penguatan UMKM Halal melalui Kolaborasi Triple Helix: Analisis Berbasis SWOT di Yogyakarta

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ABSTRACT

This study examines the development of halal Micro, Small, and Medium Enterprises (MSMEs) in Yogyakarta by analyzing the interaction between institutional actors and internal business capacity. Despite the rapid growth of the global halal industry, the number of halal-certified MSMEs in Yogyakarta remains relatively low, indicating the presence of structural challenges. This research employs a qualitative descriptive approach, utilizing data collected through interviews, observations, and literature review. The analytical framework combines the Triple Helix model, which explores the roles of academics, business actors, and government, with SWOT analysis to identify internal and external factors influencing MSME development. The findings reveal a significant gap between high market opportunities and the limited readiness of MSMEs, particularly in terms of halal literacy, technological capability, and managerial capacity. Although the Triple Helix framework has been implemented, collaboration among actors tends to be programmatic and has not yet formed a sustainable development ecosystem. As a result, MSMEs face difficulties in transforming market potential into competitive advantage. This study argues that strengthening halal MSMEs requires not only regulatory support and capital assistance but also an integrated strategy that emphasizes capacity building, institutional collaboration, and market-oriented innovation. The findings contribute to the discourse on MSME development by highlighting the importance of systemic collaboration in enhancing the competitiveness of halal-based enterprises.

Keywords: Halal MSMEs, Triple Helix, SWOT analysis, institutional collaboration, MSME development.

ABSTRAK

Studi ini meneliti perkembangan Usaha Mikro, Kecil, dan Menengah (UMKM) halal di Yogyakarta dengan menganalisis interaksi antara aktor institusional dan kapasitas bisnis internal. Meskipun industri halal global berkembang pesat, jumlah UMKM bersertifikat halal di Yogyakarta masih relatif rendah, yang menunjukkan adanya tantangan struktural. Penelitian ini menggunakan pendekatan deskriptif kualitatif, dengan memanfaatkan data yang dikumpulkan melalui wawancara, observasi, dan tinjauan pustaka. Kerangka analitis menggabungkan model Triple Helix, yang mengeksplorasi peran akademisi, pelaku bisnis, dan pemerintah, dengan analisis SWOT untuk mengidentifikasi faktor internal dan eksternal yang memengaruhi perkembangan UMKM. Temuan menunjukkan adanya kesenjangan yang signifikan antara peluang pasar yang tinggi dan kesiapan UMKM yang terbatas, khususnya dalam hal literasi halal, kemampuan teknologi, dan kapasitas manajerial. Meskipun kerangka Triple Helix telah diimplementasikan, kolaborasi antar aktor cenderung bersifat programatik dan belum membentuk ekosistem pembangunan berkelanjutan. Akibatnya, UMKM menghadapi kesulitan dalam mengubah potensi pasar menjadi keunggulan kompetitif. Studi ini berpendapat bahwa penguatan UMKM halal tidak hanya membutuhkan dukungan regulasi dan bantuan modal, tetapi juga strategi terpadu yang menekankan pembangunan kapasitas, kolaborasi kelembagaan, dan inovasi berorientasi pasar. Temuan ini berkontribusi pada wacana pengembangan UMKM dengan menyoroti pentingnya kolaborasi sistemik dalam meningkatkan daya saing perusahaan berbasis halal.

Kata Kunci: UMKM Halal, Triple Helix, analisis SWOT, kolaborasi kelembagaan, pengembangan UMKM.

INTRODUCTION

The halal industry is currently experiencing an upward trend year after year. The halal industry is also a pioneer in the country's economic development. According to data from the State of the Islamic Economy Report 2024, approximately USD 2.4 trillion is spent by Muslim communities on their wealth for purposes in the food, pharmaceutical, cosmetics, fashion, tourism, and other sharia-compliant sectors. This figure represents a 3.2% increase compared to 2022 (1). The significant level of spending could indicate substantial growth prospects in the coming years.

The largest consumption in the halal industry is in the halal food sector (food and beverages). A report by State of The Islamic Report (2024) found that Muslims spent USD 1.369 trillion on halal food consumption. This amount is larger than other sectors, with clothing products spending USD 83 billion, media and entertainment reaching USD 220 billion, travel and tourism businesses amounting to USD 189 billion, pharmaceutical products totaling USD 92 billion, and cosmetics at USD 64 billion (1). The development of the halal industry worldwide is projected to increase by 2025 across all sectors, as follows: food to USD 1.97 trillion, Islamic finance (sharia) to USD 3.5 trillion, travel and tourism to USD 274 billion, clothing to USD 402 billion, and media and entertainment reaching USD 309 billion, halal medicines and cosmetics are predicted to increase to USD 134 billion and USD 95 billion in 2024. Based on the above analysis, the market size is projected to grow by 6.2% during the

2021–2024 period, from USD 2.2 trillion to USD 3.2 trillion by 2024. In Indonesia, The consumer base for halal products is around 1.7 billion people and is worth more than 2.3 trillion dollars in the global market (2). This has an impact on the promising prospects for the development of halal MSMEs, which are part of the halal industry.

