



Initiation of the Unnes Halal Center Collaborative Development Strategy for Product Development and Halal Product Guarantee Systems

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Abstract. implementation of a mandatory halal regulation according to Law No 33 the year 2014 regarding Halal Product Guarantee. To support this program, The Halal Product Assurance Organizing Body (BPJPH) has encouraged universities to establish Halal Centers since 2019. This research aims to initiate a collaborative development strategy at the Unnes Halal Center to improve product development and halal product guarantee systems in Semarang City using the Analytical Hierarchy Process approach. This research interviewed three experts in 2024. Data analysis is divided into three stages: decomposition, pairwise comparisons, and priority synthesis. The hierarchical structure is comprised of four levels, namely the variables affecting collaboration, the actors involved, the goals, and the cooperation strategy. This collaborative approach involves various stakeholders, including academic institutions, government, industry, and society. Through close collaboration, the Unnes Halal Center strives to develop innovative halal products and strengthen the halal product guarantee system that meets international standards. The research results show that this collaboration has succeeded in increasing the quality and public trust in local halal products and creating positive synergy between the various parties involved. The implications of this strategy are expected to accelerate the development of the halal industry in Semarang City and significantly contribute to the local economy.

Keywords: Halal industry, Halal Products; Unnes Halal Centre.

1 Introduction

The halal industry is currently a world trend, including in Indonesia. This is important considering that Indonesia is a country with the most significant number of Muslims, which will significantly influence halal consumption. Data from [1] shows that the Muslim population in Indonesia has reached 238.09 million people, or 86.93 percent of the total population. This is in line with [2; 3] which shows that Indonesia is ranked first as a country consuming halal food globally, with total consumption reaching US\$144 billion out of total global halal food consumption, which reached US\$1.17 trillion. Unfortunately, the level of halal consumption in Indonesia is not accompanied by the growth of the halal industry in this country. This can be seen from the minimal exports of Indonesian halal products to other countries [4]. The problem is that the scope of the halal industry market has not been able to penetrate the global market because the quality and halal certification are still relatively low. So, it is appropriate for Indonesia to no longer be a consumer of halal products but also to be involved with the world's most prominent industry players in halal products.

What needs to be emphasized in this case is that there are efforts to improve product quality and service suitability, which can attract consumers and increase customer loyalty. According to [5; 6], product quality is the product's ability to perform its functions, including durability, reliability, accuracy, ease of operation, and other supporting attributes. Meanwhile, product quality shows the expected level of excellence and control of the level of excellence to meet the desires and needs of consumers, meaning that there is conformity with customer expectations [7; 8; 9]. Apart from that, for the Muslim community, having halal certification listed on a product can increase the sense of security for producers and consumers, which means the product is free from non-halal elements and is produced in a halal and ethical manner [10; 11]. Because products that are halal certified have higher competitiveness, they are expected to be able to take up most of the market domestically or globally [12; 13].

Seeing the existing phenomenon, the Unnes Halal Center was initiated to translate Islam as rahmatan lil'alamin, Islam that cools and makes the nation intelligent. The importance of consuming halal products is one of Allah's commandments contained in the Quran:

وَكُلُوا مِمَّا رَزَقَكُمُ اللَّهُ حَلَالًا طَيِّبًا وَاتَّقُوا اللَّهَ الَّذِي أَنْتُمْ بِهِ مُؤْمِنُونَ

Meaning: And eat halal and good food from what Allah has provided for you, and fear Allah in whom you believe in Him (QS Al-Maidah; 88)

يَا أَيُّهَا النَّاسُ كُلُوا مِمَّا فِي الْأَرْضِ حَلَالًا طَيِّبًا وَلَا تَتَّبِعُوا خُطُوَاتِ الشَّيْطَانِ إِنَّهُ لَكُمْ عَدُوٌّ مُبِينٌ

Meaning: The people eat what is halal and sound from what is on earth, and do not follow the devil's steps because the devil is a natural enemy for you (QS Al-Baqarah; 168).

The Unnes Halal Center can play an active role in helping the government and society by protecting halal products according to what is required in the teachings of the Islamic religion [14; 15] (Universitas Mathla'ul Anwar, 2019). This aligns with

Law No. 33 of 2014 concerning Halal Product Guarantees, which explains that the government and society can establish halal inspection institutions and study centers. In order to optimize the role of the Unnes Halal Center, it is hoped that there will be a cooperative memorandum of understanding between BPJPH, MUI, and LPH [16].

