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# **Success Factors Influencing Food Inspection Management in UAE**

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Abstract: Third-party halal certifications are frequently used as the main distribution channels for stunned meat in the UAE and other Muslim societies. Food inspectors are not taught how to interact with these outside parties, which is the main cause of this. This sheds light on the reason why the halal food inspectors were unable to thoroughly check packaged food and certifications. Hence, this paper presents a study on determine the success factors influencing halal food inspection management in UAE. The study identified 48 factors and clustered it into seven groups namely top management commitment; adequate support; halal training and education; employee attributes and management; policy and procedure; halal personnel empowerment; customer focus. These factors were used in the questionnaire development and respondents were request to gauge the influence of these factors based on Likert scale. The data collected from this questionnaire survey was was analysed and found that A total of all of the variables, of which 15 have mean values of 2.68 or higher which are considered as highly influencing factors. In term of the group performance, it was found that the highest group of factors affecting the halal inspection management is halal training and education, followed by top management commitment then by customer focus then by halal personnel empowerment then by adequate support then by policy and procedure and finally by employee attributes and management.

Keywords: Food inspection management, success factors, UAE

#### 1. Introduction

Muslims must abide by strict dietary regulations that specify which foods is Halal (acceptable for consumption by Muslims). With numerous market drivers, including greater purchasing power and the organic growth of the Muslim population, the halal foods market presents economic opportunities for the food industry (Wilkins et al., 2019). Due to inadequate training and development brought on by the implementation of a subpar EFST, Abu Dhabi's halal inspectors are unable to find fake certificates and inspect packaged foods. Wahab, Shahwahid, and Ab Hamid (2016) claimed that issues like falsified halal certificates might go unnoticed. Previous studies have demonstrated that this model's design does not give the halal food inspectors enough training, particularly when it comes to inspecting packaged halal and spotting fake certificates (Park Kwak and Chang, 2010; Al Halaseh and Sundarakani, 2012; Farooqui and Kurt, 2013; Ghosh, 2017; Perdana et al., 2018; Wahab Hamid, and Shahwahid, 2016; Fuseini, Wotton, Knowles, and Hadley, 2017; Butti Al Shamsi et al., 2018). In a halal environment that is rapidly changing, inadequate training is harmful because it

could make the halal inspection pointless, which could seriously harm both the local population and people in other foreign countries to which halal is exported. This claim is in fact supported by numerous recent instances of falsified documents and improperly packaged food. For instance, Muslims were consuming significant amounts of food products that contained haram ingredients such as Gelatin, which is not regarded as halal and is most likely derived from pigs, was one of the haram ingredients. Additionally, one of the processing techniques for some packaged foods includes fermentation. Alcohol is produced during fermentation, which renders the food non-halal.

This demonstrated that the ADFCA lacks sufficient inspectors and supervisors for the food industry. Brydges et al. (2017) and Kawshala (2017) pointed out that ADFCA does not attempt to leverage its strengths across the underutilised capacities and skills of halal food inspectors and through the use of administrative tools to improve the overall model of food inspectorate focused on the central principle of competencies. It is difficult to comprehend how Halal Food Inspectors are able to keep track of any aspect of the inspection following cross-examination using a widely used model like EFST. People have concern that some packaged foods sold in Abu Dhabi may have contained traces of pork, according to a Gulf News report by Kader (2014). According to Ireland and Rajabzadeh (2011), residents of the UAE expressed grave concerns about the availability of halal food in this very year. They focused in particular on the packaged foods sold to Muslims by western restaurants operating in Abu Dhabi and other regions of the UAE.

In the UAE and other Muslim societies, third-party halal labels are frequently used as the primary channels through which unstunned meat is distributed all over the nation (Fuseini et al. 2017). The main reason for this is that food inspectors are not taught how to deal with these outside parties. This highlights the cause of the halal food inspectors' failure to successfully inspect packaged food and certifications. The results give one the impression that the halal food inspectors lack the expertise to judge whether the halal is appropriate once the food has been removed from the preparation area and packaged. However, Park, Kwak, and Chang (2010) also draw attention to the inadequacy of the food inspectors to examine the methods used to prepare halal food. They found that the inspectors' abilities to check the halal food at the preparation areas, like restaurants, did not significantly improve even after training. According to the core competencies theory, the inefficiencies are harmful in a halal environment that is changing quickly.

Given this, it is crucial to conduct research that encourages the creation of a more long-term training and development model that the Abu Dhabi halal regulators can use to improve the knowledge of their inspectors. In order to manage halal food inspection in the UAE, it is necessary to identify the Critical Success Factors and evaluate the degree to which they influence halal food inspection. There is a need to develop a clear understanding among inspectors by first conducting a systematic analysis of the success factors of halal food inspection. Thus, the main goal of this study is to identify Critical Success Factors (CSFs) for halal food inspection management in the United Arab Emirates. Critical factors, which primarily monitor the project's development from the ground up, play a significant role in determining the success of a project (Ahsen et al. 2021). It is anticipated that the proposed research will enhance the inspection management system's structure. This study is crucial for Muslim customers because it will empower them as stakeholders and guarantee that businesses will take into account their needs and demands. In doing so, halal-related issues should always be given first consideration when selecting food products. Make them the ones with greater authority and control over the resources of the companies as the stakeholders. They are forced to satisfy the needs of Muslim customers as a result. The study might show how the halal label affects consumers' decisions about what foods to buy.

