

THE MUSLIM ENTREPRENEUR PRACTICES ON HALAL SUPPLY CHAIN MANAGEMENT: A STUDY IN SMALL ENTERPRISE

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Abstract: *The objective of this study is to understand the process of the practices for Halal supply chain management among Muslim entrepreneurs specifically in small enterprises. Moreover, this study is conducted based on qualitative methodology through interviews to better understand the practices of Halal supply chain management by the Muslim entrepreneur in their own business specifically in small enterprises. In addition, the findings of this study found that Halal supply chain management is built on avoiding direct contact with Haram, resolving contamination risks, and assuring compliance with Muslim customer perceptions. Product and market characteristics, in particular, are essential determinants in the management of Halal supply chains. A deeper awareness of the concepts for organizing the*

Halal supply chain among Muslim entrepreneurs is also essential. Apart from that, there is a lack of academic research in the actual practices of Halal supply chain management by the Muslim entrepreneur especially in small enterprises. This is due to the search in the Scopus database that there are only 20 papers that study Halal supply chain management and a few of these papers focus on the Muslim entrepreneur with small enterprises. Thus, this study provides the actual practices of the Halal supply chain management throughout the process of Halal products and additional knowledge specifically for Muslim entrepreneurs that involve the production of Halal products in small businesses.

Keywords: *Muslim entrepreneur, Halal supply chain management, Small enterprises.*

Introduction

Malaysia Halal certificate in an organization is done voluntarily and there is no regulation requiring that food premises operators and owners obtain it (Asnidar and Idris, 2019). In addition, the application of a Halal certificate for an organization will undergo various processes and evaluations before it is certified Halal by Jabatan Kemajuan Islam Malaysia (JAKIM) (Elistina et al., 2020). Therefore, many Muslim entrepreneurs may not apply for it due to the troublesome process. Thus, there are many literatures that has been described the overview of the Halal supply chain management in the context of Halal suppliers, Halal logistics and its practices. However, based on my review of literature, studies on the Halal supply chain management on the Muslim entrepreneurs and specifically in Small and Medium Enterprises (SMEs) are lacking. The growth of Muslim entrepreneurs has been increasing lately due to the implication of the pandemic of COVID-19 (Brodeur et al., 2021). Many people have lost their job and due to this, they decided to open small businesses like home-based and by the roadside. However, it is not well known among these new Muslim entrepreneurs about the knowledge on the Halal supply chain management for their products. Therefore, this gap has to be fulfilled because knowledge about the Halal supply chain among Muslim entrepreneurs is important to maintain its Halal status to Muslim consumers. In addition, this knowledge able to support research can be leveraged to increase the efficiency and effectiveness of research activities. The absence of such studies could result in the loss of opportunity in optimizing the knowledge of actual practices for Halal supply chain management among the new Muslim entrepreneurs especially in SMEs.

In addition, Muslim entrepreneurs bear a unique religious responsibility to ensure that their products and services comply with Shariah principles, especially in matters related to food, cosmetics, pharmaceuticals, and logistics. Halal is not merely a market label, but a comprehensive ethical and spiritual obligation. For Muslim-owned enterprises, failure to understand and implement Halal supply chain principles may lead to unintentional breaches of Halal integrity, resulting in loss of consumer trust, reputational damage, and religious non-compliance. As consumer awareness of Halal standards increases, Muslim entrepreneurs are expected to demonstrate a higher level of accountability in their operations (Abd Rahman et al., 2021). Hence, equipping Muslim entrepreneurs with the necessary knowledge and tools to manage Halal-compliant supply chains is essential for both business sustainability and religious observance. Moreover, Small and Medium Enterprises (SMEs) form the backbone of Malaysia's economy, comprising over 97% of total business establishments. Within the Halal industry, SMEs play a pivotal role in producing, distributing, and retailing Halal goods and

services to local and regional markets. However, SMEs often face limitations in financial resources, access to training, regulatory understanding, and technological capacity—factors that hinder effective Halal supply chain management (Razimi et al., 2019). Furthermore, many new and home-based Muslim entrepreneurs who emerged post-COVID-19 lack formal exposure to Halal standards and certification processes. Given their growing market presence, understanding how these small enterprises interpret and apply Halal supply chain practices is vital for enhancing the overall integrity of Malaysia's Halal ecosystem.

Literature Review

Overview of the Malaysian Halal Industry

In the 1960s, the Malaysian government began to enforce Halal regulations. The rule was originally enacted to safeguard the interests of Malaysia's Muslim majority (Rahman et al., 2018). However, in response to the growing demand for Halal products throughout the world, the Malaysian government has moved a step further to establish itself as a regional and global Halal centre. The Malaysian government has established a nationwide certification system to assure the legitimacy of Halal products (Formichi, 2020). Various government agencies have also been formed to aid the growth of Malaysia's Halal industry. The Department of Islamic Development Malaysia, or Jabatan Kemajuan Islam Malaysia (JAKIM), the Halal Industry Development Corporation (HDC), and the Malaysian Investment Development Authority are the three primary Halal-related agencies (MIDA). In Malaysia, a government organization called JAKIM, organises and oversees Halal certification. Various Halal industries coexist in Malaysia, with strong policy, certification, infrastructure, and human resource development programs supporting them.

Halal Regulations and Policy

Halal-certified items are well-known in Malaysia and across the world. New Halal product standards and laws have been established in Malaysia in response to rising global concern over the integrity of Halal goods (Aliff et al., 2015). The following are the major components: (1) Trade Description Act, (2) Custom Order, (3) Animal Importation Order, (4) Food Regulations and (5) Local Government Act. The important provisions of each of these major pieces of Halal-related legislation are listed in Table 1 below.

