

Managing the halal food supply chain during uncertainty in Hull

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Abstract - The purpose of this research is to find out about how supply chain can be managed during uncertainty, specifically with the recent Covid-19 pandemic. The Halal Food Supply Chain (HFSC) management before and during the pandemic was analysed. Unfortunately, the Covid-19 pandemic has affected most business in the world negatively, no exception to the HFSC. An HFSC manager is expected to meet the requirements and guidelines of a robust HFSC without neglecting the measures taken to comply with the Covid-19 regulations, not to mention the influences of various stakeholders that could impact the performance of the management throughout the process. A qualitative approach was utilised to collect data from a manager/owner of a Halal Food organisation located in Hull, UK. Primary data was collected through interview with the participant, which then be analysed with structural coding and discussed descriptively with the thematic analysis. The result showed that the halal food business sourced products domestically and internationally until the Covid-19 outbreak and Brexit happened, so they had to find different suppliers inside the country and moved from main suppliers into middlemen wholesalers.

Keywords – Brexit, Covid-19, halal integrity, halal SCM, HFSC

I. INTRODUCTION

1.1 Background

Muslims around the world made up about 1.57 billion of the world population in 2010, according to the studies conducted by the Pew Forum on Religion and Public Life (Zulfakar, Chan and Jie, 2018). This amount is approximately 23.4 per cent of the total world population of 6.9 billion. Wilson and Liu (2010), Kamaruzaman (2006), and Saeed (2004) reported that one-fifth of the total Muslim population, which is more than 300 million Muslims, reside in non-Muslim countries, like Australia, India, China, the European countries, the USA, and Canada (Zulfakar, Chan and Jie, 2018). Therefore, it is clear that the demand for halal products will increase as the Muslim population keeps on growing.

As of 2018, Muslims made 5.9 per cent (3,363,210) of the UK population (ONS, 2018) and 2.1 per cent (5,384) in Kingston upon Hull as of 2011 (LocalStats, 2011). According to the Muslim Council of Britain, it was estimated that the household of UK Muslims spent a total of \$6.3 billion on food and beverages in 2014 (4% of total UK spend on F&B) with a 5 per cent CAGR 2020, while the BBC estimates the halal UK food market was at

\$4.5 billion in the same year (Evans, 2015). (Majid, 2019) suggests that this market growth is caused by more than 90 per cent of Muslims who claimed that their faith affected their consumption and the purchasing power of wealthy Muslim millennials who would want to spend more on high quality products, which at the same time made manufacturers wanted to fit into this sector.

Along with the opportunities of the halal food market, it also comes with some challenges in the halal practice. The annual certification for an abattoir in the UK in 2016 could range from a few hundreds to tens of thousands of pounds, depending on the Halal Certification Body (HCB), which made some players in the meat industry intentionally mislabelled the non-halal meat as halal or even “self-certify” their products (Fuseini et al., 2017) and reluctant to apply for the halal certification (Azmi et al., 2019). The media had also reported numerous cross-contamination with meat from other animals, like pork, during the different process inside the halal food supply chain (HFSC) (Thomas et al., 2015). As the halal concept has shifted from a mere halal-slaughtered animals (Zulfakar, Chan and Jie, 2018), it also includes other aspects, such as food, lifestyle, services, and management (Tieman, 2011; Tieman, van der Vorst and Ghazali, 2012; Zulfakar, Chan and Jie, 2018). Lada et al. (2009), Alserhan (2010a), Ibrahim and Mokhtarudin (2010), and Wilson and Liu (2010) also argued that the halal concept needs a supply chain approach (Tieman, 2011).

Another trial that mankind around the globe has been facing, namely the Covid-19 pandemic. According to an interviewee from a research on the impact of Covid-19 towards the UK fresh food supply chain who source fresh food internationally, orders were running at 1.2 times during the first 18 days of the epidemic and then suddenly depleted to zero (Mitchell et al., 2020). There is a gap in finding about the impact of Covid-19 to the HFSC, let alone managing it during uncertainties. As stated by (Azmi et al., 2019), study on the HFSC needs further examination.

1.2 Research Rationale

This research will focus on the changes of how to manage a halal food supply chain before and during uncertainty, namely the Covid-19 pandemic, from a halal food manager’s perspective in Hull. Second, the researcher also would like to find out more about the difficulties a halal food manager experience in the halal food supply chain during the specified uncertainty. Third,

the researcher would like to know more about what are the actions made to overcome those difficulties and hope it would contribute to the halal industry to better face their trials, especially in a non-Muslim country. Lastly, the researcher would like to contribute the outcome of this research to further research if necessary.

1.3 Research Problem

- Most businesses from different industries around the world have been facing a lot of difficulties due to the Covid-19 pandemic, which result in the decreasing of customers caused by lockdown and social distancing, until an uncertain period of time.
- To find out if a halal food company in a non-Muslim country are neglecting the measures taken throughout the halal food supply chain to guarantee the integrity of a safe halal product for consumers during the Covid-19 pandemic.
- To find out about the influences of various stakeholders, such as government and consumers to the halal food supply chain during the uncertainty.
- Lack of previous literature review in regards of halal and the supply chain approach and due to the recently Covid-19 pandemic.

