



**DEVELOPMENT OF HALAL CERTIFICATION REQUIREMENT MODEL FOR
FOOD INDUSTRY**

By

AINI MASMIRA BINTI A. MANAF

**Thesis Submitted to the School of Graduate Studies, Universiti Putra
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Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfillment of the requirement for the degree of Doctor of Philosophy

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October 2020

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In line with increasing Halal food market demand in Malaysia, Halal certification plays a key role in food and beverages industry specifically in small medium enterprise (SME). From previous studies, the practice of Halal standards is found synonymous with quality certification such as quality management system (QMS) and food safety management system (FSMS). However, the awareness towards the Halal certification and quality systems among SME are at low level. This has led to a low business performance. The aim of this study was to develop QMS-FSMS model in order to help microenterprise entrepreneurs to acquire Halal certification effortlessly. By merging the affected elements which influenced the Halal certification process, it would expedite the process of Halal application yet maintaining product quality. However, no studies which combined QMS-FSMS requirements into Halal certification were conducted in food and beverage microenterprises in Malaysia. Therefore, this was found to be filled as the gap of this study. Semi-structured face-to-face interviews, observation and focus group discussion were used to collect qualitative data. Through purposive sampling and grounded theory approach, twelve microenterprises from Selangor and Pahang were selected as a sample for this study. From data coding analysis, six critical elements, which are top management responsibilities, operation management, team encouragement, quality culture and customer focus were generated. This model was tested with two respective microenterprises in final phase of this study. The result showed that SME 30 has fulfilled 99% of the checklist and has successfully submitted E-Halal application on the same day, meanwhile SME26 only obtained 63.4% and unable to proceed with the E-Halal application. This finding shows that QMS and FSMS implementation could expedite the Halal certification process related to document preparation. This study has revealed entrepreneurs' knowledge and experience towards QMS, FSMS and Halal certification are very low. Lack of exposure, management skill and proper training in quality system and Halal

certification among the owners were the major barriers that lead to difficulty of getting Halal certification especially related to documentation.



Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia
sebagai memenuhi keperluan untuk ijazah Doktor Falsafah

PEMBANGUNAN MODEL KEPERLUAN PENSIJILAN HALAL UNTUK INDUSTRI PEMAKANAN

Oleh

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Sejajar dengan peningkatan permintaan pasaran makanan Halal di Malaysia, pensijilan Halal memainkan peranan penting dalam industri makanan dan minuman khususnya dalam perusahaan industry kecil (IKS). Dari kajian sebelumnya, amalan standard Halal didapati berkait rapat dengan pensijilan kualiti seperti sistem pengurusan kualiti (QMS) dan sistem pengurusan keselamatan makanan (FSMS). Walau bagaimanapun, kesedaran terhadap sistem pensijilan dan kualiti Halal di kalangan IKS berada pada tahap yang rendah. Ini menyebabkan prestasi perniagaan rendah. Tujuan kajian ini adalah untuk mengembangkan model QMS-FSMS untuk membantu pengusaha perusahaan mikro memperoleh sijil Halal dengan mudah. Dengan menggabungkan elemen yang terpengaruh yang mempengaruhi proses pensijilan Halal, ini akan mempercepat proses aplikasi Halal namun tetap menjaga kualiti produk. Namun, tidak ada kajian yang menggabungkan syarat QMS-FSMS ke dalam pensijilan Halal yang dijalankan di perusahaan mikro makanan dan minuman di Malaysia. Oleh itu, ini dianggap sebagai memenuhi jurang kajian ini. Temuduga secara bersemuka, pemerhatian dan perbincangan focus berkumpulan separa berstruktur digunakan untuk mengumpulkan data kualitatif. Melalui pendekatan persampelan bertujuan dan teori landasan, dua belas syarikat mikro dari Selangor dan Pahang dipilih sebagai sampel untuk kajian ini. Dari analisis pengkodan data, enam elemen penting, yang merupakan tanggungjawab pengurusan atasan, pengurusan operasi, dorongan pasukan, kualiti budaya dan fokus pelanggan dihasilkan. Model ini diuji dengan dua syarikat mikro masing-masing pada fasa akhir kajian ini. Hasilnya menunjukkan bahawa SME 30 telah memenuhi 99% senarai semak dan telah berjaya mengemukakan permohonan E-Halal pada hari yang sama, sementara itu SME26 hanya memperoleh 63,4% dan tidak dapat meneruskan permohonan E-Halal. Keputusan ini menunjukkan bahawa pelaksanaan QMS dan FSMS dapat mempercepat proses pensijilan Halal yang berkaitan dengan penyediaan dokumen. Kajian ini telah menunjukkan pengetahuan dan pengalaman

usahawan terhadap pensijilan QMS, FSMS dan Halal sangat rendah. Kurangnya pendedahan, kemahiran pengurusan dan latihan yang betul dalam sistem kualiti dan pensijilan Halal di kalangan pemilik adalah halangan utama yang menyebabkan kesukaran mendapatkan sijil Halal terutama yang berkaitan dengan dokumentasi.