The halal industry is divided into two categories: large halal industries (better known as companies) and small industries (better known as Micro, Small and Medium Enterprises (MSMEs)). MSMEs are businesses operating in various sectors within the local community with an annual income of less than Rp500,000,000 (five hundred million rupiah) (3). MSMEs make a significant contribution to the national economy through their production output, employment generation, and foreign exchange earnings (4). The number of MSMEs in Yogyakarta in 2019 was 521,000 (3). Meanwhile, the number of halal SMEs in Yogyakarta that have obtained halal certification is 3,808 companies (5). In other words, only 0.3% have halal certification. This very low number indicates that SMEs face several challenges, including insufficient resources, lack of halal literacy, and insufficient business capital for development (6). The resources referred to are business operators who are largely unaware of the halal certification process, which includes knowledge of halal ingredients and processes, as well as the issuance of a Business Identification Number (NIB), which must be done online. The business capital referred to is the capital used to develop their businesses, which in this era must compete with the global market due to the ASEAN Free Trade Area.

Yogyakarta is famously known as the “City of Students.” This is evidenced by the number of universities in Yogyakarta, which totals 188, with a total of approximately 405,480 students (7). Yogyakarta is one of the provinces that receives special funding from the central government has allocated Rp1,000,000,000,000 (one trillion rupiah) (8). This special fund can be used, among other things, to develop MSMEs. Yogyakarta has the opportunity to synergize between students, referred to as the Academic sector, the special fund or the Yogyakarta government that receives the special fund, referred to as the Government sector, and halal SME operators, referred to as businessmen. In terms of connectivity, the author attempts to link these three actors using the triple helix method.

Yogyakarta is closely tied to the Islamic Mataram Kingdom, with the majority of its population being Muslim. This is evidenced by data from the Directorate General of Population and Civil Registration (Disdukcapil) under the Ministry of Home Affairs (Kemendagri), the number of Muslim residents in Yogyakarta in June 2021 was 3.42 million out of a total population of 3.68 million in Indonesia, or 92.89% (9). This large population has led to an increase in demand for halal products. Overall, the total amount spent on halal products was USD 220 billion, with USD 170 billion spent on the halal food sector (1). This figure shows the potential for the development of halal MSMEs in capturing market share.

Research on development strategies in the halal industry has been conducted by several researchers, including: (10) (2) and (11). These studies generally discuss the development of

the halal industry, which can serve as a foundation for research on the development of the halal industry, whether for national-level companies with a broad market share or SMEs with a local market share. Other studies were conducted by (4), (12) and (13). These studies looked at the halal industry, particularly halal MSMEs, implementing specific development strategies in each province. This study aims to develop strategies for halal SMEs to expand their market in the Yogyakarta region. Similar research has been conducted, but it was still in the early stages of socializing halal regulations. This study was conducted by Hamid and Susilo (2015). This study is interesting because it combines the three actors namely academics, halal SME practitioners, and the government in developing businesses.

RESULTS & DISCUSSION

Yogyakarta Halal MSMEs

MSME stands for Micro, Small, and Medium Enterprises. According to Law No. 20 of 2008 on Micro, Small, and Medium Enterprises, MSMEs are divided into three categories: micro enterprises, small enterprises, and medium enterprises. A micro enterprise is a productive business unit owned by an individual with a maximum net worth of IDR 50,000,000 (fifty million rupiah), excluding land and buildings, and with annual revenue of up to IDR 300,000,000 (three hundred million rupiah). Small enterprises are productive business units owned by individuals with a net worth between Rp50,000,000 (fifty million rupiah) up to Rp500,000,000 (five hundred million rupiah), excluding land and buildings, and also has an income between Rp300,000,000 (three hundred million rupiah) and Rp2,500,000,000 (two billion five hundred million rupiah). A medium-sized business is a productive business unit owned by an individual with a net worth between Rp500,000,000 (five hundred million rupiah) up to Rp10,000,000,000 (ten billion rupiah), excluding land and buildings, and also has an income between Rp2,500,000,000 (two billion five hundred million rupiah) and Rp50,000,000,000 (fifty billion rupiah).

