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Strategic Approach to *Halal* Certification System: An Ecosystem Perspective

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Abstract

*Halal* is accepted as a quality standard applied to product supply and manufacturing. The *halal* standard encompasses processed food, cosmetics, pharmaceutical and medical products. In maintaining the *halal* standard, *halal* suppliers or manufacturers must abide to the *halal* quality regulation enforced by the public, semi-public and private regulatory bodies offering the *halal* certification. These regulatory bodies play an important role within the *halal* supply chain as their operational efficiency may affect the efficiency and the competitiveness of the *halal* industry. This paper reports the findings of a research work on the strategic approach towards *halal* quality management that addresses the operational efficiency of the *halal* food certification system using the Malaysian *halal* certification as a case study. This research argues that the efficiency of the *halal* certification is dependent on the organizational structure of the holistic system. The investigation in this case study was carried out on both the supply side and the demand side of the *halal* certification to gain a holistic view of the situation. The investigation comprises of face-to-face interviews with representatives from the *halal* regulatory bodies (supply side) and *halal* food manufacturers (demand side) and document review of *halal* certification documentations. A qualitative analysis comprising of a value chain and work systems analysis was conducted to describe a new *halal* value chain, a new *halal* work system as components of a new detailed view of the *halal* ecosystem. The finding of this research contributes to the strategic approach of information systems where religious view is an important part of the organizational structure.

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1. Introduction

**Halal** certification is the process of certifying products or services as pronounced by the *shariah* law. In providing the assurance to Muslim consumers on the halal quality, a system of the halal certification and verification is seen to be a key element. Halal certification did not actually start in the Muslim countries but started in the United States in the mid 1960s by Muslim food and technical experts as a necessary safety measure for Muslims living in non-Muslim society to preserve their Muslim identity and fulfill their religious obligation. Halal is an enforced religious requirement on products and services for Muslims’ consumption and is now considered as a certification standard for quality. The halal quality standard is applied to the product supply and manufacturing encompassing processed food, cosmetics, pharmaceutical and medical products and has been extended to services involved in the logistics of halal products. The Muslims population in 2009 stands at 1.628 billion and accounts for 25% of the world population (International Halal Integrity Alliance 2010). Research conducted by the Canadian government projected a global halal market of more than 632 billion dollars annually (Mulani, 2012). These statistics project a huge demand of halal products that will spur the growth of the halal industry and in turn will naturally scale up the supply for halal certificates. As halal product certification is the prerequisite for entering the global halal market, to the businesses who export their products, the halal certificate can help them meet the halal requirements from the importing countries which in turn can help the business expands its marketplace to increase its sales and revenue.

To remain competitive the efficiency of halal certification must be emphasized. From a strategic point of view, competitiveness in the halal industry can be achieved by tackling the issues of operational efficiency. Supply chain management (SCM) is a strategic approach that emphasizes competitive advantage through increased operational efficiency and market responsiveness from production and distribution processes into the hands of consumers. This research seeks to explore on how operational efficiency in the halal supply chain can be achieved. As the subject of halal certification is rarely addressed in the literature issues of halal certification efficiency is not discussed openly. A deeper understanding on the organizational issues that affect halal certification system is seek especially on issues that are tied to religious requirements leading to issues of different governance structures, different enforcement jurisdiction and different interpretation of Islamic fatwa. This paper reports on the findings on the issues of governance pertaining to the halal certification system using the Malaysian halal certification system as a case study.

