

Diagnosing the Halal Industry of Taiwan: A Viable System Model Approach (Mendiagnosis Industri Halal Taiwan: Pendekatan Model Sistem Viable)

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ABSTRACT

The global halal industry is currently a trillion dollar industry. Businesses around the world are upbeat to get a piece of this lucrative market, including those operating within Muslim-minority contexts. To leverage on this opportunity, there is a need for emerging players to understand the current situation, with the purpose of planning and implementing strategies for the industry's growth. This study examined the Muslim-minority context of Taiwan and utilized the Viable System Model (VSM) as the framework to diagnose the current state of Taiwan's halal industry. Data for the diagnosis were collected mainly through interviews with the relevant agencies, managers or entrepreneurs of halal businesses as well as the consumers of Taiwan's halal products and services. The analysis found that the halal industry in Taiwan already has several implementation units including the Taiwan Halal Center in support of halal business promotion and growth. Taiwan's halal industry has multiple certification bodies co-existing, with several being business-oriented, while the others community-based. The findings also revealed the central role of local-born Muslims and the mosques in facilitating halal certification practices in this Muslim-minority society, indicating a strong foundation in its environment to support of the rapid growth of halal industry. Malaysia's endorsement of Taiwan's certification bodies is deemed as a crucial support mechanism for their global entry into the halal market. On the whole, the halal industry in Taiwan lacks a formalized halal industry development policy, hence the absence of the functions of policymaking, intelligence, control and coordination in support of a viable halal industry ecosystem. Moving forward, Taiwan needs to institute an integrated halal industry development policy and to fill the missing functions while ensuring cohesions among the functions to manage varieties both in its local as well as in the global environment.

Keywords: VSM; viable system model; systems perspective; systemic approach; halal industry; Muslim-minority society; Taiwan

ABSTRAK

Industri halal global pada masa ini bernilai lebih USD1 trilion. Banyak pihak berlumba-lumba untuk turut serta dalam pasaran yang menguntungkan ini, termasuklah perniagaan yang beroperasi dalam konteks minoriti Islam. Dalam merebut peluang ini, semua pihak perlu memahami situasi semasa berkaitan industri ini, demi untuk merancang dan melaksanakan strategi-strategi pertumbuhan yang berkesan. Kajian ini meneliti konteks minoriti Islam di Taiwan dan menggunakan Sistem Model Viable (VSM) sebagai kerangka untuk mendiagnosis keadaan semasa industri tersebut. Data untuk diagnosis ini kebanyakannya dikumpulkan melalui temuramah dengan agensi berkaitan, pengurus atau usahawan perniagaan-perniagaan halal serta pengguna produk halal dan perkhidmatan Taiwan. Analisis kami mendapati industri halal di Taiwan telah pun mempunyai beberapa unit pelaksanaan termasuk Halal Taiwan Center yang menyokong pertumbuhan perniagaan halal. Selain itu, terdapat badan pensijilan yang wujud bersama, ada antaranya yang berorientasikan perniagaan, manakala yang lain berteraskan khidmat untuk masyarakat. Penemuan kajian juga mendedahkan peranan penting penduduk Islam tempatan dan institusi masjid dalam proses pensijilan halal yang beroperasi dalam konteks kalangan masyarakat minoriti Islam. Hal ini membuktikan Taiwan mempunyai asas yang kukuh dalam persekitarannya untuk menyokong pertumbuhan pesat industri halal. Perakuan badan pensijilan Taiwan oleh Malaysia dianggap sebagai satu mekanisme sokongan penting untuk menyokong kemasukan Taiwan dalam pasaran halal global. Secara umumnya, dasar pembangunan industri halal Taiwan yang formal masih belum ada yang membawa kepada kurangnya fungsi penggubalan polisi, penangguhan, pengawalan dan penyelarasan yang diperlukan oleh sesebuah industri berdaya maju. Untuk tujuan ini, kerajaan Taiwan perlu mewujudkan polisi pembangunan industri halal Taiwan yang bersepadu serta mengadakan fungsi-fungsi lain dalam memastikan kesepaduan antara pihak bagi menguruskan kepelbagaian dalam persekitaran setempat serta global.

Kata kunci: VSM; sistem model viable; perspektif sistem; pendekatan sistemik; industri halal; masyarakat minoriti Muslim; Taiwan

INTRODUCTION

The global halal economy is currently a multi-trillion dollar industry. In late 2016, the value of the global halal market was estimated at USD5 trillion and predicted to hit USD7 trillion by 2018 (WIEF Foundation 2016). By 2025, the halal food market alone is estimated to reach 1 trillion dollar mark (MOEA 2018). Halal industry includes products and services that span across various sectors of food and beverages, pharmaceuticals, banking, financing, tourism, hospitality. The exponential growth of the industry corresponds with the rising numbers of Muslim population globally and the increase in their purchasing powers. Therefore, it is hard for any industry, even within Muslim-minority segments, to ignore this profitable market due to its pervasive nature in today's world and its high potential for growth. Indeed, the booming global halal market has now attracted many Muslim-minority countries, including industrialized Asian Pacific nations such as South Korea, Japan, and Taiwan (Fazira 2020; MOEA 2017; MOEA 2018).