The novelty of this research is to examine and analyze in depth the role of the Unnes Halal Center as a halal product development and product guarantee system in Central Java Province, especially Semarang City. The implementation of the Unnes Halal Center includes four aspects, namely [17; 18]: (1) The field of community service regarding halal products; (2) Fields that carry out research (interdisciplinary) on halal product issues; (3) Areas that educate the public regarding the understanding and implementation of halal products; (4) Coordinating with APKAHI (Association of Indonesian Halal Study Centers) and other partners. This can be optimized through the services that will be provided in the form of:

Table 1. Halal Service Initiation [19; 20]

Facility	Explanation
Halal facilitator	Facilitate MSMEs and industry in Semarang City in processing halal certification
Halal Corner	Providing halal consulting services to MSMEs and industry
Halal Aware	Providing education and outreach to the general public regarding the importance of "halal is lifestyle"
Semarang Halal Love	Initiating a community through social media that contains information related to halal in social life
Research and Publications	Carrying out halal research and publications in journals or other media.
Laboratory	Initiating laboratory services to support analysis regarding the halalness of a product.

Faculty of Economics and Business, Universitas Negeri Semarang, as a stakeholder in science and research, certainly supports the collaborative program launched by BPJPH Ministry of Religion through the *Sehati* Program (Free Halal certification) [21; 22]. With the existence of the Unnes Halal Center, researchers are expected to be able to help implement the *Sehati* Program evenly and comprehensively for MSMEs in Central Java Province, especially in Semarang City, so that it can improve the economic level and enable MSMEs to be competitive in the global market [16]. Implementing and developing the Unnes Halal Center requires support from work partners to increase its existence. It is hoped that this research will improve the economic level of the community and provide adequate infrastructure to contribute to and play a role in the development of halal products and a halal product guarantee system.

2 Method

2.1 Research Approach

This research uses a quantitative and qualitative approach with an Analytical Hierarchy Process (AHP) analysis. This method is suitable for solving a complex, unstructured situation into several components in a hierarchical order by giving a subjective value about the relative importance of each variable and determining which variable has the highest priority in influencing the outcome of the situation. Where AHP is an approach method that is suitable for handling complex systems related to determining decisions from several alternatives and provides options that can be considered in preparing collaborative strategies for developing halal institutions at the Unnes Halal Center, this AHP method was developed by Thomas L. Saaty in the 1970s, which is expected to be an effective decision-making tool because it can break down complex problems into a hierarchy. This method relies on research results from experts who have advantages in measuring consistency in decision-making.

2.2 Data Types and Sources

The type of data used is primary data that can support studies in formulating collaborative strategies for developing halal institutions for the development of halal products and halal product guarantee systems. The data source for this research was obtained from literature studies through observation and interview techniques with three respondents with regulatory, academic, and practitioner backgrounds who are experienced and understand the research problems.

2.3 Analysis Tools

The steps for making decisions that produce priorities with AHP are as follows [23]: (1) Defining the problem and determining the type of knowledge sought; (2) Arranging a decision hierarchy starting from the top with the goal of the decision from a broad perspective, through the middle level (criteria on which subsequent elements depend) to the lowest level (which is usually a set of alternatives); (3) Create a set of pairwise comparison matrices. Each element above a level is used to compare the element at the level directly below it; (4) Use the priorities obtained from the comparison to weigh priorities at the appropriate level below. Do this for each element. Then, for each element at the level below, add its weighted value and get its overall or global priority. Continue this weighing and adding process until the final priority of alternatives at the lowest level is obtained.

3 Result and Analysis

3.1 AHP Analysis Results

Based on the hierarchy compiled, the first level is an analysis of the various factors considered to determine the factors that influence the development of the Unnes Halal Center collaboration [24; 25]. The calculation continues to carry out the average row value of the priority vector matrix which is the local priority weight value of each factor.

Table 2 Priority Vectors Matrix Factors Considered in Determining Factors That Influence the Development of Unnes Halal Center Collaboration

Factor	(1)	(2)	(3)	Amount	Priority	Ranking
(1)	0.613	0.263	0.616	1,493	0.321	1
(2)	0.459	0.421	0.462	1,342	0.301	2
(3)	0.803	0.087	0.203	1,093	0.275	3

Note: (1) Capital; (2) Agency or institution policies; (3) Markets and consumer confidence

The results of the priority vector matrix calculation show that the main factor considered in determining the factors influencing the development of UNNES halal center collaboration is the capital factor with a weight of 0.321 or 32.1 percent. The second factor considered is the agency or institutional policy factor which has a weight of 0.301 or 30.1 percent. Then followed by market factors and consumer confidence of 0.275 or 27.5 percent.

