Halal Practices Integrity and Performance Relationship: Are Halal Supply Chain Trust and Commitment the Missing Links?

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***Abstract*- Preserving the integrity of *halal* food has become increasingly complex since its supply chain undergoes numerous production processes and distribution stages performed by different organisations. The longer the supply chain is, the greater its vulnerability and complexity. Concurrently, the rise in the number of *halal* food product status revocation indicates their non-compliance with *Shariah* requirements. As such, this study aims to investigate the influences of *halal* practices integrity (HPInt), *halal* supply chain trust and *halal* supply chain commitment on Malaysia *halal* food supply chain performance. 212 questionnaires were distributed to the participants of the Malaysia *Halal* Expo, and the responses were analysed using Smart PLS. The inclusion of *halal* supply chain trust and *halal* supply chain commitment in the conceptual model revealed a complementary mediation influence on the relationship between *halal* practices integrity and supply chain performance. A comprehensive HPInt performance model is proposed and empirically assessed. The findings of this study have significantly contributed to both theories and practices by enhancing *halal* integrity in the food supply chain.**

***Keywords*-** *Halal Practices Integrity, Halal Supply Chain Trust, Halal Supply Chain Commitment, Supply Chain Performance*.

1. Introduction

Literally, *halal* is a Quranic word which means permissible, allowed or lawful. *Halal* is defined in MS 1500:2009 as things or actions permitted by *Shariah* law without punishment imposed on the doer. *Halal* is not merely about the sources of food and beverages, the slaughter of animals, and the use of alcohol, but also covers processes and standards related to cleanliness, reliability, safety, and quality assurance [51]. Moreover, *halal* is more on Islamic values, which are clearly stated in the Quran and Hadith.

In 1974, the first *halal* certification was released by the Research Centre for the Islamic Affairs Division in the Prime Minister's Office for products which successfully fulfilled the *halal* criteria. In fulfilling the mission of establishing Malaysia as the centre of *halal* food, the government had started five initiatives, and one of them is the Malaysian Standard (MS). Malaysia released MS 1500:2000 General Guidelines on the Production, Preparation, Handling, and Storage of *Halal* Food in year 2000. These guidelines have put Malaysia as the first nation in the world with a proper documented and systematic *halal* assurance system. After a few revisions, currently these guidelines are now called MS1500:2009 *Halal* Food – Production, Preparation, Handling, and Storage – General Guidelines.

The *halal* market has flourished and grown at a tremendous rate in both Muslim countries and non-Muslim countries. Currently, the average global *halal* food trade is estimated around RM 600 billion per year. According to the State of the Global Islamic Economy Report 2017/2018, global Muslim spending across lifestyle sectors was US$2.1 trillion in 2017. Out of this amount, US$1.3 trillion was Muslim spending on food and beverages. Besides that, regulatory oversight of *halal* food production is steadily improving, with Malaysia and UAE taking the lead. With Muslim spending on food and beverages growing at 6.1 per cent and forecasted to reach US$1.9 trillion by 2023, there are significant opportunities for investment and the creation of global *halal* food brands. This indicates tremendous prospects in the development and production of *halal* products. Food manufacturers may grasp these opportunities by putting in greater efforts to gain and increase their market share.

Malaysia is still the leading global *halal* hub with more than RM43.3 billion worth of *halal* exports in 2017. The *halal* industry has contributed 7.5% to Malaysia GDP in 2017. It appears that a greater purchasing power among the Muslim consumers who adhere to *Shariah* law and are obliged by Islam to consume only those which are *halal* (allowable) is the main contribution to the growth of the *halal* market. Moreover, there is a growing trend among people opting for a healthier lifestyle of which cleanliness, sanitation, hygiene, and safety of food are the main concerns. It is in line with *halal* in Islam that embraces all those elements known as *halalan-thoyyiban* as stated in the Quran:

"O ye people! Eat of what is on earth, Lawful and good; and do not follow the footsteps of the evil one,

for he is to you and avowed enemy." (Al-Baqarah, 168)

In fact, this healthier lifestyle becomes a concern not just among Muslim consumers but also among non-Muslim users [24]. The increasing demand for *halal* food and the healthier lifestyle opted by both Muslim and non-Muslim consumers have brought a positive and significant impact on the *halal* industry. Thus, there are abundant opportunities for food manufacturers to penetrate the *halal* market by accommodating the Islamic dietary law in their food products.