Table 1: Provisions of Each of These Major Pieces of Halal-Related Legislation

Policy/ Regulation of Halal	Description
Trade Description Act 1972	The Minister can implement the Trade Descriptions (Use of Expression "Halal") Order 1975 under Section 10 of the Act 1972.
Trade Descriptions (Marking of Food) Order, 1975 (made under s.11 of the Trade Description Act 1972)	Food that is Halal according to the Trade Description (Use of the word "Halal") is required. Order 1975 cannot be given unless it is clearly designated as Halal.
Custom Order (Prohibition of Imports) 1988	This order regulates the import of milk and milk products, as well as chicken fat, lard, and pig fat. All meat and livestock brought into Malaysia must be Halal certified.

Animal Importation Order 1962	It is a legal requirement that all meat and animals be Halal, healthy, and free of illness. The Department of Veterinary Services and the Customs and Excise Department enforce the law at Malaysian entry ports.
Food Regulations 1985	Regulation 11 (1) (c) states that if the item includes beef, pork, or its derivatives, or lard, the inclusion of such ingredients must be declared on the label. Food containing alcohol must be labelled as such, according to Regulation 11 (d).
Local Government Act 1976	The licensee must wash utensils used for non-Halal food separately from those used for Halal food, according to Section 20D (1) (a), (b) of the Licensing of Food Establishments (Federal Territory of Kuala Lumpur) (Amendment) by-Laws 1995. It is also required that utensils used for non-Halal food not be used in the preparation or serving of Halal meals. Subsection (3) requires the licensee to display the phrase "Non-Halal Cuisine Exclusively" on the menu at all times if the institution only offers non-Halal food.

Sources: (Raja et al, 2017)

Furthermore, Malaysia also has a system for Halal certification. Halal certification and its related logo are used by manufacturers to notify and reassure their customers that their products are Halal and Shariah-compliant (Shafie and Othman, 2006). The true Halal certification granted by a government authority, notably JAKIM, is sought by Muslim Halal goods consumers in Malaysia. Organizations who want to utilize the Halal certificate must first apply for it and then follow the JAKIM process. The JAKIM-approved Halal certificate allows enterprises to use the standard Halal mark on their products. The Halal certification mechanism is depicted in Table 2.

Table 2: Halal Certification Mechanism

Certification System	Description
MS1500:2009	Halal food – Production, preparation, handling and storage Gives practical guidelines to the food industry regarding the provision, preparation, and handling of Halal food (including any extra nutrition).
MS2200: Section 1: 2008,	Goods for Islamic consumers – Section 1: Cosmetics and Personal Custody –General guide
MS 2400-1: 2010	Halalan Toyyiban Assurance – Pipe–Management of transportation services systems / freight chain services
MS 2400-2: 2010	Halalan Toyyiban Assurance – Pipe–Management of warehousing services systems and related activities
MS 2400-3: 2010	Halalan Toyyiban Assurance – Retail management systems requirement

Sources: (Nurul et al., 2016)

Conventional Supply Chain

The core premise of a supply chain is that it includes all parties engaged in fulfilling a consumer request (Chopra and Meindl 2013). Organizations must coordinate production, inventories, locations, and transportation across all stakeholders in a supply chain in order to fulfil consumer requests (Hugos 2006). Supply chain management is the integration of suppliers, manufacturers, distributors, and customers, in which raw materials are sourced from suppliers and sent to manufacturers, who then make completed goods and arrange delivery to customers (Vonderembse et al. 2006).

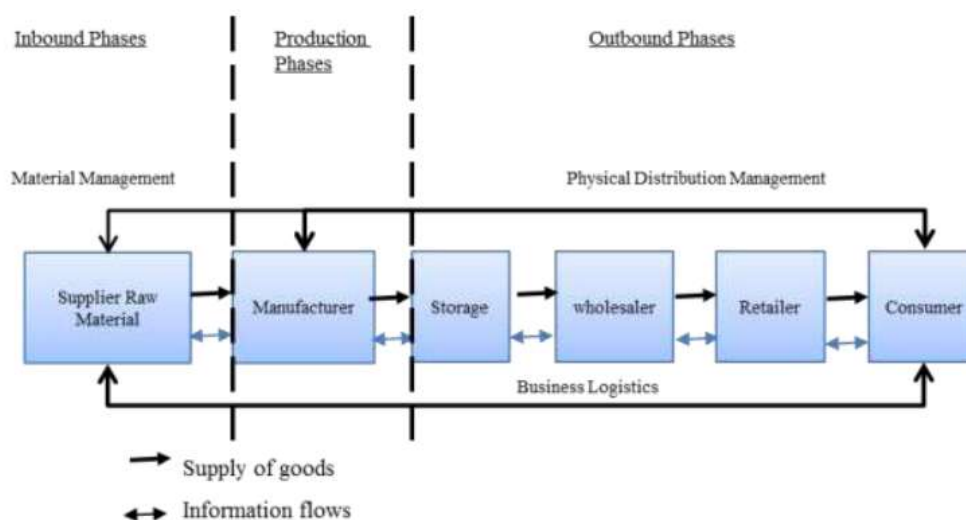


Figure 1: The flows for the conventional supply chain.

