Halal logistics in a rentier state: an observation

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Abstract
Purpose – Brunei Darussalam, a rentier state, aims to be one of the leading nations in the global halal industry, and logistics play a key role in realising the goal. However, even though logistics is a vital aspect of the halal supply chain, little is known about the halal logistics scene in Brunei. Therefore, this paper aims to discuss and uncover the various strengths, weaknesses, opportunities and threats surrounding the country's halal logistics sector.
Design/methodology/approach – The paper employs a subjective environmental scanning approach and a SWOT analysis technique through the author's observation of Brunei's halal logistics ecosystem from both intrinsic and extrinsic lenses.
Findings – The paper argues that substantial institutional support is an apparent strength, but the lack of halal logistics experts is a distinct weakness. Meanwhile, the growing use of technology presents an opportunity for the industry, but formidable regional competition poses a significant threat.
Research limitations/implications – Despite the paper's qualitative approach, insights from it could offer a better understanding of halal logistics in Brunei and serve a platform for future research endeavours.
Originality/value – Being a rentier state that depends on a non-renewable source, this paper offers an alternative strategy to diversify the economy and venture into the halal economy.

Keywords Logistics management, Halal logistics, Halal supply chain management, SWOT analysis
Paper type Research paper

1. Introduction
The recent 2019–2020 Global Islamic Economy Indicator (GIEI) (DinarStandard, 2019) forecasts that by 2024, the global Islamic economy would experience a substantial growth across multiple sectors in halal food, finance, tourism, cosmetics, pharmaceutical and fashion. Over the years, the Islamic economy has experienced a steady growth (Figure 1) that is estimated to reach a staggering USD 3.2 trillion by 2024.

The halal industry is the centre of the Islamic economy. Given the positive outlook and stable growth, it is a widely held view that the halal industry has emerged as one of the largest and most lucrative consumer markets in the world. Therefore, it is no surprise that nations and businesses around the world are jumping into the bandwagon and competing for a piece

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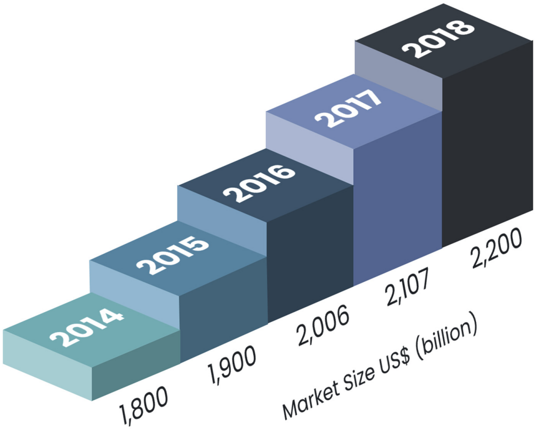

Source(s): State of the Global Islamic Economy Reports (2015-2020)

Figure 1.
Islamic economy market size 2014–2018

of the lucrative halal pie (Lever and Miele, 2012; Bergeaud-Blackler, 2015; Fischer, 2015; Izberk-Bilgin and Nakata, 2016).

Benefiting from the halal industry's growth is Brunei Darussalam. Located on Borneo Island in Southeast Asia, Brunei is a rentier state with a population of over 430,000 people and is one of the richest countries in the region (Musa, 2019). Brunei is a Constitutional Sultanate state where Islam is the official religion, and the Islamic fundamentals are engrained in its national and business affairs. Hence, the halal concept is deeply embedded among its citizens and businesses, and that commitment and investments in the halal industry have long been a national agenda.

The 2019–2020 GIEI ranks Brunei among the top 15 countries in the Islamic economy. Table 1 shows Brunei's standing in the GIEI. As shown in Table 1 the country excels in the halal food, pharmaceutical and cosmetics, media and recreation and tourism sectors. These commendable achievements portray Brunei's commitment and standing in the halal industry, as well as revealing its great halal business ecosystem that contributes to the global Islamic economic growth.

Brunei's commitment to the halal industry is evident. Being a rentier state, the volatile nature of the petroleum industry – Brunei's major source of income, and the erratic global oil prices, the country is devoted to diversifying its economy and be less dependent on petroleum-based revenues (Müller, 2016; Musa, 2019). Additionally, the decline in oil and gas production distorts the country's economic growth (Asian Development Bank, 2019), and thus, intensifies the need to reassess the sustainability of its economy. Therefore, the halal industry is seen as a promising avenue to reverberate the economy.