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LIST OF ABBREVIATIONS

| | |
|---------|--|
| CCM | Constant Comparative Method |
| CE | Close-Ended |
| CS | Category Scale |
| CSF | Critical Safety Factor |
| DOSM | Department of Statistic Malaysia |
| FAMA | Federal Agricultural Marketing Authority |
| FIFO | First In First Out |
| FSMS | Food Safety Management System |
| FSSC | Food Safety System Certification |
| F&B | Food and Beverage |
| GHP | Good Hygienic Practices |
| GMP | Good Manufacturing Practices |
| GST | Government Service Tax |
| GT | Grounded Theory |
| HAS | Halal Assurance System |
| HCP | Halal Critical Process |
| IKS | Industri Kecil Sederhana |
| ISO | International Organisation for Standardization |
| IR4 | Industry Revolution 4.0 |
| IT | Information Technology |
| JAKIM | Jabatan Kemajuan Islam Malaysia |
| MAHA | Malaysia Agriculture Horticulture and Agro-tourism |
| MARA | Majlis Amanah Rakyat |
| MATRADE | Malaysia External Trade Development Corporation |
| MESTI | Makanan Selamat Tanggungjawab Industri |

| | |
|----------|---|
| MS | Malaysian Standard |
| NP | Non-Probability |
| OE | Open-Ended |
| QC | Quality Check |
| QM | Quality Management |
| QMS | Quality Management System |
| QMSHFSMS | Quality Management System Halal Food Safety Management System |
| PNS | Perbadanan Nasional Berhad |
| SME | Small Micro Enterprises |
| SOP | Standard Operating Procedure |
| SPC | Statistical Process Control |
| TEKUN | Tabung Ekonomi Kumpulan Usahawan Niaga |
| TM | Top Management |
| TQM | Total Quality Management |

CHAPTER 1

INTRODUCTION

1.1 Introduction

The National Small and Medium-sized Enterprise (SME) Development Council defines SME as companies involved mainly in manufacturing and agricultural basic industries with annual sales turnover of less than Ringgit Malaysia (RM) 300,000 or less than five full-time employees (SME Corporation Malaysia, 2014). SMEs involvement is significant in key economic sectors. In 2016, Malaysia recorded a total of 907,065 SMEs, whereby 693,670 are microenterprises. Manufacturing sector makes up 5.3 percent of total microenterprise, which is the second highest in 2016. In the manufacturing sector, 18.2% of SMEs are concentrated in textiles and apparel while food and beverages (F&B) at 17.4%, is the second highest sector in the list (Department of Statistic, 2016). Food, as a basic necessity, always provides ample opportunities for investment considerations. The government has recognized the food processing sector as one of the priority sectors in the country's industrial development. Therefore, F&B food processing plays a significant role in the Malaysia economy and is dominated by SME companies.

Quality is one of the most important concepts in manufacturing. With better quality, the higher the chance of customer to repeatedly purchase the product. Food industry involves highly sensitive products. This is one of the key reasons for maintaining quality standards and complying with quality requirements. To ensure high product quality, quality management system (QMS) must be implemented. QMS is a structured collection of policies, procedures, processes that is associated with responsibilities into an integrated system in order to achieve quality goals and objectives. Most of the companies around the world implement QMS in accordance with the requirements of the ISO9001 standard, thus providing a framework for the entire processes of providing and delivering products and services to customer. For manufacturing companies, factors such as safety, efficiency, and reliability will affect product quality and ultimately affect overall customer satisfaction. Therefore, an adoption of food safety management systems (FSMS) also gives businesses in the food industry the security and the competitiveness they need on the market. It is a systematic method to eliminate hazards in food enterprises and ensure food safety. FSMS requirements (ISO22000), for any organisation in the food chain aims to be compatible with the current food safety management tools such as ISO9001 and HACCP while at the same time it extends the successful of ISO9001. Moreover, the Halal food market demand is arising day by day due to higher consumer trust towards the safety and cleanliness of Halal food product. Halal is an Arabic term which means allowed or lawful in Islam. In reference to food, it is an Islamic dietary standard stipulated by Shari'ah (Islamic law). Muslims must eat Halal food and use Halal products. This is because, Muslims not only eat and use consumer goods for entertainment, but also to fulfil their duties, and responsibilities in this

world. Halal certification provides a guarantee for all Muslim consumers because it complies with Islamic law. For non-Muslims, Halal products are high quality products due to the concept of Halalan Toyyiban (Halal and healthy food). Malaysian Halal Standards MS1500:2009 is the Malaysia certification procedures that is utilized among food manufacturers in Malaysia especially those intending to export their product overseas. Therefore, Halal products certified by JAKIM is recognised as food that is safe to eat, nutritious and high-quality.

This thesis focuses on development of Quality Management System, Halal, and Food Safety Management System (QMSHFSMS) model and interrelation between the QMSHFSMS requirement in small medium enterprises manufacturing F&B industry in Selangor and Pahang. At initial stage, this thesis identified the critical elements of QMSHFSMS from previous articles specifically in Malaysia. There are minimal number of articles on these elements of F&B microenterprise either in Malaysia or globally. Therefore, this thesis will make further contribution in this focused area of QMSHFSMS in F&B microenterprises.

This chapter explains the research background and problem statements, research questions, research objectives, significance of the study, research scope and thesis organisation.

1.2 Research Background

Manufacturing is the most important sector in SME that contributes to Malaysian economy (Department of Statistic, 2016; Kassim & Sulaiman, 2011). According to Chin, 2003, SME in Malaysia has changed its focus from a commodity-based into a manufacturing sector in producing consumer goods. Most of the SMEs in Malaysia are facing several barriers in applying a systematic management approach such as QMS to improve their business performance (Mustapha et al., 2011). The barriers has led to SMEs continuing their business using a manual approach (Hairuddin, et al., 2012). They are poorly managed due to lack of management skills and knowledge of the managers and employees (Mahmud and Hilmi ,2014). Inefficient SMEs will lead to decreasing revenue and profit.