One of the Muslim-minority countries which had explicitly selected the exporting of halal products as its latest policy agenda, is Taiwan. Under its New Southbound Policy, which was launched in September 2016, the establishment of a halal industry ecosystem has been made a priority agenda for Taiwan with the aims to increase the numbers of Taiwanese firms that are halal certified as well as to increase the numbers of Muslim tourists coming to Taiwan (MOEA 2017; MOEA 2018). This situation is interesting, due to the marginal number of Muslims who are actually living in Taiwan. According to the Taiwan Halal Center (2017a; 2017b), the number of Muslim Taiwanese nationals is about 50,000; a mere 0.2% of Taiwan's total population of 23 million. Other than that, there are about 280,000 foreign Muslims who are living in Taiwan for work or for study. Most of these foreign Muslims are immigrants of Indonesian nationality, who work in the construction or as domestic helpers.

The use of the term 'halal' refers to Muslims' obligation to lead a lifestyle that conforms to the teachings of Islam. Among others, Muslims are obligated to consume halal food and subscribe only to services that are considered as halal, literally translated as permissible and clean. Halal food, for example, has to be prepared in accordance to the rules stipulated by the Islamic principles. Among the rules include the prohibition of consumption of pork and liquor, adherence to the rules of animal slaughtering and requirement of hygiene in the entire process and at the place of preparation. In fact, the concept of cleanliness within the halal context goes beyond physical scrutiny; rather it encompasses humane treatment to everyone and everything, including to the workers who are involved in the value chain and animals which are being prepared as food. In other words, no one and nothing should be harmed or abused in any way. Obliging to these rules render the output of the process, be it a product or a service, to be halal and good for consumption (Al-Qaradhawi & Mohd Hafiz 2016; Marwan 2017).

Given the complexity of the rules of halal, the growth of halal industry becomes contingent with the existence of a robust ecosystem. In the context of Muslim-minority societies, halal industry ecosystem has to be developed in total, probably from scratch. This is because, due to the lack of the fundamental need or the knowledge foundation about halal, Muslim-minority societies who are interested to become part of the global halal industry ecosystem, have to find their way to develop their industry and possibly have to put vigorous effort in order to become competitive. Drawing on these needs, the objective of our study is to diagnose the current state of halal industry of Taiwan using the Viable System Model (VSM) approach. This diagnosis will illustrate the current state of affairs of the halal industry, including identifying the existing functions and roles played by various parties involved in the development of the industry (or lack thereof), so that the strategies for growth of the industry can be properly planned and implemented.

FRAMEWORK FOR DIAGNOSIS OF HALAL INDUSTRY

In diagnosing the current state of Taiwan's halal industry, this study utilize the principles of VSM and the concept of halal to illustrate the dynamics of the environment.

THE HALAL CONCEPT

Halal in general means 'permissible', and cannot be separated from the concept of *toyyib*, means 'good'. Both concepts are to be taken together to form what is known as *halalan toyyiban* (commonly referred as halal). The principles of *halalan toyyiban* are stipulated by the Quran and the Sunnah that are subscribed by all Muslims. Its application is comprehensive and encompasses all aspects of Muslims' lives. Therefore, the rulings of halal must be observed at all times and applicable in the entire value chain of any product and service. For the food industry, for instance, the requirements of halal go beyond the industry's 'good practices' such as quality control, cleanliness or food security. Based on the rules of halal, food ingredients must also free from religiously prohibited elements such as liquor and pork or substances originated from animals that are not slaughtered in the name of Allah. In addition, observing the rules of halal means that the well-beings of all members of the societies and other

creatures in the environment must also be safeguarded. Thus, among the overarching principles of halal are, all that is halal must be permissible by Allah, and all that is permissible must be good and not harmful for the mankind.

At the societal level, Muslim communities are obligated to help each other to ensure that the rules of halal are able to be adhered to, of as a part of the community's social responsibility. Thus, halal is considered one of the obligatory, God-given divine standards that are derived from the Islamic teachings and must be implemented by His servants. In Malaysia, a Muslim-majority country, procedures related to halal matters are administered by the Department of Islamic Development of Malaysia (abbreviated as JAKIM). JAKIM is Malaysia's central authority that manages halal certification process in Malaysia, which comprehensively cover all relevant aspects of halal certification. In fact, JAKIM's halal standards are recognized as the gold standard of global halal industry by many Muslim-majority countries.

The existence of Malaysia's halal administration is an example of an effort by a Muslim country's authority to facilitate the implementation of halal concept as part of their societal responsibility and guided by the religious values subscribed by the community. Nevertheless, this might not be the case for Muslim-minority societies. Observance of Islamic teachings or religious responsibility might not be the motivation for such community to embark on the halal industry; rather the efforts are likely underpinned by the principles of business growth and profitability. In order to secure sustained demands from both the domestic and global levels, there is a need for all interested parties of the halal industry to fully understand, first and foremost, the halal concept, as well as the operations of the industry. In particular, the development and sustainability of the halal industry are the areas of concern for businesses and policymakers, while on the part of consumers, the development of halal industry is equivalent to ensuring that the concept of halal is properly implemented and that its stringent requirements are fulfilled in accordance to teachings of Islam. Among others, trustworthiness needs to be embedded into the operation of halal products and services.

A SYSTEMS PERSPECTIVE ON HALAL INDUSTRY, BASED ON THE VSM FRAMEWORK

Viable System Model (VSM) is a framework that is developed based on the systems perspective that centres on the 'viability' or the ability of a system to become sustainable or self-sufficient in its environment. This viability can be achieved through effective control and information flow as determined by the five principles and five functions (Espejo & Gill 1997; Hoverstadt 2008). This systemic approach allows this study to make a comprehensive evaluation of Taiwan's halal industry, as opposed to a non-systems approach. The latter is considered a segmented evaluation method in which the diagnosing process typically focuses on certain elements while purposely ignore others.