2. Literature Review

2.1. The Malaysian Halal Certification System

Malaysia is one of the countries whose halal certification is issued by the Government, unlike in other countries whose certifications are endorsed by their respective Islamic associations (Adam, 2006). The Malaysian halal certification and logo are issued by a federal body and several state bodies. At the federal level, the authority for certifying the halal products and services is the Department of Islamic Development Malaysia (JAKIM) which is under the Prime Minister Department. JAKIM handle the halal certification process for products for the domestic market and international market. JAKIM’s Halal logo is among the most widely recognized and respected symbols of Halal compliance in the world (Adam, 2006). At the state level, the certification authorities are the State Islamic Religious Department (Jabatan Agama Islam Negeri - JAIN) and State Islamic Religious Council (Majlis Agama Islam Negeri - MAIN) who are given the authority to issue the halal certificate for domestic market. Malaysia launched the Halal Standard MS 1500:2004 Halal Food – Production, Preparation, Handling and Storage – General
Guidelines in the year 2006 which prescribed practical guidelines for the food industry on the preparation and handling of halal food including nutrient supplements to serve the basic requirement for food production and food trade or business in Malaysia.

2.2. Halal Supply Chain

The growth of the halal market necessitates the efficiency within the halal market. One approach is to apply the supply chain management (SCM) strategy as a major component of competitive strategy to enhance the halal market productivity and profitability. The production and distribution of halal goods and services can be similarly described using the concept of SCM. The halal supply chain is conceptualized and has been used by both academics and practitioners (Emi and Harlina 2011). The halal supply chain for food encompass the concept of from farm to fork covers the phases of production, processing and packaging, storage and retailing. By applying the SCM strategy a shared belief in the value of the halal supply chain as a competitive entity that needs to align all collaborative components within the chain is targeted to increase the efficiency of the halal supply chain. Within the halal supply chain the halal certification which is the process of certifying products or services according to shariah law places a vital role for the smooth flow of the halal supply chain. Similar to other supply chain, an efficient halal supply chain requires a strong information system backbone. The halal information system is a special case information system that is regulated by a religious view, which in this case it is the Shariah law in Islam.

Research on the halal supply chain is centered mainly on issues of halal logistics such as the halal traceability and tracking (Tieman 2006; Suhaiza et al 2010). Work on halal supply chain efficiency is seen in the work of Nurulhuda, et al. (2009) who studied the halal certification process from a value chain analysis perspective. Other research attempt on halal certification is seen in the work Lam and Shahadat (2008) were looking into the feasibility of a halal certification framework to increase the efficiency of the halal supply chain. Research on halal non-compliance amongst hoteliers was conducted by Suhaiza, et al (2011) and their findings showed that contributing factors to non-compliance is the perception hotels do not gain benefits by getting a halal certificate. These findings reflected that the halal supply chain is plagued by issues of strategic alignment between suppliers of halal certificates and consumers of halal certificates. In order to follow the SCM strategy a view of the various stakeholders of the halal supply chain and their roles and expectation needs to be investigated.

2.3. Ecosystem Approach as a Strategic Approach

The ecosystem approach has emerged as a biological metaphor of organization that is used to describe the work alliance and alliance-based competition. This metaphor is popularized by management consultants in describing work alliance solutions. The Early inception of the ecosystem approach was mainly used to deal with the management of biological related ecosystems such as natural resources and environmental management (Kay and Shneider 1995) and fisheries (Garcian and Cochrane 2005; Jennings 2005). The systems movement through the concerted effort of Checkland and his alliances since the 1990s have attracted the use of the ecosystem approach in socio-cultural system. Kay et al. (1999) developed the diamond heuristics to illustrate the ecosystem approach. The work was later improved by Walners-Teow and Kay (2005) and has emerged as the adaptive ecosystem approach that places the importance of governance, monitoring and management to ensure the sustainability of a system. In addition Walners-Teow and Kay (2005) developed a methodology for ecosystem sustainability that
emphasized the analysis of stakeholders and translating their stories into systems description using rich pictures, conceptual models, systems diagrams across different scales of perspectives.