Due to the stronger potentials and the global interest in the *halal* economy, Malaysia has outlined its *halal* ecosystem systematically as illustrated in Figure 1. Malaysia's *halal* ecosystem integrates various *halal* sectors and is supported by a proper certification system, infrastructure, and human capital development programmes in accelerating the growth of the *halal* industry. Per se, several joint-effort programmes such as knowledge sharing, funding and training have been undertaken between the government and private sectors in Malaysia. Hence, this is an active catalyst for the tremendous growth of the *halal* industry.

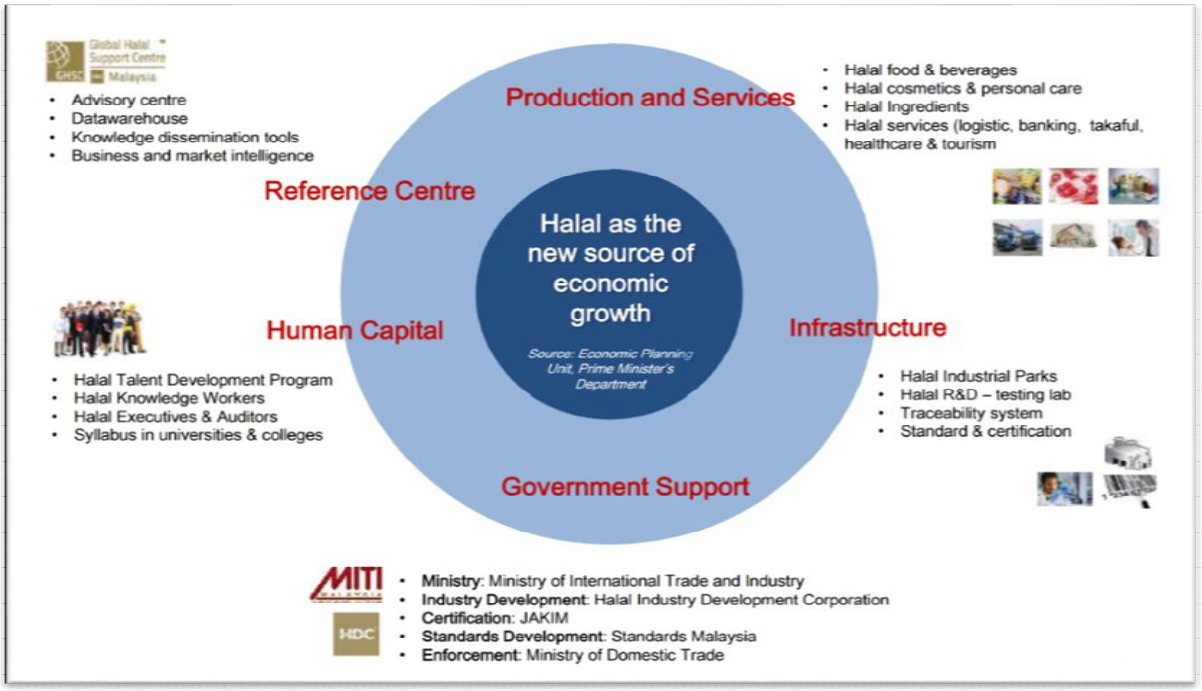

Figure 1: Malaysia's *Halal* Ecosystem

An essential factor of *halal* food production is that it must comply with the Islamic dietary law (i.e. *Shariah*). For example, food products must be free from pork or contain only ritually slaughtered meat [47]. In Malaysia, a *halal* food product should comply with the seven requirements of Trade Descriptions Act (Definition of *Halal*) 2011 under Section 28. To date, the primary concern in the food industry is *halal* authenticity [44]. Lots of cases were reported worldwide with regards to food productions involving adulteration of haram or mushbooh ingredients. Furthermore, the status of *halal* food has become doubtful as there is an increasing number of non-Muslims dominating the food industry [36], [4]. A lack of trustworthiness of the *halal* logo has also led consumers especially the Muslims, to look for additional assurance [47]. This scenario reflects a prejudicial image and reputation of the integrity of *halal* food in the market. Therefore, it is essential to preserve the integrity of *halal* food products and keep *haram* out along the supply chain [24].