In the era of new technology, Malaysian SME can perform better if they choose to adopt an appropriate management system such as QMS (Alam et al., 2011; Ali & Talib, 2013). Unfortunately, despite the wide use of QMS in large organisations around the world, SMEs in Malaysia, especially microenterprises, are still implementing the old style of organisation's management (Hairuddin et al., 2012). More often than not, with the new management approach, the productivity as well as the organisation performance may elevate their ability to increase the profit and improve the quality of the product as well. In unison with this point of view, Mustapha et al., (2011) argued that the omission of quality management system has becomes a challenge in microenterprise that needs to be tackled. This has been highlighted in other studies as well (Khalique et al., 2011). With the proper initiative, SME industries are forecasted to improve the

efficiency and productivity as what has been highlighted in Khalique et al., (2011), where among the three types of enterprises, micro enterprise is the least efficient industries, but it has 70% of contribution from national industry in Malaysia (Hairuddin et al., 2012). Therefore, this study focuses on microenterprise area specifically in manufacturing sector.

As shown in Table 1.1, F&B subsector has the second highest contribution (17.4%) in Malaysian SME is the main focus of this study (Census 2016). In addition, as mentioned by Ali and Talib (2013), this sub-sector is facing an increasing demand, which is another reason for choosing microenterprises. Unfortunately, as mentioned by Azizi (2019), nearly 90 percent of microenterprises in Malaysia do not have Halal certificates. This is happened because most of the entrepreneurs run their business in a traditional way and believe that they do not need to obtain Halal certification. Nevertheless, with the increasing demand for Halal product, a QMSHFSMS certification model should be developed in order to help the microenterprise get certified. Collected data were analysed through coding analysis, to identify the relationship between QMS, Halal and FSMS certification requirement (critical QMSHFSMS elements). Analysed output helps to establish a QMSHFSMS model, which is a Halal certification guideline for microenterprise.

Table 1.1 : Distribution of SME in Manufacturing Sector by Sub-Sector

| Sub sector | Percentage share of SME (%) |
|-------------------------------|-----------------------------|
| Textiles and wearing apparel | 18.2 |
| Food and beverages | 17.4 |
| Fabricated metal products | 11.1 |
| Machinery and equipments | 9.9 |
| Printing | 6.7 |
| Furniture | 5.2 |
| Rubber and plastic products | 5.1 |
| Non-metallic mineral products | 4.2 |
| Wood products | 3.6 |
| Electrical and electronics | 3.6 |
| Others | 14.9 |

1.3 Problem Statement

In the F&B industry, a commitment to quality is the only rule of guarantee, since end users are directly consuming the delivered product. Most of the Malaysia's economy were monopolized by SMEs especially microenterprises. As stated in SME Corporation Malaysia (2016), SMEs' productivity performance was still lagging behind compared to the other categories. In general, most of the microenterprise entrepreneurs are still working without proper QMS and FSMS knowledge and stuck in an old school approach with no systematic system applied. According to Mahmud and Hilmi, (2014), this happened due to the lack of organisations' capital and low employers' awareness in the particular systems. In fact, some of the organisations are not aware of the importance of quality

systems training, plus the lack of manpower, management skill and financial in the organisation.

According to the 11th Malaysia Master Plan (2016-2020), the Halal industry will be further developed as a source of competitive advantage in exports, and promote economic growth. Although Malaysia enjoys a high reputation for producing halal food, its domestic market is still considered small. Previous quality system implementation studies were focused more on medium and large enterprises (Alam et al., 2011; Samat, et.al., 2012), but less or maybe nil in microenterprise (Dora, et.al., 2013). Since F&B has a good potential to increase productivity and improve Malaysia's economy, it is vital to tackle this problem thoroughly by identifying the critical factors of QMS, Halal and FSMS to grow microenterprise business performance. QMS and FSMS have been established as beneficial approaches for SME to implement in order to stay competitive in the market (Bohari et al, 2017; Deros et al., 2012; Kureshi et al., 2009; Mahmud and Hilmi, 2014). Microenterprises should also consider to get Halal certified to stay competitive. Hence, in order to achieve the goal, a quality-Halal model known as QMSHFSMS model are developed at the end of this study to cater specifically designed for microenterprises F&B industry.

1.4 Research Objectives and Research Questions

The main aim of this study is to develop an interrelation model of Halal certification requirement which consists of QMS and FSMS. This model is specifically developed to ensure that SME entrepreneurs can easily apply for Halal certification. The sub-objectives that need to be achieved at the end of this study are listed below:

- 1) To evaluate the managers knowledge and experiences in QMS approach, Halal certification process and FSMS
- 2) To identify the most affected elements of QMS and FSMS in Halal certification that influences the certification process in F&B microenterprise
- 3) To develop a QMSHFSMS model while maximizing the impact of QMSHFSMS in Halal certification process among F&B microenterprise
- 4) To validate the QMSHFSMS model effectiveness in F&B microenterprise

In order to achieve the objectives, this study seeks to answer the following research questions:

- (1) To what extent does the managers' knowledge and experience in QMSHFSMS process will contribute to the smoothness of the Halal application process
- (2) What are the current problems faced by F&B microenterprise entrepreneurs when applying Halal certification?
- (3) What are the vital elements in QMSHFSMS that will affect the smoothness of Halal application process for F&B microenterprise entrepreneurs?
- (4) How can the QMSHFSMS model will improve the Halal application process in F&B microenterprise?

