PERCEPTION OF SMALL MEDIUM AND ENTERPRISES TOWARDS HALAL FOOD SUPPLY CHAIN IN MALAYSIA

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ABSTRACT

The purpose of this paper is to investigate the perception of small medium and enterprises (SMEs) that motivates to adopt halal food supply chain (HFSC) in their business. Data were collected through a survey responded 183 out of 410 potential respondents from Halal Industry Development Corporation (HDC) directory website. Reliability analyses were applied to test the internal consistency of survey instrument. Moreover, regression analysis was applied to determine the predicted factors of SME’s perception towards the adoption of HFSC. Results showed that top management, organizational readiness, halal integrity, halal awareness and expected business benefits showed significantly positive relationship towards the adoption of HFSC. Furthermore, halal integrity showed the strongest factors towards its adoption. However, the understanding practice of halal showed insignificant towards it adoption. The findings of the present study have several relevant contributions towards food industry which adopt HFSC. In order to adopt HFSC, food manufacturers must embody Islamic culture to ensure the halalness of the products. The aspects of halal integrity will be integrated into the production realms to fulfil the global standard’s needs.

Key words: SMEs, halal food supply chain, adoption of halal and food manufacturer.


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1. INTRODUCTION

The halal industry in Malaysia offers broad opportunities for Malaysian food producers whereby the worth of halal markets is estimated at USD547 billion a year [1]. Food manufacturing in Malaysia has been dominated by SMEs, yet, most of them are still reluctant to apply for halal certification [2]. Furthermore, halal industry in Malaysia provides a great opportunity for food manufacturers in Malaysia [3], [4]. Malaysia is renowned in the development of halal standards in line with the vision to be a Global Halal Hub in 2020. It is estimated that, the global halal food market has a potential to contribute about USD650 billion per year. Muslim consumer spending is expected to grow from US $ 1.6 trillion in 2012 to US $ 2.4 trillion in 2018 [5]. However, SMEs entrepreneurs do not seriously picture the significance of halal and its power to attract consumers in which even Malaysia External Trade Development Corporation (MATRADE) encourages Halal entrepreneurs to utilize technology to enhance productivity and quality [2], [6].

A study by Tieman and Nisteroy [7] shows that perception of the players in the industry cares about halal logistics but are not high perceive their responsibility than other halal supply chain participants such as the supermarket, halal authority and government. Additionally, Talib et al., [8] mentioned a study about halal food chain on upstream parties (i.e. retailers, manufacturers, suppliers, producers) are still lacking. Moreover, most of them are still reluctant to apply for halal certification due to effort and cost of certified halal, it could motivate players not to adopt halal supply chain [3], [9]. Nevertheless, there are a number of players specifically food industry take advantage in the halal industry to gains profitability because of the global potential of the halal market [10]. Therefore, the purpose of this study is to identify the perception of SME towards the adoption of HFSC in their business.

2. LITERATURE REVIEW

The organizational factors may give impact on the process of halal adoption in an organization. Therefore, the organizational dimensions represent different organizational including not limited to variables such as top management support, organizational readiness, knowledge of halal practices, halal integrity, halal awareness and business benefits [3], [4], [9], [11]–[13]. Figure 1 showed research model of the study.

2.1. Top Management Support

The top management support has been widely used as a variable in adoption studies [14]–[18]. According to Rhee et al., [19], top management needs to make its organization more adventurous and creative by consistently promoting new ideas. This is because the manager possesses power and authority as they are the key to the decision-making technique [20]. Ahmed et al. [14] stressed that top management is the primary link across the organizational functions that need to assist the team’s decision and involve in resolving the conflicts that may arise throughout the task implementation. Top management must plan well in terms of consultant skills, budget reliability, implementation team skill and compatibility with halal standards. Therefore, the hypothesis of this factor is

\[ H1: \text{Top management support has positive significant relationship with the adoption of HFSC.} \]

2.2. Organizational Readiness

To implement halal operations, the managerial commitment and employee dedication must be parallel because these two factors are vital in designing, executing, and maintaining halal food certification [21]. Ngah et al., [22] described organizational readiness namely the functionality over the operation management to adopt the halal transportation services of terms of economic and human sources. The organization should consider all the capability of the operational before adopting halal practices. This factor is the existence of exterior and interior information system.
that gives the development over customer and partner relationship management mechanism for halal [11]. Additionally Ngah et al., [9] found out this factor drives halal manufacturers to adopt halal warehousing services in their business. Azmi et al., [4] added, to adopt halal practices, the organization should be prepared in terms of training, planning, systems and others in order to meet all requirements of the halal standards. Therefore, the hypothesis of this factor is H2: Organizational readiness has positive significant relationship with the adoption of HFSC.