The use of the ecosystem approach outside the biological domain is seen in the work of Moore (1999) who uses the ecosystem approach to explain the firm’s perspective. In his work, he uses the ecological concept of co-evolution to explain sustainability. Moore offered a definition of the business ecosystem as the structure and behaviour of a network of high-tech organizations that share a key technological platform and the ways individual firms can flourish in such an environment. In terms of governance Moore proposes the collective action as part of the governance process. Essential aspects of the ecosystems that Moore highlighted are actors (species), relations between actors (network), performance (health), dynamics (evolution) and strategies and behavior of actors (roles). According to Moore a business that adopts the ecosystem approach should promote the ecosystem’s overall health similar to individual specie in a biological ecosystem. Each member of a business ecosystem ultimately shares the fate of the network as a whole, regardless of that member’s apparent strength. To explain health performance further Moore gave four factors that affect the health performance of the ecosystems. The factors are value (niche creation), critical mass (robustness), continuous performance improvement (productivity) and co-evolution or the joint learning and optimization effects. Other work that follows the ecosystem approach includes the digital business ecosystems (DBE) which has a huge following in Europe since the year 2004 through the EU research initiatives which leads to a new science digital business ecosystem (Nachira, et al, 2007). However DBE involves a community and does not see the presence of a hegemonic structure.

Early work on the ecosystem view of the halal certification system is seen in the work of Ahmad Hishamuddin (2007) who developed a conceptual view of the halal certification process in Malaysia using the halal certification from JAKIM in his illustration. His conceptual view of the halal certification process is shown in Figure 1.

![Fig 1 Conceptual View of Halal Certification Process](image)

The conceptual view shows that the halal certification process is part of a complex system involving not only the halal applicant and the halal certifier but also other agencies such the Ministry of Agriculture, Ministry of Health, Chemistry Department, Ministry of Domestic Trade. This indicates that the certification system involves several key stakeholders who may influence the efficiency of the certification process. However the extent of the stakeholder involvement is not discussed in this work as
the research concern was into the mechanism of involving the community in giving feedback of the halal non-compliance.

3. Research Method

3.1. Overall Approach

The research approach undertaken in this research adopts the adaptive ecosystem approach by Walners-Teow and Kay (2005). The strategy of data collection seeks to perform an analysis of the halal supply chain stakeholders before proceeding to translate their stories into systems description using conceptual models of work systems and integrating the different scales of stakeholders’ perspectives into systems governance conceptual model.

3.2. Data Collection

The stakeholders’ perspective is obtained by considering the perspective of both the supply and demand side of the halal certification. The supply side consists of agencies involved in the issuance of the halal certificates from the public, semi-public and private agencies. The demand side of the halal certification consists of representatives of the processed food manufacturers. Interviews with both sides were conducted separately. In addition document review based on documentation pertaining to the halal certification was also conducted.

3.2.1. Interview with Certification Agencies

Five halal certification bodies were interviewed. They are from various certification bodies representing the public, semi-public and private independent authorities and their particulars are shown in Table 1.

Table 1 Summary of certification bodies involved.

| Name of Certification Body | Certification Body Description | Authority | Product Market | Interviewee Designation |
|----------------------------|--------------------------------|-----------|----------------|-------------------------|
| Islamic Development Department (JAKIM) | Public - Federal authorisation | International and domestic | Shariah Halal Auditor |
| State Islamic Religious Department Selangor (JAIS) | Public – State authorisation body | Domestic | Halal Auditor (Food Technology Lecturer) | Shariah Halal Auditor |
| Department of Islamic Affairs of Sarawak (JAS) | Public – State authorisation body | Domestic | Technical Auditor/Assistant Director of Halal Unit |
| Halal Development Corporation (HDC) | Semi-public - Federal - authorisation body | International and domestic | Vice President of Halal Integrity Department | Shariah Auditor/ Customer Relationship Officer | Food Technology Auditor | Halal Executive Officer |
| Private Independent Halal Certification Body (IFRC-ASIA) | Private body. Unauthorised by Malaysian government | Internatio nal and domestic | Managing Director |

To facilitate the interview, the work system framework by Alter (2006) was used to generate themes for the open-ended interview questions focusing on issues of ‘how’, ‘what’, ‘when’, ‘where’ and ‘why’. The work system elements used are the process, participants, information, technologies, environment and
infrastructure. The interviewees were allowed to answer in their own words and express their opinion and knowledge that are relevant to the questions given without exerting pressure. Four interview sessions were conducted at the interviewees’ office premises and only one interview session was conducted outside her office premise. The questions asked in the interview are shown in Table 2.

