Analysis of Readiness toward Halal Certification in Sumatera Utara (A Case study in Food Manufacturer)

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Abstract

The demand for halal goods and services will increase in the future along with the growth of the Muslim population. The halal economy globally also has the potential to increase because it has a high selling value and is not only aimed at Muslim consumers. The Halal Product Assurance Law is implemented starting October 17, 2019, where all products that enter, circulate, and are traded in Indonesia are required to have a halal certificate. This study aims to analyze the level of product readiness for halal certification. Observations were made at four SMEs using the Macro-ergonomics Organizational Questionnaire Survey (MOQS) approach and a questionnaire developed based on 11 criteria for the Halal Assurance System of The Assessment Institute for Foods, Drugs, and Cosmetics (LPPOM MUI). Then tested the validity and reliability of the data. The results showed that sample 3 is the SME that is almost ready to carry out halal certification. Meanwhile, samples 1, 2, and 4 need to make some improvements to be better prepared for halal certification. This research provides a written contribution in the form of a quantitative assessment to see the readiness of SMEs in Halal certification

Keywords
Halal Criteria, MOQS approach, Halal certification, Halal product

1. Introduction

The total population of the Muslim world based on the PEW Research Center (2015) amounted to 65.2% or as much as 1,143,200,000 people, while for Indonesia it was recorded that there were 219,960,000 or 12.6% of the total

world population. The World Population Review (2020) states that, in Indonesia there has been an increase in the Muslim population to 12.7% so that the Muslim population in Indonesia is estimated to be 229,000,000.

Muslims are required to consume halal food so they need to ensure that the products they consume are Halal, namely processed from halal ingredients using facilities and methods that comply with Halal requirements. Halal certificate of a product is a guarantee that the product is Halal. The product must go through a series of processes and tests that prove the product does not contain najis and is allowed to be consumed. Products that are proven to have passed the Halal test can be determined as Halal by the authorized institution (Setyaningsih and Marwansyah 2019).

Halal food is the main and most recognized component of the halal industry. At present, halal food products are no longer seen as a mere religious need for the Muslim community, but in the non-Muslim community there is also a perception that halal food is more hygienic, clean and delicious (Ayyub 2015 and Mathew 2012). Halal products are considered to have the same impression as health and hygiene (GIE 20/21). Halal food products are increasingly recognized and are no longer a niche market, but have approached a market share of 16%, even 17% of world food trade (Zulfakar 2014 and Abd Rahman 2016).

Halal management is not only food production or manufacturing activities, but halal management also includes sources of origin (halal), movement, transportation, and distribution from upstream to downstream (Ahmad and Shariff 2016). Currently, the awareness to consume halal food is not only among Muslims but also non-Muslims. This situation can be seen based on the ITPC Osaka Market Brief, 2013: 16, that in the UK, halal meat increases sales by 11%, even though the Muslim population is only about 3% of the total UK population. The high sales of halal meat are due to the perception of freshness, and cleanliness (Maghfiroh 2015). Respondents studied are non-Muslim consumers who think that halal food is free from substances that harm the body, and its handling is cleaner.

The food supply chain that focuses more on halal is known as the Halal Food Supply Chain (HFSC). The Halal Food Supply Chain is very vulnerable to being influenced by consumer trust, integrity of maintaining halal throughout the supply chain, the essence of avoiding doubt in halal food, control on halal food regulations, and the sensitivity of Muslim customers to halal (Tieman 2017). Consumers' concern for halal food is because halal food must go through various stages from sourcing, production stages, the environment, the perishable nature of food, as well as handling during transportation to the final consumer. Therefore, operators and staff in this industry must also understand the complexities of handling halal food to ensure that the products can meet customer requirements (Thomas 2017).

To maintain consumer trust regarding the Halal status of the product that they received, so Halal certification is necessary. Halal certification is the process of assessing whether a product or service is in accordance with Sharia law. Halal certification assesses all criteria such as company management, workers, work environment, working methods, and materials that used so that halal of the product can be ascertained. Halal certificate for the product will be published when the assessment results show that all the criteria assessed have been fulfilled and declared Halal by the fatwa commission.