1.5 Significance of the Study

Since the demand for Halal food product with good quality has become a global phenomenon, development of QMSHFSMS model in this study will be the manufacturers' quick reference to apply Halal certificate from JAKIM. This will be the foundation for them to get Halal certified easily and confidently using the relevant information and critical points provided in this model. Apart from making it more feasible to get Halal certificate, this study can also help expose them with the QMS and FSMS application in their daily business routine. Indirectly, it will help them to promote their products better especially in the current "Buy Muslim First" trending campaign trending in Malaysia.

It may improve organisations' weaknesses and elevate their strength as a competitive advantage for future success. Additionally, the employer and employee awareness towards the QMSHFSMS also might be improved in order to achieve organisation objectives. They will be able to gain more knowledge on how to manage the organisation, processing the food according to the food and Halal standard as well as consistency of product quality in their business. Current microenterprise and small enterprises in Malaysia will also be better prepare to handle the expansion of their business scope and target market as well as face global exposure leading to higher demand and profit. Business can gain better understanding of the critical factors that can result in better competitiveness, consumer trust, quality of product, cost saving and quality of services for customer satisfaction as well. Ultimately, this model may facilitate the realization of the SME Masterplan of 2020, which aims to assist SMEs and contribute economic growth (SME Corporation Malaysia, 2016).

1.6 Scope of the Study

This study aims to identify the critical elements of three quality elements commonly used in the manufacturing food industry, which is QMS, Halal certification and FSMS. The identified elements contribute to the establishment of a QMSHFSMS certification model, which is the main goal of this study. It is designed to help F&B microenterprise to obtain Halal JAKIM certification effortlessly and remain competitive in the industry like large companies. Most of the current work only considers QMS and Halal certification requirement into its framework. Thus, in order to produce safe food product, FSMS is the key element that need to be included throughout the process. Therefore, in order to meet all the important elements in F&B manufacturing industry, FSMS is an additional quality element included in this study. A total of twelve (12) F&B microenterprise owners in Selangor and Pahang were selected as the target population in this study in order to identify the barriers of not getting Halal certificate. Semi-structured interviews were conducted in order to gain information and examines their perception and knowledge regarding on QMS, Halal and FSMS. This method was chosen because it can provide wealth of information about the subject being explored (Hesse-Biber, 2010). The interview sessions in both states took nearly a year to complete due to respondents' availability. Collected data were gathered, summarised and analysed manually by using constant comparative method (described in Chapter 3) through coding analysis. A QMSHFSMS certification model was successfully developed, validated and tested on two (2) microenterprises in Selangor and Pahang in order to see the effectiveness of the model.

1.7 Thesis Organisation

This study consists of five (5) chapters altogether. It begins with Chapter 1 which explains briefly the background of the study, research problems, the aims of the study, research questions, significance and limitation of the study. Literature review in Chapter 2 explains more on the definition and principles of the quality standards which include QMS, FSMS and Halal certification requirement. Meanwhile, Chapter 3 will cover the research methodology employed in this study including the details of research design utilized. Data analysis through grounded theory is also explained in detail. Chapter 4 discusses the qualitative research findings. Finally, Chapter 5 discusses the outcome of the study, limitation and recommendation for future studies.

REFERENCES

- Abdul, M., Ismail, H., & Mustapha, M. (2013). Halal Food Certification: Case Of Malaysian SME Entrepreneurs. *China-USA Business Review*, 12(2).
- Abdul, M., Ismail, H., Mustapha, M., & Kusuma, H. (2013). Indonesian Small Medium Enterprises (Smes) And Perceptions On Halal Food Certification. *African Journal of Business Management*, 7(16), 1492-1500.
- Abusa, F. M., & Gibson, P. (2013). TQM Implementation In Developing Countries: A Case Study Of The Libyan Industrial Sector. *Benchmarking: An International Journal*.
- Absar S. 2018, Similarities and Differences Between ISO 9001 and ISO 22000. 9001 Academy. <https://advisera.com/9001academy/author/absarsaleh/> (accessed 5 January 2019).
- Ab Talib, M. S. (2017). Motivations And Benefits Of Halal Food Safety Certification. *Journal of Islamic Marketing*.
- Aggelogiannopoulos, D., Drosinos, E. H., & Athanasopoulos, P. (2007). Implementation Of A Quality Management System (QMS) According To The ISO 9000 Family In A Greek Small-Sized Winery: A Case Study. *Food control*, 18(9), 1077-1085.
- Alam, S. S., Jani, M. F. M., Senik, Z. C., & Domil, A. K. A. (2011). Assessing Barriers Of Growth Of Food Processing SMI's In Malaysia: A Factor Analysis. *International Business Research*, 4(1), 252.
- Ali, K. A. M., & Talib, H. H. A. (2013). Total Quality Management Approach For Malaysian Food Industry: Conceptual Framework. *Journal of Advanced Management Science Vol*, 1(4).
- Awang, Z. (2012). *Research Methodology and Data Analysis* (2nd ed.). Universiti Teknologi Mara, UiTM Press.
- Azizi, N.A, 2019, 9 out of 10 SMEs Do Not Have Halal Certification. New Strait Times. <http://www.nst.com.my/business> (accessed 3 November 2019).
- Babbie, E. (2010). *The Practice of Social Research*. Belmont, CA:Wadsworth.
- Bahagian Halal, J. (2015). Manual Prosedur Pensijilan Halal Malaysia 2014 (Semakan Ketiga). *Jabatan Kemajuan Islam Malaysia (JAKIM)*.
- Baharuddin, K., Kassim, N. A., Nordin, S. K., & Buyong, S. Z. (2015). Understanding The Halal Concept And The Importance Of Information On Halal Food Business Needed By Potential Malaysian Entrepreneurs. *International Journal of Academic Research in Business and Social Sciences*, 5(2), 170.