Table 2 Interview Questions for Halal Certification Bodies

| Work system elements | Questions                                                                 |
|----------------------|---------------------------------------------------------------------------|
| Process              | • How the halal certification process is conducted?                        |
|                      | • How long it takes to process the halal certification application?        |
|                      | • What are the problems in the halal certification process?               |
| Participants         | • Who are involved in the halal certification process?                    |
|                      | • What are their roles in the halal certification process?                |
|                      | • Who plays important roles in the halal certification process?           |
| Information          | • What information that is requires in the halal certification?           |
|                      | • Which information is important in the halal certification?             |
|                      | • How the halal information is managed?                                  |
|                      | • How the information affect the halal certification decision making?    |
| Technologies         | • What technology used in the halal certification?                        |
|                      | • How the technology supports the halal certification process?            |
| Environment          | • What agencies involved in the halal certification?                      |
| Infrastructure       | • Is there any agency’s information system that is integrated with the halal information system? |

3.2.2. Interview with Food Manufacturers

The face-to-face interviews with six representatives of processed food manufacturers were conducted at their premises. The information on the interviewees is summarized in Table 3.

Table 3: Manufacturers’ Details

| Company | Product            | Personnel Designation                     |
|---------|--------------------|-------------------------------------------|
| A       | Beverage           | Operation Assistant Manager              |
| B       | Frozen Foods       | Business Administration                  |
| C       | Beverage           | Marketing Executive/ Halal Executive      |
| D       | Souse and Ketchup  | Managing Director                        |
| E       | Virgin Coconut Oil | Managing Director                        |
| F       | Cakes and Pastry   | Managing Director                        |

The pertinent questions raised in the interviews were focused on the halal certification application process, the difficulties encountered and the point of view of process improvement from the manufacturers’ perspective. Four work system elements were used as the guiding theme is the process, information, technology and participant. The questions asked in the interview are shown in Table 4.
Table 4 Interview questions for food processed manufacturers

| Dimension | Questions |
|-----------|-----------|
| Process   | • How do you apply the halal certification?  
           • Is the halal certification procedure is easy to understand?  
           • How long have you obtained your halal certificate and from which certification body?  
           • What are the problems that you encounter during your application process?  
           • Is the halal certification application expensive to apply?  
           • How long it takes to complete and submit the halal application?  
           • Is the 30 working days of halal certification approval is achieved?  
           • How long it takes for you to get your halal certification?  
           • Do you think the halal certification is an easy process? Why/ Why not?  
           • Have you attended the halal certification training? Who provides the training?  
           • In your opinion, what can be done to improve the halal certification system?  
           • How halal certification benefits to your company? |
| Technology| • Are you using manual or online application?  
           • What are the technologies being used in your halal application process?  
           • How do you communicate with the halal certification officer? |
| Information| • What kind of information (e.g. documents) required for your halal application?  
           • Is the information provided to you consistent and accurate?  
           • How do you get information about halal certification? |
| Participant| • Who help you to understand the requirement of halal application?  
           • How do the halal certifying officers help you to understand the halal certification procedures?  
           • Do you get the fast response from the certification officer?  
           • Are there any other agencies that help you with the halal certification process?  
           • Who are they? |

3.2.3. Document Review

The documents reviewed were from several sources such as halal certification manual procedures, halal standards, journals, proceedings, newspaper and magazine articles as well as Internet sources have been collected. During the interview with halal certification bodies documents pertaining to the procedures and process of halal certification application that is available to the public and also to halal certification applicants were reviewed. The documents include the halal certification application forms, the list of halal certification charges and brochure of halal certification were gathered from public and private certification bodies.