Table 1.
Brunei Darussalam's GIEI score and rank

	GIEI (overall)	Islamic finance	Halal food	Travel	Fashion	Media and recreation	Pharma and cosmetics
Score	40	35	53	30	11	44	49
Rank	11th	12th	6th	9th	12th	5th	4th

Source(s): State of the Global Islamic Economy Reports 2019/2020

Aside from the strategic undertaking, Brunei's focus on the halal industry is inevitable. Brunei is heavily dependent on halal imports, predominantly halal food, from countries like Malaysia, Singapore, Indonesia, Australia and the UK Looking at the country's food export and import numbers (Table 2), it is evident that food import surpasses export values by a large margin. The great dependency on halal food imports to cater for domestic consumption is because large-scale cattle farming and meat production are unsuitable in Brunei (Khalid *et al.*, 2018). Thus, it is obvious that the focus on halal industry is not only driven by economic incentives but also compelled by the need to satisfy domestic food consumption demand.

Crucial to Brunei's economy and its standing in the halal industry is logistics management. Logistics plays a key role in a nation's progress. For instance, Chu (2012) demonstrates that China's strategic logistics investment is necessary to encourage economic growth. Similarly, D'Aleo and Sergi (2017) further prove that better logistics system has a positive impact on economic growth among European countries. Surely, the careful logistical planning, operation and investments are central to Brunei's halal economy growth and progress. Moreover, logistics play a critical role in the country's halal supply chain as it ensures halal product and service statuses and integrity are protected from forbidden (haram) elements, and that logistical components and processes are performed according to the Sharia principles (Talib *et al.*, 2015a; Soon *et al.*, 2017; Zailani *et al.*, 2017).

Despite the vital role of logistics in the halal supply chain, there is hardly any research dedicated to logistics in Brunei and that data on its logistics industry are not available (Tongzon, 2011). The unavailable data could be due to the lack of proper documentation and that logistics industry in most Southeast Asian countries is not fully developed (Gupta *et al.*, 2011). In a study on foreign direct investment in Brunei, Yean (2018) describes Brunei's logistics sector as a substantially government-backed service sector that is uncompetitive, disintegrated and has a weak private sector involvement.

However, based on the 2018 Logistics Performance Index (LPI) (Table 3) – an indicator assessing logistics competitiveness, the World Bank classifies the country's logistics sector "above average" with a 2.78 LPI mean score (Arvis *et al.*, 2018). The LPI reflects that Brunei commands a reasonable and efficient logistics operation and connects firms to domestic and international markets in the supply chain. Moreover, in a seminal paper by Tieman (2011), Brunei, along with Malaysia, is the only country that has a developed halal supply chain system that is sensitive, robust and protective. Regrettably, the absence of dedicated halal logistics service providers and the nonuniform halal standards continues to be an issue for Brunei (Tieman, 2011). The disparity of views on Brunei's logistics sector indicates the lack of attention and dedicated research from past scholars. The diverging outlook on Brunei's logistics landscape, the issues surrounding its halal logistics and the supply chain call for a more in-depth observation and study.

Therefore, this paper attempts to investigate the current halal logistics landscape in Brunei. Specifically, the paper intends to discourse and highlight the strengths, weaknesses, opportunities and threats that surround the halal logistics landscape in Brunei. According to

			Bovine meat (numbers)		
			Import		Local
Year	Import (B$ million)	Export (B$ million)	Live	Processed (metric Tonnes)	Live
2016	599.5	8.6	3,181	1160.4	795
2017	565.1	11.3	5,427	650.5	651
2018	612.0	17.6	4,906	1296.0	681

Source(s): Department of Economic Planning and Development, Ministry of Finance and Economy

Table 2. Food import and export in Brunei (2016–2018)

Country	ASEAN rank	Global rank	Mean LPI score
Singapore	1	5	4.05
Thailand	2	34	3.36
Malaysia	3	35	3.34
Vietnam	4	45	3.16
Indonesia	5	51	3.08
Philippines	6	64	2.91
Brunei	7	73	2.78
Cambodia	8	89	2.66
Lao PDR	9	120	2.48
Myanmar	10	139	2.34

Source(s): The Logistics Performance Index and Its Indicators, The World Bank

Table 3.
LPI ranking and score

Talib and Hamid (2014), observing logistics development through intrinsic (strengths and weaknesses) and extrinsic (opportunities and threats) views would give a clearer picture on the halal logistics phenomena under study and potentially benefit stakeholders on a micro- and macro-level. This paper, hence, gives a fresher observation on two foundations. Firstly, being a rentier state that depends on the non-renewable petroleum industry, much of the literature on Brunei diversification strategies centred on foreign direct investment and entrepreneurial endeavour (Kumpoh, 2017; Hamdan and Hoon, 2019; Heilmaier and Ling, 2020; Thambipillai, 2020) and, unfortunately, hardly any on leveraging on the rapidly growing halal industry. Secondly, much of the research on the halal industry, and that of the halal logistics sector, are heavily focused on countries such as Malaysia (Zailani *et al.*, 2017), India (Haleem and Khan, 2017) and Indonesia (Masudin *et al.*, 2020). Except for the work done by Talib (2020a, b) on halal logistics in Brunei, scholars often overlooked Brunei's potential in the halal sector and its logistics prospects. Therefore, this paper offers an alternative strategy to diversify Brunei's economy by venturing into the halal economy and capitalising on halal logistics' growing significance in the halal supply chains.