2. Literature Review, Research Model and Hypothesis

Supply chain management (SCM) has emerged as a strategic tool that creates value for companies over the past decade in various industries [8]. The enormous attention from previous research in several fields provides significance evidence on the importance of SCM as a new operational tool for organisations to improve their performance [2]. SCM includes a set of approaches and practices that effectively integrate suppliers, manufacturers, distributors, and customers to improve the long-term performance of firms and their supply chains (50). These practices represent opportunities for organisations to differentiate themselves by superior performance in the context of demand forecasting, product availability, inventory management, and distribution. Thus, organisations that successfully implement SCM practices achieve superior supply chain performance. The better supply chain

performance, however, requires internal cross-functional integration within a firm and external integration with suppliers or customers.

Recently, the *halal* food supply chain has received a high degree of attention and thought by numerous researchers due to its complexity and uniqueness [25], [24], [32]. According to [34], the conventional SCM concentrates on cost reduction. On the other hand, *halal* SCM fulfils the *Shariah* requirements and *halal* policy that provides practical guidance on the particular design parameters to enable the operationalisation of the *halal* SCM [45]. Subsequently, the *halal* status of products should remain intact throughout the whole supply chain and not merely to satisfy customers' wants and needs.

2.1 Supply Chain Performance

Supply chain performance (SCPer) refers to the performance of the numerous processes in a firm's supply chain. Superior SCPer can be achieved through well-integrated supply chain strategies which require internal cross-functional integration within a firm and external integration with suppliers or customers [26]. Since the 1990s, the identification of performance evaluation systems was a key concern in measuring the SCPer that is aligned with corporate strategies [11].

According to [39], efficiency and effectiveness are the key indicators in measuring SCPer to satisfy the consumers in the previous studies. Efficiency is the usage of minimum resources, such as cost and inventory turnover [35]. [40] defined SCPer as the extent to which the supply chain meets end-consumer requirements in terms of product availability and on-time delivery. Hence, SCPer is a measuring tool to ensure the process of delivering products is effective and efficient to the consumers. [30] proposed four criteria to improve supply chain efficiency and effectiveness in manufacturing, which comprise of flexibility performance, delivery performance, customer responsiveness, and time to market. The measurement of SCPer of a company that is not in line with its supply chain objectives is useless. It is essential to have well-integrated supply chain strategies in the halal food supply chain so as to achieve superior performance in business. However, the indicators should fulfil the *Shariah* requirements in ensuring that the food products are *halalan-thoyyiban*.

2.2 *Halal* Practices Integrity

Integrity requires responsible actions by doing the right thing in the right way. Therefore, the integrity of *halal* products should be upheld as *halal* integrity is a basis for the success of the *halal* industry. According to [43], *halal* supply chain approach is essential to ensure that there is no exploitation of *halal* integrity as products go through various processes along the supply chain. It becomes a major challenge for all supply chain members to maintain *halal* integrity [32]. Furthermore, supply chain is inherently complex, and manufacturers must consider the impact of the channel on consumers' perception of their products. Consumers should receive something that is declared or something undiminished. [23] defined *halal* practices integrity (HPInt) as a systematic and continuous process of adherence to *halal* integrity, which affects individual and supply chain partners that contribute to the betterment of business performance. Hence, integrity is the platform for successful performance.

Previous studies identified integrity as trust antecedents [48]. According to [43], the *halal* supply chain is purely based on trust, and the company will be responsible for ensuring that the food is *halal*. The *halal* trust mark gives assurance that the entire supply chain is in compliance with *Shariah* [43]. In addition, effective communication gives pertinent information to trustors, helping them to assess what trustees do, thus escalating transparency and affecting trust levels. Effective communication appears to have a positive and immediate impact on trust formation [12]. Thus, trust between supply chain partners is an essential factor in *halal* food manufacturing [24].