4. Results and Findings

4.1. Thematic Analysis

The interview from both the supply side and demand side was transcribed and analyzed to obtain important themes. The themes were also compared with the analysis form document review made. From the interviews, the content analysis using the key-words-in-context (KWIC) (Ryan and Bernard, 2003) was employed. As the questions generated were based on the work system elements (Alter, 2006), the keywords were also based on the work system elements. The systematic search on the whole transcriptions were made to find all the instances of word or phrase. Once the words were identified, the whole sentences were copied. The sentences will be organized into piles of similar meaning and from that the themes were determined. The themes identified from the interviews as shown in Table 5.
Table 5: Thematic Analysis of Interview with Halal Certifiers (Supply Side)

| Themes                  | Sub-Themes                              | JAKIM                                      | JAIS                                      | HDC                                      | Private Certifier                                      | JAS                                      |
|-------------------------|-----------------------------------------|--------------------------------------------|-------------------------------------------|------------------------------------------|---------------------------------------------------------|------------------------------------------|
| Process                 | **Halal Certification Procedures**       | Manual Procedures of Halal Certification  | Manual Procedures of Halal Certification  | Manual Procedures of Halal Certification | Own guideline that complies with Shariah law            | Manual Procedures of Halal Certification |
|                         |                                         | Malaysia                                   | Malaysia                                  | Malaysia                                 |                                                         | Malaysia                                  |
| Scope                   | Consumer good                          | Consumer good                              | Consumer good                            | Consumer good                           | Consumer good                                          |                                         |
|                         | Food premise (including hotel)         | Food premise (including hotel)            | Food premise (including hotel)          | Food premise (including hotel)          | Food premise (including hotel)                         |                                         |
| Abattoirs               | Abattoirs                               | Abattoirs                                  | Abattoirs                                | Not available                           | Abattoirs                                              |                                         |
| Application Process     | Online and manual                       | Online and manual                          | Online                                   | Manual                                   | Manual                                                  |                                         |
| Charges                 | Applicable on the whole premise and not based on no. of products. | Applicable on the whole premise and not based on no. of products. | Applicable on the whole premise and not based on no. of products. | The charge is based on number of products. | Applicable on the whole premise and not based on no. of products. |
| Certification Validity  | 2 years for consumer goods but 1 year for abattoirs. | 2 years                                   | 2 years but plan to make it 3 years.    | 1 year                                   | 2 years                                                 |                                         |
| Premise Inspection      | Internal team of auditors at least one *Shariah* Auditor and one Technical Auditor | A team of auditors at least one *Shariah* Auditor and one Technical Auditor from JAIS, representatives from University, Ministry of Trade, related experts | Internal team of auditors at least one *Shariah* Auditor and one Technical Auditor | One internal or external inspector (auditor). | A team of auditors at least one *Shariah* Auditor, one Technical Auditor and one focal Halal officer from JAS |
| Slaughtering House Inspection | A team of auditors from JAKIM with officers from Dept. of Veterinary Services | A team of auditors from JAIS, academician or MARDI and officers from Dept. of Veterinary Services | A team of auditors from JAKIM with officers from Dept. of Veterinary Services | No service provided | Not available |