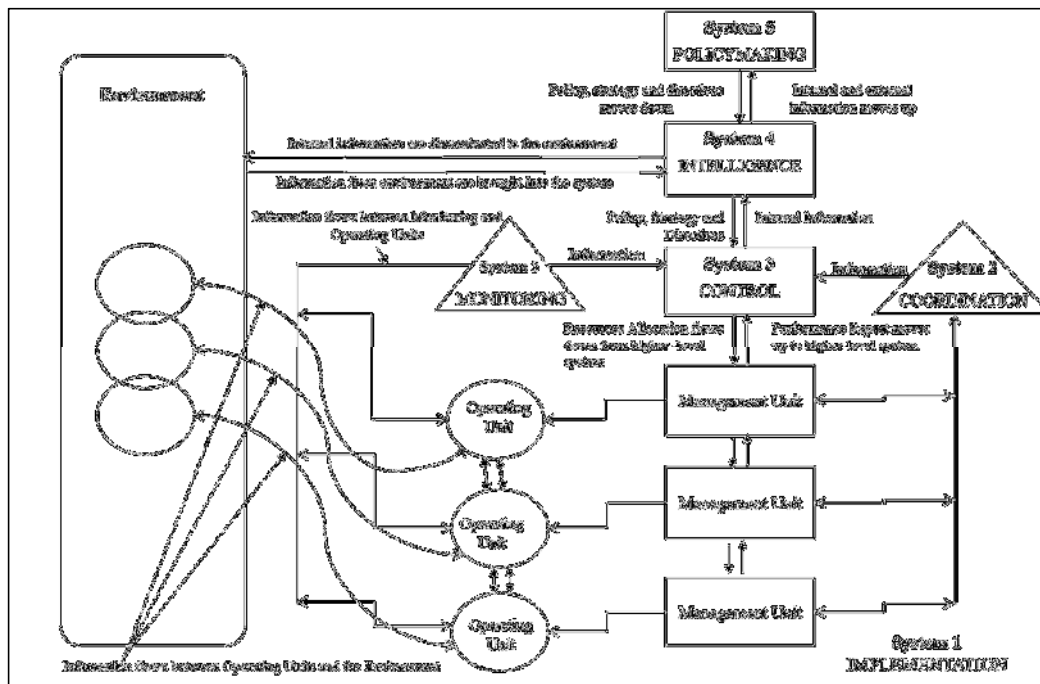
Extant literature that focuses on the halal industry mostly discusses about specific aspects of the industry such as halal logistics and supply chain management (Ab. Talib & Hamid 2004), halal market and its growth (Mohd Nawawi et al. 2019), halal certification (Jaiyeoba, Abdullah & Dzuljastri 2019) and halal tourism (Nur Sa'adah et al. 2019). So far, there is an obvious lacuna in analysing the halal industry systemically or explaining how the elements within the industry interact and collaborate with other, for the purpose to facilitate its management and sustainability.

The VSM can be utilized as a diagnosis or modelling tool, or as both (Khairul Akmaliah et al. 2015). Past studies have utilized VSM to diagnose, for example, the implementation of a biotechnology policy (Khairul Akmaliah et al. 2011), an IT industry development policy (Khairul Akmaliah et al. 2012); and the operation of a social incubator (Khairul Akmaliah et al. 2019). In addition, VSM had been applied in conceptualizing a viable research university (Khairul Akmaliah et al. 2015) and monitoring of functions of a policy implementation (Khairul Akmaliah et al. 2017). For this study, the VSM is utilized in the diagnosis mode.

Figure 1 showed the basic elements of a VSM. Based on the framework, the viability of the system hinges on the implementation of the five principles of a viable system, which include *recursiveness*, *complexity*, *cohesion*, *responsiveness* and *variety*. Recursiveness can be described as a characteristic of a system that consists of sub-systems and that these sub-systems comprises of their respective subsystems as well. In fact, the main assumption of VSM is that each system contains further subsystems right down to the level of the single cell, or in the context of an organization, a single person (Espejo & Gill 1997). According to the VSM, a system needs to have all its subsystems to be viable for it to be deemed as viable. The viability of each system at all levels of recursion is required to manage the system's complexity as defined by the organization purpose and its varieties (Beer 1981, 1989; Espejo & Gill 1997; Hoverstadt 2008).

Moreover, the viability of a system and all of its subsystems requires their cohesive relationships; cohesive relationships of all the five system functions (*implementation*, *coordination*, *control*, *intelligence* and *policymaking*) are also required to achieve system viability. Cohesive operations of all the subsystems and system functions support the ability of the system to respond to its internal and external complexity (system responsiveness), which means the system possessed sufficient internal varieties to match its external varieties (Espejo & Gill 1997). Responsiveness is defined as the system's level of readiness to manage these varieties. This

means that the higher the variety or complexity in the environment, the faster the responsiveness (or level of readiness to act) is needed in the system.



Sources: Adapted from Beer (1981); Espejo & Gill (1997); Hoverstadt (2008); Khairul Akmaliah et al. (2008; 2017; 2019)

FIGURE 1. Viable System Model, with salient descriptions of the lines, arrows and shapes.

In reference to VSM structure shown in Figure 1, successful utilization of all five viability principles requires the halal industry to act as a system that operates the policymaking (System 5), intelligence (System 4), control and monitoring (System 3), coordination (System 2), and implementation (System 1) functions (Beer 1981, 1989; Espejo & Gill 1997; Hoverstadt 2008). The policymaking (System 5) is related to the function of decision-making concerning the system under study. Meanwhile, the function of intelligence (System 4) directly collects relevant information from the external environment at the higher level as well as gathers information of its internal situation and lower-level environment through the control function (System 3). These information are subsequently submitted to the policymakers (System 5) for decisions at the strategic-level.