2.3. Knowledge of Halal Practices
In terms of the practice of food integrity, the players do not only fulfill the existing standards requirement, but must also understand the Shariah law to ensure the implementation meets the requirements provided by certification bodies especially in the context of Malaysia. Alserhan [23] described that traditionally, to determine whether a product is halal or not is at the final stages of production, where the process and ingredients are guaranteed to be compliant with the principles of Shariah law. Ngah et al., [22] stated, understanding of the enablers and limitations is crucial for the researchers in order to recognize the actual situation which happens among the halal industry and ultimately gives information about the industry to the government. Therefore, the hypothesis of this factor is H3: Knowledge of halal practices has positive significant relationship with the adoption of HFSC.

2.4. Halal Integrity
The element of health and safety, sources of product and ethics is a crucial factor in order to ensure food integrity. Halal integrity refers to products which are still halal on entire supply chain [24]. The Shariah requirement must fulfill starts from roots of sources until to final products to be consumed [4]. Alserhan [23] pointed out as halal integrity ensuring the entire supply chain should be perfect and not contamination with a non-halal product that brings the assurance of the manufactured product are truly halal according to Shariah law. Halal integrity can't be compromised at any stage, and consumers are highly demanding in terms of quality and assurance when it comes in accordance with halal products [25]. Therefore, the hypothesis of this factor is H4: Halal integrity has positive significant relationship with the adoption of HFSC.

2.5. Halal Awareness
Awareness in the context over halal literally means having a unique interest in or experience of something and/or being well knowledgeable concerning what is taking place at the present time on halal food, beverages and products [26]. An increasing awareness of Muslim consumers about their religious obligations has created greater demand for halal products. Meanwhile, halal supply chain providers asserted up to expectation awareness regarding organizational players could stay a reason by what means the majority over halal manufacturers are not adopting halal supply chain services [22], [27]. Therefore, the hypothesis of this factor is H5: Halal integrity has positive significant relationship with the adoption of HFSC.

2.6. Expected Business Benefit
The implementation of halal practices with satisfactory results will ensure successful competitive performance for firms. An expected business benefit is a related element of financial gains and operational benefits whereby organization setup strategic planning to achieve the objectives [13], [28], [29]. The 15th Malaysia International Showcase [30] reported, business players in halal industry can gain financial objectives through halal sector whereby HDC’s report the global Muslim population is projected to increase about 27% per cent of the world’s total population by 2030 and halal exports are set to contribute higher by 2020. The positive impact in halal market in the future will motivate SMEs to adopt HFSC in their business. Therefore, the hypothesis of
this factor is **H6**: *Expected business benefit has positive significant relationship with the adoption of HFSC.*

![Research model](image)

**Figure 1** Research model

### 3. METHODOLOGY OF THE STUDY

#### 3.1. Sampling

Convenience sampling is a sampling technique that utilized by the study to collect primary data from food manufacturers. This technique is an accumulation of data from individuals of the population who are advantageously accessible to access [31]. The study collected a large amount of data to address SMEs halal food manufacturing in Malaysia. The study utilised a large amount of data obtained from Halal Industry Development Corporation (HDC) directory website. A total of 183 respondents out of 410 potential respondents took part in the survey. The study demonstrates primary data to answer all research objectives by employing causal research study. It is also known as explanatory research where the major objective of this research approach is to obtain evidence or test hypothesis regarding cause and effect relationships [32].

#### 3.2. Operational Construct

Survey research provides a quantitative or numeric description of trends, attitudes, or opinions of a population by studying a sample of that population [33]. A questionnaire is an instrument of the survey method of this study to obtain information from Halal food manufacturers in Malaysia. The study applied multiple-choice questions to obtain demographic profiles. To identify the perception of SME food manufacturer towards HFSC, the study developed a questionnaire using 18 items adapted from previous study. The items of the questionnaire are tested by utilized five-point Likert scale point. The study range the scale from 1 (Strongly Disagree) to 5 (Strongly Agree).

#### 3.3. Data Analysis

The sample size was tested to examine the reliability of the questionnaire by demonstrates pilot test by carried out 100 sample of the food manufacturers. According to Nunnally and Bernstein [34], Cronbach’s value must 0.70 and above and the questionnaire is considered reliable. After the sample founds reliable the study distributes the questionnaire for the next analysis.

Furthermore, reliability analyses are tested to measure a total of 183 respondents of internal consistency. Lastly, regression was applied to determine the perception factors of SME food manufacturer towards adoption HFSC.
4. RESULTS AND DISCUSSIONS

Reliability is typically reported by means of a correlation coefficient which is technically called a reliability coefficient. One of the most frequently used reliability coefficients is Cronbach alpha. The value of the Cronbach alpha is above 0.60, it’s showed that the values of the results are accepted [35]. Organisational factors; 0.680 for top management support (3 items), 0.735 for organisational readiness (3 items), 0.610 for knowledge of halal practices (3 items), 0.785 for halal awareness (3 items), 0.755 for halal integrity (3 items), and 0.720 for expected business performance (3 items). Table 1 showed results of reliability analysis.