Sources: (Salini and Nitty, 2019)

The optimization of material procurement from upstream suppliers through the downstream distribution of goods to end consumers has largely driven the planning, modelling, designing, and analysis of a traditional supply chain. In a traditional supply chain, there are three phases: import phases, manufacturing phases, and outgoing phases, as depicted in Figure 1. Organizations engage with material acquisition and management during the inflow phase. It entails actions such as transportation, storage, and delivery of materials into facilities or enterprises (Tieman, 2013). Outbound logistics, on the other hand, is concerned with identical things leaving the plant, or enterprises, which comprise all storage, logistics, marketing, and sales to the final client. The raw materials, any work-in-process, and completed items were typically moved from upstream to downstream consumers or end-users.

Halal Supply Chain

Preventive efforts, beginning with the sourcing process, should be taken as soon as feasible to ensure the integrity of Halal products and services. The movement of products and information from suppliers to end-users is depicted in Figure 2. The picture also depicts the actions of Halal checkpoints at various locations throughout the supply chain. The notion of a Halal supply chain is based on the same concepts as traditional supply chain management, but with a focus on and endorsement of products and services that are Halal (Mohamed et al 2016). The creation and execution of Halal company policies and activities that simultaneously maintain market positions and create profits are referred to as a Halal supply chain. The core concept behind a Halal supply chain is to ensure that the integrity and quality of Halal products are maintained

throughout the entire supply chain (Abd Rahman et al., 2017). It is critical to ensure that enterprises always examine and prepare for Halal quality at each level.

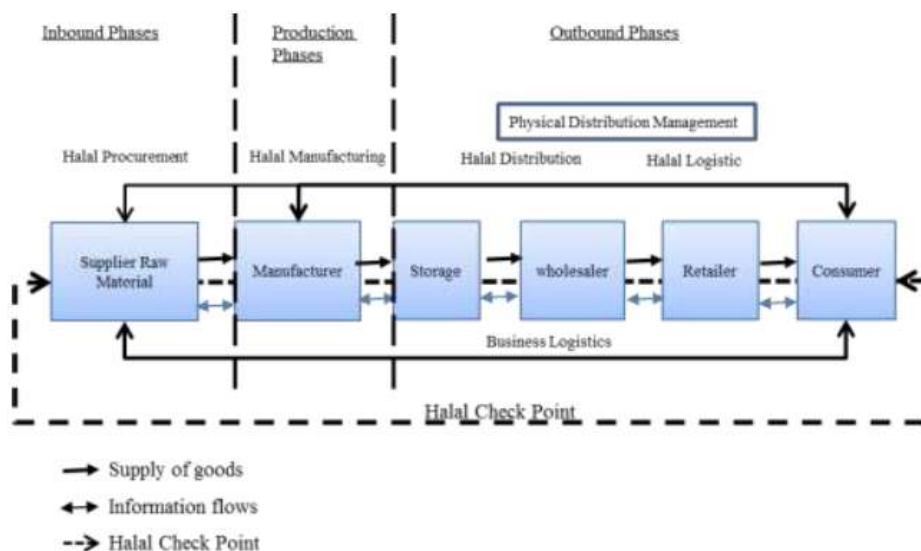


Figure 2: The flows for Halal Supply Chain

Sources: (Salini and Nitty, 2019)

A Halal supply chain, in general, consists of four key activities: (1) Halal procurement (2) Halal manufacturing (3) Halal distribution (4) Halal logistics are the four pillars of Halal procurement, production, distribution, and logistics. Firms must at the very least follow the fundamental criteria defined by MS 1500 in order to build a Halal supply chain. Firms must follow Halal protocols in every operation involved in the production of the products, in particular.

Furthermore, numerous Halal studies have been undertaken in a wide range of scientific areas, particularly in the certification of food items. Obtaining Halal certification in businesses is the source of many concerns regarding the compliance procedure. A scarcity of labour certification organizations, as well as a lack of technology, are among the sources of the problem (Noordin et al., 2014). The lack of enforcement and certificate compliance lowered trust in the Halal certifications' validity (Khan et al., 2018). Due to unethical logo impersonation by certain traders, consumers are unlikely to place full faith in Halal-certified products. Similarly, in Malaysia, several enhancements have been made, particularly by the JAKIM, to speed up the production of Halal certificates and these steps appear to be working as seen by the growing number of production certificates (Fujiwara, 2017; Tieman et al., 2012). In comparison to other items, a network with Halal certification converts a product into a more comprehensive package to attract Muslim clients. Furthermore, it strives to maintain a solid relationship between suppliers and buyers (Haleem et al., 2019). Halal certification is used extensively by Islamic goods companies to sell their products. The network is not just for Muslim customers; it is used by individuals all across the country as a regular alternative since the dietary product is not only known for adhering to Islamic law, but also for its cleanliness and production practices (Ahmad et al., 2019). Additionally, many customers are drawn to the Halal label because of the strictness with which cleanliness goods are enforced.

In addition, nowadays, with the effect of the COVID-19 pandemic, many people especially in Malaysia many Muslim communities have lost their job (Janice et al., 2021). Therefore, many new Muslim entrepreneurs has joined the business field with starting at home-based and selling by the roadside in order to increase their income (Khan, 2021). Thus, these new Muslim entrepreneurs may not have sufficient knowledge about Halal supply chain management during the production of their products. Therefore, the study on Muslim entrepreneurs practise on Halal supply chain management is important in order to assist and give more knowledge to these new Muslim entrepreneurs. In addition, within the Halal framework, the Halal supply chain is concerned with the integration of the enterprise's numerous functional areas, such as manufacturing operations, procurement and logistics, and value-adding activities (Abd Rahman et al., 2021). It is a cyclical connection that begins with the provider and ends with the customers of Halal products. The chain control component is significant since, in order to avoid infection, Islam forbids mixing the clean and dirty. The integrity and security of food items may be ensured through the Halal chain during the flow of resources, processing, packaging, storage, transportation, and warehousing (Razimi et al., 2019).