*Shariah* Auditor, *Technical* Auditor, *Halal* Inspector
| Information Need | Company | Company profile | Company profile | Company profile | Company profile |
|------------------|---------|----------------|----------------|----------------|----------------|
| Company registration | Company registration | Company registration | Not available | Company registration | Map of premise location/factory |
| Map of premise location/factory | Map of premise location/factory | Map of premise location/factory | Not available | Map of premise location/factory |
| **Product** | Name and information of product/ menu for verification | Name and information of product/ menu for verification | Name and information of product/ menu for verification | Name and information of product/ menu for verification |
| List of ingredients | List of ingredients | List of ingredients | List of ingredients | List of ingredients |
| Halal status of ingredients and their Halal certifications or product specifications for critical ingredients | Halal status of ingredients and their Halal certifications or product specifications for critical ingredients | Halal status of ingredients and their Halal certifications or product specifications for critical ingredients | Halal status of ingredients and their Halal certifications or product specifications for critical ingredients |
| List of product barcode | List of product barcode | List of product barcode | Not available | List of product barcode |
| **Staff** | ID and offer letter for Halal Executives | ID and offer letter for Halal Executives | ID and offer letter for Halal Executives | Not available | ID and offer letter for Halal Executives |
| ID and offer letter for Muslim staffs (Production section) | ID and offer letter for Muslim staffs (Production section), | ID and offer letter for Muslim staffs (Production section), | Copies of Identification Card for two Muslim workers. | ID and offer letter for Muslim staffs (Production section) |
| **Other certification, permit or licensing** | HACCP, ISO, GHP, GMP, TQM certificate | HACCP, ISO, GHP, GMP, TQM certificate | HACCP, ISO, GHP, GMP, TQM certificate | Not available | HACCP, ISO, GHP, GMP, TQM certificate |
| Import permit from Dept. of Veterinary Services | Import permit from Dept. of Veterinary Services | Import permit from Dept. of Veterinary Services | Not available | Import permit from Dept. of Veterinary Services |
| License from Ministry of Health | License from Ministry of Health | License from Ministry of Health | Not available | License from Ministry of Health |
| **Supplier** | Name and address of producer/ ingredient supplier | Name and address of producer/ ingredient supplier | Name and address of producer/ ingredient supplier | Name and address of producer/ ingredient supplier |
| Individual/Agency Involved in Halal Certification Personnel | Shariah Officer | Shariah Officer | Shariah Officer | Shariah Officer | Shariah Officer |
|---------------------------------------------------------------|----------------|----------------|----------------|----------------|----------------|
| Food Technology Officer                                      | Food Technology Officer | Food Technology Officer | Food Technology Officer | Food Technology Officer |
| Halal Certification Panel                                    | Halal Certification Panel | Halal Certification Panel | Halal Certification Panel | Halal Focal Officer |
| Accredited Lab                                                | Accredited Lab | Accredited Lab | Accredited Lab | Halal Coordinator |
|                                                              |                 |                 |                 | Halal Certification Panel |
|                                                              |                 |                 |                 | Technical Committee on Halal Certification Sarawak Islamic Council |
|                                                              |                 |                 |                 | Accredited Lab |
| Halal Enforcement Personnel                                   | Shariah Officer | Shariah Officer | Shariah Officer | Not available | Enforcement teams |
| (Officer or representative)                                   | Officer from KPDNKK | Officer from KPDNKK | Officer from KPDNKK | Officer from KPDNKK |
|                                                              | Officer from Dept. of Health | Officer from Dept. of Health | Officer from Dept. of Health | Officer from DVS |
|                                                              | Officer from Local Council | Officer from Local Council | Officer from Local Council | Officer from Dept. of Health |
|                                                              | Officer from State Islamic Dept. | Officer from State Islamic Dept. | Officer from State Islamic Dept. | Officer from Local Council |
| Halal Certification Panel                                      | Internal experts in Shariah and Technical background. | Internal auditors and representatives from other agencies such as academician, officers from MARDI, Ministry of Health, KPDNKK, Mufti Department and DVS. | Appointed external experts in Shariah and Technical background. | Internal panel |
|                                                              | Head of Halal Development Unit at Sarawak Islamic Religious Department | Director of Sarawak Islamic Religious Department | Chief Assistant Director of Enforcement Division | Chemistry Department |
|                                                              | Sarawak branch JAKIM | Dept of Veterinary Services (DVS) | Sarawak branch JAKIM | Sarawak branch JAKIM |
|                                                              | Department of Health | Department of Health | Department of Health | Department of Health |
Table 5: Thematic Analysis of Interview with Halal Certifiers (Supply Side) (continued)