1.4 Research Aim/Objective

1. How do halal food manager(s) manage the HFSC before the Covid-19 pandemic?
2. What are the constraints/issues of managing the HFSC during Covid-19?
3. What is the solution to the problems in managing the HFSC during uncertainty?

1.5 Literature Review

1.5.1 Halal

Halal is an Arabic and Quranic term for permissible (Mohd Nawawi et al., 2019), permitted, allowed, lawful, or legal (Tieman, 2011) and generally perceived as limited to only food products, while can also be applied in some services in hospitality, banking and finance, insurance, beverage, and cosmetics (Annabi and Ibidapo-Obe, 2017). The halal concept refers from the teachings of Islam through the Holy Qur'an and the Hadith of the Prophet Muhammad and is a holistic point of view, focusing on both physical attributes and moral sense (Ab Rashid and Bojei, 2019). It was mentioned in the Holy Qur'an:

O believers! Eat from the good things We have provided for you. And give thanks to Allah if you truly worship Him alone. (Al-Baqarah 2:172)

"The consumption of halal (lawful) and *toyyib* (wholesome); and abstaining from haram (unlawful) are essential according to Shariah in protecting Islamic faith, life, dignity or lineage, intellect and property" (IHI Alliance, 2009; Laldin, 2006) as cited in (Tieman, van der Vorst and Ghazali, 2012). According to Kamali (2010), the factors of haram in food are:

- manifest of harm;

- intoxications (alcohol and narcotics);
- filth, impurity, and natural revulsion (such as carrion, spilt blood, pig meat); and
- unlawful acquisition

Even though halal as a product technically means a product that fits Muslim consumers, Wilson and Liu (2010) and Zakaria and Abdul-Talib (2010) argues that halal as a concept extends further into the disciplines of management of the company, organisational behaviour, culture anthropology and sociology as cited in (Tieman, 2011).

1.5.2 Halal Food Supply Chain (HFSC)

"The process of supplying halal food from the point of origin to the point of consumption or from farm to plate with the purpose of satisfying the requirements of halal consumers" (Zulfakar, Chan and Jie, 2018), while Azmi et al. (2019) suggests that HFSC's prime nature is the urge of the Shariah law to set in all activities inside the supply chain from the supplier to the final consumer. A more systematic definition from Khan et al. (2018) is the focusing on key areas of halal, *toyyib*, stakeholder, flow, coordination/collaboration, performance/efficiency, value creation, and farm-to-fork approach involved in different processes, such as warehousing, sourcing, transportation, handling product, inventory management and procurement, and order management (Azmi et al., 2019). According to Tieman, van der Vorst and Ghazali (2012), there are grey areas (matters that fall between halal and haram) in the HFSC management, which is due to the Shariah is not free from doubt. To overcome these problems, the Islamic school of thought, local fatwas (religious rulings) and local customs are critical to judge if it is to be avoided or followed (Tieman, van der Vorst and Ghazali, 2012).

1.5.3 Halal Supply Chain Management (Halal SCM)

The halal supply chain management (halal SCM) can be defined as "the management of a halal network with the objective to extend the halal integrity from source to the point of consumer purchase" (Tieman, van der Vorst and Ghazali, 2012). Tieman (2011) argued that the foundation of a halal SCM is determined by three factors:

- direct contact with haram (prohibited);
- risk of contamination; and
- perception of the Muslim consumer

In this model, risk is according to the product characteristics, such as wet and dry products, while perception is based on the market requirements, such as the Islamic school of thought (Tieman, 2011; Tieman, van der Vorst and Ghazali, 2012). As the Holy Qur'an clearly states that pork and liquor are forbidden and other matters are left to be interpreted by different scholars, Dr Mohamad Akram Laldin (International Shariah Research Academy for Islamic Finance) stated that a halal supply chain manager needs to guarantee that there is no contamination between the halal and haram while also addressing halal matters at the point of consumption and

the whole supply chain in order to protect the halal integrity of the product according to all people interviewed (Tieman, 2011). This also aligns with Tieman and Darun (2017) which argued that supply network becomes complex to design, manage, and optimize due to the maintenance of the halal integrity and quality, keeping away from doubt, lack of control of food norms, and sensitivity of the Muslim consumers regarding halal matters (Azmi et al., 2019).

1.5.4 From the Previous Research Paper of “Principles in Halal Supply Chain Management” by (Azmi et al., 2019)

This paper mainly discussed about the principles in the design and management of halal food supply chains, introducing the halal supply chain model through different frameworks defined from large discussion group and focus groups. The paper showed some findings that product characteristics and market requirements determine the supply chain vulnerability to halal contamination. The research paper argued that halal control activities and assurance activities are needed in order to reduce the supply chain vulnerability.

The introduced halal supply chain model consists of several elements: halal policy, supply chain objectives, logistics control, supply chain resources, supply chain business processes, supply chain network structure, and halal supply chain performance.

First, it was concluded by the research that the vulnerability of supply chains could be reduced by simplifying the supply chain structure and establishing halal control activities and assurance activities in logistics business processes and could be avoided partially by having dedicated logistics infrastructure. As for the market requirements that define the level of segregation between halal and non-halal products, it could be met by having a dedicated Halal Regional Distribution Centre (HRDC) as a customer order decoupling point (CODP).