The paper argues that there is potential for halal logistics to grow in Brunei. The presence of halal logistics in Brunei could be beneficial for various stakeholders. For instance, consumers would experience absolute halal goods and services. Given that the demand for halal food is growing – which is an obvious outlook here in Brunei (Muslichah *et al.*, 2019), and that consumers are constantly wary of the "*halalness*" of the food supply chain (Lubis *et al.*, 2016), this paper could offer a logistical insights or solution that might ease their trepidation. Meanwhile, for firms, the strengths and opportunities of halal logistics in Brunei would provide managers the insights on which areas in the logistics sector they should capitalise on in the pursuit of competitive advantage. Additionally, the halal logistics weaknesses and threats discussed in this paper would perhaps contribute to fundamental realisation on which area of the industry the public sector should focus its attention and resources. Besides, considering the lack of halal logistics studies in Brunei, an industry environmental overview is needed. Scrutinising the halal logistics environment in Brunei is necessary because this allows better understanding of the situation, leveraging on the strengths and opportunities and generate solutions to the weaknesses and threats (Talib and Hamid, 2014). Therefore, apart from the potential contribution to the industry, public sector and consumers alike, this paper would also enrich the growing literature on halal logistics by presenting insights from an often overlooked market – Brunei.

2. Halal logistics overview

Logistics is generally defined as a series of strategic processes that span across multiple organisations in managing the flow of goods, services and information from the point of origin to the point of consumption (Christopher, 2016; Murphy and Knemeyer, 2018). Further, logistics is part of a supply chain, and the last three decades have experienced substantial changes, progress and innovations (Larson and Halldorsson, 2004; Murphy and Knemeyer, 2018), such as from the use of steam engines to the ground-breaking containerization, to the use of electronic data interchange (EDI) and revolutionary function of radio frequency identification (RFID) (Grawe, 2009).

Innovation in logistics is crucial because the drive for globalisation is relentless. The push for globalisation continuously intensifies given that alleviated market entries, technological advancement, rapid information transfer and the rise of new and emerging markets are aggressively revitalising the current saturated global business (Kiessling *et al.*, 2014). Additionally, innovation is a key driver and firms devise new and sustainable ways to remain competitive (Wong *et al.*, 2016), to provide service advancement (Busse and Wallenburg, 2011) or to strive for sustainable operation (Björklund and Forslund, 2018).

One of the many innovations in logistics, specifically in service innovation, is halal logistics. Halal logistics is regarded as an innovation in the field because for consumers, particularly the Muslims, it brings in higher product or service value that are not only comprehensive but also complies with the Islamic principles (Fathi *et al.*, 2016; Haleem and Khan, 2017). Moreover, for firms, halal allows them to penetrate new markets, providing service enhancement and differentiation, and even improving the corporate image (Talib *et al.*, 2017; Zailani *et al.*, 2017).

According to Tieman *et al.* (2012), halal logistics is defined as:

> . . .the process of managing the procurement, movement, storage and handling of materials, parts, livestock, semi-finished or finished inventory both food and non-food, and related information and documentation flows through the organisation and the supply chain in compliance with the general principles of Shariah.

This thorough definition indicates that the halal concept is applicable in the supply chain and that shipments change hands from one party to another. This calls for halal approaches and logistics practices to be aligned in ensuring the protection of halal status and integrity throughout the entire logistics chain. Hence, through dedicated logistics service providers, the farm-to-fork integrity, safety and status of halal goods and services can be safeguarded (Zulfakar *et al.*, 2014).

In previous studies on halal logistics, different motivation factors have been found to influence halal logistics adoption. Zailani *et al.* (2017) explain that the highly lucrative and promising outlook of the halal industry instigates logistics service providers to offer halal logistics services. Additionally, the drive towards service differentiation encourages firms to implement halal logistics and standout from the highly saturated logistics industry (Zailani *et al.*, 2017). Aside from seizing market opportunities, halal logistics adoption is also influenced by market pressure. For instance, market competition and consumer demand are known to be significant factors behind the push for halal logistics (Ngah *et al.*, 2019). Similarly, institutional pressure rising from governmental intervention and support as well as dealing with societal expectations are prevalent halal logistics motives (Talib and Hamid, 2014; Zulfakar *et al.*, 2018). Furthermore, apart from the external motives of market, consumer, competitive and governmental pressures, studies have shown that halal logistics adoption could also originate internally. Ngah *et al.* (2015) substantiate that awareness on the availability of halal warehousing, a component of halal logistics, would encourage service adoption. Besides, internal managerial support, either through financial or non-financial commitment, plays a pivotal role in the pursuit of halal logistics adoption (Ngah *et al.*, 2015).