| Business Views | Perceived Efficiency | Slow Processing | Slow Processing | Slow Processing | Efficient and Fast Processing | Slow Processing |
|----------------|----------------------|-----------------|-----------------|-----------------|-----------------------------|-----------------|
| Recognition    | Recognised by the Malaysian government and several countries | Recognised by the Malaysian government and several countries | Recognised by the Malaysian government and several countries | Not recognised by the Malaysian government but recognised by several other countries | Recognised by the Malaysian government and several countries |
| Market         | Certification for local and international | Certification for local | Certification for local and international | Certification for local and international | Certification for local |
| Technology     | Processing           | Using e-halal system for halal application | Manual system and using e-halal system | Using e-halal system | Manual system |
| Communication  | Telephone, Fax, E-mail | Telephone, Fax | Fax, Telephone E-mail | Telephone, Fax | Fax, Telephone |

The theme analysis from the interview with the manufacturers highlighted the business view related to the halal certification. The result of the analysis is summarized in Table 6.

Table 6 Summary of Thematic Analysis of the Interview with Manufacturers (Demand Side)

| Theme            | Company A          | Company B | Company C          | Company D   | Company E   | Company F      |
|------------------|--------------------|-----------|--------------------|-------------|-------------|----------------|
| Certification Body | JAIM JAKIM          | JAIS      | JAIM JAKIM         | JAIM        | JAIM        | JAIJ JAKIM     |
| Communication Channel | Telephone Fax Face-to-face Letter | Telephone Fax Face-to-face Letter | Telephone Fax Face-to-face Letter | Telephone Fax Face-to-face Letter | Telephone Fax E-mail Face-to-face Letter |
| Application System | Manual (JAIM) Online (JAKIM) | Manual (JAIS) | Manual (JAIM) | Manual (JAIM) | Manual (JAIJ) Online (JAKIM) |
| Problem          | Application of halal certificate takes more than thirty days to be processed and approved | Manual delivery of application form | Halal panels meeting often being postponed | Application of halal certificate is too strict and rigid | Application of halal certificate takes more than thirty days to be processed and approved |
|                  | Delay halal certificate approval | Shariah officers are rigid in their decision making | Halal certification takes too long to be approved |
Table 6 Summary of Thematic Analysis of the Interview with Manufacturers (Demand Side) (continued)

| Information | Inconsistent information provided to the applicant | Lack of understanding and knowledge of the halal certification requirements and procedures | No one stop centre on halal certification guidelines | - | - |
|-------------|------------------------------------------------------|---------------------------------------------------------------------------------|---------------------------------------------------|---|---|
| Feedback | Slow feedback/acknowledgement of application problem | Slow feedback/acknowledgement of application problem | - | - | - |
| Communication | Poor communication between applicant and certification officer | Poor communication with the halal certification officer due to lack of staff | Poor communication between applicant and certification officer | - | Poor communication with the halal certification officer due to lack of staff |
| Technology | Difficulty in using the Online Halal application | - | - | - | - |

Suggestion(s)

| Processing | - | - | - | - | Make halal process less complicated and more tolerant in decision making |
| Information | Provide halal certification course to the applicants | Provide halal certification course to the applicants | Provide halal certification course to the applicants | Provide articles in local newsletter to educate people about halal and any latest information about halal matters | Make halal process less complicated |
| Develop a raw material checklist and halal certification number of each raw materials | Educate public on halal matters. | - | - | - |


| Customer Service | Halal certification officer must give clear and consistent information to the applicants | Improve shariah officers services to handle people and complaints | Improve halal information system |
|------------------|------------------------------------------------------------------------------------------|------------------------------------------------------------------|--------------------------------|
| Technology and System | Implement online halal certification application | | |
| Human Resource | Increase the no. of halal certification officer | Job delegation | Increase the no. of halal enforcement staffs. |