Second, the research paper mentioned about the importance of coordination and a certain specified level of segregation in halal supply chains. Coordination is critical for non-Muslim countries to achieve efficiencies in halal supply chains, while a specified level of segregation depends on the destination market. This research verified that halal certified or compliant supply chain partners in non-Muslim countries are much scarcer, which need the role of an HRDC as a CODP to allow customising the halal segregation level.

Third, the research addressed supply chain resources, like the operations staff that needs extensive training, innovative logistics cargo solutions in non-Muslim countries, sharing the halal status of cargo through the “halal supply chain” code, and tracking and tracing. These applications are required to assure the halal integrity of the logistics operation, gaining benefits in non-Muslim countries, simplify segregation for export markets, and making halal supply chains effective.

Lastly, the focus groups discussed about the halal control activities and assurance activities in

transportation, warehousing, terminal operations, and cleaning, which act as a practical guidance for the industry in designing and managing logistics business processes for particular product-market combinations. The mentioned activities have been reviewed, adjusted, and published by the International Halal Integrity (IHI) Alliance as the International Halal Logistics Standard IHAS 0100:2010 (IHI Alliance, 2010). This standard can be certified globally and used as the reference for the halal supply chain initiative.

This research paper suggested on how a halal supply chain should operate in terms of planning and execution, specifically not only how we should address the halal food supply chain in Muslim countries, but also non-Muslim countries.

1.5.5 From the Previous Research Paper “The Application of Halal in Supply Chain Management: In-depth Interviews” by (Tieman, 2011)

This journal mainly discussed about the basic requirements of halal food supply chains for it to guarantee the halal integrity at the point of consumption, described through in-depth interviews. This journal found out that “halal supply chain management is based on avoiding direct contact with Haram, addressing the risk of contamination and ensuring that it is in line with the perception of the Muslim consumer”.

From the results, we can learn that avoiding a halal product to move into a doubtful state, also known as the halal supply chain risk, is the most important principles for halal logistics and halal supply chains. The product characteristics are important determinant for risk, like wet and bulk products have a higher risk compared to dry and unitted products. The research also highlighted that the perception of the Muslim consumer is the most important factor to be taken into account for designing a halal supply chain as well as organising the transportation, storage, and handling to meet consumer requirements.

This research paper suggested that halal certified companies extend the halal aspect to the entire supply chain in order to ensure that all stages in the supply chain processes are in line with Shariah and meet the target Muslim market requirements. This paper has also suggested on how a halal certified company should focus on what the Muslim market would need from a halal company.

1.5.6 From the Previous Research Paper “Institutional Forces on Australian Halal Meat Supply Chain (AHMSC) Operations” by (Zulfakar, Chan and Jie, 2018)

This journal aims to investigate how the halal meat production requirements are fulfilled and maintained throughout the supply chain in a non-Muslim country from the perspective of multiple stakeholders. It was founded that institutional forces (coercive, mimetic, and normative pressures) affect the overall operations of the Australian halal meat supply chain (AHMSC), especially those from the coercive forces.

Results from this paper have shown that the coercive pressures that influence the AHMSC are deducted from government policies and religious requirements. These coercive pressures – predominantly affect the export halal supply chain – can further be derived from various stakeholder groups, such as government agency, halal certifiers, and the halal consumers. From the perspective of the normative and mimetic forces, both forces tempt most domestic meat processors to expand into the lucrative halal meat market and follow the single-line production from successful halal meat processors respectively.

This paper suggested that the halal integrity of the halal meat supply chain management operations in a non-Muslim country can be guaranteed with supportive involvement from the federal government and the halal certifiers in order to fulfil the requirements of the Muslim market. This paper has also suggested on addressing the halal supply chain management in a non-Muslim environment and adding several important focuses on different stakeholder groups to give a better understanding of the whole supply chain operations.

1.5.7 From the Previous Research Paper “The Relationship between Halal Traceability System Adoption and Environmental Factors on Halal Food Supply Chain Integrity in Malaysia” by (Ab Rashid and Bojei, 2019)

As the issues on cross-contamination in halal products shocked the Muslim market, the demand on having an assured halal integrity throughout the whole supply chain was rising. Food companies have to implement a systemic traceability system and comprehend the importance of Halal Industry Environmental Factors (HIEF) to protect any risks from the cross-contamination of halal products. This research paper aims to clarify the relationship between the Halal Traceability System Adoption (HTSA) and HIEF on the HFSC integrity. The study found that there is a significant relationship between the two aspects of HTSA and HIEF on the HFSC integrity. The highest of the HTSA are among producers and end-consumers and the highest contributors in influencing the HIEF are the economic and socio-cultural factors.

The research paper restated that the supply chain approach towards halal is important to guarantee the halal integrity from farm-to-plate. To ensure the halal integrity, one must understand the whole HFSC fully. The paper also stated that the halal food industry depends highly on the customers’ trust of its food integrity. Hence, this requires all aspects from the supply chain to fulfil all requirements needed in ensuring a halal product (Ab Rashid and Bojei, 2019).