Halal certification is currently no longer a necessity for SMEs, but has become a demand with the enactment of the Halal Product Assurance Law since October 2019. The Ministry of Cooperatives and SMEs is targeting an increase in the export market for SME products by 0.5% in the period 2020-2024. To be able to penetrate the export market, especially to Islamic Cooperation Organization (OIC) countries, a Halal certificate is also a must. This is in line with the view of the Indonesian government which states that the contribution of SMEs in national exports can be enlarged by encouraging SMEs to enter the formal sector, cooperatives, and groups economically, in addition to being based on superior commodities and digital ecosystems (Ministry of Cooperatives and SMEs of the Republic of Indonesia, 2020).

The government has begun to anticipate the development of the halal issue with the ratification of law no. 33 in 2014 concerning Halal Product Assurance Law (2014). Besides aiming to provide comfort, security, safety, and certainty of halal information for the public in consuming and treating, halal products have been proven to increase added value and competitiveness for business actors in doing business. The increase in the halal product market also occurs in halal-certified products produced by Muslim minority countries (Prabowo and Abd Rahman 2016).

With the ratification of the Halal Product Assurance Law, the government provides guarantees and protections to Muslim consumers to obtain information related to halal products. Not only that, the law explains that the obligation to be certified can also affect in increasing the selling value, and market competitiveness amid the global trend to consume halal products (Qomaro et al. 2019). Access to food security and technology can be done through halal certification so that in the end it can help the independence of SMEs and increase their ability to produce safe food and increase competitiveness, which has implications for strengthening the national economy (Prabowo and Abd Rahman 2016).

The impact of Halal certification on the performance of food SMEs has been studied by Giyanti and Indriastiningsih (2019). In that study, the extent to which the impact of certification has on profit margin and operational performance is seen, by comparing the performance before and after certification. Also, the difference between SMEs that already have a halal certificate and those that don't have a Halal certificate. From that research, it can be seen that the certified SMEs have better performance, namely in terms of production capacity, product quality, sales, net profit, number of consumers, consumer loyalty and market share. The performance of SMEs with Halal certification is actually better than those that are not Halal certified.

Halal certification is also related to improving company performance. Halal certified pharmaceutical product manufacturers are able to expand the market to various countries. Exports of halal food products from Singapore to the United Arab Emirates for example can increase up to 67% per year. Frozen food producers in Malaysia are also able to expand the market up to 100% after obtaining Halal certificate. Research conducted on the financial performance of large companies listed on the Malaysia Stock Exchange also shows that Halal certificates are positively correlated with increasing the company's financial performance (Giyanti and Indriastiningsih 2019).

Muslim producers should understand the requirements needed to produce Halal products. So far, many producers have self-claimed their products without halal certification. Halal product status should be determined by the authorized institution. There are still few food products SME that are halal certified and the enactment of Law no. 33 of 2014 concerning Halal Product Assurance Law encourages a study of the readiness of food SMEs in implementing standards according to the Halal Assurance System. The results of this research can encourage SMEs to be able to improve their conditions independently to be more prepared for Halal certification.

2. Methods

The research was conducted in 4 SMEs in Sumatera Utara Province in Indonesia. The selection of SMEs is based on consideration of the characteristics of their management, using the purposive sampling technique. SME 1 is a producer of opak crackers, which are traditional Indonesian foods made from cassava. This business is managed semi-professionally. This can be seen from the existing division of tasks among workers, some production equipment that uses machines such as milling machines and printing machines. The product produced is only a single type, namely raw opak crackers. SME 2 is a producer of tempeh crackers, which are snacks made from soybeans and tapioca flour. This SME only produces a single type of product. This business is managed in a very traditional way. The owner and his family help organize and run almost all activities, both internal and external. Labor is only involved in some stages of production. The production equipment used is also very simple. SME 3 is a manufacturer of chips made from cassava and bananas. Products are sold in various flavors. The owner has appointed one professional person to manage business operations. In this SME, there has been a Standard Operational Procedure for all activities. SME 4 is a manufacturer of fried tofu. The tofu produced is used by consumers as an ingredient for stuffed tofu and meatball tofu products. This SME is managed by an operations manager and uses a milling machine to grind soybeans, as well as a boiler to generate heat in the soy porridge boiling process. The four SMEs selected represent the characteristics of traditional (SME 2), semi-professional (SME 1), and professionally managed (SME 3 and 4). All SME owners are Muslims.