<table>
<thead>
<tr>
<th>Organizational factors</th>
<th>Number of items in scales</th>
<th>Cronbach Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top Management Support</td>
<td>3</td>
<td>0.680</td>
</tr>
<tr>
<td>Organisational Readiness</td>
<td>3</td>
<td>0.735</td>
</tr>
<tr>
<td>Knowledge of Halal Practices</td>
<td>3</td>
<td>0.610</td>
</tr>
<tr>
<td>Halal Awareness</td>
<td>3</td>
<td>0.785</td>
</tr>
<tr>
<td>Halal Integrity</td>
<td>3</td>
<td>0.755</td>
</tr>
<tr>
<td>Expected Business Benefits</td>
<td>3</td>
<td>0.720</td>
</tr>
</tbody>
</table>

Regression analysis was performed to explore the relationship between the dependent variable and each category of independent variables. Table 2 shows that Organisational factors explained 83% of the variance in the adoption of HFSC. Knowledge of halal practices (β= -0.193, p=0.60) showed an insignificant relationship with the adoption of HFSC. So, H3 was not supported. While, halal integrity (β= 0.260, p=0.00), organisational readiness (β= 0.205, p=0.03), top management support (β=0.210, p=0.04), halal awareness (β= 0.201, p=0.00) and expected business benefits (β=0.110, p=0.00) showed significant relationship with the adoption of HFSC. So, H1, H2, H4, H5 and H6 were supported. The study founds five (5) positive relationships with HFSC adoption which were top management, organizational readiness, halal integrity, halal awareness and expected business benefits. Meanwhile, knowledge of halal practices was insignificant.

According to the analysis, halal integrity shows the highest regression coefficient (Beta = 0.260), meaning that with the increasing halal integrity of the food manufacturer, it will further enhance the adoption of HFSC with the assumption that others variables are held constant. Beta = 0.210 is the regression coefficient of top management support, meaning that with the increasing management support will further enhance the adoption of HFSC with the assumption that others variables are held constant. Beta = 0.205 is the regression coefficient of organisational readiness, meaning that with the increasing organizational readiness will further enhance the adoption of HFSC with the assumption that others variables are held constant. Beta = 0.201 is the regression coefficient of halal awareness, meaning that with the increasing halal awareness will further enhance the adoption of HFSC with the assumption that others variables are held constant. Beta = 0.110 is the regression coefficient of expected business benefits, meaning that with the increasing business benefits will further enhance the adoption of HS with the assumption that others variables are held constant.

Table 2 Regression Analysis

<table>
<thead>
<tr>
<th>Variables</th>
<th>Regression Models</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Adoption of HFSC</td>
</tr>
<tr>
<td></td>
<td>B</td>
</tr>
<tr>
<td>(H1)Top management support</td>
<td>0.210</td>
</tr>
<tr>
<td>(H2)Organisational readiness</td>
<td>0.205</td>
</tr>
<tr>
<td>(H3)Knowledge of halal practices</td>
<td>-0.193</td>
</tr>
<tr>
<td>(H4)Halal integrity</td>
<td>0.260</td>
</tr>
</tbody>
</table>


5. CONCLUSION

An organisational factor plays an important role in order to secure long term success and improve performance among SMEs’ Halal food manufacturing in Malaysia. A study found that Halal integrity is the most influential factors in determining the adoption of HS. Zailani et al., [13] asserted that halal integrity has positive effects on halal orientation strategy adoption among halal food firms in Malaysia whereby it is proven to be an important internal driver of halal implementation. Additionally, Talib et al., [36] stated that halal integrity is a key to halal industry success because of the needs of higher quality assurance and better traceability process [37]. Furthermore, Malaysian halal standards are specifically designed to ensure the halal integrity of supply chains and logistics [38]. However, the halal integrity in the halal supply chain has yet to be assured in the industry and its logistics practices [39]. Additionally, halal integrity shapes firms’ organisational culture in such that Islamic culture is embodied in order to implement successful Islamic business [40]. With respect to organisational contexts, halal integrity appears to be the most influential factor. The statistical analysis shows that halal integrity is positively related to the adoption of HFSC. The SMEs will have higher intentions to adopt HFSC because the integrity will ensure the halalness of the products. It is also the key to success for Halal adoption.

The findings of the present study have several relevant contributions towards food industry which adopt halal practices. In the context of organisational, halal integrity is the most influential factors in determining the adoption of HS. To produce food safety, health, nutrition and quality, the producers must ensure the halalness of the products is well secured from raw materials production until the final consumptions. The aspects of halal integrity will be integrated in the production realms to fulfil the global standard’s needs.

The study focused on organizational factors to determined HFSC adoption, However, factors of technology and environmental of the firms are not investigate in the study. Furthermore, using alternative approaches (e.g. case study research) as well as combining both approaches (questionnaire and case study), one may also attempt to investigate why and how organizations adopt HFSC. Moreover, in food supply chain are vulnerable due to complexity to manage integrated parties involve in the chain. Therefore, risk might occur when the status of the halal product is still questionable by the consumers. The future study is recommended to identify the source of risk in HFSC in order to maintain the products are not being unquestionable by consumers.

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