This research paper suggested that future studies explore further on other categories in the food industry, like raw materials and ingredients, such as poultry, meat, and dairy products. It also suggested to use the mixed-method approach as the integration of quantitative and qualitative methods could contribute further insights on

the issue of halal practices and halal integrity. The qualitative method could help the researcher in providing in-depth data to complement the interpretation of the quantitative results.

1.5.8 From the Previous Research Paper “The Emergence of Halal Food Industry in Non-Muslim Countries: a Case Study of Thailand” by (Mohd Nawawi et al., 2019)

This research paper’s purpose is to explore the development of the halal industry in a non-Muslim-majority country, which in this case is Thailand. Thailand is known to be one of the successful countries in exporting halal-certified food products across the Southeast Asian region. Among the 69-million population of Thailand, only 4.3 per cent are Muslims. This research found that the reasons behind its success is their scurry tourism industry that helps to aid the country’s halal branding, the uniformity of the halal concept and standards, and effective support towards the local small-medium enterprises (SMEs) (Mohd Nawawi et al., 2019).

To ensure the halal status of the products, Thailand has their agency to manage the halal certificate issuance and accreditation, called the Halal Standard Institute of Thailand (HSIT). Its aims are to establish halal standards, conducting research, and providing training related to halal matters in Thailand. They work together with Thailand’s Islamic Centre Committee and also the government to meet the Islamic requirements in establishing halal food standards, international standards, and halal certification regulations in Thailand. The well-organised system established by the Thai government is believed to be the cause of why Thailand is one of the leading producers in halal brands. However, this recognition is thought to be unsustainable if there is no regulated law regarding the halal practices in Thailand. Thus, there are no serious consequences, prosecutions, or fines on those who abuse the halal certification.

This research paper suggested that the lack of the Muslims’ involvement in the halal industry could harm the country’s image as one of the leading halal players, specifically on the long-run. Muslim workers and producers are hoped to understand the halal concept and practices fully and also the Islamic legal and ethical standards. This will automatically fasten up the implementation of the halal practice across companies and simultaneously increase the consumers’ confidence level towards the halal products.

II. METHODOLOGY

2.1 Research Method

For the purpose of gaining a better understanding of a new phenomenon, the in-depth interview is an effective method (Tieman, 2011).

2.2 Research Approach

In research, there are two paradigms called positivism and interpretivism (Gaus, 2017). The positivist research

separates the researcher and the reality, which the researcher believes that the research object has essential qualities that are independent, while the interpretivist research is when the researcher and the reality are not separable and the worldly knowledge is believed to be composed through a person's lived experience (Weber, 2004). For the matter of this research, this research will go by the interpretivism paradigm.

For the research approach itself, this research will use the qualitative approach, as opposed to the quantitative approach, where this research is trying to gain knowledge on how a phenomenon means to an actor(s) in everyday social context (Johnson et al., 2007).

2.3 Data Collection

The method used in this research is the qualitative data collection method through the interview method as it is known to be the centre in the effective methods of primary data collection (Adhabi and Anozie, 2017).

2.3.1 In-depth Interview

Specifically, the key questions are:

- How does one manage the HFSC before the uncertainty (Covid-19) from a food manager point of view?
- What are the constraints experienced in managing the HFSC during the uncertainty?
- How does one solve the problems faced during managing the HFSC in uncertain conditions?

The interview will be conducted in English and voice recorded in order to make the result easy to be transcribed into the form of a text and to better analyse it.

2.3.2 Test Units

The respondent(s) should fulfil these criterias:

1. Residing in Hull for the last twelve months
2. Owns/manage a halal food shop/restaurant
3. Whose halal food business were affected by the Covid-19

2.3.3 Sampling Technique

Purposive sampling will be carried out to meet with the halal food manager in Hull, which is based in Hull. The person interviewed is considered to be an expert and experienced in the management of the HFSC.

2.3.4 Reliability and Validity

In this research, the reliability is depending on the previous research held by (Tieman, 2011), while the truth is socially constructed and relative (Gaus, 2017). The validity is based on the expertise, positions, and the willingness to share the information they have based on their reputation in the halal industry.

2.3.5 Ethical Considerations

According to (Gaus, 2017), the ethical procedures will be as follows:

1. Procedural ethics:

- Permission was sought from the authority in each organisation prior to conducting data collection.
- The respondents were made available about all information related to this research through a participant information sheet. This sheet contained information about

the purpose of the research; the nature of respondents' participation which was highly on the basis of voluntariness; their right to withdraw at any time during the ongoing research activities without providing any reasons and without any harms their right to know any likely risks arose from their participation; the right to know how data will be handled, analysed, and destroyed; and the right to decide whether to participate in the research or not through the signed inform consent.

- The nature and procedures of the research were reiterated in each interview.

2. Situational ethics:

- During data collection in each organisation, the researcher made attempt to not interrupt the daily activities of the organisation.

- The researcher made efforts to respect the culture held by each organisation and adapted the researcher's manner to that culture.