Based on the hierarchy compiled, an analysis of the various factors considered in the effort is then carried out. Determining the actors involved in the UNNES halal center development cooperation strategy [26; 27]. The calculation continues to carry out the average row value of the priority vector matrix which is the local priority weight value of each factor.

Table 3. Priority Vectors Matrix Factors Considered in Determining Actors That Influence the Development of Unnes Halal Center Collaboration

Factor	(1)	(2)	(3)	(4)	(5)	(6)	(7)	Amount	Priority	Ranking
(1)	0.230	0.210	0.210	0.277	0.560	0.237	0.183	1,907	0.063	7
(2)	0.303	0.276	0.276	0.316	0.337	0.235	0.685	2,428	0.141	4
(3)	0.115	0.105	0.105	0.090	0.705	0.102	0.814	2,036	0.108	5
(4)	0.108	0.114	0.151	0.130	0.451	0.175	0.811	1,940	0.092	6
(5)	0.198	0.405	0.301	0.310	0.877	0.952	0.031	3,073	0.195	2
(6)	0.244	0.295	0.258	0.187	0.336	0.251	0.970	2,541	0.160	3
(7)	0.634	0.607	0.657	0.818	0.856	0.449	0.708	4,730	0.241	1

Note: (1) LSP; (2) Consumer; (3) MSMEs; (4) Other Halal Centers; (5) Private companies; (6) Semarang City Government; (7) BPJPH

The results of the priority vector matrix calculation are the main factors to be considered in the effort to determine the actors involved in the UNNES halal center development cooperation strategy BPJPH with a weight of 0.241 or 24.1 percent. The second actor considered is the Semarang City Government at 0.195 or 19.5 percent. Then followed by the Semarang City Government which has a weight of 0.160 or 16 percent.

Based on the hierarchy compiled, the next level carried out is an analysis of the various factors considered in the Determining the main objective of developing Unnes Halal Center collaboration [27]. The calculation continues to carry out the average row value of the priority vector matrix which is the local priority weight value of each factor.

Table 4. Priority Vectors Matrix Factors Considered in Determining Goals that Influence the Development of Unnes Halal Center Collaboration

Factor	(1)	(2)	(3)	(4)	(5)	(6)	Amount	Priority	Ranking
(1)	0.132	0.135	0.669	0.906	0.947	0.152	2,940	0.195	1
(2)	0.911	0.194	0.699	0.381	0.385	0.304	2,873	0.187	2
(3)	0.231	0.728	0.422	0.199	0.109	0.461	2,151	0.172	4
(4)	0.535	0.797	0.014	0.333	0.077	0.589	2,346	0.178	3
(5)	0.159	0.560	0.058	0.381	0.077	0.427	1,662	0.113	6
(6)	0.049	0.048	0.009	0.746	0.329	0.909	2,090	0.155	5

Note: (1) Strengthening the function of the halal center; (2) Strengthening inter-institutional performance; (3) Helping MSMEs in accelerating halal certification; (4) Professional certification is related to product halalness; (5) Collaboration with private institutions; (6) Utilization of assistance funds from the government

The results of the priority vector matrix calculation show that the main objective considered in determining the goal of developing the Unnes halal center collaboration is to strengthen the function of the halal center with a weight of 0.195 or 19.5 percent. The second factor considered is strengthening inter-institutional performance which has a weight of 0.187 or 18.7 percent. Then followed by professional certification related to product halalness of 0.178 or 17.8 percent.

3.2 Determining an Appropriate Marketing Model for the Unnes Halal Center to Support Increasing Campus Income.

Several steps in the marketing model are applied: First, marketing is based on basic needs and services—products or services related to essential goods used by the general public. Consumer behavior in meeting their basic needs requires more detailed information regarding whether essential product products are halal-standardized. This is based on faith, especially Muslim consumers who want their consumption patterns for life necessities to be of halal standards. Under these circumstances, the position of the Unnes Halal Center is to absorb opportunities to develop its services by gradually maximizing research on the types of essential goods needed by the community [28].

Through MUI standardization regarding the existence of its institutions, the Unnes Halal Center automatically gains the public's trust, which directly impacts the marketing of its services.