Conceptual Framework on Halal Supply Chain Practices among Muslim Entrepreneurs in SMEs

The conceptual framework guiding this study is constructed based on themes emerging from the literature on Halal supply chain management (HSCM) and small business practices among Muslim entrepreneurs. It focuses on three interrelated components that influence the implementation of Halal principles within the SME context: (1) Knowledge and Awareness, (2) Operational Practices, and (3) Institutional Support and Certification. These three dimensions are proposed to contribute collectively to the outcome variable, namely Halal Integrity in SMEs. The first component, knowledge and awareness, pertains to the entrepreneurs' understanding of Halal principles, the requirements of Halal supply chain management, and familiarity with relevant standards such as MS1500:2009. Research has shown that limited knowledge and misconceptions about Halal protocols among entrepreneurs often result in inconsistencies in implementation, despite good intentions (Mohamed et al., 2016; Haleem et al., 2022). In particular, the complexity of Halal supply chain requirements—ranging from sourcing to logistics—requires not only religious commitment but also technical awareness of regulatory compliance (Che Hassan & Osman, 2024).

Then, the second component, operational practices, refers to the actual execution of Halal-related procedures across the supply chain. This includes Halal-compliant procurement, processing, packaging, storage, transportation, and hygiene management. According to Tieman (2023), ensuring Halal integrity requires a robust system of control at every stage, where any form of contamination—whether physical, procedural, or cross-contact—may compromise the Halal status of the final product. For SMEs, particularly micro and home-based businesses, operational challenges are exacerbated by resource constraints and informal production settings (Janice et al., 2021; Abd Rahman et al., 2021). The third component, institutional support and certification, involves the role of regulatory bodies, such as the Department of Islamic Development Malaysia (JAKIM), in providing accessible and transparent certification processes. While Halal certification provides legitimacy and consumer trust, many SMEs face difficulties in navigating certification systems due to bureaucratic complexity, insufficient training, and perceived cost burdens (Nurul et al., 2016; Lee et al., 2019). Moreover,

institutional support mechanisms for SME-level Halal compliance remain limited and under-researched.

Taken together, these three components form the foundation of the proposed framework, whereby Halal Integrity in SMEs is seen as the outcome of the combined effects of knowledge, operational behaviour, and institutional environment. The framework acknowledges the multidimensional nature of Halal compliance and emphasizes the need for an integrated understanding of how Muslim entrepreneurs navigate both religious obligations and commercial realities. This model also aligns with calls in recent literature for more contextualized studies focusing on SME practices within the Halal industry, especially in post-pandemic entrepreneurial environments (Khan, 2021; Razimi et al., 2019).

Therefore, the conceptual framework for this study is illustrated in Figure 3. It highlights three key dimensions derived from the literature: (i) Knowledge and Awareness, (ii) Operational Practices and (iii) Institutional Support and Certification which are proposed to influence the Halal Integrity of products and services offered by Muslim entrepreneurs in SMEs. These dimensions are interconnected and collectively contribute to the entrepreneurs' ability to implement and maintain a Halal-compliant supply chain. As shown in the figure, each theme represents a crucial factor in shaping Halal compliance, with the outcome variable serving as the focal point of analysis.

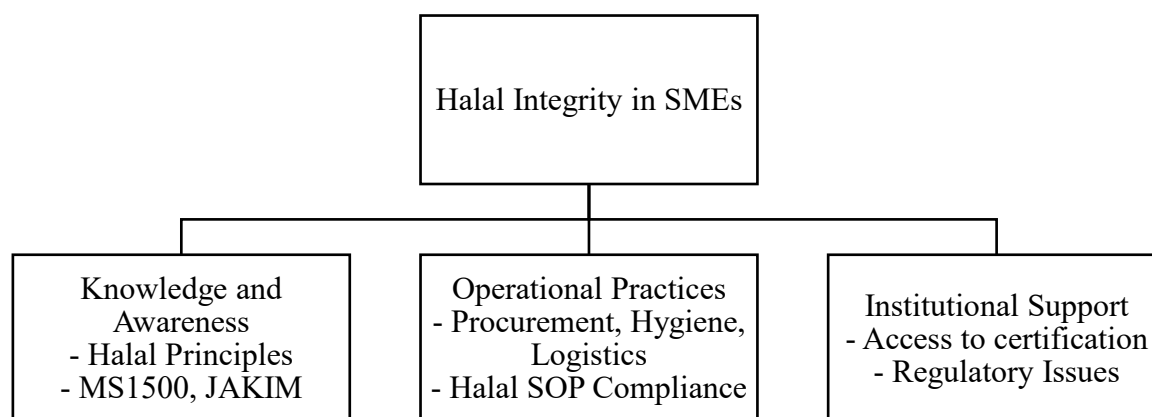


Figure 3: Conceptual Framework for Halal Supply Chain Practices Among Muslim Entrepreneurs in SMEs

Sources: Author

Halal Supply Chain Management in Small and Medium Enterprises (SMEs)

Furthermore, there are few studies have been conducted to evaluate the features of Halal supply chain management in SMEs. The majority of research has focused on SMEs' competence in sustaining a competitive edge by aligning supply chain goals with company strategy. Based on the research from Lee et al. (2019), Supply Chain Management (SCM) offers the right framework for identifying, integrating and managing synergies that are relevant to overall business process excellence in establishing links with other supply chain participants. In addition, the author has used the Scopus database for conducting literature reviews because it is the largest academic database in the world. Moreover, the Scopus database allows the researcher to use the string in conducting the search. Therefore, based on the author's search in the Scopus platform database, by using this string search, TITLE (Halal AND supply AND

chain AND management) AND (LIMIT-TO (LANGUAGE, “English”)) AND (LIMIT-TO (SRCTYPE, “j”)), the result of search string by the author has found that there are only 20 documents that related with this field of Halal supply chain management.