3. Exiting ethics:

- Upon leaving the research site, the researcher informed participants about how the data collected and their privacy will be handled.
- To preserve anonymity of both the respondents and their institutions, the use of pseudonyms was applied.
- To ensure confidentiality, all data obtained were strictly protected both in a private password-protected laptop and university computers. The data were only accessed by the researcher and the researcher's supervisors. The data will be destroyed after one year.
- To ensure transparency of the research process, the audit trail was undertaken and presented in a detailed explanation, encompassing all processes that had been gone through during the research process.

2.4 Data Analysis

The coding process in data analysis is identified as the labelling of words and sentences that conveyed the same meaning, also known as "meaning units", with codes (Graneheim and Lundman, 2004). To minimize the number of codes used, "structural coding" is used where the labelling of passages that have relations to the research questions take place (Belotto, 2018).

III. RESULTS

The paragraphs below show the thematic results created from codes derived from the themes of the previous researches and from the respondent's data collected. Answers from the respondent will be presented correspondingly. The respondent is known as the manager of a halal retail business in Hull, UK. The codes and data are meant for and towards the business.

3.1 Management pre-Covid

"We do not import any stock directly from overseas. It becomes more time consuming and costly. We used to buy (poultry) directly from the main factories, but as a business, it's nice to be a big customer, so we took our

business away from the main supplier, went in with a wholesale supplier, and for the wholesale supplier, we are a big customer. All the suppliers that we use, they are all certified HMC (Halal Monitoring Committee) production. I used to go to the factory and watch the live killing myself. From 12 years ago, we have a specific vehicle. We would just transport meat and we don't use it for any other purpose, even though we can use it for packing other items and delivering them, and we don't throw it on the floor. Pre-Covid, our business is kind of 50-50. It's 50% realized on the catering side and 50% is on the retail side."

3.1.1 Governmental Conditions

"The UK, they've become very strict on health and cleanliness. It was a Friday night, the government announced that all of the hospitality sector has to show, but the announcements are not always clear cut, it's always the day after that, the full blueprint comes down in bullet points about what can happen. They never said that you have to shut, they just said that you can't do people sitting in restaurants. They never mentioned you can't do takeaways. The government announced that there was going to be a scheme for the restaurants called 'eat out to help out'. Basically, you could go to a restaurant, pay for one main meal and get another one free and the government will reimburse the businesses for the second one. Just to get the hospitality trade going again. What hasn't helped the UK is the amount of help the government have given. Predominantly, every business, if they closed or didn't close, receive 10,000 pounds from the local community because they were advised to close. Yes. fantastic, the government have helped everybody in the UK, but everybody knows, maybe not in my lifetime, but in the next generation or the generation, after, this money will have to be reimbursed in taxes and so forth. They will have their money back. That helped, but not for the long run, not for how much money they're pumping in. I'm learning now that in France, they're banning selling or slaughtering halal items and stuff. We are quite fortunate that I don't think the government have ever done anything to make life harder in that terms, or I don't see them doing anything. I just think it's okay."

3.1.2 Market Conditions

"What didn't help was the panic buying, which actually drove the price up. Red meat is more selective. Some people don't have red meat due to health concerns. Some people don't have red meat because they don't like red meat. Generally, red meat is more expensive than the poultry as well, so sometimes, it's just about affordability. Panic buying period started about a month before. Ramadan started, so our Muslim brothers and sisters were panicking and thought that they will not get any food for Ramadan, so they started buying the Ramadan products a month in advance. I put it in terms of sheep; one person does it, everybody else follows. Our caterer is naive and they believe that they have to completely shut.

About 60 to 70% of our (catering) customers said, "We're going to close. We're scared of the, of the Covid." People just thought, "Yeah, we're going to get government help, 10,000 pounds or whatever it is coming through the door. We'll be all right for a month, two months." A lot of people stayed away from the Chinese market. Customers are still there, but there's so many options. We had some catering businesses closed up to six months. So, by then, all of restaurants were fully open again, ready for it. Public morale is low, everybody's depressed, and some people don't believe in these conspiracy theories and such. If a customer comes into the shop, you ask them to wear a mask, they can get abusive. There was a time before, and it still is to a degree in terms of, let's just say non-Muslims, where people think that the halal slaughtering of animals is unethical for the animals. You still have a section of the public, which believe in that, but I think with time that's going down suppressing because there's more Muslims in the population."

3.2 Covid-19 Issues

"The poultry side got affected by the pandemic more because the poultry side has more sources of halal food coming in from Europe. There are more poultry factories in Europe that slaughter halal and export it into the UK at a cheaper price. It's cheaper to produce in Europe than the UK. As pre-Covid, the poultry side of the halal food chain, it was a mixture of European chicken and UK chicken. So, due to the pandemic, obviously Europe went into strict lockdown immediately and especially when the panic buying started on the production of the UK poultry factories, they couldn't meet demands. Prices doubled overnight within a week. The only effect that Covid had on the red meat side was just the sheer demand on the production side, which made the prices go up. All the abattoirs were looking to buy more and more livestock. So, at source, they were having to pay more for the livestock they would then have to pass the price onto us, which in effect we have to pass the price onto the consumer and that was the problem. The red meat side, went up by about 30%. What didn't help was the panic buying period, which started about a month before. Ramadan started. our Muslim brothers and sisters started buying the Ramadan products a month in advance. Now, the last six months, from a catering point of view, business is quiet. The issue becomes that there was a lot of things that come imported from the far East, Asia, like rice and such things, were stuck in Europe. Things were stuck in containers and things were not coming. All of a sudden, every importer and every manufacturer in the UK was inundated with orders, so they couldn't fulfil the orders. We don't have the logistics and they don't have the infrastructure to supply the whole UK with such a demand on the trade."