Apart from the adoption motives, scholars have identified various barriers that hinder halal logistics implementation. The lack of institutional support is among the most frequently mentioned barriers. According to Talib *et al.* (2015a), although there are efforts to encourage halal practices among businesses, the focus is more on promoting halal products but less on halal logistics. Similarly, the lack of collaboration, cohesion and urgency among logistics service providers and the relevant authorities is a prevalent issue in halal logistics (Zailani *et al.*, 2017; Haleem *et al.*, 2018). Meanwhile, the shortage of specialised halal logistics professionals and the absence of industry champion are also factors hindering halal logistics adoption (Talib *et al.*, 2015a; Talib and Hamid, 2014). Moreover, studies (Zailani *et al.*, 2017; Talib and Hamid, 2014; Tieman *et al.*, 2012) reveal that the absence of a singular and uniform halal logistics standards is another issue that continues to hinder halal logistics adoption and hamper the progress towards total halal logistics chain. Zailain *et al.* (2017) argue that the plethora of standards from various countries and organisations create confusion as there are various criteria and standard operating procedures (SOP). The absence of a single internationally recognised halal logistics standard could lead to confusion, operation misalignment and loopholes in the halal logistics operation and supply chain (Talib *et al.*, 2015a; Talib and Hamid, 2014). Besides, the absence of such a standard would ultimately discourage firms from practising halal principles and disbanding halal logistics services as doing so causes more complication and burden (Talib *et al.*, 2015b).

Thus far, the review of extant literature indicates various opportunities and challenges that lie within halal logistics. In fact, the various opportunities and challenges could originate internally or externally on a micro- or macroeconomic perspective. However, the past literature is heavily dominated by studies from Malaysia (Haleem *et al.*, 2020), and therefore, might not represent a true picture of what is currently happening in Brunei. Albeit the shortcoming, this paper takes on the call for halal logistics research to be conducted in a different setting (Talib *et al.*, 2015a; Talib and Hamid, 2014). Understanding the halal logistics phenomenon, in this case in Brunei, is pertinent because of the inter-country movement of goods and services as well as the different halal logistics SOPs. Therefore, the following sections detail on the methodology of observing the halal logistics scene in Brunei and subsequently report the strengths, weaknesses, opportunities and threats concerning halal logistics in the country.

3. Methodology

Scanning, or analysing, the business environment is gathering and understanding information that is relevant to an industry (David and David, 2016). Through environmental scanning, organisations can recognise challenges and prospects that may impact a business ecosystem in advance (Borges and Janissek-Muniz, 2018). Additionally, Garg *et al.* (2003) argue that effective environmental scanning of internal and external matters is fundamental to achieve and improve firm performance. Therefore, considering the lack of research specific to Brunei, the paper takes on an environmental scanning approach to understand the halal logistics environment in Brunei further.

Environmental scanning methods vary depending on the intended research objective. Babatunde and Adebisi (2012) explain that environmental scanning can be sourced from primary or secondary data. An environmental scanning method using primary data includes surveys, interviews or observations. Meanwhile, gathering information from the literature review, online database or hardcopy materials are the sources of secondary data.

To achieve the intended research objective, this paper takes on a direct introspective observation on the halal logistics landscape in Brunei. The year-long personal observation is gathered and supported by relevant empirical data, press release, government gazettes, as well as anecdotal information. Through uncontrolled observation, the author did not attempt to interfere with the logistics industry settings (Sekaran and Bougie, 2016). Moreover, this gave the author the chance to observe the industry without manipulating, controlling or influencing the potential outcomes. Although observational research is unpopular in logistics studies (Sachan and Datta, 2005), there is a growing trend to use observation approach because results could be more detailed, significant and richer (Pålsson, 2007; Sachan and Datta, 2005).

Moving on to the analysis technique, there are several approaches for environmental scanning. Among the established techniques are the External/Internal Factor Evaluation analysis (E/IFE), Internal-External Matrix, Strategic Position and Action Evaluation (SPACE), Political-Economic-Social-Technological-Environment-Legal (PESTEL) analysis and the Strengths-Weakness-Opportunities-Threat (SWOT) analysis (David and David, 2016). SWOT analysis is chosen as the technique to scan the halal logistics environment in Brunei. Consistent with the paper's objective, SWOT analysis examines the internal strengths and weaknesses while an external analysis concerns on investigating the opportunities and threats (David and David, 2016). In other words, SWOT analysis takes on a developmental outlook that leverages on the strengths, improving on the weaknesses, seizing the opportunities and be mindful of the threats.