Research done by [49] found that affective commitment has a positive effect on satisfaction. However, continuance commitment has no significant effect on satisfaction. To retain the customers (e.g. customer satisfaction) in the business, the manufacturer has to satisfy their requirements through normative commitment [22]. In general, there is a positive relationship between commitment and business performance [25], [5], [6]. With reference to the previous studies, this research suggests that:

H_{1a}: HPInt has a significant influence on supply chain performance.

H_{1b}: HPInt has a significant influence on halal supply chain trust.

H_{1c}: HPInt has a significant influence on halal supply chain commitment.

2.3 *Halal* Supply Chain Trust

[20] defined trust as "confidence in the integrity and reliability of another party, rather than confidence in the partner's ability to perform a specific action." However, [7] argued that the definition of trust is difficult to be interpreted since its interpretation is often baffled with confidence. Today, trust is considered a delicate but vital source of sustainable competitive advantage in a successful business-to-business relationship and business-to-consumer relationship [33], [37]. Trust contributes to the strength of interpersonal, intra-and-inter-organisational relationships, which enables cooperative behaviour, promotes adaptive organisational forms and reduces transaction costs [37]. The perceived trust towards suppliers in the

supply chain provides a significant impact on the long-term buyer-supplier relationships [31]. Besides, [24] found a significant relationship between trust and supply chain performance.

Traditionally, commitment and trust are key mediating variables which should be critically studied. Failing to include their effects in such studies would result in flawed conclusions [33], [25]. Some of the previous studies suggested that trust contributes to commitment [49]; and through commitment, it contributes to business performance [5]. As commitment is vulnerable, supply chain partners in the *halal* food industry ought to collaborate only with trustworthy and committed partners. In light of this discussion, this research proposes:

H_{2a}: HSCT has a significant influence on supply chain performance.

H_{2b}: HSCT mediates the relationship between HPInt and supply chain performance.

2.4 *Halal* Supply Chain Commitment

According to [42], commitment is a multi-dimensional construct which refers to affective, normative and continuance commitment. In the *halal* food context, [25] defined affective commitment as the manufacturer's desire to build and maintain relationships with supply chain partners (i.e. suppliers and consumers) because of the enjoyment of the relationships for their own sake and also because it creates a 'stickiness' by keeping them to the company. Continuance commitment is the degree to which a *halal* food manufacturer experiences a need to build and maintain relationships with supply chain partners because of the significant perceived switching costs associated with leaving those relationships and economically-based dependence on product benefit [6]. Finally, normative commitment is reflected in the perceived ethical and moral obligation of a *halal* food manufacturer to stay in relationships with supply chain partners [6]. [49] used commitment as a mediating variable in their study on the supply chain partnerships in high-tech industries, in accordance with the "commitment-trust model" developed by [33]. [33] emphasised that commitment is a vital mediating variable in their study. [24], [5] and [49] suggested that trust contributes to commitment and business performance. Thus, the following hypotheses are proposed:

H_{3a}: HSCC has a significant influence on supply chain performance.

H_{3b}: HSCC mediates the relationship between HPInt and supply chain performance.

3. Research Methodology

There are four primary constructs involved in this study, namely *Halal* Practices Integrity (HPInt), *Halal* Supply Chain Trust (HSCT), *Halal* Supply Chain Commitment (HSCC) and Supply Chain Performance (SCPer). This study employed certain measurement items from previously validated constructs and developed certain new measurement items based on a preliminary study. The questionnaire consists of two parts. The first part consists of 29 items on HPInt, 17 items on HSCT, 18 items on HSCC, and 5 items on SCPer. The second part of the questionnaire includes the demographic section related to respondents' company background (eight items).

Likert scale was used to measure a wide variety of latent constructs. A seven-point Likert scale was used to measure HPInt, HSCT, HSCC and SCPer. The seven-point Likert scale is a valid and appropriate measurement, as many previous pieces of research have used the seven-point scales to measure HPInt, HSCT, HSCC, and SCPer [29], [9], [6], [37]. In developing the HPInt dimensions (compliance, coordination, control, cooperation, and communication), the items have been adapted and modified from MS 1500:2009, [29] and [38]. The respondents were asked to indicate their level of perceptions on a 7-point Likert Scale ranging from 1 (Not at all) to 7 (Extensive). In addition, HSCT dimensions (suppliers' credibility, top management capability and government support) were adapted from [9]. HSCC dimensions (normative commitment, continuance commitment, and affective commitment) were adapted from [52] and [6]. The respondents were asked to indicate their level of perceptions on a 7-point Likert Scale ranging from 1 (Strongly disagree) to 7 (Strongly agree). SCPer items were adapted from [37].