#### 2. Literature Review

Halal food research in the first half of the 20th century concentrated on identifying, preventing, and treating diseases caused by nutrient deficiencies, while research in the second half concentrated on the importance of nutrition in maintaining health. Scientific reports on diet and faith first appeared in the early 1960s, and ever since then, the evidence for particular foods and dietary components having particular health effects has grown quickly (Variyam and Golan 2002). Consumers' understanding of the connection between beliefs and diet has been translated into useful advice on dietary practices as scientific research in this area develops. In addition to word of mouth and personal physicians, consumer beliefs are important factors in their daily diet.

The diet of people is closely related to various food cultures and religions. Religion tries to show itself through food, and for many people, food symbolizes religion. The majority of religions have dietary prescriptions or standards. Some religions have very clear prohibitions on certain foods. There is a connection between food and religion for many different groups living in both developing and developed nations. A group of people's interpretation and response to what they consider to be sacred and supernatural is what is known as their religion. The majority of religions forbid or outright forbid such behaviour, including drinking. According to Schiffman and Kanuk (1997), members of different religious groups can have an impact on their purchasing decisions. This is a common concept in courses on international business and marketing. There are several aspect which must be known for effective halal food inspecting management as discussed in the following sub-sections.

#### 2.1 Mandates that the Islam Religion Has Set on the Halal Food Supply Chain Mandate

The current empirical understanding of the predominate level of halal food inspection in the UAE, and specifically Abu Dhabi, is still in its infancy. However, some researchers have made an effort to look into the cause. The Al Halaseh and Sundarakani (2012) study is one of the most controversial ones. In this study, the researchers looked into the rules that the Islamic faith has established for the halal food supply chain. The effects of the requirements on the quality of meat and how it compares to non-halal food items are also investigated by the researchers. The researchers conducted document analysis with a focus on the reports issued or stored by halal authorities to achieve this goal. It was found that the UAE only concentrates on exemplary hygiene practises and benchmark processing practices. Farooqui and Kurt's (2013) study offered comparable insights validating the findings of Al Halaseh and Sundarakani (2012) in the face of the identified bias. The goal of Farooqui and Kurt's (2013) investigation was to learn more about the certification and auditing procedures for halal food. The application process, receiving contracts that have been signed, asking about ingredients, internal auditing, process reviews, site reviews, and document inspection are of particular interest to the researchers. The experimental design used by Farooqui and Kurt (2013) is modelled after the procedures followed by the halal food inspection authorities. The basic steps of the halal inspection process are revealed to be the verification of the food items, the sharia board's approval, and finally, the issuance of the certificate. Even though this is the case, it was noted that the majority of the agencies involved in the certification processes have faced significant challenge. This may possibly be one of the main causes of the inspectors' inability to determine whether a certificate is genuine or forged, proving that this study does, in fact, answer the research questions posed. Given that it uses public records as a source of data, this study is fairly thorough. As a result, the study's practical applications are crucial. However, it is clear that the study did not consult any of the many secondary sources that might have been necessary to verify some of the assumptions.

#### 2.2 Halal Safety Issues along the Supply Chains

Rahman et al. (2014) conducted a follow-up study with the aim of examining the case of halal safety concerns in the Islamic region. The researchers used a systematic review of the literature to achieve this goal. The study demonstrates that the Islamic rules that typically govern food are not only straightforward but also unambiguous. Additionally, the researcher believes that these regulations mandate separating the halal production process from the non-halal production process. Halal inspectors frequently stress the importance of sanitation, hygiene, and safety considerations when preparing and manufacturing halal. Rahman et al. (2014) pointed out that the standards of food preparation and manufacturing have been lowered as a result of the rising demand for halal food. The researchers hypothesise that there has been an increase in the use of illegal raw materials and their other derivatives, which aren't always disclosed on food labels. The results of the other two studies by Al Halaseh and Sundarakani (2012) and the study by Farooqui and Kurt (2013) are in agreement with these findings. The effectiveness of halal investigators in determining whether foods are safe for consumption by humans is a crucial question that this study significantly contributes to resolving. The resource demonstrates that the lack of disclosure of important information on the labels is the most convincing justification. Therefore, this study unequivocally demonstrates that manufacturers are equally as incompetent as the inspection system. If this is the case, then the study contributes to giving the current issue new angles. The information presented is very credible because the research techniques were primary-based. The researcher might, however, have been unable to gather additional information that would have improved the research process due to the small sample size. In a subsequent study, Sani and Dahlan (2015) sought to profile the food value chain scenario and discuss the relationship between halal safety and appropriate processing procedures in addition to halal certification. But the researchers concentrated on Abu Dhabi's situation within the UAE. The researchers adopted the use of numerous case studies to accomplish this goal. Due to the migration of Islamic people to Europe and other western countries, there is a high likelihood that quality will be compromised, particularly when it comes to halal exports. The researchers argue that improved halal safety measures are therefore necessary.