Therefore, based on these 20 papers, there are five papers that focus on Halal supply chain management for a certain country like India, Korea, China and Indonesia. Then, there are two papers focus only on supplier management. After that, there are three papers discussed about the integration of Halal supply chain management with sustainability and ten papers discussed the definition, principle as well as strategy of practising of Halal supply chain management. Therefore, based on the papers that the author has read, there is still lack of papers that discussed about the relationship of Muslim entrepreneurs with Halal supply chain management on the Small and Medium Enterprises (SMEs). Thus, in order to ensure the authenticity of the Halal products, the products must go through a process and procedures from the slaughtering process until they enter single or multiple supply chain checkpoints that highlight the Halal food separation concept and sanitary compliance. Ensuring integrity in a halal supplier is important for maintaining the trust of consumers who seek halal products (Che Hassan & Osman, 2024). The study on the actual application of practices for Halal supply chain management assumed by Muslim entrepreneurs in SMEs is one of the gaps that need to be filled in this study. Ensuring integrity in a halal supplier is important for maintaining the trust of consumers who seek halal products.

Despite the growing importance of Halal supply chain management in Malaysia, existing literature primarily focuses on large-scale manufacturers and exporters. There remains a notable gap concerning the practical understanding and implementation of Halal supply chain principles among Muslim entrepreneurs operating within the SME sector. This gap is particularly crucial given the role of SMEs in Malaysia’s Halal ecosystem and the increasing number of home-based Muslim entrepreneurs post-COVID-19. Therefore, it is imperative to explore how these entrepreneurs perceive, understand, and apply Halal supply chain management in their daily operations. Moreover, the extensive body of literature on Halal supply chain management, previous studies have largely concentrated on large corporations, export-based industries, and institutional frameworks. There remains limited empirical focus on how Muslim entrepreneurs particularly those operating within the SME sector understand and implement Halal supply chain principles. The reviewed literature also highlights systemic barriers such as limited certification knowledge, lack of technical resources, and weak enforcement, but few studies have explored these challenges from the lived experiences of SME owners themselves. Furthermore, while theoretical models exist on Halal logistics and certification, there is a noticeable lack of applied models that link entrepreneurial behaviour, operational practices, and Halal compliance. This study aims to address this gap by exploring the real-world practices of Muslim entrepreneurs and proposing a framework for understanding their engagement with Halal supply chain management in the Malaysian SME context.

Research Methodology

The design of this study is using a qualitative study. This study is focusing more on the meaning of the Halal supply chain and understanding the process as well as the activities of the Halal supply chain throughout the production of the Halal products. A total of three informants will be selected using purposive sampling, a strategy that allows for the intentional selection of participants who are especially knowledgeable about or experienced with the subject matter.

The selected informants will be Muslim entrepreneurs who own or manage SMEs involved in Halal-related industries such as food and beverages where Halal compliance is relevant. All participants must be either currently Halal-certified or in the process of pursuing certification. This research utilizes qualitative methodology as their tools to gain related information. The main method for data collection is through in-depth personal interviews. Qualitative study satisfies this purpose of the study because the main purpose of this method is to uncover the meaning, process and achieve understanding of the sample. In this method, researchers are regarded as the primary instrument of data collection. According to Merriam & Tisdell (2016), inductive process is involved in this type of study because the concept and variable is not clear yet to the researcher. In this study, the researcher employed a basic qualitative method by conducting interviews with selected samples that can give accurate data and information to achieve the objective of the study. Basic qualitative method is the most suitable method to achieve the understanding of the stated objective of the study. Using this method, the researcher will undergo an inductive process by employing thematic analysis using data collected from the sample. The group that has the most accurate information as the respondent are for those Muslim entrepreneurs that involve in the production of Halal products.

This study employs a qualitative research design through the use of semi-structured interviews to explore the perceptions, practices, and challenges faced by Muslim entrepreneurs in implementing Halal supply chain management (HSCM) within small and medium-sized enterprises (SMEs) in Malaysia. A total of ten informants will be selected using purposive sampling, a strategy that allows for the intentional selection of participants who are especially knowledgeable about or experienced with the subject matter. The selected informants will be Muslim entrepreneurs who own or manage SMEs involved in Halal-related industries such as food, beverages, cosmetics, and other sectors where Halal compliance is relevant. All participants must be either currently Halal-certified or in the process of pursuing certification. This interviews are conducted face-to-face depending on the participants' availability and convenience. The fieldwork is expected to take place over a period of four to six weeks. Each interview session will last between 45 to 90 minutes and conducted in either Malay or English, based on the preference of the informant. All interviews will be audio-recorded with the participants' consent and transcribed verbatim for analysis.

In addition, the process of data analysis was beginning with reading the first interview transcribe, the first set of field notes, the first document collected in the study. As the author read down through the transcribe, for example, jot down all the notes, comments, observations, and queries in the margins. These notations are next to bits of data that strike the researcher as interesting, potentially relevant, or important to this study (Kumar, 2019). This process of making notations next to bits of data that strike the author as potentially relevant for answering the research questions is also called *coding* (Merriam & Tisdell, 2016). At the beginning of the analysis, the author has become as expansive in identifying any segment of data that might be useful. Assigning codes to pieces of data is how the author begins to construct categories. After working through the entire transcribe in this manner, the author goes back over to the marginal notes and comments (codes) and try to group those comments and notes that seem to go together (Merriam & Tisdell, 2016). The process of categorization is very inductive. The author starts with little pieces or segments of data, group data units that appear to be related, and then "name" the cluster. This is a category, a theme or a finding.