There are two reasons to use a SWOT analysis. Firstly, SWOT analysis is a well-established environmental scanning technique in business research (Panagiotou, 2003; Helms and Nixon, 2010). In a study on the application of environmental scanning to gather strategic industry information, du Toit (2016) reveals that SWOT analysis is the most used technique. Evidently, Shinno *et al.* (2006) justify that SWOT analysis is one of the most effective techniques to analyse a business environment. Secondly, SWOT analysis is preferred over the other techniques because it is suitable for a less explored environment (Talib and Hamid, 2014), such as the halal logistics in Brunei. This paper argues that understanding Brunei's internal and external halal logistics environment through SWOT analysis could potentially provide another avenue for the country to diversify its economy. The approach is inspired and corroborated by the notion of Sammut-Bonnici and Galea (2015) that internal environment analysis may reveal a country's capabilities, core competencies and competitive advantage. Additionally, analysing the external environment would allow a country to identify significant developments and potential implications that are beyond its control. In short, taking into account the benefits of the SWOT analysis mentioned above, this paper outlines the source of competitive advantages that are critical to Brunei's competitive position in the halal economy and identifies potential threats and challenges that could disrupt the nation's efforts in diversifying its economy.

A complete depiction of the research design for this research is shown in Figure 2. Through direct industry observation and the application of SWOT analysis, the following sector reports on the strengths, weaknesses, opportunities and threats of halal logistics in Brunei. Furthermore, following suggestions by Shinno *et al.* (2006) and Helms and Nixon (2010), the validity of the SWOT factors was validated in focused discussions with industry experts and academics at the annual International Seminar on Halalan Tayyiban Products and Services, in conjunction with the 2019 Brunei Halal showcase (BruHAS) organized by the Ministry of Energy, Manpower and Industry, Brunei Darussalam.

4. SWOT analysis

This section of the paper reveals and discusses the strengths, weaknesses, opportunities and threats of halal logistics in Brunei.

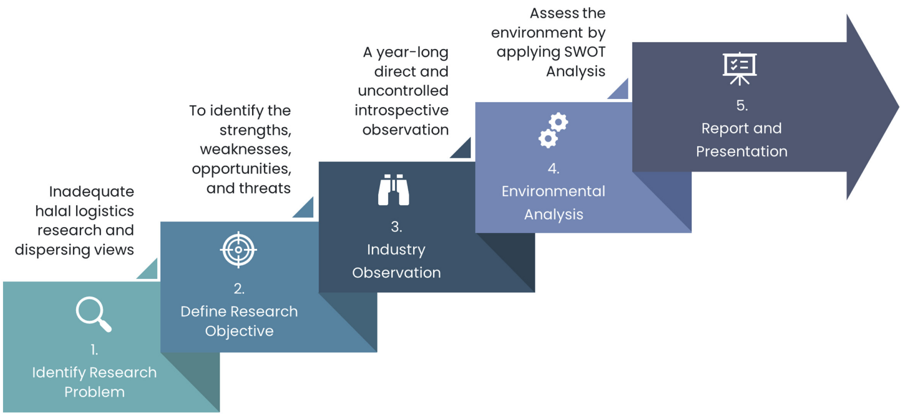

Figure 2.
Research design

4.1 Strengths

4.1.1 Strong governmental support. The strong and continuous support from the government is apparent, particularly in the halal-related decrees and policies. With an unyielding adherence to Islam, the government identifies halal as the ideal approach to achieve the country's agenda and concurrently leveraging on the growing global halal markets. With the halal doctrine engrained, the Islamic faith sets the fundamentals of doing business in Brunei and backed by strong governmental support, there is no surprise that logistics operations also focused on abiding by halal principles and practices.

Efforts to boost the Brunei halal industry is obvious. Even though the investments are mainly on halal food, the logistics sector plays a key part in ensuring the halal-compliant distribution. For example, the halal service sector is identified as one of the priority industries clusters by the Brunei Economic Development Board and the Prime Minister's Office (Hamdan and Hoon, 2019). As a key industry cluster, Hamdan and Hoon (2019) explain that the government is encouraging foreign direct investment (FDI) initiatives to set up businesses in Brunei. As a result, firms from overseas are establishing their operation and investing in the country's halal sector.

4.1.2 Entrepreneurial agenda. Brunei is diversifying its economy and intends to be less dependent on oil-based revenues. Moving away from the oil and gas industry, Brunei recognises entrepreneurship as one of the ways forward that could sustain and develop the economy. Through its entrepreneurial arm, the Darussalam Enterprise (DARe), the government agency was established to nurture, support and encourage local entrepreneurial endeavours. Although the link between logistics and entrepreneurship is scantly researched, there is no doubt that entrepreneurial emphasis creates innovation in the supply chain (Ojha *et al.*, 2016), and that entrepreneurial logistics initiatives have begun to surface (Dablanc, 2017). For instance, Brunei Delivery Services (BDS) is an excellent example of entrepreneurial logistics that currently provides customised urban home deliveries and distribution.