Once the decision making (i.e. policymaking and intelligence) is made, the intelligence function (System 4) then communicates the instructions from management of the higher-level to the implementation unit (System 1), via the control unit (System 3). It also directly distributes the internal communicate to the system environment. In general, the implementation function (System 1) is the system's primary production unit (Espejo & Gill 1997) while the coordination function (System 2) ensures the smooth running of the communication and information flow amongst the implementation units and between the implementation function and the higher-level functions.

As defined from the VSM perspective, a viable halal industry that possesses the conditions of viability (the five principles and five functions), is expected to be able to develop the requisite variety that matches its environmental ones in a successful way. Particularly, having these conditions would assist the halal industry to become responsive to its environment such that it is able to fulfil the needs of its customers and other relevant stakeholders within the local and global halal industry. These stakeholders, which include the suppliers, manufacturers, consumers, and others in the value chain, must fulfil the obligations of the Islamic beliefs. In addition to the basic conditions of the halal standard, the Islamic beliefs also stress the efficiency in the essence of the factors of production, including the need to avoid waste and abuse of resources and supplies and ensure benefits to the communities and environment. In the VSM term, internalizing the Islamic teachings and understanding of the halal markets becomes the requisite variety of the system in serving the needs of its customers (suppliers, manufacturers and end consumers) which are involved in the manufacturing of halal products or services.

The application of the five principles and five functions of VSM is also determined by the system's purpose (Devine 2005). In this study, the halal industry development of Taiwan is a part of the initiatives under Taiwan's New Southbound Policy. The initiative was to support export of home-grown halal products to the global halal market, as well as to develop the local halal industry to attract inbound Muslim tourists to Taiwan (MOEA 2017).

METHODOLOGY FOR SYSTEM DIAGNOSIS

This study adopted the qualitative design by Merriam and Tisdell (2016) as the method to conduct the diagnosis of the halal industry of Taiwan. The qualitative design is most suitable given that there is a need to understand, in-depth, the functions, elements and characteristics of the halal industry, as well as the underlying nuances of the social context (Nur Sa'adah et al. 2018). This study collected qualitative data through 1) in-depth interviews with the relevant agencies, organizations, consumers of halal products, as well as owners or managers of selected businesses located within Taiwan, 2) physical observations on the availability of halal consumer products on the shelves in selected supermarkets and convenience stores as well as 3) through systematic online reviews on the availability of halal products and services on two selected business-to-business (B2B) platforms.

Based on the VSM, we developed the protocols for the interviews with the stakeholders of the halal industry in Taiwan, including halal certification bodies and other relevant agencies, selected manufacturers and consumers. For interviews with the halal certification bodies and other relevant agencies, the questions focused on their tasks and functions. For interviews with the manufacturers, the interviews were focused on getting the information about the companies and the process of that they have to go through in getting their halal certificates. Whereas the interviews with the consumer group, who included Muslims who were traveling to, or living or studying in Taiwan, were focused on their behaviours in halal food consumption.

The participants of our study include the representatives of the Chinese Muslim Association of Taiwan (CMA), Taiwan Halal Integrity and Development Association (THIDA), the Taipei Grand Mosque Foundation (TGM), Taiwan Halal Center (THC) and other relevant agencies in Taiwan; as well as manufacturers and businesses that have gained halal certifications, and a number of consumers of halal products and services in Taiwan, including tourists to Taiwan. The three manufacturers selected for this study (Firms A, B and C) were among the small number of Taiwanese businesses that run full halal operation and were willing to provide information about their firms and the process that they had underwent in getting halal certification. Firm A produced cakes and cookies, while firm B was a gourmet ice-cream maker. Whereas Firm C manufactured and sold high-end cooking oils. In total, we interviewed 40 participants representing the certification and relevant agencies, manufacturers and consumers.

In addition to in-depths interviews, to corroborate our interview data, we conducted four structured observations, which focused on examining the availability of products with halal logos, at two major supermarkets and two convenience stores operated within the densely populated capital city of Taipei and located in areas most frequently visited by tourists to Taiwan. One supermarket was located in the Taipei 101 building, while the other in Ximending; while both the convenient stores were located in Gongguan area of Taipei. Whereas for ascertaining the availability of halal products and services on business-to-business platforms, we conducted a systematic online review at TaiwanTrade and Idealez.com, two major online business-to-business trading hubs in Taiwan. Data collection was completed in early 2018.

All of interviews were audio recorded and transcribed, while the observations and online reviews were documented as field notes. Data analysis process comprised of several steps: First, we gathered the interview transcripts, as well as the notes from observations and online review, to constitute the main dataset of this study. Second, based on the VSM as the diagnostic framework, we identified the players within the halal industry ecosystem in Taiwan and developed in-depth understanding of the functions and tasks of each of the agencies. Third, we mapped our findings onto the VSM framework. Fourth, we affirmed the mapping of the functions onto the VSM by cross-comparing our data against the functions and principles of the VSM framework. Finally, we generated the output of this process, which is a framework that comprehensively illustrates the current state of the halal industry in Taiwan.

FINDINGS – HALAL INDUSTRY ECOSYSTEM OF TAIWAN

HALAL INDUSTRY FOCUS UNDER TAIWAN'S NEW SOUTHBOUND POLICY

The new Southbound Policy, which was launched in late 2016, was aimed at achieving the economic growth of Taiwan over the long term and to establish prosperity for all of its partner countries in South Asia, Southeast Asia and the South Pacific through “enhancing trade and economic ties” (MOEA 2017; MOEA 2018). One of the policy's objective is to promote the establishment of halal industry for internal and export markets, with having its own halal industry ecosystem become a priority for Taiwan (MOEA 2017; MOEA 2018). The partner countries under this policy include ten member countries of the Association of Southeast Nations (ASEAN), six nations of South Asia, as well as Australia and New Zealand. Among the main aspects that were being pursued under their New Southbound Policy were economic and trade collaborations, people-to-people exchange and resource sharing and promotion of institutional links.