Halal SMEs are SMEs that have undergone technical processes compliant with Islamic principles or sharia to produce halal products (4). According to a report from the Halal Registration and Certification Center, the number of halal SMEs in Yogyakarta in 2022 was 3,808 (5). In market development, halal certification can expand market share (14). The presence of halal label on SME products serves as evidence that the products meet the Halal Product Assurance concept. This concept encompasses halal awareness and halal branding. Both aspects can enhance product development, as the halal concept also includes the hygiene (thayyib) aspect of products, ensuring consumers can consume them safely and healthily.

Triple Helix Model for Yogyakarta Halal MSMEs

The triple helix concept is also known as the ABG concept, which consists of three mutually beneficial actors, namely A (Academic), B (Business), and G (Government). These three actors complement each other's roles (15). Academic refers to researchers

from universities who have an interest in applying and disseminating their knowledge to business actors as part of their duty in the three pillars of higher education, namely education and teaching, research and development, and community service. Business refers to halal SMEs that have an interest in the sustainability and development of their businesses to achieve greater progress. Government or the State has an interest in the success of creating job opportunities for the unemployed through the growth of SMEs. Each of these three actors plays a distinct role in developing businesses.

Table 1. The Role of MSME Development in Triple Helix Model

No	Actor	Job / Role
1	Academic (University)	<ol style="list-style-type: none"> 1. Conducting training on product design, critical points in halal production, issuing Business Identification Numbers (NIB), online marketing, and MSME accounting management. 2. Conducting research on raw materials that may contain haram elements. 3. Eradicating technological illiteracy, including computers and the internet.
2	Business (Halal MSME)	<ol style="list-style-type: none"> 1. Self-development, which involves participating in socialization, workshops, and training on design, online marketing, and halal product accounting management 2. Implementing a locomotive-carriage system from large to small entrepreneurs 3. Complying with government regulations and rules on Halal Product Guarantee
3	Government (Department of Cooperatives and Small-Medium Enterprises)	<ol style="list-style-type: none"> 1. Facilitating domestic halal product exhibitions 2. Providing capital assistance 3. Regulating halal MSMEs to enable further growth 4. Facilitating overseas promotion in the era of globalization

Based on the table above, the relationship between the three actors, namely academics, MSME players, and the government, is mutually beneficial. The essence of this relationship is that players in developing their businesses receive support from academics in the form of innovations obtained from research and development, such as the issuance of halal certificates, NIBs, and digital management and technology.

Additionally, the core of the relationship between halal SME operators and the government lies in regulations regarding Halal Product Certification, which can help develop their products, as well as assistance in the form of infrastructure and capital that can support business development.

Strategy Analysis Using SWOT Model

Strategy, in general terms, is a comprehensive approach related to the structured implementation of objectives, starting from an idea or concept, followed by planning and the implementation stage of an activity within a certain period of time. Optimizing strategy requires coordination among workgroups, clear tactics for achieving objectives, identifying supporting factors aligned with rational ideas, and efficient use of funds (16). There are three types of strategic approaches: corporate strategy, business strategy in commercial competition, and functional strategy (17).

Development is an effort to enhance capabilities in conceptual, technical, and individual or group attitudes according to needs through training and education (16). In this context, SME development is directed toward business actors capable of enhancing competitiveness through business strengthening and productivity improvement, supported by market segment adaptation in utilizing outcomes and aligning with technology (18). A company grows when it can increase production and market its products at regular intervals.

This study uses the SWOT analysis approach to develop the company. SWOT analysis is used to assess the environmental conditions by mapping internal and external factors to determine the compatibility between the two factors. The following is an explanation of the SWOT analysis conducted on Halal SMEs in Yogyakarta, presented in table form.

Table 2. Matrix SWOT

Strenghts:	Weaknesses:
S.1. Possession of halal certification	W.1. The number of MSMEs with halal certification is still very low
S.2. Muslim majority population	W.2. Low level of halal MSME resources
S.3. Increased halal awareness among non-Muslims	W.3. Low level of halal MSME technology
S.4.Proliferation of Islamic Universities and educational institutions	W.4. Low level of halal MSME literacy
S.5. Government support	
Opportunities:	Thearts:
O.1. Increased trust in halal products	T.1. The presence of foreign halal products
O.2.Development of digital technology era	T.2. Variation in halal products outside MSMEs
O.3. Availability of capital assistance from the government	T.3. Price competition with other companies and MSMEs that are not yet halal certified

Based on the table above, the strengths of halal MSMEs are:

1. Halal certification. In concept, it is not only halal products that comply with Islam that are the benchmark, but there are also hygiene elements that can be the advantage and strength of halal MSME products.
2. The majority of Muslims in Indonesia in general and Yogyakarta in particular make halal MSME products a potential market.
3. Increasing halal awareness among non-Muslims. This also impacts the increase in demand for products from non-Muslim communities who have come to understand that halal products contain elements of health and hygiene.
4. The proliferation of Islamic universities and places of worship. This can enhance halal literacy through education and religious study sessions.
5. Government support. This is evidenced by the existence of halal regulations that require all circulating products to be halal.