A survey method is employed for this study by using a questionnaire to test the conceptual model and developed hypotheses. The survey is the most common methodology in research because it seizes for the accumulation of substantial amounts of data from the sizeable population [15]. Furthermore, the tendency to adopt the survey method could be imputed to the issues of convenience, cost, time, and accessibility [14]. A total of 300 questionnaires were distributed, from which 100 questionnaires during the Penang International *Halal* Expo & Conference (PIHEC) 2016, 130 questionnaires during the Malaysia International *Halal* Showcase (MIHAS) 2016, and 70 questionnaires during the Fantastic Malaya Food Festival (FMFF) 2016. Out of the 300 distributed questionnaires, 212 were usable after deleting outliers for data analysis, thus produced a 71 per cent usable response rate. For the purpose of this study, the purposive sampling and judgmental sampling methods had been chosen where the *halal* food manufacturers have been approached to answer the questionnaires. The respondents are managers who are directly involved in food production.

4. Analysis and Findings

A two-step approach was used in this study. Firstly, the measurement model analysis was estimated using confirmatory factor analysis. Secondly, the researchers analysed the structural model and estimated the path coefficients by applying a partial least square structural equation modelling (PLS-SEM) method using SmartPLS. PLS-SEM is used to examine the goodness of measurements and to evaluate the developed hypotheses in this study. According to [15], the most challenging feature of using statistics is on how to select the appropriate statistical test for each of the developed hypotheses. SEM also tests if the model fits together with the individual parameter estimate and has become a popular advanced statistical analysis technique in academic research [17], [27].

4.1 Measurement Model Analysis

Both validity and reliability tests were performed based on the full measurement model generated. Table 1 shows that all the constructs had composite reliability (CR) values greater than the threshold point of 0.7 [19]. The average variance extracted (AVE) of these constructs achieved the cut-off point, indicating a satisfactory degree of reliability. The discriminant validity was analysed using the cross-loadings and [13] criterion. The discriminant validity problem may arise if the measure in question is incapable of discriminating as to whether it belongs to the construct it was intended to measure or it belongs to another [21]. Table 2 presents the calculated square root of the AVE, and they exceeded the inter-correlations of a construct with the other construct in the model, indicating adequate discriminant validity.

Table 1: Measurement model

Constructs	Cronbach's Alpha (CA)	Composite Reliability (CR)	Average Variance Extracted (AVE)
Halal Practices Integrity	0.960	0.963	0.515
Halal Supply Chain Trust	0.946	0.952	0.538
Halal Supply Chain Commitment	0.953	0.958	0.560
Supply Chain Performance	0.856	0.897	0.636

Table 2: Discriminant validity

	HPInt	HSCT	HSCC	SCPer
Halal Practices Integrity (HPInt)	**0.718**			
Halal Supply Chain Trust (HSCT)	0.619	**0.748**		
Halal Supply Chain Commitment (HSCC)	0.708	0.513	**0.733**	
Supply Chain Performance (SCPer)	0.496	0.512	0.599	**0.798**
Note: Diagonals represent the square root of the AVE, while the off-diagonals represent the correlations				

Table 3: Heterotrait-Monotrait Ratio (HTMT)

	HPInt	HSCC	HSCT	SCPer
Halal Practices Integrity (HPInt)				
Halal Supply Chain Trust (HSCT)	0.639			
Halal Supply Chain Commitment (HSCC)	0.735	0.532		
Supply Chain Performance (SCPer)	0.536	0.561	0.657	
Note: Thresholds values - $HTMT_{.85} < 0.85$				

According to [21], the exact HTMT threshold level is debatable. [27] suggested a threshold value of 0.85. However, [41] recommended threshold value of 0.90. Thus, if the HTMT value is below 0.90, discriminant validity has been established between two constructs, whereas if the value of the HTMT is higher than this threshold, there is a lack of discriminant validity. The threshold value of 0.85 was used in this study as illustrated in Table 3. The findings show that all the values are less than 0.85, implying discriminant validity. In conclusion, all the discriminant validity criteria, namely [13] criterion, the cross-loadings and HTMT, provide substantial evidence for the constructs' discriminant validity.