Resource sharing with partner countries, in particular, has been mentioned explicitly in the Southbound Policy document as the vehicle toward promoting the development of halal industry in Taiwan in the sectors of

agriculture and tourism (MOEA 2017). One of the executives who was involved in managing the Taiwan halal product exports further explained on this matter:

“The development of Taiwan halal industry refers to both our export market as well as the local market. For the export market, this initiative is to encourage Taiwanese businesses to obtain halal certification to facilitate our products’ entry into the international market. Internally, the halal policy aims at increasing the numbers of halal-certified local products and services to attract Muslim travellers to visit Taiwan.”

Our further review on the documents related to this policy, however, revealed the absence of a specific policy document on the halal industry development.

ADMINISTRATION OF THE MUSLIMS’ AFFAIRS IN TAIWAN

In analysing the halal industry in Taiwan, it is important to understand the affairs of the Muslims in Taiwan. The main body that administers the affairs of Muslims in Taiwan is the Chinese Muslim Association of Taiwan. A former Imam of the Taipei Grand Mosque explains the fundamental functions of the Chinese Muslim Association:

“The functions of CMA include the management of hajj affairs for the Muslims in Taiwan. It also receive and manage donations as well propagates the teachings of Islam among local Muslims. The aim of the organization is to promote the beliefs of Islam and support the Taiwanese born Muslims to observe their religious obligations”.

The Chinese Muslim Association also acted as the ‘go-between’ the Taiwanese government and the Muslims in Taiwan. The formation of the association was actually originated in the Mainland China in 1930s, before it was properly registered in Taiwan in 1950s. By 2018, there were eight major mosques in Taiwan; six of them were under the purview of the Chinese Muslim Association, while two were operated by other bodies. To date, the Taipei Grand Mosque is the biggest mosque and Islamic centre in the capital city of Taipei. While explaining on the early initiation of halal certification process in Taiwan, one director of Taipei Grand Mosque stated:

“In earlier times, the process of halal certification was not too structured. It was based more on trust. If the restaurant or other business owners were Muslims and members of the mosque’s congregation, then their products (slaughtered meat or prepared foods) were considered as halal and good for consumption by other Muslims. This ‘certification’ was strictly based on trust, without any physical certification or audit conducted.”

Besides Taipei Grand Mosque, other mosques, such as Kaohsiung Mosque and Taichung Mosque also played an active role in facilitating the practices and management of halal through giving halal certification as well as providing informal endorsement of halal for Muslim-operated business premises as a form of social service for the benefit of the local community (Nur Sa’adah et al. 2018). This situation was afforded by the active engagement of the local-born Muslims, who led by the Imam of the mosques, who were committed to ensure that Islamic teachings can be properly practiced by its followers. By 2018, most halal certification bodies in Taiwan operated offices that were located within these mosques. The mosques, particularly the Taipei Grand Mosque, also served as halal products’ marketing platforms for the Muslim community.

HALAL CERTIFICATION BODIES AND HALAL CERTIFICATION PROCESS IN TAIWAN

Early initiatives on formalizing halal certification began in 1990s by Taipei Grand Mosque, due to the demands from several local non-Muslims product manufacturers who wanted to sell their products to Muslim customers. Overtime, the demand for halal certification continued to increase. Previously, most of products consumed by Muslims in Taiwan were produced by Muslims themselves, as such, integrity issues did not arise; the Muslims would trust that the products produced by fellow Muslims should be fit for their consumption. Following Taipei Grand Mosque, later on, other mosques also began to offer their own halal certificates that targeted their respective communities.

In early 2000s, the management of the Taipei Grand Mosque began to approach JAKIM of Malaysia in the former’s effort to gain some sort of international recognition for their function as a halal certification body. The effort was also to enable the local Taiwanese products to be marketed to Malaysia. In 2004, Taipei Grand Mosque was granted as one of the recognized foreign halal certification bodies by JAKIM. By late 2011, new certification bodies appeared in the form of Taiwan Halal Integrity and Development Association, Taichung Mosque, and Taipei Cultural Mosque. All these certification bodies were private bodies with no direct connection to the government of Taiwan. In the same year, Taiwan Halal Integrity and Development Association managed to gain itself the recognized foreign halal certification body status from JAKIM, and later from Indonesian Ulema Council (MUI) as well as Singaporean Islamic Religion Council (MUIS). Since late 2010s, Taiwan Halal Integrity and

Development Association emerged as the one and only certification body in Taiwan that had been given the recognition by multiple international agencies, namely JAKIM, MUI, and MUIS.

International recognition is considered vital for the local certification bodies in Taiwan, as international endorsements facilitate export of Taiwan halal products into the Muslim markets. For example, in the case of Malaysia, all products must be certified halal by JAKIM or by other bodies endorsed by JAKIM, in order to be marketed as halal for Malaysian markets. Particularly being a Muslim-minority society, the endorsement by JAKIM is considered crucial for Taiwan to gain the trust of other importing Islamic countries. Due to these reasons, local certification bodies in Taiwan seemed to recognize Malaysia as the main gateway for Taiwan's entry into the lucrative global halal markets.