Moreover, this process includes familiarising with the data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and finally producing a coherent narrative. Thematic analysis is chosen for its flexibility and suitability in identifying complex patterns within qualitative data. NVivo 14, a qualitative data analysis software, will be utilised to manage the coding process systematically and efficiently. A coding manual will be developed to guide the interpretation of data, and intercoder reliability will be assessed through collaborative review with a second researcher. This rigorous analysis aims to derive meaningful themes aligned with the conceptual framework of the study, particularly those relating to knowledge and awareness, operational practices, and institutional support, all of which contribute to understanding Halal integrity within the SME sector.

Findings

The activities in Halal supply chain management practices by the Muslim entrepreneur.

The practices and activities in controlling the Halal supply chain management start from the (a) procurement, (b) inventory, (c) manufacturing and (d) distribution. One of the Muslim entrepreneur emphasizes that the activities in controlling the Halal supply chain management in her Halal food business is as follows:

“Processes from farm to fork is important in order to give the best services and Halal food products to the customers. Because the food that we eat will be our flesh and blood so, we really need to take this process from the raw materials, the preparation and processes of food, the packaging as well as until to deliver the food to the customers.”

Procurement and Purchasing of Raw Materials

Procurement is a process of obtaining services, supplies and equipment in conformity with applicable law and regulations. In addition, during this activity and practice, it involves the acquisition of appropriate goods or services at the best possible total cost of ownership. Moreover, it also covers all purchasing activities whose purpose is to give buyer the best value for money. Therefore, according to one of the Muslim entrepreneur, her emphasizes that during the procurement and purchasing steps as follows:

“At the beginning, during the procurement and purchasing for the raw materials. We will get it from our supplier that we confirm that they have Halal certificate. For example, we are selling chicken chop. Therefore, for the raw material of the chicken, we bought it from the confirm Halal slaughter chicken that have Halal certificate. Then, for the other dry ingredients like flour, oil and so on, we also use the one that have Halal logo that recognize by JAKIM on it if it involves the process products.”

Therefore, based on the interview above, Halal procurement can be described as Halal purchasing, which entails participation in actions aimed at maintaining Halal integrity across the supply chain. Identification of all inputs, by products, and resources is critical for each sourcing activity throughout the Halal supply chain in order to assure Halal integrity. Halal material conformances was implemented at an early stage by carefully selecting Halal certified

sources. The implementation of Halal material conformances should begin as soon as possible by carefully selecting a Halal certified provider.

Inventory management

Inventory management is one of the important activity in ensuring the supply chain management is Halal. It is the activity that functioning to manage storage product like raw materials from being contaminated with impermissible materials. Therefore, among the inventory management that can control the Halal supply chain are (a) put the raw materials suitable with their temperature and (b) segregate between wet and dry materials. Thus, one of the Muslim entrepreneur emphasizes that among the practices for the management of their inventory is as follows:

“For the wet materials like chicken, lamb, sausage and so on we will directly put it in the refrigerator with suitable temperature to avoid any factors that can damage these wet materials like fungi growth. Plus, we also segregate between the wet and dry materials so that there is no mix of taste, smell and odour between these wet and dry materials.”

Thus, based on the interview above, the way of the entrepreneur to organize and manage their inventory also need to be taken into account in order to ensure that all of their raw materials and ingredients are free from any contaminations with haram or doubt elements which can change the Halal status of the output. Therefore, one of the practices that the Muslim entrepreneurs did is by segregating the place of the wet and dry materials. This is important in order to restrain any cross contaminations between them like mix of taste, smell and odour. Then, the Muslim entrepreneur put their wet materials like chicken, lamb and sausage at suitable temperature so that, there will be no growth of any organisms like fungi on it.

Preparation and Manufacturing Process

Preparation and manufacturing process is one of the crucial step in manufacturing Halal products since it is the process of transferring input into output products. Therefore, during the production of Halal food, the Muslim entrepreneur are focusing on the quality, sanitary and safety for the customer consumption. Thus, according to one of the Muslim entrepreneur that produce Halal food products emphasize that, their practices during the preparation and manufacturing process as follows:

“After we have prepared all the materials, we will ensure that all of these materials that have been prepared are putting in container that being covered with the lid to avoid any unwanted things to contaminate in it. Then, during the preparation of the materials, we also segregate the use of the knife and cutting place between the wet and dry materials. This is to ensure that there is no contamination between them. Because, in wet materials, there is much more bacteria that we can't see compared to the dry materials. So, that's the purpose why we segregate between this both type of materials. Then, for the cooking process, we cook like usual but always wash all the tools and equipment before we cook because we do not know that whether there is dust on it or maybe any animal touch that tools.”

Therefore, based on the interview above, the handling process for the preparation of the ingredients are important. The handling process during the preparation of food include the way of the use for the tools and equipment like the knife, the cutting board and the container with its lid to keep it. Then, during the cooking process, the Muslim entrepreneur prioritize of the cleanliness of the tools and the equipment before it will be use during cooking process. Thus, all of these tools and equipment are washed first before it is use for the cooking process.