3.3 Solutions

"We didn't experience a shortage of (red meat) stock purely due to our relationship with the supplier. We

would advise people not to buy red meat, but people didn't follow. Then, the price before Ramadan was lower than what it actually was before the pandemic. We got on the phone Saturday morning, rung all of our customers. I sat down with my brother and said, "Look, we have to give confidence to all of our customers on the catering side that it doesn't mean you can't do takeaways." Eventually, the public will get tired of cooking at home, so they are going to go on to takeaways. So, the 35% (of caterers) that did remain open, obviously had an effect on our business. After two and a half weeks, it just went boom and the caterers, it was like New Year's Eve every day. Eventually, we were servicing 30% of our catering customers. The poultry side, it was tricky. Sometimes we fell short. Instead of sourcing three days a week, we were sourcing six days a week from different suppliers. So, as a business, instead of purchasing the dry products from main manufacturers to restock our store, we had to go to wholesalers and middlemen where the middlemen were charging double the price. We have a margin of business that we need to achieve, so we stuck to it. If we had to buy it from the middleman, we decreased our margin just to help the public, because it was never going to be long term. As long as you've got enough to pay your bills and such, sometimes you've got to serve the public and do the best you can. We were balancing the ethical side, the profitability, and the business books. If a competitor needs help, "Can he borrow a box of chicken?" Yeah, no problem. As a business, you've just got to be polite, controlled, and then not get drawn into confrontation."

IV. DISCUSSION

4.1 Management pre-Covid

As concluded in the previous research by Azmi et al. (2019) that simplifying the supply chain network could reduce the vulnerability of the supply chain, this was also implemented by the respondent of this research. The halal food manager did not import stocks directly from export countries because of the time and cost required to deliver from overseas suppliers.

The respondent said:

"[...] yes, you can save money, but it's if the hours and the management of that side are needed, and what we may be able to negotiate in price would be nothing compared to the biggest suppliers of halal food source. There's plenty of supply now in the UK who deal with the import-export game specifically and we just buy from the main dealers and the main producers of the products."

When Zulfakar, Chan and Jie (2018) suggested that the supportive involvement from halal certifiers guarantee the halal integrity of the halal meat supply chain management operations in order to fulfil the Muslim market requirements, the halal food manager ensure their halal integrity with the help of HMC (Halal Monitoring Committee) certified suppliers only. They would show the

customers their evidences if a customer wanted to see it, as the respondent said,

"[...] obviously, all of the products have the legitimate stamps and coding just to see [...] that usually stays on the product itself all the way through to the end. When we received the boxes, the stamps are there and everything's there. If a customer wants to see evidence, it is there visible."

Not to mention, they would also watch the live slaughtering, assuring the HMC status, and use a specific vehicle for transporting the halal meat products. This action is supported by the previous research by Azmi et al. (2019) which argued that halal control and assurance activities could reduce the supply chain vulnerability.

The respondent said:

"[...] I used to go to the factory and watch the live killing myself from running around to it [...] to loading it into the van and it's a hundred percent halal. There's no stunning involved, it's just a pure knife. They have HMC offices line to assure that it is all been on the correct way. [...] from 12 years ago, we have a specific vehicle. We would just transport meat, and we don't use it for any other even though we can use it for packing other items and delivering them. [...] we don't throw it on the floor."

According to the respondent, being halal is not just about ensuring the halal integrity, but also the cleanliness of the products. This showed similar principles to the previous paper from (Tieman, van der Vorst and Ghazali, 2012). The paper said "halal assurance activities have been assessed for warehousing, transportation, terminal operations and clean(s)ing (as corrective measure)."

The respondent said:

"We don't throw it on the floor or anything like that. [...] it's not just about being halal. It's about cleanliness."

It was mentioned in the previous research that the coercive pressures which influence the Australian halal meat supply chain can be derived from different stakeholders (Zulfakar, Chan and Jie, 2018). Two of which are government agency and the halal consumers. The following points are to discuss the findings of this research in regard to the previous literatures, mostly considered to be a contribution as the halal topic is of contemporary significance towards the supply chain (Tieman, 2011) and due to the recent Covid-19 pandemic.

4.1.1 Governmental Pressure

According to the data, the government was very strict on health cleanliness. Companies are required to have food agencies to make sure that they are operating correctly to the government guidelines.

The respondent said:

"[...] the UK, they've become very strict on health and cleanliness. These big companies have HFA (Halal Food Authority) and FSA (Food Standard Agency) [...] who assure that this is all done to government guidelines."

As the government announced that the hospitality sector had to show up, they have helped the industry by giving 10,000 pounds and building up a program that would raise the markets' eagerness to keep the hospitality trade flowing again.