Second, marketing is based on raw material services and related to raw materials, which are the starting materials for forming a finished product. At the halal standard level, it is essential to know whether the product is halal or not. For example, the medicinal raw material (shells) that we all know is dominant; most shells are made based on components found in pigs. It is very contradictory for Muslim consumers to consume it [29]. This has become a long debate and continues continuously. This potential is the primary source of sustainable research development and, along with new findings, will impact institutional marketing services.

The established marketing plan is expected to fulfill the objectives of developing the Unnes Halal Center. Enable institutions to detect internally to understand the value of the impact and results of previous stage marketing decisions [30]. First, encourage companies to review externally to understand the market being targeted and where the competition is in that space. Second, Focus sets future goals and provides appropriate direction for future marketing initiatives. Moreover, the objectives must be understood and supported by all institution components.

With various marketing model channels, the Unnes Halal Center will collaborate with internal units/institutions in business matters. In this realm, the business domain is the manager and organizer of the Business Center. The Unnes Halal Center is a laboratory service focusing on research and development. This business collaboration could become a role model between institutions/units at the Unnes Halal Center. Seeing the broad and profitable potential, this collaboration could be through other parties such as canteens, faculties, and cooperatives that provide food and beverage products. In this case, the halal side of products and materials also invites the Universitas Negeri Semarang community to agree more with the halalness of all aspects. What is more innovative is developing halal, where many female students wear clothes that do not meet halal standards. Through a business approach, it also changes and encourages Islamic brotherhood and student morals. There are various internal and external business potentials related to the existence of the Unnes Halal Center:

Table 5. Unnes Halal Center Business Potential [28]

No	Potency	Related parties
1	Halal Food	Unnes Halal Center, Faculties at Universitas Negeri Semarang, Canteen, Cooperative, Food and beverage provider/distributor.
2	Halal Fashion	Community, Universitas Negeri Semarang Community
3	Halal Tourism	Regional Government, Central Government, Travel, EO

3.3 Meaning and Application of Halal Concepts in Industry

Indonesia has the most significant Muslim majority and the largest Muslim population compared to other countries [31]. Based on this data, in 2020, the population of Indonesia will reach 269,413,457 people, and the number of Indonesian Muslims still dominates at around 237,083,842 people (88%) of the total population of Indonesia [32]. Current global market conditions, based on the needs and preferences of many Muslims throughout the world, have given rise to intense competition in the industrial sector [33]. This creates opportunities for companies to exploit the halal product market, especially in emerging markets. This sector (halal industry) is increasingly attracting the attention of policymakers and entrepreneurs as an industry with increasing growth potential [34; 35].

Data on the population and purchasing power of Muslims throughout the world shows an increase and strengthening of the halal lifestyle trend among them. For the 1.6 billion Muslim population, halal lifestyle has become a new pattern. This is confirmed by the State of the Global Islamic Economy 2017-2018, which reports that current halal business and industry trends continue to show progress, including business in the halal food sector, halal tourism (halal travel), halal media and recreation (halal media and recreation), halal pharmaceuticals and cosmetics (1).

In the past, the halal concept was only a concern for Muslims, but now, the halal concept has become a global concern in all business and industrial sectors [36; 37]. Public attention to halal products shows greater awareness among Muslims about the need for halal products. The increase in Muslim spending on the halal business and industrial sectors will increase due to several main supporting factors, namely the growth of the Islamic economy, demographic growth, business practices, and lifestyles that focus on halal orientation. The application of the halal concept in the industrial sector has become a necessity for Muslim and non-Muslim countries. Globally, the halal industry market segment has proliferated in Muslim and non-Muslim countries.

The *ḥalal* terminology is identical to Islamic law's teachings [38]. *Ḥalāl*'s meaning has been more often associated with drinks and food. The context of "eat what is halal and good" in this verse has a more general meaning, namely covering all actions and deeds related to human life activities [39]. The meaning of the halal concept in industry refers to compliance with Islamic law, which ensures that products and production processes meet halal standards. In the food, beverage, cosmetics, and pharmaceutical industries, halal means that the product does not contain prohibited ingredients such as pork and alcohol, is processed cleanly and is not contaminated [40]. Implementing the halal concept includes procurement of raw materials originating from halal sources, production processes that prevent cross-contamination with non-halal products, and separate storage and distribution to maintain product halalness. Halal certification is also essential, where products are assessed and approved by authorized institutions to ensure that all aspects of production comply with halal standards. This implementation not only increases Muslim consumer confidence but also expands the market and product competitiveness in the global market.