#### 2.3 Firmness in Necessitating Halal Certification

Manurung (2019) reported that few Asian governments are steadfast in requiring halal certification. The researcher also provided evidence that the industrial players are not properly aware of their obligation to register food products. The majority of Asian food industry stakeholders view certification as merely licencing, as demonstrated by Ridlwan and Anwar (2018). According to the researchers, the issue is made worse by the lack of human resources with the necessary qualifications and experience to inspect the packaged halal food. Additionally, the researcher stated that a major barrier to conducting proper halal certification is the halal certification process. According to Hosen (2018), many issues exist in Asian nations that prevent an efficient certification process. These problems can be found in the halal standards, the legal framework that controls the certification procedure, and the halal supply chain. Additionally, the researcher hypothesized that there is a serious lack of cooperation among Asian certification organizations.

#### 2.4 Different Halal Certification Standards and Regulations

According to BSA (2019), various halal inspection agencies in Abu Dhabi and the UAE as a whole adhere to different standards and guidelines. This has a negative effect because it causes variations in the level of inspection. As a result, one agency may rely on lax standards, making it nearly impossible to address current inefficiencies like certificate fraud. It was discovered in a different study by Sulaiman et al. (2016) that the efficiency of halal is lacking due to dwindling auditor expertise and experience. Similar to this, Shahdan et al. (2016) indicated that the interpretation of the certification standards by halal food inspectors differs, which jeopardises their ability to carry out their duties effectively. Despite being primary scientific sources, the two studies by Sulaiman et al. (2016) and Shahdan et al. (2016) concur with the BSA (2019) report that the inspection process for halal food is somewhat deficient. The fact that this study's data came from primary sources is the ideal thing about it. Consequently, it is very likely that the source has accurately captured the current state of the targeted phenomenon.

#### 2.5 Problems in Implementing Halal Food Certification

Majid et al. (2015) conducted a study to identify a number of problems with the implementation of halal food inspection in the United Arab Emirates, particularly in Abu Dhabi. It was discovered that the certification procedure is seriously threatened by halal governance in the UAE. Inspectors working for small and medium-sized inspection agencies have a strong incentive to build a positive reputation for halal inspection because of poor governance. Although the results of these two studies do not establish the current state of halal inspection, they do provide information that encourages speculation. As a result, the researchers discussed how the current changes in the halal industry may jeopardise food safety. Thus, this research is essential for shedding light on the potential reasons for the inability to recognize fake certificates. Due to the disparity in standards, dishonest food producers have a chance to get around the requirements for certification. Therefore, even though this connection may not be made clear in the article, the researchers have succeeded in developing a theory that could help in understanding how the issuance of forged certificates is related to the absence of a common standard.

#### 2.6 Problems with Accreditation and Information System for Halal Certification Process

Khan and Haleem (2016) sought to provide a brief overview of halal, halal certification, and the accreditation process through case study, just like Sani and Dahlan (2015). But the researchers concentrated on the situation in India. It has been discovered that the halal certification and accreditation system used in India is the same as the one found in many other Asian nations. Additionally, Khan and Haleem (2016) find that the complexity of the halal certification agencies' work has a negative impact on the inspection's quality. The researchers discovered that the inspecting agencies lack the necessary standards for an adequate inspection. Raja (2018) echoes this viewpoint when he claims that the diversity of halal requirements and standards is indicative of a significant structural problem. Particularly difficult during the early stages of the inspection process is the multiplicity problem. Maison, et al. (2018) discovered that both implicit and explicit information about halal products frequently has significant ramifications. The researchers found that the majority of inspectors only pay attention to explicit information and ignore implicit data. In this context, implicit information is used to describe statements that suggest whether a food item is halal or not. The implicit message is frequently communicated using a variety of techniques, such as giving a product an Arabic name, labelling products with the nation in which they were packaged, and using Arabic letters on packaging. According to Maison, et al. (2018), the majority of halal inspectors make the assumption that something is suitable for Muslim consumption if there is an implicit halal indicator. The issue is that these implicit halal indicators can occasionally be misleading. As a result, it is relatively simple to pass food off as halal while actually not being.

#### 2.7 Critical Success Factors Influencing Halal Food Inspecting

#### 2.7.1 Top Management Commitment

The top management commitment to the Halal management programme requires a high level of management engagement (Ahmad et al, 2017). Top management must enable employees to adopt Halal values and certify themselves, claim Ab Talib et al. (2015). Ngah et al., (2015) emphasized the value of supporting top management throughout the adoption process because they will decide what is best for their company. For instance, if the employees understood that the warehouse's Halal operations were advantageous to the business but that their goal would remain the same without Top Management's consent. On the other hand, if top management believed it would be advantageous to the company, halal warehousing will be incorporated into its supply chain operations after receiving approval from top management. The results of this analysis suggest that better comprehension would result in higher decisions in favour of Halal compliance (Ngah et al., 2014). The main causes of Halal's inspection are managerial and managerial commitment (Ab Talib et al. 2015). In order to ensure that administrators of the Halal system are knowledgeable and capable of performing their duties, businesses will also make sure they are adequately informed about the Halal system's application (Ahmad et al., 2017).