4.2 Structural Model Analysis

Figure 2 illustrates the findings of the coefficient of determination *(R^2)* values of the model. R^2 is used to measure the model's predictive accuracy by calculating the squared correlation between a particular endogenous construct's actual and predicted values. It represents the endogenous latent variables combined effects on the endogenous latent

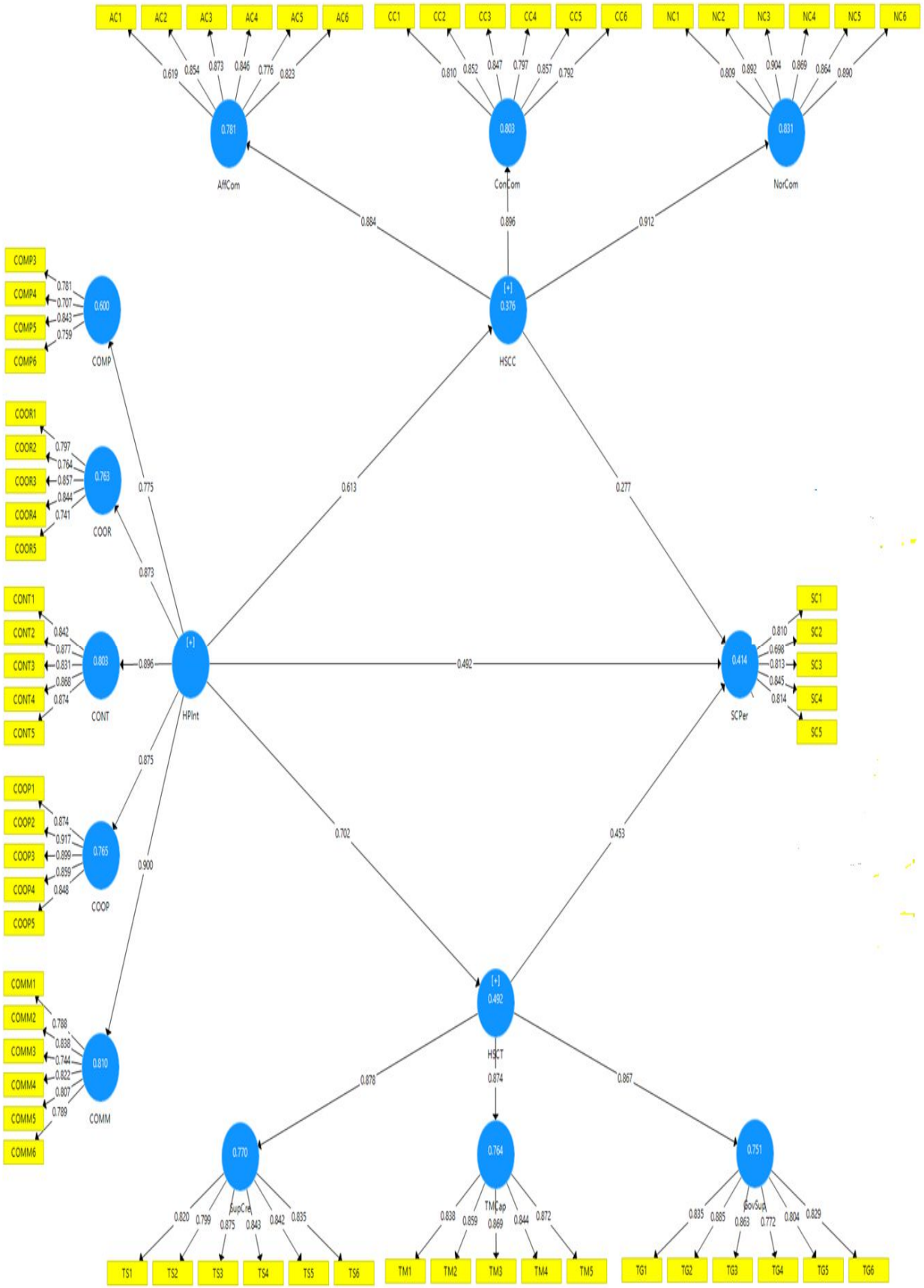

Figure 2: PLS Algorithm Results

variables. There is no specific or particular rule of thumb for R^2 value. The value of 0.75, 0.50, and 0.25 describe substantial, moderate, or weak levels of predictive accuracy, respectively [18]. Meanwhile, [10] considers the values of approximately 0.35 as substantial, values around 0.333 as moderate, and values of about 0.190 as weak. Using a bootstrapping technique with a re-sampling of 500, the path estimates and t-statistics were calculated for the hypothesised relationships. HPInt explained 37.6 per cent of the variance in HSCC and 49.2 per cent of the variance in HSCT. The R^2 value for SCPer was 0.414, suggesting that 41.4 per cent of the variance can be explained by HPInt, HSCC and HSCT. Thus, the findings are considered to be moderate [10], [18].

Table 4 shows the structural model analysis. SCPer was significantly influenced by HPInt (β = 0.441, t = 5.571, α = 0.01). From the analysis, it was also found that HPInt (β = 0.702, t = 15.283, α = 0.01) was positively related to HSCT. HPInt (β = 0.613, t = 13.768, α = 0.01) was positively related to HSCC. In addition, HSCT has a significant influence on SCPer (β = 0.453, t = 4.889, α = 0.01). HSCC has a significant influence on SCPer (β = 0.277, t = 3.040, α = 0.01).

Accordingly, this study examined the direct and indirect effects of HPInt on SCPer through HSCC and HSCT as mediators by using [53] mediation analysis procedure. The results indicate that the significant direct effect of HPInt on SCPer (β = 0.441, t = 5.571, α = 0.01) has become more significant (β = 0.492, t = 7.984, α = 0.01) when HSCC and HSCT are included in the model. Furthermore, the analysis also displays an increased in the R^2 value from 0.243 (24.3%) to 0.414 (41.4%) with the introduction of HSCC and HSCT as mediator factors.