- Basir, N. S. A., Chik, C. T., Bachok, S., Baba, N., Hamid, R., & Salleh, M. M. (2018). Motivational Factors For Halal Certification Adoption Among Small And Micro Enterprises In Malaysia. *Int. J Sup. Chain. Mgt Vol, 7(4)*, 391.
- Bazeley, P. (2009). Analysing Qualitative Data: More Than 'Identifying Themes'. *Malaysian Journal of Qualitative Research, 2(2)*, 6-22.
- Bohari, A. M., Hin, C. W., & Fuad, N. (2017). The Competitiveness Of Halal Food Industry In Malaysia: A SWOT-ICT Analysis. *Geografia-Malaysian Journal of Society and Space, 9(1)*.
- Backhouse, C., & Mohamad, N. (2014). A framework for the development of Halal food products in Malaysia.
- Brickau, R., Chaston, I., & Mangles, T. (1994). Factors Influencing The Performance Of SME Food Processing Companies Within The Single European Market. *International Business Review, 3(2)*, 165-178.
- Castanheira, I., Roe, M., Westenbrink, S., Ireland, J., Møller, A., Salvini, S., & Calhau, M. A. (2009). Establishing Quality Management Systems For European Food Composition Databases. *Food Chemistry, 113(3)*, 776-780.
- Chandrasegaran, S., Badam, S. K., Kisselburgh, L., Ramani, K., & Elmqvist, N. (2017, June). Integrating Visual Analytics Support For Grounded Theory Practice In Qualitative Text Analysis. In *Computer Graphics Forum* (Vol. 36, No. 3, pp. 201-212).
- Chik, C. T., Nur'aliyyah Zaini, S. B., Shahril, A. M., Mohi, Z., & Ariffin, H. F. (2015). Small Medium Enterprises Manager's Motivators In Implementing ISO 22000: Explorative Study. *International Review of Humanities and Saciencific Research*
- Chiseri-Strater, E. (2012). 'What Goes on Here?'The Uses of Ethnography in Composition Studies. *Exploring Composition Studies: Sites, Issues, and Perspectives*, 199-210.
- Chun Tie, Y., Birks, M., & Francis, K. (2019). Grounded theory research: A Design Framework for Novice Researchers. *SAGE Open Medicine, 7*, 1-8.
- Corbin, J., & Strauss, A. L. (1990). Grounded Theory Research : Procedures, Canons, and Evaluative Criteria. In *Qualitative Sociology* (Vol. 13).
- Department of Standard Malaysia, (2012). Malaysian Standard. Food Safety Management System - Requirements for any Organization in the Food Chain (ISO 22000:2005, IDT). Retrieved from www.jsm.gov.my.
- Department of Standard Malaysia, (2015). Malaysian Standard. Quality Management Systems - Requirement (Second Revision) (ISO 9001 :2015, IDT). 2019. Retrieved from www.jsm.gov.my.

- Department of Standard Malaysia, (2009). Malaysian Standard. Halal Food-General Requirement (Second Revision). 2009. Retrieved from www.jsm.gov.my.
- Department of Statistic Malaysia, (2011). SME Annual Report 2011/2012. Retrieved from <https://www.dosm.gov.my>.
- Department of Statistics Malaysia, (2016). SME Annual Report 2016/2017. Retrieved from www.dosm.gov.my.
- Department of Statistics Malaysia, (2017). SME Annual Report 2017/2018. Retrieved from <https://www.dosm.gov.my>.
- Deros, B. M., Saibani, N., Yunos, B., Rahman, M. N. A., & Ghani, J. A. (2012). Evaluation Of Training Effectiveness On Advanced Quality Management Practices. *Procedia-Social and Behavioral Sciences*, 56, 67-73.
- Din, R. C., & Daud, S. (2014). Critical Success Factors Of MS1500: 2009 Implementation. *Procedia-Social and Behavioral Sciences*, 121, 96-103.
- Djekic, I., Tomasevic, I., & Radovanovic, R. (2011). Quality And Food Safety Issues Revealed In Certified Food Companies In Three Western Balkans Countries. *Food Control*, 22(11), 1736-1741.
- Dora, M., Kumar, M., Van Goubergen, D., Molnar, A., & Gellynck, X. (2013). Food Quality Management System: Reviewing Assessment Strategies And A Feasibility Study For European Food Small And Medium-Sized Enterprises. *Food control*, 31(2), 607-616.
- Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison Of Convenience Sampling And Purposive Sampling. *American journal of theoretical and applied statistics*, 5(1), 1-4.
- Fard, F. S., Mansor, N. N. A., Mohamed, A., & Bahru, J. (2011, March). The Critical Success Factors Of Performance Measurement For Malaysian Smes In Manufacturing Sectors: A Proposed Framework. In *Proceeding of the 2nd International Conference on Business and Economic Research*.
- Feng, M., Terziowski, M., & Samson, D. (2008). Relationship of ISO 9001: 2000 Quality System Certification With Operational And Business Performance: A Survey In Australia And New Zealand-Based Manufacturing And Service Companies. *Journal of manufacturing technology management*.
- Fernando, Y., Ng, H. H., & Yusoff, Y. (2014). Activities, Motives And External Factors Influencing Food Safety Management System Adoption In Malaysia. *Food Control*, 41, 69-75.
- Ghobadian, A., & Gallear, D. N. (1996). Total Quality Management In SMEs. *Omega*, 24(1), 83-106.