The object of research is the activities of SMEs starting from the procurement of raw materials to the delivery of products to consumers. The subjects in this study were selected SME business actors, especially those with critical functions in the SME such as Owner, Purchasing Section, Production Section, Storage Section, Transportation Section, and other important parts that have been previously determined.

The variables in this study were 11 criteria of Halal Assurance System (HAS) including halal policy, halal management team, training and education, materials, products, production facilities, written procedures for critical

activities, traceability, handling of products that do not comply to Halal criteria, internal audit, and management reviews. This criterion is a reference for measuring the level of halal certification readiness according to LPPOM MUI (The Assessment Institute for Foods, Drugs, and Cosmetics). These 11 HAS criteria have a different focus of assessment between the slaughtering, processing, restaurant, and catering industries. The sample studied in this study came from representatives of the processing industry.

All situations or circumstances that exist and occur in the SME while being observed. The condition of SMEs can affect their readiness to obtain a halal certificate.

2.1 Develop Assessment Model

In the actual assessment of the Halal Assurance System criteria, there are three columns that must be marked with a check mark (✓), one of which is "appropriate", "not appropriate" and "irrelevant". If the conditions in the field match the description of the assessment, a check mark is given in the "appropriate" column. And a check mark is given in the column "not appropriate", if the conditions are not met. A check mark in the "irrelevant" column is given if the situation in question is not relevant to the conditions in the company. Assessments carried out in this way can provide different assessment results because they are highly dependent on the auditor's level of understanding and experience. An example of HAS assessment can be seen in Table 1.

Table 1. Part of Halal Assurance System (an example)

No.	Halal Assurance System Criteria	Appropriate	Not Appropriate	Irrelevant
1	**Halal Policy**			
a.	There is a halal policy that contains the company's commitment to consistently produce halal products	✓		
b.	Socialization of the halal policy has been carried out to all workers and suppliers	✓		
	Method of Socialization: using banner in production area			
2	**Halal Management Team**			
a.	The halal management team has been appointed and there is evidence of its appointment	✓		
	Evidence of halal management team legally: Halal Management Team Decree			
b.	The team includes all parts of a critical activity		✓	
c.	Duties, responsibilities and authorities of the team have been defined		✓	
d.	The team has the competence, authority and resources needed		✓	
e.	The team understands and carries out the assigned duties, responsibilities and authorities		✓	
	Notes: Halal Management Team Decree need to be revised, added number of decree, personnel must be active employee, and need to state area of each personnel.			

The status/ value of the Halal Assurance System (HAS) can indicate the quality of HAS implementation in the company. From the Guidelines for Assessment of Audit Results issued by LPPOM MUI, it is known that the HAS status issued as a condition for the company to obtain a Halal certificate is in 2 categories, namely A and B. A status is given if the implementation of HAS in the company is very good (no critical weaknesses were found during the audit). If the HAS implementation is not good, the company is asked to improve it first and get a B status (which has met the minimum requirements, and critical weaknesses found during the audit have been corrected by the company).

The assessment points on the 11 criteria for the Halal Assurance System are adopted and quantified using a 3-Likert scale. A score of 1 is given if the condition of the company is considered bad, or does not exist, or does not meet the statement being assessed. A score of 3 is given when the condition of the company is good or complete in accordance with the items being assessed. A score of 2 can be given if the condition is between a score of 1 and a score of 3. If there is an item that is irrelevant, it will be given a score of zero. The number of item assessed are 85. After all items were assessed, a recapitulation of the assessment score is compiled. If a minimum score is obtained for critical statement items, this is an indication that the company is not ready to obtain a Halal certificate. An example of an assessment for the condition of a halal policy can be seen in Table 2.