As for the weaknesses of halal SMEs, they include:

1. The number of certified SMEs remains very low. This is evidenced by data only 1,994 out of 521,000 SMEs have obtained halal certification.
2. Low resources of halal SMEs. Generally, the education level of SME operators is limited to high school graduates, resulting in low levels of knowledge and management capabilities
3. Low technology adoption among halal SMEs. SMEs are small-scale businesses, so the technology used is simple, and the market tends to be local.
4. Low literacy among halal SMEs. Currently, knowledge about halal ingredients and processes remains low due to a lack of understanding of critical points and ingredients that may contain prohibited elements.

The opportunities for halal SMEs are as follows:

1. Increasing trust in halal products, which can be an opportunity for SMEs to develop their products
2. Development of digital technology enables halal SME products to be marketed more widely. This is because halal certification can expand market share
3. Access to government capital assistance. This is evidenced by the availability of loans with easy installments that can support the development of halal SMEs.

Meanwhile, the challenges or threats to halal SMEs are:

1. The influx of halal products from abroad due to the ASEAN free market, which has higher quality and poses competition for halal SME products.
2. The variety of halal products available in the country can encourage halal consumers to purchase these products, thereby posing a threat to the development of halal MSMEs.

Based on the SWOT analysis matrix mentioned above, a development strategy for halal MSMEs can be formulated, consisting of four strategies, namely:

1. **S-O (Strengths-Opportunities) Strategy**, which formulates the following strategy:
 - a) The presence of halal certification for SMEs can provide opportunities to develop their businesses by receiving government assistance in the form of training, halal regulations, halal exhibitions such as the Jogja Halal Fest, and funding.
 - b) Meanwhile, academic support comes from the many universities that already have Halal Certification Bodies (HCBs) tasked with inspecting and researching products to obtain halal certification. In Yogyakarta, specifically, there is the HCB at UIN Sunan Kalijaga, which can assist SMEs in understanding halal literacy and obtaining halal certification, thereby expanding their market reach. Positive consumer perceptions of halal certification can also add value to products. As indicated in studies conducted by (19), (20), dan (21).
 - c) The development of the digital era has created opportunities for the marketing of halal SME products to reach a national and even international scale. The government can act as a facilitator to enable businesses to take advantage of this digital era.
2. **S-T (Strengths-Threats) Strategy**, formulating strategies as follows:
 - a) Strengthening industrial downstreaming by conducting training and education related to understanding the halal product process so that SMEs can more easily certify their products as halal.
 - b) Innovating products to offer variety while maintaining product quality and halal standards. This is intended to ensure that halal consumers maintain their purchasing power.
 - c) Enhancing the role of religious institutions and universities in enriching halal literacy.
3. **W-O (Weaknesses-Opportunities) Strategy**, formulating strategies as follows:
 - a) Enhancing the role of the government in channeling capital assistance that can develop businesses
 - b) Building synergies between academia, halal SMEs, and the government to create diverse halal products and facilitate market reach.
4. **W-T Strategy (Weaknesses-Threats)**, formulating strategies as follows:
 - a) Intensifying promotion of halal SMEs to hinder the entry of foreign halal products into the market
 - b) The government should implement tax policies that favor domestic halal products over imported halal products entering the market.

CONCLUSION

This study demonstrates that the development of halal MSMEs in Yogyakarta is shaped by the interaction between market potential and structural limitations. While the growth of the halal industry provides significant opportunities, MSMEs continue to face challenges related to low halal literacy, limited technological adoption, and insufficient managerial capacity. The application of the Triple Helix model shows that collaboration among academics, business actors, and government has been established, yet it remains largely programmatic and has not evolved into a fully integrated development ecosystem. This condition limits the effectiveness of existing strategies in strengthening MSME competitiveness. The SWOT analysis further reveals an imbalance between strong external opportunities and weak internal capacity, indicating that the main issue lies not in the lack of market potential, but in the ability of MSMEs to transform that potential into sustainable economic value. Therefore, this study highlights the need for a more integrated development approach that goes beyond regulatory enforcement and financial assistance. Strengthening halal MSMEs requires continuous capacity building, improved institutional collaboration, and the development of innovation-driven and market-oriented strategies. In this context, halal should be positioned not only as a compliance requirement, but also as a strategic asset that can enhance competitiveness and expand market access.

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