- Gill, P., Stewart, K., Treasure, E., & Chadwick, B. (2008). Methods Of Data Collection In Qualitative Research: Interviews And Focus Groups. *British dental journal*, 204(6), 291-295.
- Giyanti, I., Indrasari, A., Sutopo, W., & Liquidanu, E. (2020, December). Prioritizing Important Factors For The Successful Of Halal Food Standard Practice In Small Medium Enterprises. In *IOP Conference Series: Materials Science and Engineering*(Vol. 1003, No. 1, p. 012102). IOP Publishing.
- Glaser, B. G., & Strauss, A. L. (2017). *Discovery Of Grounded Theory: Strategies For Qualitative Research*. Routledge.
- Grigg, N. P., & Walls, L. (2007). Developing Statistical Thinking For Performance Improvement In The Food Industry. *International Journal of Quality & Reliability Management*.
- Golnaz, R., Zainalabidin, M., Mad Nasir, S., & Eddie Chiew, F. C. (2010). Non-Muslims' Awareness Of Halal Principles And Related Food Products In Malaysia. *International food research journal*, 17(3), 667-674.
- Grunert, K. G. (2005). Food Quality And Safety: Consumer Perception And Demand. *European review of agricultural economics*, 32(3), 369-391.
- Gupta, S., & Jain, S. K. (2015). An application of 5S concept to organize the workplace at a scientific instruments manufacturing company. *International Journal of Lean Six Sigma*.
- Hairuddin, H., Noor, N. L. M., & Ab Malik, A. M. (2012). Why Do Microenterprise Refuse To Use Information Technology: A Case Of Batik Microenterprises In Malaysia. *Procedia-Social and Behavioral Sciences*, 57, 494-502.
- Halal Journal Team (2015). Demand For Halal Products Rising Report. Retrieved from <http://www.Halaljournal.com/2015/11/03/demand-for-Halal-products-rising-report/>
- Hasan, H., & Tanakinjal, G. H. (2020). Halal And Small Mediums Enterprises (SMEs): The Importance Of Fulfilling The Demand Of Fardhu Kifayah. In *The 1st International Conference on Entrepreneurship and Small Business (ICES2020)* (p. 106).
- Hasnan, N. N., Aziz, N. A., Zulkifli, N., & Taip, F. S. (2014). Food factory design: Reality and challenges faced by Malaysian SMEs. *Agriculture and Agricultural Science Procedia*, 2, 328-336.
- Hesse-Biber, S. (2010). Qualitative Approaches To Mixed Methods Practice. *Qualitative Inquiry*, 16(6), 455-468.
- Ionita, I., Popescu, F., Done, I., Andrei, J., Matei, M., & Subic, J. (2009). Quality- A Factor For Competitiveness Improvement For Small And Medium Enterprises.

- Kannan, H.K., 2019, Malaysia: MNCs, big firms should help SMEs involved in Halal products. *New Strait Times*. <http://www.nst.com.my/business> (accessed 3 November 2019).
- Kafetzopoulos, D. P., & Gotzamani, K. D. (2014). Critical Factors, Food Quality Management And Organisational Performance. *Food control*, 40, 1-11.
- Kar, F., Bin, M., Sorooshian, S., & Bin, S. (2016). Implementation Of Total Quality Management And ISO 9000 Certification. *International Journal of Engineering Applied Sciences and Technology*, 1(6), 33-6.
- Kassim, Z. A., & Sulaiman, M. (2011). Market Orientation And Leadership Styles Of Managers In Malaysia. *International Journal of Leadership Studies*, 6(2), 230-245.
- Kaynak, H. (2003). The Relationship Between Total Quality Management Practices And Their Effects On Firm Performance. *Journal of operations management*, 21(4), 405-435.
- Khalique, M., Isa, A. H. B. M., Nassir Shaari, J. A., & Ageel, A. (2011). Challenges Faced By The Small And Medium Enterprises (Smes) In Malaysia: An Intellectual Capital Perspective. *International Journal of current research*, 3(6), 398.
- Khan, M. I., & Haleem, A. (2016). Understanding “Halal” and “Halal Certification & Accreditation System” - A Brief Review. *Saudi Journal of Business and Management Studies*, 1(1), 32–42.
- Kim-Soon, N., Chin, L. H., & Ahmad, A. R. (2017). Quality Assurance Practices Of The Food Manufacturers In Malaysia. *Advanced Science Letters*, 23(1), 317-321.
- Koc, T. (2007). The Impact of ISO 9000 Quality Management Systems On Manufacturing. *Journal of Materials Processing Technology*, 186(1-3), 207-213.
- Kolb, S. M. (2012). Grounded Theory and the Constant Comparative Method : Valid Research Strategies for Educators. *Journal of Emerging Trends in Educational Research and Policy Studies*, 3(1), 83–86. Retrieved from <http://jeteraps.scholarlinkresearch.com/articles/Grounded Theory and the Constant Comparative Method.pdf>
- Kureshi, N. I., Mann, R., Khan, M. R., & Qureshi, M. F. (2009). Quality Management Practices Of SME In Developing Countries: A Survey Of Manufacturing SME In Pakistan. *Journal of Quality and Technology Management*, 5(2), 63-89.
- Kusumastuti, R. D. (2017). Awareness of Halal Certification of Micro and Small Enterprises in Jakarta. *International Journal of Economics & Management*, 11.