The respondent said:

"The hospitality sector has to show. [...] Even if they close or didn't close, they receive 10,000 pounds from the local community because they were advised to close. The government announced that there was going to be a scheme for the restaurants called "eat out to help out". Basically, you could go to a restaurant, pay for one main meal and get another one free and the government will reimburse the businesses for the second one."

However, the announcements the government conveyed were not as clear as it should be, according to the respondent. The respondent also mentioned the funding as not to be beneficial for the long term.

The respondent said:

"[...], but the government's announcements are not always clear cut. It's always the day after that, the full blueprint comes down in bullet points. [...] Yes, fantastic, the government have helped everybody in the UK, but everybody knows that in the next generation or the generation after, this money will have to be reimbursed in taxes and so forth. They will have their money back. [...] That helped, but not for the long run, not for how much money they're pumping in."

On the other hand, it was a relief from the government that they do not complicate things to the Muslim market by banning halal products or practices like other countries would do. This would be unpleasant if it were to happen during the times of Ramadan, especially.

The respondent said:

"[...] I'm learning now that in France, they're banning selling or slaughtering halal, items and stuff. In this group, it's more accepted. Where we purchased halal, our abattoir that I get the red meat from, they export to Germany, because there's difficulty in purchasing non-stunned red meat in Germany. So, that's why there's a demand imported from in-point into Germany is allowed, but they're just not in Germany. I think in this country, alhamdulillah, we are at a good stage compared to some other countries where it's going to, reading the news that if they are stopping some slaughtering of halal produce in France at a time of Ramadan's starting, it's not a nice thing."

4.1.2 Market Pressure

There were some notable actions and responses from the market that impacted the management of the HFSC directly or indirectly. First of some was the panic buying that happened a month prior to Ramadan in that year, caused by the low public morale that the market experienced and resulting in the increase of prices.

The respondent said:

"[...] what didn't help was that lockdown started literally when the panic buying period started, about a month before Ramadan started. So, our Muslim brothers and sisters were panicking and thinking that they will not get any food for Ramadan, so they started buying the Ramadan products a month in advance [...] and that's what actually drove the price up higher. [...] Public morale is low."

As the business consisted of the retail and catering side, they had to convince not only the end customer, but their business customers, which were the caterers. Unfortunately, a big portion of them were not confident enough to keep on opening during the early stages of the Covid-19 pandemic.

The respondent said:

"[...] our caterer is naive and they believe that they have to completely shut, but the government never said you have to shut, he just said you can't do people sitting in restaurants and eat. They never mentioned you can't do takeaways."

As a result, when the takeaway and delivery business started to open again, customers had many options and it ended up in the quietness of the situation in some caterers.

The respondent said:

"[...] if you fast forward eight months, now everybody's open, everybody's delivering, but everybody's quiet because there's so many options."

Interestingly, there were still some people from the public that thought that the halal practice towards animals was unethical for the animals. However, that portion was believed to be declining as the Muslim population continued to grow. Consequently, it is the task for all Muslims to educate others on the halal concept and practices, so that they will not misunderstand about what certain people believe to be good as something rough. It was hoped that over time, people will start to learn to accept the halal standards.

The respondent said:

"I think it's more accepted now in this country. There was a time before, and it still is to a degree in terms of, let's just say non-Muslims, where people think that the halal slaughtering of animals is unethical for the animals. You still have a section of the public, which believe in that, but I think with time, that's going down suppressing because there's more Muslims in the population. What I feel from a younger age, there's more diversity. So, you're growing up, understanding it, so I think, in shaa Allah, over time, as time goes on, it will get easier, as well for them to accept."

4.2 Covid-19 Issues

Another form of contribution towards previous literatures is the issues that Covid-19 brought towards the

halal industry, specifically from a supply chain point-of-view.

Firstly, prices due to Covid-19 went up, which affected the poultry side of the business more and somehow to the red meat as well. This is, again, caused by several factors, including the lockdown from neighbouring countries and the panic buying from customers.

The respondent said:

“The poultry side got affected by the pandemic more because the poultry side has more sources of halal food coming in from Europe. Especially, when the panic buying started, [...] they couldn't meet demands. [...] if the demand is high, then production prices are only going to go up and prices doubled overnight within a week. [...] The only effect that Covid had on the red meat side was just the sheer demand on the production side. [...] Yes, prices went up on the red meat side [...] by about 30%.”

On the demand side, the business had a significant drop from the business customers, which were the caterers. They were not confident enough to keep on opening while the situation was still uncertain as the respondent said,

“Now, the last six months, from a catering point of view, business is quiet.”

Lastly, the respondent experienced issues coming from the logistics side. Stocks from overseas could not reach the UK and manufacturers did not have the logistics nor the infrastructure to fulfil the demand.

The respondent said:

“The issue becomes huge because a lot of things imported from the far East, Asia, [...] were stuck in Europe and things were stuck in containers. All of a sudden, every importer and every manufacturer in the UK was inundated with orders. They couldn't fulfil the orders. [...] We don't have the logistics and they don't have the infrastructure to supply the whole UK with such a demand.”

4.3 Solutions

Lastly, in response to the mentioned issues above, this research has contributed by providing the solutions to overcome those issues conveyed from the respondent of this research.

To overcome the issues regarding with supplies, the respondent established a good relationship with the supplier and sourced some produce from different suppliers for an extended period of time.