3.4 Opportunities and Challenges for the Halal industry in Indonesia

The opportunities for the halal industry in Indonesia are tremendous, considering that this country has the largest Muslim population in the world, with more than 230 million potential consumers who are increasingly aware of the importance of halal products. Through regulations and policies that encourage the development of the halal industry, government support strengthens this ecosystem. Apart from the large domestic market, Indonesia also has excellent opportunities to export halal products to the global market, which continues to grow [41]. Sectors such as food and beverages, cosmetics, medicines, and halal fashion show significant growth, driven by increasing consumer demand and awareness. Investments in halal certification, research, and development of innovative products can further strengthen Indonesia's position as the center of the world's halal industry.

The market potential for halal products in Indonesia is enormous, even including the largest in the world. Moreover, the use of halal products in the Indonesian market is increasing. In 2017, the total consumption of halal products in Indonesia was recorded at US\$ 200 billion, or more than 36% of total household consumption. Consumption of halal products will continue to grow with an average growth of 5.3%. In 2025, it is estimated that Indonesia's consumption level of halal products will reach 330.5 billion US dollars [42].

The opportunity to develop the halal industry, which has become a trend in the global community, is an opportunity for the halal industry in Indonesia to become the center of the world's halal industry [43]. The world community has recognized Indonesia as one of the countries that focuses on developing the halal industry. The State of the Global Islamic Economy Report 2020/2021 notes that Indonesia is ranked fourth in the world out of 15 countries in the Top 15 Global Islamic Economy Indicator Score Rank. Ranked second in the fashion sector, fourth in the world in the halal food sector, fifth in the media and recreation sector, and sixth respectively in the Islamic finance, travel, pharmaceutical, and cosmetic sectors [1]

On the other hand, the halal industry in Indonesia generally has two challenges [44; 45]: external and internal. Challenges always exist in the business world and are an inevitable part. However, with an optimistic attitude, intelligence in reading opportunities, and the right solutions, all these challenges and obstacles will be overcome. The desire of business people to get big profits through destructive methods, namely by selling haram products, will cause them to lose trends and customers and ultimately harm themselves. So, providing halal products becomes part of a business need and is no longer an option.

Table 6. Internal and External Challenges of the Unnes Halal Center [31; 46; 47; 48]

Challenge		Explanation
External	Many competing countries	Competing countries emerge from Muslim countries and non-Muslim countries. This will affect the absorption capacity of Indonesian halal products in the global arena, the quality of products and services so that they are able to compete with competing countries so that they do not become a passive country or a country that is only a market and consumer of world halal products

	There is no uniformity of globally agreed halal certification	Each country has its own halal certification standards. This condition of the things that needs serious attention for Indonesia which is trying to develop its halal industry to the world stage. Indonesia can emerge as a pioneer in initiating world halal certification standards.
	incompatibility of Muslim countries in setting halal product standards	The incompatibility of Muslim countries in the world in setting standards for halal products is a challenge for the Islamic world. This makes countries with a majority of non-Muslims take a big role in producing halal products. In fact, the issue of halal products is a sharia matter so it should be managed by an organization or accreditation body that has expertise and sensitivity to the Islamic faith
Internal	lack of halal awareness among Indonesian society	Halal awareness is closely related to knowledge, understanding and the level of religiosity of the community, so it requires more intense socialization by related parties, in order to provide understanding and awareness of the halal lifestyle for the community, especially in consuming halal products.
	problems of Law Number 33 of 2014 concerning Halal Product Guarantees.	Since Law Number 33 was enacted in 2014, its implementation only came into effect on October 17 2019. Even after it was enacted in 2019, this Law still takes time because halal certification obligations are carried out in stages. This shows how slow the implementation of regulations in the country is, as well as showing the weak implementation of halal certification for the halal industry.

3.5 Unnes Halal Center Development Roadmap

Developing the halal industry in Indonesia, especially in the city of Semarang, requires the contribution of many parties, giving rise to various institutions and policies. With the establishment of the National Committee for Sharia Financial Economics (KNEKS) and the Regional Committee for Sharia Financial Economics (KDEKS), they have shown their contribution in supporting the development of the Indonesian halal industry roadmap, especially in Semarang City. It is necessary to initiate a blueprint for sharia economic and financial development. Apart from that, the birth of this institutional body is regulated in Law No. 33 of 2014 concerning Halal Product Guarantees. The task of this body is to produce regulations that explain Halal Product Guarantees as the legal basis for implementing halal product guarantees, so this law is binding on all business actors in Indonesia.