The majority of the informants thought that management commitment was an important element that could help or hurt the implementation of a successful halal management system. For instance, an auditor claimed that if top management lacks commitment, halal implementation will be hindered. According to some industry insiders, top management support shows a company's dedication to halal certification. One of the halal executives explained how top management's support for their halal management efforts benefited them. Others claimed that top management's involvement strengthened their staff's resolve to address halal-related issues. However, some halal executives believed that their top management was not sufficiently involved, leaving it up to their staff to manage every aspect of the halal programme. As a result, it will be challenging for these managers to advocate for or carry out significant changes that will enhance the halal system in their facility. The majority of respondents also thought that top management needed to be aware of halal requirements so they could understand the programme and allocate funds to support halal programme changes.

#### 2.7.2 Adequate Support

The importance of having enough support is acknowledged by every informant when a halal programme is being implemented. During the interview, the informants gave examples of support such as infrastructure (facilities, equipment), tools, manpower, and a prerequisite programme. A suitable infrastructure is needed for the production of halal, safe, and effective foods, including a factory layout and useful tools and equipment. Poor equipment maintenance, according to some halal executives, has hurt their halal processing by endangering the safety of their food products (Raheem and Demirci, 2018). The majority of respondents also mentioned the labour pool. Companies that want to be certified as halal must appoint a Muslim executive officer for halal matters and guarantee that there are at least two Muslim employees (permanent and Emirati citizens) available in the production area. For halal certification, good hygiene and pest control were deemed essential.

#### 2.7.3 Halal Training and Education

Training and education are a further significant theme in this investigation. Informants emphasized the importance of training in ensuring that workers have the abilities and information needed to do their jobs. Some informants claimed that halal education/training options included formalized group training with outside providers as well as individualized on-the-job instruction. Some halal executives had to figure out a way to get around language barriers with non-Emirates or non-English speaking production workers in order for them to understand and follow the halal programme (Zailani et al, 2019). For instance, some halal executives used body language to convey information or included graphics in the training materials. The importance of top management and managerial staff training for the successful execution of the halal programme was also emphasised.

#### 2.7.4 Employee Attributes and Management

Because their work directly affects the company's products, the majority of informants saw production workers' roles as essential to the success of the halal food management system. An efficient halal food management system is facilitated by employees who are dedicated, knowledgeable, and empowered to act on halal and safety issues. Some informants also emphasised the value of a plan for motivating, rewarding, or punishing employees who disobeyed halal rules and regulations (Naeem et al. 2019).

#### 2.7.5 Halal Personnel Empowerment

The empowerment of halal executives and staff was another common theme among informants. As the halal certification requirement covers both Shariah and Toyyiban (quality) aspects, halal executives are typically hired from individuals with a background in Islamic studies or food (science or technology). For instance, four out of seven informants are tasked with handling both halal and quality issues in their company due to financial restrictions. Because not everyone is capable of handling two functions, this is referred to as one of the challenges facing the industry (Ahmad et al, 2020). Not all executives with scientific backgrounds are knowledgeable about Islamic topics like deciphering and understanding fatwa rulings. Similarly, a businesswoman with an Islamic background claimed that she was unqualified to handle tasks involving the quality and safety of food due to her lack of technical knowledge. Most consultants and auditors concur that Halal Executives must possess knowledge and expertise (Ahmad, 2018). To ensure that these executives are competent and well-equipped to handle their tasks and functions, companies must ensure that they receive adequate training on halal programme implementation. Giving halal executives enough power to make decisions and take action in their work areas without seeking prior approval from top management is a crucial part of enhancing the halal programme. According to some informants, if halal requirements for a product or process are not met, halal executives with the required authority (empowerment) may halt production, reject raw materials, or halt shipment. Additionally, a channel for halal executives to speak with top management directly about halal issues or concerns needs to be provided (Ishii, 2019).

#### 2.7.6 Policy and Procedure

Effective halal food management could also be hampered by policies and procedures, which were also mentioned. The business must set up halal rules that forbid serving forbidden food and beverages in eating establishments. Informants discussed how the company's ability to maintain its halal status if halal rules and regulations aren't put in place (Khan et al, 2019). Numerous respondents thought that top management was essential in making sure that the halal policy was taken seriously. Additionally, informants mentioned posting a brief halal mission statement or policy on the company noticeboard or at the entrance to the food facility, explicitly stating that their business intends to offer only halal goods. Some industry insiders claim that this tactic helps companies convey to their stakeholders i.e. employees, clients, and suppliers that their goal is to supply and process only halal products. The implementation of halal programmes was made easier by the description of procedures, especially for production workers. These employees are guided by procedure regarding what must be done to ensure that halal laws are upheld (Ali et al, 2017).