By 2018, the Taiwan halal industry has evolved with having multiple certification bodies co-existing; several being business-oriented, while the mosques continued to play their social roles at the community level. The certification process or activities under the bodies are mainly managed or supported by the local-born Muslims' employees. The Chinese Muslim Association of Taiwan emerged as the main certification body for local services of restaurants, kitchens, and other related tourism services, while Taiwan Halal Integrity and Development Association as the main certification body for foods and manufactured foods. On the other hand, Taipei Grand Mosque served as a certification body for both local services and manufacturers, whereas Taichung Mosque continued to give halal certifications particularly to manufacturers which operated in close vicinity to the mosque. Taiwan Halal Integrity and Development Association had a structured organization, with staff members in charge of the halal certification process. Similarly, the Chinese Muslim Association, also had dedicated staff members to manage the halal certification unit. The staff members at the Taipei Grand Mosque and the Taichung Mosque, on the other hand, while having the most experience in conducting halal certification process, needed to perform multi-tasking in serving multiple roles as the respective mosque's committee members.

Our interviews with three selected manufacturers revealed that they were satisfied with the efficient certification services provided by Taiwan Halal Integrity and Development Association (two manufacturers – Firm A and C) and the Taipei Grand Mosque (one manufacturer – Firm B). All of them had benefitted from having the certification in terms of local sales particularly for the tourism market. However, Firm B, whose products were certified by a body that had yet to obtain the recognized foreign halal certification body status from JAKIM, was not able to use it as a support of their market entry into the global Muslim markets. In addition, being new in the international market, Firm B also faced other market entry-related problems including absence of distribution partner in Malaysia. In contrast, Firm A had a vast experience in international market. And because it had received halal certification by Taiwan Halal Integrity and Development Association, which had obtained the JAKIM's certified body status since 2011, it was able to achieve rapid growth in many international markets.

Regardless of issues faced by Firm B, the process that all three firms had underwent to become halal certified was fast, simple and structured. It took them between two to six months to obtain the halal certification, depending on their readiness to meet the halal standard requirements (the process began from the time they filled up the paperwork and had their products checked, to the time they finally receive the certification from the certification body). The fact that the managers and entrepreneurs were non-Muslims and were initially unfamiliar with halal concepts and applications was not a major problem. Among the reasons for this smooth-running process were probably due to these companies having highly mechanized manufacturing and factory operations, as well as clear procedures and documentations regarding the sources for their products' ingredients, whether from plants or animals.

GOVERNMENT AND PRIVATE AGENCIES RELATED TO HALAL INDUSTRY IN TAIWAN

In April 2017, the Taiwanese government formed the Taiwan Halal Center, which operated by the Taiwan External Trade Development Council (TAITRA), under the Bureau of Foreign Trade. The establishment of Taiwan Halal Center seeks to enhance the lives of Muslims in Taiwan through developing halal industry internally and to increase its halal export markets (Taiwan Halal Center 2017a). The first function of the Taiwan Halal Center were to support establishment of a conducive Muslim-friendly environment for Taiwanese Muslims, while, the second function aims to increase exports of Taiwanese products (Taiwan Halal Center 2017b). In fact, by having a robust Muslim-friendly environment in Taiwan, it would tremendously improve the overall quality of lives of the local Muslims in Taiwan. Being a minority group in Taiwan, for many years, the Muslims faced difficulties in getting halal food and in observing their religious obligations (Abu Zafar 2016).

By the end of 2017, there have been some efforts by private associations, such as International Muslim Tourism Industry Development Association, to support the local service providers to increase the quality of their services to ensure high satisfaction of Muslim tourists. For this purpose, the International Muslim Tourism Industry Development Association had leaned on recognitions by international bodies, such as International Islamic Institute for Halal Research and Training of Malaysia. In the same year there were about 700 Taiwanese manufacturers who had obtained the halal certification, with more than 500 of these manufacturers received their

halal certifications from Taiwan Halal Integrity and Development Association, while the rest received certifications from Taipei Grand Mosque and Taichung Mosque.

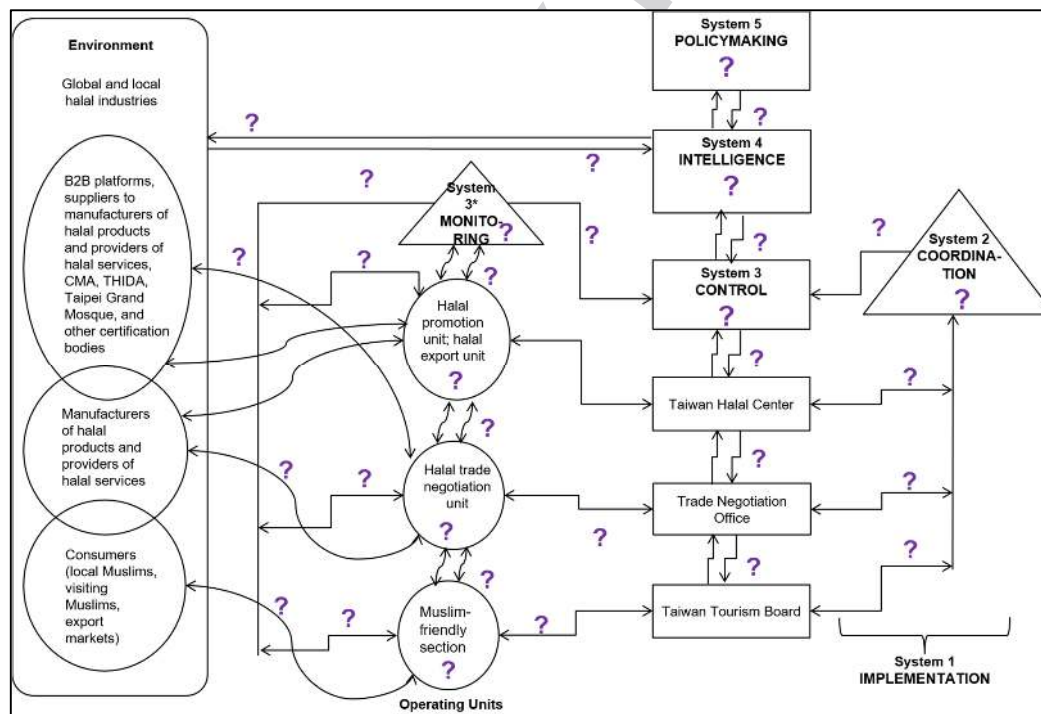
AVAILABILITY AND VISIBILITY OF TAIWANESE HALAL PRODUCTS AND SERVICES IN THE DOMESTIC MARKET