Table 7. Unnes Halal Center Development Roadmap [49; 50]

Stages	Scope of Semarang City	University Scope
Stage 1: Increased Awareness and Understanding	1. Public Education Campaign: • Carrying out halal awareness campaigns through local media, seminars and workshops.	1. Formation of a Working Team: Forming a working team consisting of halal experts, academics and industry practitioners to design and develop the Unnes Halal Center. 2. □ Strategic Planning: Identifying the vision, mission and

**Stage 2:
Strengthening
Regulations and
Infrastructure**

- Conduct outreach in schools, universities and communities about the importance of halal products.

2. Education and Training:

- Integrate material about halal in the local education curriculum.
- Organizing training for business actors regarding the certification process and halal standards.

1. Regulatory Development:

- Collaborate with city governments to implement regulations that support the halal industry.
- Improve coordination between halal certification bodies and local governments to ensure consistent standards.

2. Infrastructure Development:

- Building a halal research and development center in Semarang.
- Increase laboratory capacity and halal testing facilities in the city.

**Stage 3: Increased
Production and
Innovation**

1. Support for MSMEs:

- Providing technical and financial assistance to MSMEs to produce halal products.
- Providing easier access to certification facilities for local MSMEs.

2. Product Innovation:

- Encourage research and development of innovative halal products.
- Develop new halal products that have high competitiveness in local and national markets.

long-term goals of the Unnes Halal Center and formulating strategic plans to achieve these goals.

1. Facility Development: Building adequate laboratory facilities and research centers to support halal testing and research activities.

2. Recruitment of Experts: Recruit competent experts in the halal field, including scientists, food experts and halal certification experts.

1. Research and Development: Initiate research programs to generate new knowledge about halal and develop new technologies for the halal industry.

2. Education and Training: Organizing education and training programs for students, business people and the general public regarding halal and halal certification.

3. Halal Certification: Introducing trusted and quality halal certification services to support the food, beverage, cosmetics and pharmaceutical industries in Semarang and its surroundings.

**Stage 4:
Market Expansion and Increased Exports**

1. Domestic Market Development:
 1. Increasing distribution of halal products in the local market of Semarang.
 2. Building partnerships with modern and traditional retailers to market halal products.
2. Export Strategy:
 - Targeting the international market with high quality halal products from Semarang.
 - Participating in international exhibitions and promoting Semarang halal products in the global market.

1. Industrial Cooperation: Building partnerships with local industrial players to support the development of halal products and improve the quality of halal certification.
2. Research Collaboration: Collaborate with other research institutions and universities to conduct joint research and exchange knowledge in the halal field.
3. International Cooperation: Developing working networks with halal-related international institutions and organizations to support information exchange and technology updates.

**Stage 5:
Digitalization and Technology**

1. Technology Integration:
 - Using technology to increase the efficiency of production and distribution of halal products.
 - Developing a digital platform for certification and tracking of halal products.
2. E-Commerce:
 - Increasing the presence of Semarang halal products on e-commerce platforms.
 - Utilizing blockchain technology to ensure transparency and consumer trust in halal products.

1. Halal Industry Promotion: Carrying out promotional campaigns to increase public awareness about the importance of halal products and the existence of the Unnes Halal Center as a center of halal excellence.
2. Policy Advocacy: Influencing government policies and related institutions to create a regulatory environment that supports the growth of the halal industry in Semarang and its surroundings.

**Stage 6:
Monitoring and Evaluation**

1. Periodic Monitoring:
 - Conduct regular audits and evaluations of halal producers and products in Semarang.
 - Develop an effective monitoring system to ensure compliance with halal standards.
2. Strategy Adjustment:

1. Performance Monitoring: Conduct regular evaluations of the Unnes Halal Center's performance in achieving its goals and ensure that all activities run according to plan.
 2. Strategy Adjustment: Adapting strategies and work plans based on evaluation results to ensure suitability to developments in the halal industry and community needs.
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- Make strategy adjustments based on evaluation results and feedback from industry players and consumers.
- Identifying new opportunities and emerging challenges to continue improving the halal industry in Semarang.