Distribution and Transportation to The Customers

Halal packaging and Halal containers are essential components of Halal distribution. Among the important role of packaging in logistics is to keep products contained and protected during delivery and distribution. It is also used to protect employees handling goods from potential risks like chemicals, liquids, or related to external. Therefore, according to one of the Muslim entrepreneur, she emphasizes that their practices during the distribution and delivery to their customers as follows:

“For the packaging, we just use polystyrenes and boxes that can preserve long lasting for its hot temperature and have their own lids this is to avoid any contamination in it.... for the delivery process, we will ensure that the runner is a Muslim.”

Moreover, packaging will safeguard items from any cross-contamination between Halal and non-Halal ingredients in the context of Halal. In addition, during the transportation or delivery to the customers, the Muslim entrepreneur strictly appoint their runners is a Muslim.

The challenges for the Muslim entrepreneur during the implementation of Halal supply chain management.

The difficulties for the Muslim entrepreneur in order to implement Halal supply chain mostly is due to the (a) lack of knowledge on the Halal supply chain management and (b) third party logistics. This can be seen from the interview with one of the Muslim entrepreneurs she emphasizes as follows:

“Among the difficulties that I need to encounter throughout the changes to the consumption of Halal supply chain are we cannot control the external things like just now, the runner which linked with the Halal logistics. Then, we also do not have many knowledges about this Halal supply chain, lack of join with the Halal talk and training. Plus, with this pandemic of COVID-19, it makes us more difficult to connect with the person who is expert in this field. Then, the next challenges are because of our employees. Because maybe in front of us, our employees did all their works comply with the Halal guidelines but behind us we do not know. So it’s all about the integrity.”

One of the challenges that Muslim entrepreneurs faced in order to maintain and implement Halal supply chain is due to the lack of knowledge on it. Sometimes, it may not come from the owner of the business but from the employees itself. Furthermore, usually the employees only understand, that Halal is the outlines of the conditions that producers, service providers, and consumers must meet in order for items to maintain their Halal certification. Moreover, there is also misconception about Halal by the Muslim entrepreneur and the employees think that

Halal is just a religious requirement for Muslims, and that as long as there the raw material is Halal, it is deemed Halal. This can be supported by one of the Muslim entrepreneur by her experience as a new Muslim entrepreneur as follows:

“Basically, all of the new Muslim entrepreneur do not know on this farm to fork process must be complying with the Islamic guidelines. Yes, I said this from my experience too. Because, before this my husband and I just want to make money but do not aware of this processes whether it is complying with the Halal guidelines or not. But now, we already aware of it after almost 3 years we have venture into this food business. And plus, my husband’s mother also did not aware of this Halal food supply chain too. All that we know is just the raw material that we use must be Halal.”

After that, another challenges faced by the Muslim entrepreneur in order to maintained the Halal supply chain management is about the status of the third party logistics to deliver their products to their customers. So, basically this is influenced by the external party which it is quite difficult for the owner to control and monitor it, but if it is related with the internal party, it will be easier for the owner to control and manage it. This can be supported by one of the Muslim entrepreneur which she emphasizes as follows:

“If the customers ordered to us directly, we just use Muslim runner to send it to them. but, if the customers use online food delivery like Food Panda and Grab Food, we can’t choose the runner or the delivery man because it has already been set by the system itself. So, about that, the screening process that I use if it is only linked with the runner from out stall only, we will ensure that the runner is a Muslim.”

The Islamic elements that can influenced on the practices of Halal supply chain management.

The practices of Halal supply chain can be influenced by the Islamic elements which include (a) Islamic motivation, (b) Islamic business training and (c) Islamic education. Islamic elements are important in understanding the definition and the purpose of Halal supply chain management during the production of Halal products. Therefore, according to one of the Muslim entrepreneur, she emphasizes the Islamic elements that influenced the practices of Halal supply chain as follows:

“Entrepreneur’s motivation in Halal business reflects as a Muslim to earn money by carrying out the task to Almighty Allah SWT as well as pay responsibility towards all other Allah’s creation which lives on the earth. Then, from that sentence I just realised that is what we should achieve throughout our business. And from that, I try slowly to join the talk and class about the Halal food preparation and Halal business. In addition, from my understanding based on the class and talk that I have joined before, in a Halal business, entrepreneurs’ Islamic education determines individual ethical and moral behaviour together with formal and logical.”

In addition, motivation is important for Muslim entrepreneur. Motivation help the respondent to manage their inner desire to pursue and achieve both personal and organizational objectives. Thus, according to the respondent of Muslim entrepreneur, the Islamic perspective in motivation help them for Halal company represents their as a Muslim to earn money by carrying out Allah's SWT's work as well as pay responsibility to all of Allah's creation that exists on the world. Moreover, according to the respondent of Muslim entrepreneur, she emphasises that entrepreneurship training has been provided at all levels of her business in order to improve their skills and knowledge to learn new and better management techniques. Furthermore, according to the respondents, by attending particular training can stimulate and encourage the employees to improve in their areas of interest as well as modify the behaviour of employees in the workplace, which can boost the firm's productivity. Islamic business training encompasses the employees' moral and spiritual growth. Islamic training and development is necessary since it can improve a person's faith in God. Apart from that, according to the respondent, with adequate knowledge and education, the more efficient of their Halal business. In a Halal business, entrepreneurs' Islamic education, affects individual ethical and moral conduct. The entrepreneur's Islamic education background would bring benefit in terms of honesty, simplicity and ensuring the integrity of Halal operations.