#### 2.7.7 Consumer Focus

How consumer management affects halal food product management was a question posed to informants. Some informants concurred that handling complaints and other forms of consumer management are essential. These sources claim that the halal programme is a comprehensive initiative that demands the inclusion of a safety component. As a result, responding to customer complaints is one way to raise the product's level of safety and quality. One halal executive, however, argued that there should be no halal complaints and that handling them would have no impact on halal product management (Ahmed et al, 2019). A consultant who claimed that there should be no product ingredient complaints because this attribute is credibility supports this further. Responding to consumer questions about halal is crucial, according to another informant, if you want to control consumer doubt or unfavourable perception. One informant from a food company previously connected to a halal incident claims that their business has created a system to handle customer inquiries or complaints regarding halal as a result of the incident (Ab Talib et al, 2017). The proliferation of false information about halal on social media was one of the difficulties in controlling consumer behaviour. A halal executive in one company is in charge of stopping the dissemination of false, unreliable, or biassed information about their brand or product. Because this factor cannot be predicted, some auditors claimed that advance planning for handling halal concerns or crises is essential for halal food management (Bashir, 2019). One of the auditors brought up earlier halal issues and how the specific business lost the trust of its customers by being too slow to respond to the public. The auditor, on the other hand, noted a positive development in the market, noting that more businesses are improving and speeding up their public relations efforts in response to low-risk problems (such as the spread of false information on social media) regarding the halal and security of their products.

#### 3. Research Methodology

The study's goal was to discover the crucial success factors for the administration of halal food inspection in the United Arab Emirates. For this, the study employed a quantitative technique. Almansoori et al. (2021) cited that the use of quantitative methods aids the researcher in making sense of voluminous data.. Data collection was done based on survey method using a structured questionnaire (Saunders et al., 2015). The term "questionnaire" refers to a revised set of written questions that ask respondents to record their responses, usually within very precise, well-defined substitutes. Additionally, once the researcher is familiar with the variables that must be measured, it is a crucial tool in a study (Yilmaz, 2013). Questionnaire is a simple but effective testing method that is inexpensive and minimises data distortions brought on by interviewer bias (Ott & Longnecker, 2015 cited by Almazrouei et al. 2021) As a result, a structured questionnaire with options on a five-point Likert scale ranging from 1 to 5, which represent strongly disagree to strongly agree was used in the current study. Questionnaires allow for the more efficient collection of data about time, energy used, and costs (Omair, 2015). The data analysis involved mean value calculation to categorise mean values as if the mean scores fall between 3.68 and 5.0, a moderate level if the mean scores fall between 2.34 and 3.67, and a low level if the mean scores fall between 1.00 and 2.33. The extent to which a consistent result of ongoing measurements of a data collection approach is produced for variables of concern is referred to as reliability testing, and as a result, the reliability and the error are inverted: the higher the reliability, the lower the error (George & Mallery, 2016). The Cronbach alpha was estimates were used to assess the reliability of the composite items of each construct scale in this thesis because it uses a multi-item scale. Furthermore, different acceptability rates may be used to test the precision of a metric system (Bonett & Wright, 2015). The widely accepted thumb rule was developed to describe the internal accuracy calculation of Lee Cronbach's alpha as described in Table 1.

Table 1 - Cronbach's alpha internal consistency range

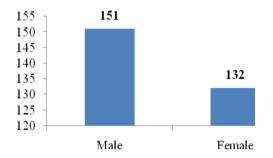
| <b>Internal Consistency</b> | Cronbach's Alpha       |
|-----------------------------|------------------------|
| Excellent                   | $0.9 \le \alpha$       |
| Good                        | $0.8 \le \alpha < 0.9$ |
| Acceptable                  | $0.7 \le \alpha < 0.8$ |

| Questionable | $0.6 \le \alpha < 0.7$ |
|--------------|------------------------|
| Poor         | $0.5 \le \alpha < 0.6$ |
| Unacceptable | $\alpha < 0.5$         |

The coefficients range from 0 to 1, and the closer it is to 1 the better the inner consistency (Tavakoi, 2011). A Cronbach alpha coefficient above 0.7 is considered acceptable, but above 0.8 or 0.9 is considered good or excellent (Sekaran, 2006). For the validity and reliability tests on all the postulated study variables, a cutoff of 0.70 Cronbach alpha point will be used in this study as adopted by (Almarashda et al. 2021).

#### 4. Results and Discussion

Data collection was carried out by recording the perception of the people engaged in Abu Dhabi Food Control Authority as well as the uses of halal food approved by ADFCA. The profile of the respondents in presented in Figures 1 to 4.



General manager

Executive Director

customer

employee

Fig. 1 - Respondents by gender

More than 16 years

11 to 15 years

6 to 10 years

1 to 5 years

0 20 40 60 80 100

Fig. 2 - Respondents by working position

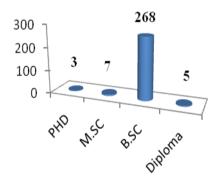


Fig. 3 - Experience of the respondents in current institution

Fig. 4 - Qualification of the respondents in current institution

Figures 1-4 show that approximately 53% of respondents are male and 47% are female. The positions of the respondents were recorded as 1.41% of general manager and 8.12% of Executive Director from the total targeted respondents. According to the experience distribution, the majority of respondents with 1 to 5 years of experience represent 30.38%, while those with 6 to 10 years of experience represent 33.56%. The percentages of respondents with 11 to 15 years of experience and those with more than 16 years of experience were 27.91% and 8.12%, respectively. The questionnaires were distributed using a probability sampling technique known as systematic random sampling, which was designed by professionals from the Abu Dhabi Food Control Authority. Also, it is observed that the majority of respondents (94.69%) have a B.SC degree. An M.sc degree is held by 2.47% of respondents, a diploma degree by 1.76% of respondents, and a PhD certificate is held by others representing 1.06% of total respondents.