3.6 Post-Law Certification Number 33 of 2014 concerning Halal Product Guarantees

Halal Product Guarantee must be implemented in Indonesia to provide security, comfort, safety, and availability of halal products to all Indonesian people, especially Muslims [51]. The existence of certification will also increase added value for companies in selling and producing their products by Article 3 of the JPH Law. With the Halal Product Guarantee Law (UU JPH), it is hoped that all products imported or circulating in Indonesia will have a halal certificate [52]. The issuance of the JPH Law brought changes, especially regarding the institutions administering halal certification. BPJPH collaborates with several institutions, such as ministries, LPH, and MUI, to realize the JPH Law. BPJPH collaborates with the Halal Inspection Institute (LPH) to conduct product audits. Meanwhile, in determining the fatwa, BPJPH collaborates with the MUI by issuing a decision to determine halal products through a halal fatwa trial [53]. The differences in these certifications are more fully explained in the table below:

Table 8. Differences in Pre-Post Certification Law no. 33 of 2014

Before the JPH Law	After the JPH Law
Certification is voluntary	Certification is mandatory
The Indonesian Ulema Council (MUI) is the institution with authority in the halal certification process	BPJPH is the main institution authorized in the halal certification process
Certification is carried out by non-governmental organizations or non-governmental organizations	Certification is carried out by government institutions under the Ministry of Religion
LPPOM MUI is an institution that carries out audits or inspections of halal products	The Halal Inspection Institute (LPH) is the institution that carries out the audit
The certificate is valid for two years.	The certificate is valid for 4 years. Has strong legal certainty. There are criminal sanctions and fines for business actors who do not maintain the health of products that have been certified halal.
Does not yet have strong legal legitimacy	

Short certification flow: business actor
 → LPPOM MUI → MUI

The certification process is longer: business actor
 → BPJPH → LPH → BPJPH
 → MUI

Initially certification was carried out by MUI through LPPOM MUI (Figure 1a). After the formation of BPJPH, the certification flow underwent slight changes (Figure 1b) [43]

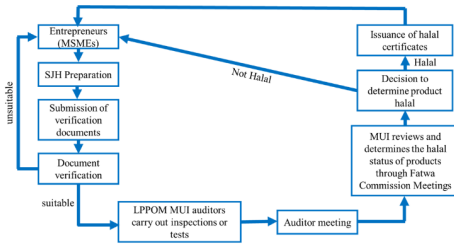


Figure 1a. Certification Was Carried Out by MUI

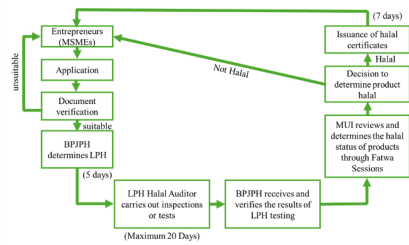


Figure 1b. Certification Was Carried Out by BPJPH

The LPPOM MUI certification flow is as follows: (1) Business actors prepare all complete documents; (2) Verify documents by LPPOM MUI; (3) Conduct audits carried out by LPPOM MUI auditors; (4) MUI reviews and determines product halal; (4) Issuance of halal certificates. The explanation of the image above is as follows: (1) Business actors make an application for certification and attach the required documents; (2) BPJPH will verify the attached required documents; (3) Conduct product audits and inspections carried out by LPH; (4) Submit the results of the inspection of the MUI to issue a fatwa; (5) Issue a halal certificate if it has passed the audit.

3.7 Urgency of Development of the UNNES Halal Center

The Unnes Halal Center is a center of excellence established by Universitas Negeri Semarang (UNNES), focusing on developing halal science, certification, product innovation, and education. As an institution committed to supporting the growth of the halal industry, the Unnes Halal Center offers various services and programs designed to meet the needs of the industry and society. The following is a general description of the Unnes Halal Center [28]: (1) Research and Development Center: Unnes Halal Center provides laboratory facilities and research centers equipped with sophisticated equipment to carry out testing, research, and development of halal products; (2) Halal Certification Services: As a recognized and trusted institution, the Unnes Halal Center offers halal certification services for food, beverage, cosmetics, and pharmaceutical products. This helps manufacturers ensure that their products meet strict halal standards; (3) Education and Training Programs: Unnes Halal Center organizes education and training programs for students, business people, and the general public on various aspects of the halal industry, including halal principles, certification processes,

product innovation, and halal management; (4) Industrial Partnerships and Work Networks: Unnes Halal Center establishes partnerships with industry players, government and other related institutions to expand work networks and support the growth of the halal industry as a whole; (5) Public Education Campaign: To increase public awareness about the importance of halal products, the Unnes Halal Center is also active in carrying out public education campaigns through seminars, workshops and other outreach activities.