Table 4: Hypothesis Testing

Hypotheses	Path Coefficient (β)	Standard Error	*t* Statistics	Decision
H_{1a}: HPInt -> SCPer	0.441	0.058	5.571***	Supported
H_{1b}: HPInt -> HSCT	0.702	0.046	15.283***	Supported
H_{1c}: HPInt -> HSCC	0.613	0.046	13.768***	Supported
H_{2a}: HSCT -> SCPer	0.453	0.097	4.889***	Supported
H_{3a}: HSCC -> SCPer	0.277	0.091	3.040***	Supported
H_{2b}: HPInt -> HSCT -> SCPer	0.492	0.062	7.984***	Supported for complementary partial mediation
H_{3b}: HPInt -> HSCC -> SCPer				
Note: ***t-value > 2.58 (p = 0.01)				

5. Discussion

The tested structural model provides some evidence that SCPer is dependent on HPInt, HSCT and HSCC in the *halal* food industry. This is expected as the improvement of *halal* food manufacturing requires good awareness in maintaining the integrity of *halal* food products along with supply chain trust and commitment among the supply chain partners. The study found that HPInt was positively related to SCPer (β = 0.441, t = 5.571, α = 0.01). All items of HPInt (i.e. compliance, coordination, control, cooperation, and communication) are significantly influenced by SCPer in *halal* food industry. There are several reasons to explain the significant results of HPInt on SCPer. Firstly, *halal* food manufacturers should maintain the integrity of *halal* food by complying to the quality assurance system (i.e. *halalan-thoyyiban*). Subsequently, quality standards have contributed to food safety and the well-being of consumers [46]. The ability to coordinate and control supply chain partners, as well as the cooperation and communication among them are other factors that can sustain the integrity of *halal* food. This finding is consistent with the previous studies done by [12].