The collected data through questionnaire was tested for the reliability and consistency with Cronbach's alpha and the results are presented in Table 2.

Table 2 - Reliability result for pilot testing

| Nos. | Groups of factors                  | Number of factors | Cronbach's Alpha |
|------|------------------------------------|-------------------|------------------|
| 1    | Top management commitment          | 7                 | 0.878            |
| 2    | Adequate support                   | 8                 | 0799             |
| 3    | Halal training and education       | 7                 | 0.785            |
| 4    | Employee attributes and management | 8                 | 0.827            |
| 5    | Policy and procedure               | 5                 | 0.806            |
| 6    | Halal personnel empowerment        | 5                 | 0.736            |
| 7    | Customer focus                     | 8                 | 0.727            |
|      | Total                              | 48                | 0.794            |

Table 2, evaluates the consistency of the entire scale and the results show that all the success factors have Cronbach Alpha value above 0.7 which confirms the reliability of the data. Hence, the data is considered satisfactory for further analysis. Before assessing the significance of the parameters measuring success factors, the normality of the data was assessed based on skewed and kurtosis values of all the items. Normality refers to the form of the data distribution for an individual metric variable according to Hair et al. (2011) and its correspondence to the normal distribution (which is the benchmark for statistical methods) (which is the benchmark for statistical methods). Skewness and kurtosis are the indicators of normality. The kurtosis value provides information on the distribution's "peakness," whereas the skewness value indicates the symmetry of the distribution (Pallant, 2011). Skewness and kurtosis values between -1 and +1 or -1.5 and +15 can be studied using the theory of normality (Schumacker and Lomax, 2004). The result of the normality test is presented in Table 3.

Table 3 - Descriptive statistics for constructs

| Item Description   |        | Kurtosis<br>Statistics |
|--|--------|------------------------|
| Top Management Commitment  |        |                        |
| Support from management and the environment improves the quality of the produced.                  | -1.016 | 1.073                  |
| Customer-focused strategies improve operational efficiency.  | 792    | .758                   |
| Consumer-focused businesses produce higher-quality goods.  | 608    | .153                   |
| Management and employee characteristics have a favourable impact on operational performance.       | 778    | .918                   |
| Management and employee qualities have a favourable impact on product quality.                     | -1.027 | 1.348                  |
| The effect of teamwork on operational performance is favourable.                                   | 854    | 1.039                  |
| Teamwork improves the quality of the final product   | 601    | .276                   |
| Adequate Support   |        |                        |
| Measurements Items   | 431    | 235                    |
| Products' halal ingredients ought to be examined and confirmed                                     | 542    | .040                   |
| It's important to mention which food additives contain halal ingredients                           | 295    | 043                    |
| Ensure there is enough information available to make an informed choice                            | 783    | 1.249                  |
| Government must ensure that Halal goods are available  | 694    | .389                   |
| The availability of Halal goods is under the control of Halal Authorities                          | 763    | 1.109                  |
| Manufacturers are in charge of ensuring the availability of Halal goods                            | 709    | .620                   |
| Supermarkets are in charge of ensuring the availability of Halal goods.                            | 563    | 035                    |
| Halal Training and Education   |        |                        |
| Train the team on how to create new halal food products.   | 824    | .748                   |
| Halal food standards must be fully understood by all team members                                  | 642    | .770                   |
| Due to dedicated storage, personnel must acquire more skills to deal with proper customer delivery | 801    | .871                   |
| Disseminate information about how having a dedicated vehicle makes deliveries to customers simple  | 725    | .749                   |
| Change the amount of the offered halal food being produced   | -1.189 | 1.509                  |
| Tailor production to the range of halal foods available.   | 816    | 1.032                  |
| Comply with the halal food production process being offered  | 514    | 252                    |
| Employee Attributes and Management   |        |                        |
| Fulfil customer need for halal   | 078    | 525                    |
| Responding sincerely and openly to customer complaints about halal food                            | 624    | .315                   |
| Being aware of the worker's religious background and his propensity for handling halal food        | 697    | .356                   |