4.1.3 Consumer demand. Studies have shown that consumers are prepared to pay a premium for halal logistics services (Tieman *et al.*, 2013; Fathi *et al.*, 2016). Though there is no empirical data to reflect the current situation in Brunei, the author assumes that similar conception can be made. As a vast Muslim majority of consumers in Brunei demands halal products and services to satisfy their personal and religious needs, halal logistics should be in high demand.

In a study on halal certification in Brunei, Kifli (2019) finds that consumers in Brunei are beginning to demand halal and certification is a way to reduce concerns and doubt over imported goods. Kifli (2019) then further argues that businesses in Brunei are also starting to see the potentials of the halal industry. Taken together, it is with confidence to postulate that there is also a rising demand for halal logistics. This paper argues that the availability of such a service could add another layer of assurance to consumers that aside from the halal certification of products, halal logistics ensures that the distribution and supply chain of goods are also halal and Sharia-compliant.

4.1.4 Premium halal brand. It is believed that Brunei's halal brand portrays a premium image. This view was observed from the author's interactions with locals and tourists in Brunei. Such reflection is likely because of the government-backed halal certification and its highly regarded halal standards. In other words, the reputation of the country plays a significant role in boosting the halal image and prestige. Besides, Brunei houses regional and international logistics service providers with reliable capabilities. With reliable logistics providers, and coupled with the premium tag, showcases the country's notable strength in halal logistics.

According to Kifli (2019), Brunei's *BruneiHalal* brand is beginning to set foot in the international markets and that the brand carries a positive image. For instance, companies from South Korea and China consider Brunei's halal certification and brand are trustworthy and they are committed to investing millions. Hence, this indicates that *BruneiHalal* is a premium brand. Considering the good position and image of the country's halal brand, perhaps the same could be for the halal logistics sector. Besides, with Brunei restricting the logistics of alcoholic beverages and swine by-products, this further alleviates the halal logistics service to be absolutely halal.

4.2 Weaknesses

4.2.1 Talent and expert deficiency. Though Brunei has ample talents in halal, mainly in food, sciences and legislative domains, the absence of halal logistics experts is a concern. Understandably, considering the country's population, Brunei is reportedly lacked in professional talents (Hamdan and Hoon, 2019) and this is a serious weakness in the pursuit for total halal logistics. Halal logistics is demanding and needs dedicated specialist that understands both the essence of halal practices and logistics operations.

Although logistics professionals are plying their trades in the country, none qualifies as a dedicated halal specialist. The lack of talent and expertise in halal logistics is not a surprise. Studies (Talib and Hamid, 2014; Talib *et al.*, 2015b) have shown that the deficiency of halal logistics specialists is one of the main barriers in the field. A dedicated and well-structured program (Talib *et al.*, 2015a), either at undergraduate or graduate level, is critical and could ensure ample supply of talents that are experts in halal logistics.

4.2.2 No halal logistics standards. Presently, a series of halal standards are available such as for food (PBD 24:2007), medicines (GD 24:2010) and cosmetics (PBD 26:2016). However, a specialised standard relevant to logistics and distribution management is absent. A dedicated halal logistics standard is essential in setting the guidelines for best practices and an essential aspect for Shariah-compliant logistics operations (Talib *et al.*, 2015a, b). With a proper halal logistics standard, any potential "grey areas" and loopholes can be addressed and set standardised practices across the logistics chain. Nevertheless, the government is currently devising a standard specific for halal logistics, but until then, the absence of such standard is a distinct weakness for the country.

4.2.3 Lack of dedicated infrastructure. Another weakness is the lack of halal logistics exclusive infrastructure. Through the observation, although the author witnessed adequate logistics infrastructure, none is dedicated to handling total halal logistics operations. Infrastructure like halal storage and warehousing, exclusive halal port, or specialised transportation fleet is lacking. Dedicated halal logistics infrastructures are crucial to protect the halal integrity and enhance the halal value chain. Therefore, dedicated halal logistics infrastructures can have positive ramification to the country and its stakeholders.

4.2.4 Weak private sector demand. Halal standards, particularly in the food and cosmetics industries, are mandatory in Brunei. Firms must be halal certified, either locally or from abroad, before businesses commence. The necessary condition implies that the halal-certified goods are guaranteed halal. From the observation, private firms in the supply chain (i.e. suppliers, manufacturers, wholesalers and retailers) only concern the product certification and neglect the logistical aspects. Firms are of the understanding that if the products are halal certified, then there is no need to have the logistics processes certified as well. Such understanding undermines the importance of halal logistics and causes weak demand. The lack of demand from the private firms for halal logistics further emphasises the weaknesses discussed earlier – the lack of halal logistics experts, infrastructure and the absence of dedicated halal logistics standards could cause the adverse demand.