4.2. Discussion

From the thematic analysis of the halal certification bodies it is obvious that the private certification authority relaxed on the information needs and various procedures of the halal certification when compared to the public authority bodies. This may be the reason why the processing of the halal certification application is faster. From the demand side, the main problem highlighted is that the halal certification process is slow and causes delay to applicants. The halal certification bodies’ cited the delay is due to a) halal certification applicant incompetency of completing the application forms due to poor understanding of the halal certification procedures, b) limited manpower at certification bodies, c) lack of technology used and also d) governance problem. These claims concurred with the findings obtained from the manufacturers. The manufacturers suggested that authorities educate the manufactures on the halal certification by providing courses, improved communication between the halal certifiers and the applicants and also assistance to complete the halal application. In addition, the manufacturer extended their view of empowering state halal authority to also perform the halal certification for the export market. However from the study no conclusion can be made on the perception of the demand for the private halal certification body as none of the manufacturers interviewed engage the services of the private halal certifier.

4.2.1. Halal Ecosystem

From the analysis, a description of the halal ecosystem is produced and shown in Appendix A. The holistic approach was undertaken to visualize the components, the process of the halal certification, the actors in the certification process and their related agencies and the regulations within the halal ecosystem. The essential component of the halal ecosystem is a halal certification process. In general the halal certification process consists of a) receiving halal application form and supporting documents, b) checking and verifying the application form and supporting documents, c) conduct premise inspection, d) approval or rejection of the application, e) issuing halal certificate and f) monitoring the certified company. Each process is managed by the specific individual or a team who have their own roles and responsibilities in managing the respective process. The main stakeholders of the halal certification process are the halal applicant, halal certification officers, administrative officers and halal certification panels. Other agencies related to the halal certification process are the local council, fire and rescue
agency, environmental agency, occupational and safety agency. These agencies have an indirect role in the halal certification application as business license is one of the information required in applying the halal certification. These agencies are parties involved in the approval of business license. The good rapport amongst them will help smooth the halal certification process.

4.2.2. Halal Governance Structure

In the context of business, governance relates to consistent management, cohesive policies, guidance, processes and decision-rights for a given area of responsibility. Good governance requires the examination of external factors such as industry regulation, market forces and competition and internal factors such as business strategy and goals and corporate culture. In the Malaysian halal scenario, JAKIM assumes the de facto role of overseeing the halal governance while remaining involve in the operations pertaining to the issuance of halal certificates especially for the export market together with the other halal authorization bodies consisting of the state and the independent halal authorization body. From the analysis of the data, current emphasis of halal governance is on the compliance of the shariah law and the industry regulation, but overlooks emphasis on external factors of market forces and competition and internal factors of business strategy and corporate culture.

A governance structure proposed (Appendix B) posited a role for a halal certification coordinator who takes role of overseeing the halal governance and does not involve the direct operation of the halal certificate issuance. Other halal certification authorities may exist as a public halal authorizing body both at the federal or state level. As the halal industry is set to grow, the existence of private halal authorization bodies should not be discounted as they too can help improve the operational efficiency of the halal certification which can help boost the halal industry. However, the halal certification coordinator must play their role strictly as not to allow sub-standard practices of halal certification that does not comply with shariah law and industry standards.

5. Conclusion and Future Work

This paper has managed to highlight some pertinent issues related to the operational efficiency of the halal certification process from the perspective of the supply and demand side of the halal supply chain. By taking the ecosystem approach as a strategy for addressing the operational efficiency of the halal certification, a conceptual model of the halal ecosystem and halal governance is presented. These models will be useful for those who seek to have an understanding of the halal industry in particular on the halal certification process. Future work is to develop a framework for halal certification based on these conceptual models.

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Appendix A. Halal Ecosystem

Appendix B. Halal Governance Structured