- Lamprinopoulou, C., Tregear, A., & Ness, M. (2006). Agrifood Smes In Greece: The Role Of Collective Action. *British Food Journal*, 108(8), 663–676.
- Majid, M. A. A., Abidin, I. H. Z., Majid, H. A. M. A., & Chik, C. T. (2015). Issues Of Halal Food Implementation In Malaysia. *Journal of Applied Environmental and Biological Sciences*, 5(6), 50-56.
- Mahmud, N., & Hilmi, M. F. (2014). TQM and Malaysian SMEs Performance: The Mediating Roles Of Organisation Learning. *Procedia-Social and Behavioral Sciences*, 130, 216-225.
- Malhi, R. S. (2013). Creating And Sustaining: A Quality Culture. *Journal of Defense Management S*, 3, 1-4.
- Mano, Y., Iddrisu, A., Yoshino, Y., & Sonobe, T. (2012). How Can Micro And Small Enterprises In Sub-Saharan Africa Become More Productive? The Impacts Of Experimental Basic Managerial Training. *World Development*, 40(3), 458-468.
- Marshall, C., & Rossman, G. B. (2014). *Designing Qualitative Research*. Sage publications.
- Marzuki, S. Z. S. (2012). Understanding Restaurant Managers' Expectations of Halal Certification in Malaysia: *A Thesis Submitted in Partial Fulfilment of the Requirements for the Degree of Doctoral [ie Doctor] of Philosophy of Commerce in Management at the University of Canterbury* (Doctoral dissertation, University of Canterbury).
- Mercan, S. O., & Bucak, T. (2013). The ISO 22000 Food Safety Management System In The Food And Beverage Industry. *International Journal of Education and Research*, 1(6), 3.
- MS ISO 9001:2015. (2015). Malaysian Standard Quality management systems - Requirements (Second revision). 29. Retrieved from <http://www.uniti.edu.my/download/Kualiti/QMSStandardRequirement2ndRevISO9001-2015.pdf>
- Muhammad, M. Z., Char, A. K., bin Yaso, M. R., & Hassan, Z. (2010). Small And Medium Enterprises (Smes) Competing In The Global Business Environment: A Case Of Malaysia. *International Business Research*, 3(1), 66.
- Mustapha, M. R., Muda, M. S., & Hasan, F. (2011). A Survey Of Total Quality Management In The Malaysian Small And Medium Sized Manufacturing Companies. *International Journal of Humanities and Social Science*, 1(2), 118-122.
- Nind, M., & Lewthwaite, S. (2019). A Conceptual-Empirical Typology Of Social Science Research Methods Pedagogy. *Research Papers in Education*.

- Noordin, N., Noor, N. L. M., Hashim, M., & Samicho, Z. (2009, July). Value Chain Of Halal Certification System: A Case Of The Malaysia Halal Industry. In *European and Mediterranean conference on information systems* (No. 2008, pp. 1-14).
- Noordin, N., Noor, N. L. M., & Samicho, Z. (2014). Strategic Approach To Halal Certification System: An Ecosystem Perspective. *Procedia-Social and Behavioral Sciences*, 121, 79-95.
- Nuratifah, A. S., Sharifudin, M. S., & Mariam, A. L. (2019). Evaluation Of Knowledge And Practices Of Halal Certification Among Food Processing Companies In Sabah, Malaysia. *International Food Research Journal*, 26(1).
- Othman, B., Shaarani, S. M., Bahron, A., & Nawi, N. H. M. (2015). The Influence Of Halal Practices On Organisational Performance Among Food Industries (SMEs) In Malaysia. *Halal Journal*. Retrieved from www.halal.gov.my.
- Pambreni, Y., Khatibi, A., Azam, S., & Tham, J. (2019). The Influence Of Total Quality Management Toward Organisation Performance. *Management Science Letters*, 9(9), 1397-1406.
- Powell, T. C. (1995). Total Quality Management as Competitive Advantage: A Review and Empirical Study (pp. 15–37). pp. 15–37.
- Průša, J. (2010). Productivity Of Czech Small And Medium Enterprises: Lagging Behind Their Potential. *Journal of Industry, Competition and Trade*, 10(3-4), 343-363.
- Radam, A., Abu, M. L., & Abdullah, A. M. (2008). Technical Efficiency Of Small And Medium Enterprise In Malaysia: A Stochastic Frontier Production Model. *International Journal of economics and Management*, 2(2), 395-408.
- Rahman, N. A., Yaacob, Z., & Radzi, R. M. (2016). The Challenges Among Malaysian SME: A Theoretical Perspective. *World Journal of Social Sciences*, 6(3), 124–132.
- Rezai, G., Mohamed, Z., & Shamsudin, M. N. (2012). Assessment Of Consumers' Confidence On Halal Labelled Manufactured Food In Malaysia. *Pertanika Journal of Social Science & Humanity*, 20(1), 33-42.
- Samad, S., Abdullah, M.A., & Ahmed, W.A. (2014). The Impact of Organizational Culture on Organization Performance. *Australian Journal of Basic and Applied Sciences*, 7(14), 442-449.
- Samat, H. A., Kamaruddin, S., & Feng, C. J. (2012). ISO 9001: 2008 Implementation in a SME: A case study. *Pertanika Journal of Social Science and Humanities*, 20(2), 353-374.