4.3 Opportunities

4.3.1 Extensive use of information technology (IT). The extensive use of IT in logistics is undoubted. Firms across the halal supply chain apply IT for monitoring, tracking, tracing and identification purposes (Talib *et al.*, 2015a). The expansion and application of IT, particularly in the use of blockchain technology and the internet of Things (IoT) (Tieman and Darun, 2017; Ali and Sulaiman, 2018), presents an excellent opportunity for halal logistics. Tieman and Darun (2017) argued that blockchain technology could provide better customer relations, asset management, consolidation and higher efficiencies. Besides, with the rise of IoT, firms could explore more technologies to further safeguard integrity in the halal supply chain (Ali and Suleiman, 2018), including halal logistics and operations. Therefore, the halal logistics scene in Brunei should leverage on the growing utilisation of IT through proper investment in technology adaptation, infrastructure and human capital.

4.3.2 Thriving halal industries. As mentioned in the introduction, the halal economy has witnessed constant growth across sectors. The halal food, travel, cosmetics, pharmaceutical and fashion sectors signify the increasing demand for halal-certified products and services (DinarStandard, 2019). Paralleled with the said growth is the distribution and logistics of halal commodities. The author observed that as the demand for a halal sector increases, it causes the rising need for halal logistics. For instance, the growth of halal tourism in Brunei could generate more demand for halal food logistics chain, while the inflow of imported halal goods from Muslim and non-Muslim countries creates the need for halal packaging, containerisation, warehousing and transportation. The domino effects will continue to materialise because halal logistics is needed for both the distribution and protection of halal status and integrity.

4.3.3 OIC and ASEAN cooperation. Brunei has long been part of regional and global intergovernmental organisations, such as the OIC and ASEAN. For years the Organisation of Islamic Cooperation (OIC) has continuously supported the trading of halal goods and services (Majeed *et al.*, 2019), and the SGIER revealed that the halal commodity trading among OIC members has consistently reached new heights (DinarStandard, 2019). Meanwhile, the halal industry in the South East Asian region, backed by the Association of Southeast Asian Nations (ASEAN), is thriving with calls for a unified ASEAN halal standard (Othman *et al.*, 2016). Initiatives such the ASEAN Cooperation in Halal Food (2017–2020) signify strategic halal initiative to enhance international competitiveness within the region. With a presence in the OIC and ASEAN circles, Brunei should capitalise the opportunity to collaborate and expand its halal and logistics businesses. Perhaps the country could learn from the likes of Malaysia, Singapore and Indonesia in developing its halal logistics efforts.

4.4 Threats

4.4.1 Regional competition. Brunei is currently in a tremendous competition among its neighbouring countries, specifically from Malaysia, Indonesia and Singapore. These countries are regarded as the "powerhouse" of the halal industry in the region. For example, the halal standards from the three countries are world-renowned and backed by well-established halal governing bodies. Furthermore, these nations have advanced logistics infrastructure and serving vast halal supply chains. However, instead of lamenting on the challenges, perhaps there could be ways that are yet to be explored by the competitors. Possibly, Brunei could champion in a "genuine" halal logistics approach, where aside from protecting halal integrity, the country could be the advocate of *riba*-free and uncompromising logistics service and operation.

4.4.2 Operation nonalignment. Operation nonalignment involving halal logistics operations such as packaging, handling, warehousing, sourcing and transportation are apparent. Tieman *et al.* (2012) demonstrated that various approaches and understandings to managing and executing halal had caused halal logistics nonalignment globally. For example, there are different practices between Muslim and non-Muslim countries on storage, packaging, stunning and distribution of halal goods. Additionally, differences in Islamic jurisprudence can cause confusion and distrust (Majeed *et al.*, 2019) that could potentially impact logistics operations. Brunei, for instance, practices a strict no-alcohol policy and its stand permeates across sectors and businesses, including the restriction on alcoholic distribution. However, other countries and markets might not practice similar ruling, and therefore, creates nonalignment in the supply chain.

4.4.3 No uniform halal standards. The absence of a globally recognised uniform halal standards continues to be a significant threat to the halal industry. Likewise, there are no uniform halal standards specific to logistics and distribution management and have caused confusions among firms that lead to logistics operation nonalignment. Although calls for a uniform standard across borders (Othman *et al.*, 2016; Talib *et al.*, 2015a, b), efforts remain futile as nations are noncooperative (Talib and Hamid, 2014). The situation is a challenge for Brunei in terms of logistics operation and regulation because the guidelines applied in Brunei might not be applicable in other countries, and vice versa. Hence, this could create confusion, inconsistency and potentially break the halal supply chain integrity.