Discussions

For Halal supply chain management, the availability of resources that meet Shariah standards is critical. The issue of regulating the Halal supply chain is made much harder by the use of numerous materials in multiple production processes. Furthermore, Halal items need a specific infrastructure to minimise physical interaction with non-Halal products, making Halal resources a critical aspect in Halal supply chain management (Tieman, 2011). Because the complexity of managing Halal supply chain necessitates a higher degree of commitment from top management which is the Muslim entrepreneur itself in terms of leadership and resource allocation. Moreover, to ensure the integrity of Halal food through lengthy and complicated supply chains is difficult in the context of Halal techniques (Sungkar, 2009). Standards and regulations alone will not be sufficient to manage food quality concerns and supply chain vulnerabilities in the long run. Furthermore, because Halal supply chain management is a new field, it requires government assistance in the areas of legislation, regulation, planning, development, implementation, promotion, and education for Muslim entrepreneurs and Halal consumers.

In addition, the demand for Halal products is a major component in Halal supply chain management. With more disposable money, customers are placing a greater emphasis on the quality and safety of commodities, as well as the product's integrity. In the case of Halal products, consumers are much more concerned about the product's validity because it is associated with a qualitative characteristic of credibility. Therefore, to gain client trust, the Muslim entrepreneurs must guarantee that they fulfil the criteria of Halal product standards, which may include various standards like in the findings, it is highlighted about four phases in supply chain that need to comply with Halal guidelines. Supply chain networks become increasingly likely to be fraudulent as they get more complicated. To ensure Halal Integrity at the consumption point and make the Halal supply chain efficient, a high level of integration is required at all levels of the supply chain. Moreover, according to Khan et al. (2022), effective management of the HSC is positively related to the firms' sustainable performance, thus helping managers make the organisation sustainable in the long term.

Apart from that, the major goal of Halal supply chain management is to preserve and ensure Halal integrity until it reaches the point of consumption, which encompasses the material, manufacturing process, information, and capital related with the product. The Halal supply chain attempts to ensure that the requirements for Halal as indicated by trustworthy standards are satisfied. Furthermore, successful Halal supply chain management incorporates a conventional quality control system, which requires that the produced product be wholesome while adhering to Shariah by adopting a process-oriented method. The Halal supply chain's effective management assists in gaining consumer confidence and maintaining customers. The Halal supply chain's appropriate management aids in gaining consumer trust and maintaining customers. A study from Manzouriet et al. (2013), also support that Halal supply chain management has a good relationship with long-term development.

Therefore, based on the findings, it is found that the challenges that usually faced by the Muslim entrepreneur to contain the Halal supply chain is due to the third party logistics to send the products to the customers like food panda and grab food. Moreover, the challenges that might be happened is due to the lack of knowledge on the Halal supply chain management. Therefore, in order to overcome this problem, the Muslim entrepreneur itself must actively involve with many programs in Halal food handling courses that have been prepared by the local authorities and the government. Then, for the external parties third party logistics like Food Panda and Grab Food, the Muslim entrepreneur must ensure that the runner segregated the containers used to send Halal food products with not mixing up together with the ones used for non-Halal products. Next, the Muslim entrepreneurs and their employees must join continual Halal food handling training in order to acquire new skills for the firm to ensure that the Halal supply chain can be controlled.

Therefore, extending the body of knowledge, Halal's *toyyib* characteristics, which promote for wholesome consumption, are a predictor of Halal supply chain's sustainability since it mandates that processing methods exclude dangerous, intoxicating, and harmful materials. In the study from Soon et al. (2017), found that Halal wholesomeness standards are linked to sustainability. Thus, Halal is a strict quality control procedure that ensures the product's integrity and wholesomeness. Halal supply chain management incorporate Islamic ideals such as animal rights, ethical concerns, sustainability, cleanliness, equality, environmental friendliness, and fair trade from farm to fork to assure safe and healthful consumables. Furthermore, the capacity to motivate and nurture others in order to encourage them to work together to achieve the firm's goals is considered vital as a Muslim entrepreneur. As a result, a Muslim entrepreneur with Islamic motivation may lead and encourage personnel in the proper way to obey Allah SWT, resulting in improved company performance. Therefore, all of these extension knowledges and information can fulfil this particular gap about the understanding on Halal supply chain management.

Conclusions

In conclusion, based on the findings, there are four activities that are being practices by the Muslim entrepreneur in ensuring the Halal supply chain is protected through all the process of production which can be categorised into procurement and purchasing of raw materials, inventory management, preparation and manufacturing process as well as distribution and transportation to the customers. Moreover, in order to ensure the implementation of Halal supply chain management through all the process is successful, there will definitely be

challenges. Thus, based on the findings, among the challenges that the Muslim entrepreneur encounter can be from within the firm which is from the employees and comes from the external parties like the third party logistics. Besides that, based on the findings, to ensure that the practices of Halal supply chain are continuing, the Muslim entrepreneur emphasises about the Islamic elements that can contributed to the practices of Halal supply chain which includes Islamic motivation, Islamic business training and Islamic education. These criteria are required for the development of Halal-aware for Muslim entrepreneurs specifically who can fit into the Halal business environment.

In a nutshell, Halal food has been treated with a high degree of hygiene and safety standards, as well as meeting particular cleaning standards. It is food that has been manufactured, transported, and preserved in strict accordance with Shariah standards. Halal principles are growing more acceptable to the health-conscious and sanitary culinary style, rather than only the truly religious. This may be seen by the fact that, as the demand for Halal food grows, people are becoming more aware of it. Halal cuisine is vital for health-conscious individuals since it reflects sanitary, cleanliness, and nutrition. After all, Halal is important not just for business, but also for the protection of the Ummah, which will be held accountable in this world and hereafter. Moreover, it is critical for Halal certified businesses to go beyond their production and ingredients and extend Halal across their whole supply chain, ensuring that their transportation, storage, and handling are Shariah compliant and fulfil the needs of their target Muslim consumer.

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