Based on our observation, the number of halal products and services on business-to-business platforms is low, despite the high number of Taiwanese companies that had successfully obtained halal certificates. In 2018, there were only about 280 halal products being listed on the TaiwanTrade.com, with only sixteen halal items spotted on Idealez, a major business-to-business/business-to-customer (B2C) e-commerce platform in Taiwan. This seems to indicate the possibility that the local demand for halal product is still low and/or that these manufacturers' perceive that the local retail consumers are not part of their target markets, and/or that the branding of the Taiwanese halal logo is still unknown to both potential local and foreign buyers, and/or that the marketing of halal products through these B2B and B2C platforms was not significant as a means to reach out to their targeted customers.

Similarly, the availability and visibility of products with halal logos in Taiwanese supermarkets and convenient stores are generally low, as evidenced by our interview and observation data. Most of the products with halal logos, when available, were stamped with logos of foreign bodies such as that of JAKIM, MUI and MUIS. Very few products carry the halal logos of local Taiwanese certification bodies. In addition, the products, when available, were not really visible as halal products due to the humble size of halal logos displayed on the product packaging. According to our interviewees, almost all descriptions of the ingredients of the products on sale in Taiwan were written in Chinese only, thus, adding the difficulty for those who cannot read the language to ascertain the status of the products. Moreover, halal logos of local Taiwanese certification bodies were not widely known amongst the local Muslims in Taiwan, more so to foreign tourists who were visiting for short-terms.

ANALYSIS OF TAIWAN'S HALAL INDUSTRY, BASED ON VSM

Figure 2 maps the current halal industry ecosystem in Taiwan, based on the VSM framework.



Note: Question Mark “?” denotes the missing or unclear function, unit or linkage.

FIGURE 2. The halal industry ecosystem in Taiwan, based on the framework of VSM

SYSTEM 5 (POLICYMAKING), SYSTEM 4 (INTELLIGENCE), AND SYSTEM 3 (MONITORING AND CONTROL)

Taiwan's New Southbound Policy contained some tactical plans for the development of halal industry. However, there seems to be an absence of a specific halal industry development policy. A structured plan of actions is also missing, namely on how they are going to achieve the plans for resource sharing (which aim was stated in the Southbound Policy as to promote the development of halal industry). Absence of the policy lead to the missing functions of policymaking (System 5) which is to be aided by the intelligence functions (System 4) and by the control functions (System 3).

SYSTEM 2 (COORDINATION)

System 2, namely coordination, is also missing, because there is a lack of evidence of coordination among the different implementation units, namely, Taiwan Halal Center and Taiwan Tourism Board. Taiwan Halal Center does not have strong linkage in terms of joint programs with the Taiwan Tourism Board, with each operating mainly on their own.

SYSTEM 1 (IMPLEMENTATION)

System 1 seems to be in place with several implementation units, namely, Taiwan Halal Center, Trade Negotiation Office and Taiwan Tourism Board. One of the implementation units, Taiwan Halal Center, acts as the halal trade promotion unit that serves both the government and the industry. This unit, which is located within the structure of the Taiwan External Trade Development Council, however, is not a full government office. Being a council, rather than a full-fledged government office, renders it lacking of authority in making policies or giving instructions to members of the private sector that operate halal businesses (i.e. manufacturers, hotels, travel agencies). In other words, the implementation unit can provide coordination activities but not direction to related businesses.

There is also an absence of a dedicated halal trade negotiation unit to facilitate the businesses entry into the global market. Given the aspiration for involving in the global halal industry, the government of Taiwan need to establish a dedicated halal trade negotiation unit, within the office of trade negotiation. Moreover, there is yet a specific Muslim tourism unit under the Taiwan Tourism Board. Taiwan Tourism Board's responsibility covers all aspects of tourism activity in Taiwan, and not just focusing on the Muslim-friendly or halal tourism. Some efforts have been put into promoting halal-based tourism activities in Taiwan, through providing relevant information on the board's website, engaging celebrities, as well as providing incentives to hospitality providers. There are other forms of information dissemination online, through the mobile apps and websites on Taiwan's halal tourism, however, they are developed by individuals and private entities whom do not received any financial support or incentives from the board.

LINK BETWEEN THE MANAGEMENT UNITS, OPERATING UNITS AND ENVIRONMENTAL ELEMENTS

Taiwan Tourism Board has yet to institute a structured process of collecting information on Muslim tourists, perhaps due to the absence of a specific unit that manages the sector of halal tourism. Even though the board does provide a website that contains information on service providers (e.g. hotels, restaurants and tour agencies), our research found that the information provided seems to be fragmented, not up-to-date and some were incomplete. Moreover, relevant information seems to not being properly disseminated to potential Muslim tourists. This is evidenced by our informants stating their lack of knowledge of the existence of such website. As such, there is the need for a consolidated information management in order to facilitate tourists to get the information that they need.