Figure 3 summarises the results of the SWOT analysis. The results of the SWOT analysis indicate that for halal logistics in Brunei to grow, the internal strengths must be maintained or

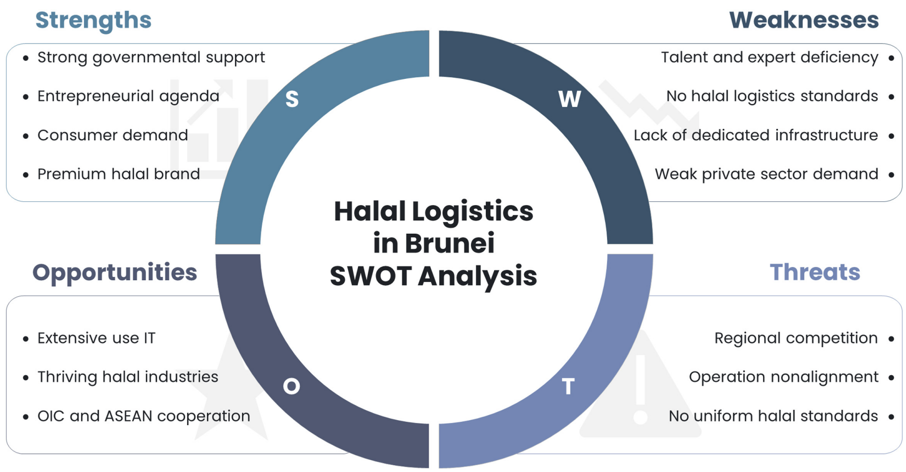

Figure 3.
Halal logistics in Brunei SWOT analysis

improved further while leveraging and seizing the external opportunities of massive and growing global halal industry. Moreover, the internal weaknesses must be closely monitored and minimised to reduce the impact on Brunei's halal logistics sector. Lastly, the constant external threats must never be understated and every stakeholder in the halal logistics chain should be mindful of the potential impendence because staying vigilance and cushioning the impact of external forces could ensure progress for the halal logistics sector in Brunei.

5. Conclusion

This study sets out to discuss and uncover the various strengths, weaknesses, opportunities and threats surrounding the halal logistics sector in Brunei. The outcome from the observation and SWOT analysis highlighted that substantial institutional support, high local entrepreneurial drive, strong consumer demand and premium halal image are the strengths of halal logistics in Brunei. Additionally, the lack of talent and expertise, the absence of a dedicated halal logistics standard, insufficient halal logistics infrastructure and weak demand from the private sector are the apparent weaknesses. Moreover, with the rampant use of IT in logistics, the growing global demand in various halal sectors, as well as being a member of OIC and ASEAN present excellent opportunities for halal logistics to thrive in Brunei. However, the formidable regional competition, global operation nonalignment and the lack of a uniform halal standard pose significant threats to halal logistics in the country.

Ideally, the paper hopes to provide a richer understanding of the halal logistics and supply chain management and simultaneously contribute to the growing research in the halal industry. This study asserts that studying the strengths, weaknesses, opportunities and threats might uncover newer insights into the potentials and concerns enveloping the halal logistics in Brunei. Further, insights from the intrinsic and extrinsic means could be beneficial for stakeholders in reaping the full benefits of the expanding halal industry through strategic halal logistics operations. For scholars, this study could set the groundwork for future research on halal logistics in Brunei. Doing so would enrich the halal logistics supply chain knowledge as well as contributing to the overall halal business discipline. Meanwhile, for practitioners, results from this study would inform them of the potentials and opportunities that lie within Brunei's halal logistics sector. Moreover, information from this paper would be beneficial for managers, whether in the public or private sectors, in formulating or executing strategic undertakings.

Being among the first few studies that investigate halal logistics in Brunei, a limitation of this study is the highly subjective findings. The highlighted strengths, weaknesses, opportunities and threats are based on the author's industry observation. Moving forward, future research should undertake a quantitative SWOT analysis. An empirical analysis would prove the significance and substantiates the subjective factors highlighted in this paper. Also, as the logistics industry continuously progresses, the results from this paper should be treated as a guideline because the underlined internal and external factors may change in the future. Therefore, future research should focus on more structured and thorough empirical studies. Further works are also needed to uncover and understand other relevant or hidden strengths, weaknesses, opportunities and threats surrounding halal logistics in Brunei fully. Hence, the paper recommends future empirical research involving panel interviews or focus groups to generate more substantial insights into the overall halal logistics knowledge in the Islamic economy. Albeit the paper's limitations, and considering the sparse halal logistics research in Brunei, the qualitative nature and approach used in this paper further corroborates the suitability and relevancy of SWOT analysis for exploratory research.

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