Table 2. Example for Assessment of Halal Policy Condition

Score	Description
3	The written Halal policy has illustrated the company's commitment to consistently produce Halal, and has been signed by the company leadership
2	There is already a written Halal Policy which describes the company's commitment to producing Halal, but it still needs improvement
1	No Halal Policy

After the assessment is carried out on all the criteria for the Halal Assurance System, then a recapitulation of the scores obtained is carried out, as shown in Table 2. The value recapitulation form has been designed to separate critical items from non-critical items, so there will be no errors in inputting values.

Table 3. Part of Quantitative Halal Assurance System (an example)

No	Halal Assurance System Criteria	Critical Score	Non-critical Score
1	**Halal Policy**		
1.a*	There is a halal policy that contains the company's commitment to consistently produce halal products	2	
1.b*	Socialization of the halal policy has been carried out to all management and workers	3	
1.c	The halal policy has been disseminated to suppliers		1
2	**Halal Management Team**		
2.a*	The halal management team has been appointed and there is evidence of its appointment	2	
2.b*	The team includes all parts of a critical activity	1	
2.c*	Duties, responsibilities and authorities of the team have been defined	2	
2.d*	The team has the competence, authority and resources needed	1	
2.e	The team understands and carries out the assigned duties, responsibilities and authorities		2

In the example of Table 3, it can be seen that there are 3 assessment items for the halal policy criteria while in the actual form there are only 2 items (see Fig 1). The addition of assessment items occurred as a result of the merger of 2 assessment references, namely HAS and Guidelines for Assessment of Audit Results.

2.2 Method of Collecting Data
Data collection was carried out by direct observation to the location of the SME, interviews with related parties, and distributing questionnaires. The questionnaire was prepared using the Macro-ergonomics Organizational Questionnaire Survey (MOQS) approach. From the HAS assessment points, scoring is carried out according to the condition of the SMEs. Good/complete condition is given a score of 3, incomplete/non-existent conditions are given

a score of 1. A score of 2 is given if the condition is between the two. The final score is obtained from the sum of the scores of each item.

2.3 Method of Data Processing
Data processing is carried out in several stages. The first stage is to test the validity and reliability of the instrument, then an assessment of the readiness of SME for halal certification is carried out using the Likert scale on the assessment form for the implementation of the halal assurance system. Furthermore, the scores were added from the questionnaire results, and the last was the ranking of each SME.

3. Results and Discussion
Macro-ergonomics Organizational Questionnaire Survey (MOQS) is a method that has been used widely in industry to gather information about organizational conditions, tasks, environmental problems, tools, and individual characteristics (Hendrick and Kleiner 2002).

The questionnaire in this study was prepared using the MOQS approach to measure the level of readiness of SMEs in obtaining halal certification based on 11 criteria from LPPOM MUI. These criteria consist of Halal Policy, Halal Management Team, Training and Education, Materials, Products, Production Facilities, Written Procedures for Critical Activities, Traceability, Handling of Products Not compliant to halal criteria, Internal Audit, and Management Review. The scores obtained from each criterion will be added, there are 85 items assessed, and then ranked as shown in Table 4.

Table 4. Total Score and Ranking Level of Readiness for Halal Certification

	Sample 1	Sample 2	Sample 3	Sample 4
Sum	170	143	205	164
Ranking	**2**	**4**	**1**	**3**

From Table 4. it can be seen that of the 4 SME studied, in general, Sample 3 is the SME that is almost ready for the certification because sample 3 obtained the highest score from the results of the assessment of the condition of SMEs related to items that affect the product's halal status; then following Sample 1, Sample 4, and Sample 2. An analysis of the level of readiness for halal certification can be briefly seen in Table 5.

Table 5. Analysis of Readiness Level of Halal Certification

	Sample 1	**Sample 2**	**Sample 3**	**Sample 4**
Halal Policy	SME has not focused on paying attention to halal-certified	SME has not focused on paying attention to halal-certified	Already committed to maintaining halal-certified and cleanliness	SME has not focused on paying attention to halal-certified
Halal Management Team	Do not have a special team in charge	Do not have a special team in charge	Already have a special team in charge	Do not have a special team in charge
Training and Education	Don't have a procedure yet	Don't have a procedure yet	Have had and already have a special procedure	Don't have a procedure yet
Material	The materials used are halal	The materials used are halal even though some have no halal certificate	The materials used are halal and are equipped with evidence	The materials used are halal even though some have no halal certificate