On the link of the Taiwan Halal Center to its environment, there seems to be some joint programs between Taiwan Halal Center and elements in its environment such as the Taipei Grand Mosque and selected manufacturers which have gained halal certification.

SYSTEM ENVIRONMENT: HALAL CERTIFICATION BODIES, MANUFACTURERS, SERVICE PROVIDERS, SUPPLIERS AND CONSUMERS

The environment of the halal industry can be categorized as high in complexity, due to Muslim-minority's environment in Taiwan that is not very familiar with Islam, particularly among officers in the government offices and agencies; even among the general society. This situation requires highly effective higher-level intelligence function (S4), which should be responsible for gathering the information on the demand and supply of halal businesses in Taiwan. In addition, there is a need to educate the general society through disseminating information about halal and Islam in general. Given Taiwan's focus on the global halal market, the system requires high

intelligence amongst its society of further understanding the behaviour of Muslim tourists to Taiwan as well as the Muslim consumers of the global markets.

The intelligence function in general is to gather internal information via the control function and to disseminate this information to the external environment. This intelligence function seems to be missing at the moment, thus creating a situation of asymmetrical information, which in turn lead to lack of information not only to serve the purpose of policymaking but also for the purpose of the implementation units in the system as well as the system's stakeholders in the environment. This absence perhaps explains why the halal industry in Taiwan is still relatively unknown to the general public, while the availability and awareness on the branding of the halal products made in Taiwan are still very low.

Particularly since the Taiwanese government has explicitly define that the growth in the global export market as one of its goals, knowledge about the global halal market needs to be fed into the system. At the lower level system (System 1), currently, the implementation unit of the Taiwan Halal Center are doing its own intelligence, but as the intelligence function at the higher system level is missing, the amount of information needed to support viability of the implementation subsystem is insufficient.

The halal certification agencies, and the Taipei Grand Mosque and other local mosques play an active role in facilitating the practices of halal in Taiwan through providing formal and informal endorsement of halal for Muslim-operated business premises in their respective community. The mosques also play important role in providing halal certification to non-Muslims-operated manufacturing facilities.

From the manufacturers' perspective, those that were interviewed agreed that they had received efficient service in getting their halal certificates. Our study also revealed that each of the halal certification bodies conducted their own intelligence function, respectively. In comparison to Taipei Grand Mosque, the Chinese Muslim Association and Taiwan Halal Integrity and Development Association have a more structured process of disseminating information to the general public and collecting information on their respective halal certified products and companies. Taipei Grand Mosque with its shortage of staff members have yet to develop an updated databases about their certified products.

On the business side, for firms that have lack of experience and with halal products or services certified by the bodies not recognized by JAKIM, they face a lot of obstacles in entering into the Muslim market, particularly the Malaysia market. Whereas on the customer side, consumers face problems in getting halal products due to their lack of availability in the markets. Within tourism industry for example, Muslim tourists face difficulties when visiting Taiwan because of the lack of one-stop communication provided by the Taiwanese government. Information that are severely needed by Muslim tourists include the information concerning location of mosques and suitable places for prayers, places that provide halal foods, as well as prayer schedules.

CONCLUSION

In this study, we diagnose the current state of the implementation of halal industry in Taiwan, as an instance of a Muslim-minority society that is emerging as a global halal industry player. The systems perspective is a useful approach to comprehensively assess Taiwan's halal industry including the value chain, which includes halal certification bodies and other relevant agencies, halal product and service providers, as well as the consumers of the halal products and services in Taiwan. The framework is useful in evaluating the potential viability of a highly complex environment (Khairul Akmaliah et al. 2012) such as the halal industry that requires it not only to be adaptable to the demands of the industry, but also addresses the requirements of the Islamic teachings in its truest sense.

While the studies in halal industry have attracted a lot of attention in the recent years, to our knowledge, none of the literature have analysed the halal industry from a systems perspective as what has been done in this study. Our findings extend the current literature on halal industry management by providing a comprehensive understanding of halal industry ecosystem through defining the functions, the operating units, elements in the systems environment, as well as the relevant linkages.

On the whole, the findings highlight the existing functions that support the viability of the halal industry in Taiwan, as well as the missing pieces (the functions and the principles) needed for it to be competitive and sustainable in a long term. In particular, our analysis reveals an absence of a halal industry development policy. This situation then explains why Taiwan lacks the formal policymaking and intelligence as well as the control and coordination functions. The halal industry however has a very important implementation unit in the form of Taiwan Halal Center in support of halal industry promotion and growth.

The system's environment is conducive as it already have a thriving local-born Muslims in their communities. It also has multiple halal certification bodies in support of halal certification application and auditing by businesses. Some of these activities are operated at the mosques, with the mosques offering halal certification mainly as community service. There was also existence of halal certification agencies which are business-oriented. The businesses in the environment also demonstrate high level of readiness for embracing halal assurance system

given the highly developed nature of food production in Taiwan, which affords the manufacturers a smooth halal certification process.

Going forward, our analysis justifies the need for proposing a new integrated system of halal industry development policy in Taiwan. Such a policy requires the higher level functions of policymaking, intelligence, control and coordination along with the implementation units in the halal industry to adhere to the global business requirements as well as the Islamic teachings. In implementing this integrated policy, Taiwan needs to institute the missing functions and ensure cohesions among the functions to manage varieties both in the local as well as in the international environment if it aspires to emerge victorious as a player in the global halal industry.

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