- Samori, Z., Ishak, A. H., & Kassan, N. H. (2014). Understanding The Development Of Halal Food Standard: Suggestion For Future Research. *International Journal of Social Science and Humanity*, 4(6), 482.
- Santos, G., Barros, S., Mendes, F., & Lopes, N. (2013). The Main Benefits Associated With Health And Safety Management Systems Certification In Portuguese Small And Medium Enterprises Post Quality Management System Certification. *Safety science*, 51(1), 29-36.
- Sekaran, U., & Bougie, R. (2016). *Research Methods For Business: A Skill Building Approach*. John Wiley & Sons.
- Shafie, S., & Othman, M. N. (2006, September). Halal Certification: An International Marketing Issues And Challenges. In *Proceeding at the International IFSAM VIIIth World Congress* (pp. 28-30).
- Shokri, A., Nabhani, F., & Hodgson, S. (2010). Supplier Development Practice: Arising The Problems Of Upstream Delivery For A Food Distribution SME In The UK. *Robotics and Computer-Integrated Manufacturing*, 26(6), 639-646.
- Siaw, C. L., & Rani, N. S. A. (2012). A Critical Review On The Regulatory And Legislation Challenges Faced By Halal Start-Up SMEs Food Manufacturers In Malaysia. *Procedia-Social and Behavioral Sciences*, 57, 541-548.
- Sumaedi, S., & Yarmen, M. (2015). The Effectiveness of ISO 9001 Implementation in Food Manufacturing Companies: A Proposed Measurement Instrument. *Procedia Food Science*, 3, 436-444.
- SME Corporation Malaysia. (2013). SME Annual Report 2013/2014. In *SME Corp Malaysia*. Retrieved from <https://www.smecorp.gov.my>.
- SME Corporation Malaysia. (2014). Guideline for SME Definition. In *SME Corp Malaysia*. Retrieved from <https://www.smecorp.gov.my>.
- SME Corporation Malaysia. (2014). SME Annual Report 2014/2015. In *SME Corp Malaysia*. Retrieved from <https://www.smecorp.gov.my>.
- SME Corporation Malaysia. (2016). SME Annual Report 2016/2017. In *SME Corp Malaysia*. Retrieved from <https://www.smecorp.gov.my>.
- SME Corporation Malaysia. (2017). SME Annual Report 2017/2018. In *SME Corp Malaysia*. Retrieved from <https://www.smecorp.gov.my>.
- SMIDEC. (2016). Small and Medium Industries Development Corporation. Retrieved from www.smidec.gov.my.
- Stefano, B., & Giovanni, B. (2003). Process Management Practices And Quality Systems Standards. Risks And Opportunities Of The New ISO 9001 Certification. *Business process management Journal*, 9(2), 149-169.

- Tahir, P. R., Hanaysha, J., & Sultana, M. (2016). Level Of Success Of Halal Small And Medium Entrepreneurs In Malaysia. *Asian Journal of Scientific Research*, 9(4), 214-218.
- Talib, H. A., Ali, K. M., Jamaludin, K. R., & Rijal, K. (2008, May). Quality Assurance In Halal Food Manufacturing In Malaysia: A Preliminary Study. In *Proceedings of International Conference on Mechanical & Manufacturing Engineering (ICME2008)* (pp. 21-23).
- Talib, H. H. A., Ali, K. A. M., & Idris, F. (2014). Critical success factors of quality management practices among SMEs in the food processing industry in Malaysia. *Journal of Small Business and Enterprise Development*.
- Tari, J. J., Molina, J. F., & Castejon, J. L. (2007). The Relationship Between Quality Management Practices And Their Effects On Quality Outcomes. *European journal of operational research*, 183(2), 483-501.
- Tawil, N. M., Ramlee, S., Jaafar, J., & Saat, F. M. (2015). An Overview Of Foodpreneur Awareness Among Small And Medium-Sized Enterprises (SME) Of Halal Certification. *Asian Social Science*, 11(21), 91.
- Thomas, A., Barton, R., & Chuke-Okafor, C. (2009). Applying Lean Six Sigma In A Small Engineering Company—A Model For Change. *Journal of Manufacturing Technology Management*.
- Yamada, T. T., Poltronieri, C. F., Nascimento Gambi, L., & Gerolamo, M. C. (2013). Why Does The Implementation Of Quality Management Practices Fail? A Qualitative Study Of Barriers In Brazilian Companies. *Procedia-Social and Behavioral Sciences*, 81, 366-370.
- Yunoh, M. N. M., & Ali, K. A. M. (2015). Total quality management approach for malaysian SMEs: Conceptual framework. *International Journal of Business and Social Science*, 6(1).
- Yunos, R. M., Mahmud, C. F. C., & Mansor, N. H. A. (2014). Compliance To Halal Certification-Its Impact On Business Financial Performance. In *Recent Trends in Social and Behaviour Sciences-Proceedings of the 2nd International Congress on Interdisciplinary Behavior and Social Sciences 2013, ICIBSoS 2013* (pp. 499-503)
- Yusuf, A. H., Shukor, S. A., & Bustamam, U. S. A. (2016). Halal Certification Vs Business Growth Of Food Industry In Malaysia. *Journal of Economics, Business and Management*, 4(3), 247-251.
- Zhou, H., & De Wit, G. (2009). Determinants And Dimensions Of Firm Growth. *Scales EIM Research Reports (H200903)*.
- Zhou, H., Shou, Y., Zhai, X., Li, L., Wood, C., & Wu, X. (2014). Supply Chain Practice And Information Quality: A Supply Chain Strategy Study. *International Journal of Production Economics*, 147, 624-633.