Table 5. Analysis of Readiness Level of Halal Certification

	Sample 1	Sample 2	Sample 3	Sample 4
Product	Names, forms, and sensory profiles do not refer to anything that is haram / unclean	Names, forms, and sensory profiles do not refer to anything that is haram / unclean	Names, forms, and sensory profiles do not refer to anything that is haram / unclean	Names, forms, and sensory profiles do not refer to anything that is haram / unclean
Production Facilities	Stripping, drying, and sieving facilities are at risk of contamination	The cauldron is not thoroughly washed after using it	All facilities have been maintained and cleanliness is guaranteed	The tools used to take samples are used repeatedly
Written Procedure	Do not have procedures related to new material selection or product development	Do not have procedures related to the selection of new materials and sanitation that can maintain cleanliness	All activities for critical activities have procedures	Already have procedures but do not have a standard written formulation
Traceability	Do not have a procedure that guarantees product traceability	Do not have procedures related to product traceability	Can guarantee product traceability	Do not have a procedure that guarantees product traceability
Handling of Products Not Comply to Halal Criteria	Reused or destroyed	Withdraw and destroyed	Used for other products or destroyed	Used for other products or destroyed
Internal Audit	There are no procedures related to an internal audit that complies with the 11 HAS criteria	There are no procedures related to an internal audit that complies with the 11 HAS criteria	Supervision is carried out routinely but the responsible party has not been active in participating in the training which includes the 11 HAS criteria	There are no procedures related to an internal audit that complies with the 11 HAS criteria
Management Review	Performed and under owner control	Performed and under owner control	Conducted and under the control of a person who has special duties and responsibilities in supervision	Conducted and under the control of the manager

From Table 5, it can be seen that almost all of the criteria for HAS indicate Sample 1, Sample 2, and Sample 4 have weaknesses so that to be better prepared for halal certification, these things must be addressed first. Only on the product criteria shows that all samples are of good value because they do not lead to something haram. For material criteria, all four samples used halal materials although some of them needed to be supported by adequate halal documents. In terms of production facilities, all samples have a dedicated production facility, but improper handling risks causing contamination with najis. Sample 3 is generally better prepared for halal certification than the other three samples. Sample 3 and sample 4 already have operational managers who manage SME activities

professionally, but the certification readiness assessment assigns sample 4 to rank 3. This implies that professional management is not a guarantee that the business will be more ready to be certified. From the results of discussions with SMEs owners during field observations, it was revealed that many SMEs owners did not understand the mechanism for obtaining Halal certification. They even think that this is something that is complicated, beyond the ability of those who generally have low levels of education (secondary and basic education).

There are many things that play a role in the readiness of Halal certification such as support from management, strengthening the halal assurance system, environmental control, acceptance from workers, and changes in the company's vision (Tarmizi 2014). The criteria for the halal assurance system adopted in the developed model also take into the factors of company management, workers, work environment, and work methods, in addition to halal of the materials used. When the company is prepared for certification and improves business conditions by referring to the assessment points in the developed model, the certification process will be easier, business performance will increase if it has a Halal certificate, because certification can improve the operational performance of SMEs, including capacity production, product quality, sales, net profit, and market share in line with the results of research as in research Giyanti and Indriastiningsih (2019).

4. Conclusions

Based on the research that has been done, it is known that Sample 3 is the SME that is almost ready for halal certification. Meanwhile, the other 3 SMEs, Sample 1, Sample 2, and Sample 4 still need improvement. The weaknesses seen in each of the criteria need to be addressed immediately so that SMEs are better prepared for halal certification.

The theoretical contribution of this research is a quantitative assessment to see the readiness of halal certification. For SME management, the results of the analysis of the level of readiness for halal certification provide an overview of the improvements that need to be made to be ready to be certified. The results of this study also show that the religious status of the business owner is not a guarantee of sufficient understanding for halal certification. The research focus for the level of readiness for halal certification is carried out on the processing industry. Given the differences in the focus of the assessment, it is necessary to research in the field of slaughtering, restaurant business, and catering.

Acknowledgments

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