The respondent said:

“[...] we didn't experience a shortage of stock (on the red meat side) purely due to our relationship with the supplier. [...] The poultry side, it was tricky. Sometimes we fell short. [...] Instead of sourcing three days a week, we were sourcing six days a week from different suppliers.”

Next, to solve the problems coming from the demand, the respondent advised the customers politely not to panic buy because prices will fall after a certain period of the lockdown. When the prices went up, the respondent would decrease the margin to help the public in order to balance the ethical and profitability sides of the business. To raise demands from the catering side, the respondent reached out the customers to gain their confidence on opening during Covid-19.

The respondent said:

“[...] we were telling people not to (panic buy), they were still doing it and what happens after the month of panic buying, when Ramadan started, in the week or two, all the prices, had gone back down to lower than what it was before the pandemic. [...] If we had to buy it from the middleman, we decreased our margin just to help the public, because it was never going to be long term. [...] we were balancing the ethical side, the profitability, and the business books. [...] we got on the phone and rung all of our customers. [...] we have to give confidence to all our customers on the catering side that it doesn't mean you can't do takeaways. [...] After two and a half weeks, the caterers were like New Year's Eve every day. Eventually we were servicing 30% of our catering customers. You've just got to be polite, controlled, and then not get drawn into confrontation.”

Finally, to overcome the issues from the logistics aspect, the respondent had to buy dry products from middlemen, even if they charged double the price.

The respondent said:

“[...] instead of purchasing the dry products from main manufacturers to restock our store, we had to go to wholesalers and middlemen where the middlemen were charging double the price.”

V. CONCLUSION

As the halal concept and industry continue to grow and develop over time with the dynamics and changes that the world has been facing throughout the years, it could not neglect the supply chain approach (Tieman, 2011) and the need to prevent possible downsides of a business caused by future uncertainties. In the management of a halal supply chain, there are several things need to be considered, such as operations staff, logistics, halal assurance activities (Tieman, van der Vorst and Ghazali, 2012), the Muslim market requirements (Tieman, 2011), the government, and halal certifiers (Zulfakar, Chan and Jie, 2018) in order to make a halal supply chain a more robust one. These standards are specifically critical to be implemented in Muslim-minority countries.

From the result of the data analysis, it was discovered that although procuring supplies from the main exporters would be more cost-effective, sourcing from wholesalers domestically might be more profitable as it would save the time consumed for the delivery and be able to fulfil

the customer demands. They would only buy products that are HMC certified and assure the halal integrity and cleanliness of the meat suppliers themselves, so that the Muslim market requirement is met.

Along the process, the halal food business experienced hardships during the Covid-19 pandemic and some influences from various stakeholders. They had to face certain behaviour from the market, like panic buying, which later affected the prices to rise drastically. Not only did the end-customers had a low public morale due to Covid-19, but also most of the business customers were not confident enough to open for a long period of time since the early stages of the pandemic. They also had to face some hindrances from the logistics side of the business, where dry products coming from overseas were stuck in European countries due to lockdown and Brexit. Not to mention the government's help through programs and funding and also the influence of competitors who might abuse the situation.

The key to having a stable stock of supplies is by maintaining a mutual relationship with the supplier and not sticking to only one main supplier. Being flexible by moving around to different suppliers will tackle the problems from a supply chain or even logistics point of view. A halal food manager is also required to be able to anticipate any possible opportunities lying ahead of the situation and actively educate the public on the knowledge they know to gain back their customers' trust and confidence as best as they can.

The researcher suggested that:

- HFSC managers are aware of the situation and keep their business practices to the Sharia law and government guidelines. They are also suggested to balance between the assertiveness in complying with government regulations and warmth in their service, should they prioritise the customer needs.
- HFSC managers keep the competition between other businesses a healthy and supportive one. Help others in need and others will come to help.
- The government review the needs of the community and business doers and enforce regulations accordingly to the urgency of the situation.
- The public should obey with government regulations and the local businesses advises on how to respond to the situation. Be wise and fair in purchasing primary needs without being hasty, should they wish the community to act justly and with considerations for the common welfare.

5.1 Limitation and Further Research

This research is limited due to the local regulations and guidelines regarding Covid-19, like lockdowns and social distancing. The limited number of respondents is due to the unwillingness of a few targeted respondent and also the limited number of halal food business/manager

present in the city of Hull. Virtual interview is insufficient compared to face-to-face in-depth and unstructured interview in terms of the nature of expressing the answers. Further in-depth interviews with more respondents are highly recommended for managing the HFSC in Muslim-minority or majority countries during uncertainty.

5.2 Reflection of the Process

Along the process, this research developed the researcher's academic skills and courage to reach out and interact directly with potential respondents to ask their willingness in participating in this research during the Covid-19 pandemic. Moreover, the researcher gained experience in interviewing someone from another country with English, which is not the researcher's mother language. This developed the researcher's communication skills on channelling the conversation flow into a more relaxed one. Especially, some of the research process took place during the holy month of Ramadan, which made the researcher able to focus and work under pressure while fasting during the day. Lastly, the researcher attained skills in analysing qualitative data and refining the ability in referencing.

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