The study also found that HPInt was positively related to HSCT (β = 0.702, t = 15.283, α = 0.01) and HSCC (β = 0.613, t = 13.768, α = 0.01). Since the *halal* supply chain is becoming complex and vulnerable, the trust should be obtained from supply chain partners as [43] emphasised that *halal* food supply chain is based on pure trust. Similar to previous studies [12], [24], the results of this study show that HPInt has a direct impact on HSCT. Moreover, commitment and integrity are paramount in any long-term business relationship, which leads to success as long as they can provide and meet consistently the needs of their valued clientele. Consistent with previous studies [25], the results of this study show that HPInt has a direct impact on HSCC.

Subsequently, the findings of the study also indicated that HSCT and HSCC have a positive effect on SCPer with significant values of (β = 0.453, t = 4.889, p < 0.01) and (β = 0.277, t = 3.040, p < 0.01) respectively. This finding is supported by the studies of [31] and [37], which indicated that trust plays a critical role in relationship development and business performance. Besides, some studies found that the

manufacturers, suppliers, and distributors should interactively develop and sustain commitment among them by building pledges as to bind them in a relationship [16][3][30]. Their empirical findings proposed that commitment to a relationship with each firm is affected by the perception it has for other firms' commitment. The finding of this study is consistent with the research done by [5] and [28] in the franchise system and agri-food supply chain in New Zealand, respectively. They concluded that strategic commitment among supply chain partners would enhance firms' performance.

In addition, HSCT and HSCC were found to mediate the relationship between HPInt and SCPer ($\beta = 0.492$, $t = 7.984$, $\alpha = 0.01$). The result provides the opportunities to understand further the importance of HSCT and HSCC in enhancing SCPer of *halal* food industry. HSCT in this study focused on the trust issues among supply chain partners in maintaining the integrity of *halal* food produced by *halal* food manufacturers. Those trust issues include supplier credibility, top management capability and government support. On the other hand, HSCC in this study focused on commitment issues. These findings are also in accordance with the previous studies by [49], [1], and [25] through which they found that trust and commitment mediate the relationship of antecedent variables and its outcomes. [32] emphasised that trust and commitments among supply chain partners are vital factors which must be taken into serious consideration by *halal* food manufacturers to fulfil the needs and protect the well-being of *halal* food consumers. This robust finding provides additional support to the mediating role of HSCT
and HSCC in the proposed model.

6. Conclusions and Implications

There are emerging studies on the integrity of *halal* food in the literature. However, the empirical findings are still lacking in relation to HPInt, HSCT, HSCC, and SCPer, especially in *halal* food research. Thus, this study provides a significant theoretical contribution by looking into the influence of HPInt, HSCT and HSCC statistically towards SCPer of *halal* food manufacturing, including the role of mediating effects of HSCT and HSCC.

The HPInt performance model is the first testing of the comprehensive theoretical model. In addition, this research focuses on the implementation of HPInt by *halal* food manufacturing organisations. The HPInt performance model is focusing on HPInt implemented by *halal* food manufacturing organisations to integrate and coordinate trust and commitment with immediate supply chain partners and the impact of those practices on performance.

The findings of the present study provide guidance to Malaysian *halal* food manufacturers in developing a proper strategy to enhance their supply chain performance and in adopting operation practices to effectively and efficiently handle the needs of Muslim consumers. This assistance includes:

i. identifying complementary *halal*-compliant services, which include dedicated cold-chain, warehousing facilities, packaging materials, and logistics for halal food products;

ii. increasing the demand for *halal* food products through product range expansion to stay a step ahead of fast-changing consumer behaviour and demographic compositions;

iii. enhancing awareness on the importance of research and development (R&D) to ensure that *halal* food products strictly adhere to Islamic dietary law and yet remain competitive in the market. Without being innovative, efficient, and productive, *halal* food manufacturers would not be able to attract consumers (both Muslims and non-Muslims) to purchase their products.

As a conclusion, *halal* food manufacturers should embrace the elements of *halal* practices integrity to give positive implications on the performance of the *halal* industry as a whole, and on their separate *halal* supply chain trust, commitment and performance in particular. The present findings provide valuable information to all the key players in *halal* industry in ensuring that all *halal* food products abide by *Shariah* and possess the highest level integrity at every stage of the supply chain. With the continuous and robust support from all the *halal* industry players, Malaysia could maintain its status as the world's *halal* leader in *halal* product markets.

Acknowledgement

We would like to acknowledge the financial support provided by Universiti Selangor in completing this research.

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