| Item Description   | Skewness<br>Statistics | Kurtosis<br>Statistics |
|--|------------------------|------------------------|
| Ascertain that the worker is familiar with all the requirements and guidelines for the halal food industry | 880                    | 1.024                  |
| Observing the employee's participation in the production of halal food                                     | 352                    | 225                    |
| Make sure the worker follows the rules and is very interested in the required halal food                   | 627                    | .253                   |
| ingredients.   |                        |                        |
| Top-down coordination among the committed team   | 604                    | .265                   |
| Policy and Procedure   |                        |                        |
| Following all wholesome ingredients  | 752                    | .431                   |
| Implement the necessary precautions to protect your health.  | 638                    | .566                   |
| Making sure the materials don't contain any animal byproducts that are forbidden by sharia                 | 526                    | .252                   |
| Free from anything that Islamic law classifies as najis (filth).   | 237                    | 127                    |
| Eating halal food is acceptable and legal  | 352                    | 265                    |
| Halal Personnel Empowerment  |                        |                        |
| Willing to put forth significant effort to acquire Halal foods   | 838                    | 1.623                  |
| Believing that a product is Halal influences behaviour in a positive way                                   | 949                    | 1.474                  |
| Comply with regulations and guidelines to ensure that halal products are of high quality                   | 797                    | .920                   |
| It is important to choose a candidate who has the knowledge necessary to make a decision                   | 622                    | .587                   |
| It's crucial to check that certain food additives contain halal ingredients                                | 844                    | 1.100                  |
| Customer Focus   |                        |                        |
| I only purchase goods whose packaging bears the word "Halal"   | 702                    | .050                   |
| I cite the legitimacy of Islamic institutions that grant halal certification                               | 978                    | .826                   |
| If there is no Halal certification, I identify the product's source  | 713                    | 036                    |
| The cleanliness of the location where the product is purchased worries me                                  | 920                    | .899                   |
| I never purchase a foreign product with a Halal logo without first confirming that it is a recognised logo | 687                    | .253                   |
| If a non-halal product is sold next to a product I intend to purchase, I won't                             | 352                    | 265                    |
| I only purchase a product when the business owner is a Muslim  | 687                    | .253                   |
| I'll use the apps on my phone to research the halal status   | 494                    | 313                    |

Table 3 shows that all items have values of skewness and kurtosis within the acceptable range and hence the data used for this study is considered satisfactory. In essence, the data can be used for understanding the variables and success factors for managing halal food inspection in the UAE. Hence, the data was further analyzed for ranking purpose to prioritize the success factor using mean values as depicted in table 4.

**Table 4 - Ranking of the success factors** 

| Item Description   | Mean<br>Statistics | Ranking |
|--|--------------------|---------|
| Top Management Commitment  |                    |         |
| The effect of teamwork on operational performance is favourable.                             | 3.85               | 1       |
| Management and employee qualities have a favourable impact on product quality.               | 3.72               | 2       |
| Management and employee characteristics have a favourable impact on operational performance. | 3.66               | 3       |
| Teamwork improves the quality of the final product   | 3.66               | 4       |
| Support from management and the environment improves the quality of the produced.            | 3.64               | 5       |
| Customer-focused strategies improve operational efficiency.                                  | 3.60               | 6       |
| Consumer-focused businesses produce higher-quality goods.                                    | 3.56               | 7       |
| Adequate Support   |                    |         |
| The availability of Halal goods is under the control of Halal Authorities                    | 3.90               | 1       |
| Manufacturers are in charge of ensuring the availability of Halal goods                      | 3.77               | 2       |
| Products' halal ingredients ought to be examined and confirmed                               | 3.58               | 3       |
| Government must ensure that Halal goods are available  | 3.66               | 3       |
| Ensure there is enough information available to make an informed choice                      | 3.52               | 4       |
| Supermarkets are in charge of ensuring the availability of Halal goods.                      | 3.50               | 5       |
| Measurements Items   | 3.37               | 6       |
| It's important to mention which food additives contain halal ingredients                     | 3.14               | 7       |

| Item Description   |      | Ranking |
|--|------|---------|
| Halal Training And Education   |      |         |
| Change the amount of the offered halal food being produced   | 4.05 | 1       |
| Tailor production to the range of halal foods available.   | 3.84 | 2       |
| Disseminate information about how having a dedicated vehicle makes deliveries to customers simple  | 3.77 | 3       |
| Due to dedicated storage, personnel must acquire more skills to deal with proper customer delivery | 3.76 | 4       |
| Halal food standards must be fully understood by all team members                                  | 3.69 | 5       |
| Train the team on how to create new halal food products.   | 3.67 | 6       |
| Comply with the halal food production process being offered  | 3.40 | 7       |
| Employee Attributes And Management   |      |         |
| Observing the employee's participation in the production of halal food                             | 3.73 | 1       |
| Ascertain that the worker is familiar with all the requirements and guidelines for the halal       |      |         |
| food industry  | 3.67 | 2       |
| Top-down coordination among the committed team   | 3.66 | 3       |
| Being aware of the worker's religious background and his propensity for handling halal food        | 3.58 | 4       |
| Responding sincerely and openly to customer complaints about halal food                            | 3.49 | 5       |
| Make sure the worker follows the rules and is very interested in the required halal food           | 3.14 | 6       |
| ingredients.   |      | _       |
| Fulfil customer need for halal   | 3.02 | 7       |
| Policy And Procedure   |      |         |
| Free from anything that Islamic law classifies as najis (filth).                                   | 3.80 | 1       |
| Eating halal food is acceptable and legal  | 3.76 | 2       |
| Following all wholesome ingredients  | 3.54 | 3       |
| Implement the necessary precautions to protect your health.  | 3.38 | 4       |
| Making sure the materials don't contain any animal byproducts that are forbidden by                | 2.20 | ~       |
| sharia   | 3.28 | 5       |
| Halal Personnel Empowerment  |      |         |
| Willing to put forth significant effort to acquire Halal foods                                     | 3.67 | 1       |
| It's crucial to check that certain food additives contain halal ingredients                        | 3.62 | 2       |
| It is important to choose a candidate who has the knowledge necessary to make a decision           | 3.57 | 3       |
| Believing that a product is Halal influences behaviour in a positive way                           | 3.56 | 4       |
| Comply with regulations and guidelines to ensure that halal products are of high quality           | 3.51 | 5       |
| Customer Focus   |      |         |
| I cite the legitimacy of Islamic institutions that grant halal certification                       | 3.77 | 1       |
| If a non-halal product is sold next to a product I intend to purchase, I won't                     | 3.76 | 2       |
| The cleanliness of the location where the product is purchased worries me                          | 3.70 | 3       |
| If there is no Halal certification, I identify the product's source                                | 3.60 | 4       |
| I only purchase goods whose packaging bears the word "Halal"                                       | 3.56 | 5       |
| I never purchase a foreign product with a Halal logo without first confirming that it is a         | 3.54 | 6       |
| recognized logo  |      |         |
| I only purchase a product when the business owner is a Muslim                                      | 3.54 | 6       |
| I'll use the apps on my phone to research the halal status   | 3.42 | 7       |