The development of the UNNES Halal Center has significant urgency in the context of developing the halal industry in Semarang and its surroundings. First of all, Indonesia, as the country with the largest Muslim population in the world, places the need for halal products as a top priority. In this context, the UNNES Halal Center becomes very important as an institution capable of developing halal-related science, technology, and services [54]. The presence of the UNNES Halal Center supports the food and beverage industry and the cosmetics, pharmaceutical, and other industries, which are increasingly paying attention to the need for halal certification to increase the competitiveness of their products in domestic and international markets. Apart from that, the UNNES Halal Center also plays a vital role in providing education and training about halal principles to the public, business people, and students, which will increase awareness and understanding of the importance of halal products. Thus, the development of the UNNES Halal Center is an urgency that cannot be ignored in supporting the growth of the halal industry, improving community welfare, and strengthening Semarang's position as a competitive halal industry center.

Analysis of the problem solving approach begins by analyzing the potential for developing halal products that have not been managed optimally [55]. So the Faculty of Economics and Business, Universitas Negeri Semarang initiated the formation of the Unnes Halal Center as an effort to develop halal products and a halal product guarantee system through socialization, mentoring, apprenticeship, research and development of halal products. Optimizing the performance of the Unnes Halal Center can be realized by collaborating through a memorandum of understanding with the Halal Product Guarantee Organizing Agency under the Ministry of Religion; Halal Inspection Institutions established by universities, Islamic foundations or associations and the Indonesian Ulema Council as well as other parties involved in developing halal products [9]. This was done by the Faculty of Economics and Business to respond to the great opportunity of the global market in the halal industry. So the hope is that halal products and industries in Central Java Province, especially Semarang City, will guarantee the quality of their halal products so they can compete in the global market. Apart from that, it is hoped that the Unnes Halal Center will be able to provide an understanding of the importance of halal certification in developing halal products, guiding MSMEs in Central Java Province, especially Semarang City, so that they can play an active role in the competition in the halal industry so that they can improve their economic level.

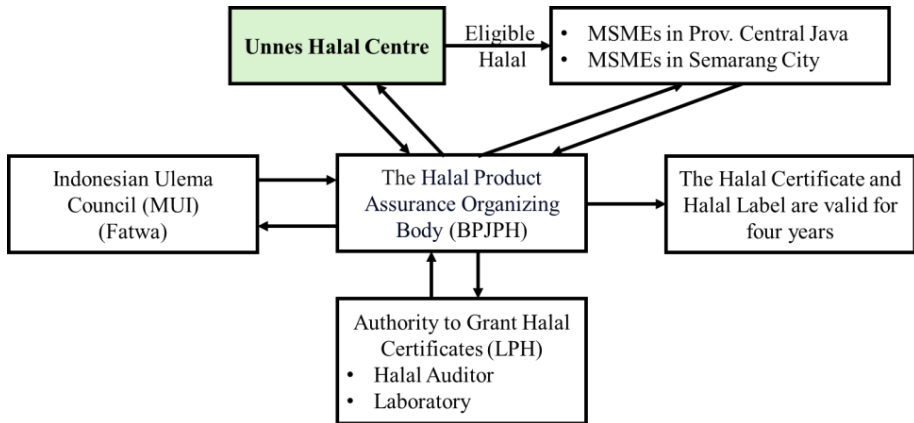


Figure 2. Design of the MSME Halal Certification Model

4 Conclusion

Capital and agency policies influence the Unnes Halal Center's collaboration with other institutions. The primary collaboration strategy is the use of government assistance funds. Halal centers can collaborate with various ministries or institutions in terms of their role as companions and coaches for MSMEs in implementing the Halal Guarantee System, such as with the Ministry of Religion, Department of Manpower, Cooperatives & UMKM, Bank Indonesia, Bank Jateng, Department of Industry and Trade, and Banks Sharia Indonesia. The intended development of cooperation can be in the form of cooperation to facilitate halal certification for MSMEs, education, and provision regarding halal certification. Apart from that, the Halal Center can also collaborate with private companies supporting halal obligations in Indonesia. This research only involved food and beverage MSMEs in Semarang City and several experts from the government and universities. Further studies could involve MSMEs in the medicine and cosmetics sector outside Semarang City.

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