Table 4 shows that "The effect of teamwork on operational performance is favourable" is the most desirable success factor related to top management commitment. It is followed by "management and employee qualities have a favourable impact on product quality". Similarly, in the category of adequate support "the availability of Halal goods is under the control of Halal Authorities" and Manufacturers are in charge of ensuring the availability of Halal goods" are the top two variable adopted as success factors. In the category of success factors Halal training and education, the top two factors are Change the amount of the offered halal food being produced and Tailor production to the range of halal foods available. Assessment of employee attributes and management category shows that observing the employee's participation in the production of halal food is the most desirable variable. The second variable in this category is "ascertain that the worker is familiar with all the requirements and guidelines for the halal food industry". Policy and procedure is another success factors which influence the halal food inspecting management. In this category first ranked variable is Free from anything that Islamic law classifies as najis (filth) while second ranked variable is eating halal food is acceptable and legal. The success factors category halal personnel empowerment showed that "willing to put forth significant effort to acquire Halal foods" and "It's crucial to check that certain food additives contain halal

ingredients" are the top two variables which influence halal food inspecting management system. Inspection of the success factor category customer focus revealed that the first ranked variable is "I cite the legitimacy of Islamic institutions that grant halal certification" and second ranked factor is "if a non-halal product is sold next to a product I intend to purchase, I won't".

The mean scores from each of the factor in the group are averaged to give the mean score of each group. Figure 5 indicates the mean score for each group in influencing the halal food inspection management.

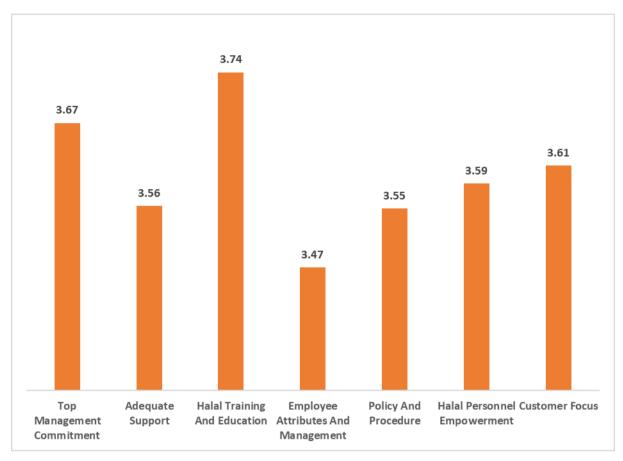


Fig. 5 - The rank of the factors' groups

Figure 5 shows that the highest group of factors affecting the halal inspection management is halal training and education, followed by top management commitment then by customer focus then by halal personnel empowerment then by adequate support then by policy and procedure and finally by employee attributes and management.

#### 5. Conclusion

This paper identified and ranked the success factors influencing the halal food inspection management in the UAE. Halal food is the fundamental need of a Muslims and essential component of Islam. In the UAE and other Muslim societies, stunned meat is typically distributed primarily through third-party halal certifications. The primary reason for this is that food inspectors are not taught how to communicate with these outside parties. This clarifies the cause of the halal food inspectors' inability to examine packaged food and certifications in great detail. Therefore, this study identified the success factors influencing the Halal Food Inspection Management Practice using a questionnaire survey. All of the variables, of which 15 have mean values of 2.68 or higher, are significant influencing factors, according to the data analysis. In term of the group performance, it was found that the highest group of factors affecting the halal inspection management is halal training and education, followed by top management commitment then by customer focus then by halal personnel empowerment then by adequate support then by policy and procedure and finally by employee attributes and management. One of the variables is changes in the amount of halal food offered that is produced in accordance with the adequate support category.

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