Social Capital Influence on Supply Chain Integration in the Food Processing Industry in Malaysia

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Abstract **- Supply chain integration has been established as one of the key factors in influencing supply chain effectiveness. In relation to the food processing industry, the need to integrate supply chain initiatives has become more critical as those involved in the food processing and distribution industry are deemed key players whose roles are pertinent in determining supply chain success. Drawing upon the importance of integration, this study establishes the link between supply chain social capital constructs with integration. Based on a final sample size of 184 food manufacturers, a survey was conducted to determine the influence of supply chain relational capital, supply chain structural and supply chain cognitive on the integration of the food processing supply chain. The findings reveal that all three dimensions of supply chain social capital exert significant influence on supply chain integration, thus indicating the importance and relevance of integration among members in the food processing industry. With such findings, the study establishes that both structural and relational elements are of significant importance in ensuring the achievement of ultimate business performance. Although the study has not directly relate supply chain integration with business performance, the direction of the study is substantial to postulate that such relationships is possible and this therefore will be the direction of future study.**

Keywords *- Supply chain management, supply chain integration, social capital, food processing industry*

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I. Introduction

The importance of the food supply chain in influencing business performance of all the members within the chain has been well established given the critical contribution of food distribution to the masses. Indeed, the complexities associated with this supply chain is acknowledged as structural and relational elements intertwined in influencing the effectiveness of the processes involved. Dudbridge (2011) describes the food processing industry as vast and complex as it involves multiple supply chain members from upstream participants like farmers who supply inputs to food manufacturers up to the end products that are made available to the end users. The above description is also supported by numerous scholars such as Al-shahri (2008), Kumar and Nigmatullin (2011), and Turi et al. (2014) who claim that the complexity of the food supply chain system is caused by the increasing number of companies participating in the supply chain system. Thus, this has led to the difficulty for supply chain members to exchange information effectively due to the absence of a compatible system for information exchange. Besides that, the fragmented attributes that separate the supply chain system production and distribution brings on challenges to the food manufacturers in terms of innovation or value added characteristics (Mohezar & Nor, 2014). One of the problems that may also contribute to the challenge is the seasonality or unavailability of raw materials (Kumar & Nigmatullin, 2011).

This therefore has further extended the importance of supply chain integration as such practices are deemed crucial in ensuring supply chain effectiveness. The importance of this industry specifically in Malaysia has been more pronounced during the financial crises of 1997 when Malaysia was inadvertently faced with shortages of staple food whilst the country is essentially a producer of many agricultural produce. This has made the food processing industry more pertinent and given special attention by the government in order to ensure that it is constantly efficient and effectively managed to ensure sustainability of supply and distribution.

II. The Food Processing Industry in Malaysia and Supply Chain Integration

Malaysia's robust economy is based on the strong foundation of mixed economies consisting of services and manufacturing industries as well as the agricultural sector (Pin & Suresh, 2012). In recognition of the importance of the agricultural sector as one of the main contributors to the Malaysian economic development (Ayupp & Tudin, 2013), the Malaysian government allocated RM6 billion to the agro-based industry in 2015, mainly to strengthen the food supply chain in Malaysia (Bernama, 2014). Also, the government has set an investment target of RM24.6 billion to the food processing industry under the 2006-2020 Industrial Plan (IMP3) period (MITI, 2006).

As such, it can be argued that the imperative role played by the food processing industry in contributing to the nation's economic growth is indeed apparent and this has been reinforced by a substantial number of authors such as Shamsudin, Mohamed, Yusop and Radam (2011), Ayupp and Tudin (2013) and Ahmed (2012). However, there is limited number of empirical studies conducted to investigate the attempts undertaken by companies in the food processing industry in taking advantage of supply chain integration with internal or external participants consisting of both upstream and downstream supply chain members. Indeed, integration is essential and necessary to the manufacturers in the food processing industry if they wish to maintain their competitiveness in the market. Nonetheless, there are assertions that the partnership philosophy is not comprehensively applied in the food industry but is gradually replaced with the concept of cooperation and coordination (Dunne, 2008). In addition, evidence from a study conducted by Xu, Zhao, Li and Sun (2010) in the context of the manufacturing industry revealed that demand uncertainty has significant relationship with supply chain integration. Such integration practices are considered important in a situation where demand is uncertain and this reflects the food processing industry where complexities persist because demand uncertainty is quite valid (Beckeman, Bourlakis & Olsson, 2013; Matopoulos, Vlachopoulou, Manthou & Manos, 2007).

It has also been established that integration is essential due to globalisation and liberalisation of trade that offer various business opportunities within and across countries. Investigation on the concept of integration for the supply chain of the food processing industry in Malaysia is inevitable as assertions of soft behavioural aspects of integration among supply chain entities is the prerequisite for performance improvement and firm's competitiveness (Zolait et al., 2010; van Donk & van der Vaart, 2005). Supply chain management is usually described as requiring coordination or integration (Akmal, 2011; Mentzer et al., 2001; Wisner, 2003). Omain et al. (2010) as well as Chen and Paulraj (2004) claim that integration refers to the interaction within SCM practices that should not be separated from the social capital concept (Horn, Scheffler & Schiele, 2014). In general, this indicates the importance of close and repeated interactions (Whittaker and Burns, 2003) between focal firms with its supply chain networks to facilitate the integration process (Cousins & Menguc, 2006; Stam, Arzlanian & Elfring, 2013) leading to the sharing of information and resources (Yim & Leem, 2013).

III. The Importance of Supply Chain Integration in Social Capital Understanding

Pagell (2004) asserts that integration is relatively related to interaction and collaboration of members in a network to attain mutual benefits. It can be postulated that integration is the interaction, collaboration, coordination and these terms are often used interchangeably and are complementary of each other (Arshinder, Kanda & Deshmukh, 2008). This view is reinforced by Richey, Roath, Whipple and Fawcett (2010) and Chow et al. (2008) as they claimed that supply chain management encompasses integration, coordination, and collaboration across organisations in the new economic environment. Companies that adopt supply chain management best practices require intra-organisational and inter-organisational integration as this may allow them to handle uncertainties that come their way.

Essentially, supply chain management is concerned with "relationship building" of a focal company with its supply chain partners that entails internal, supplier and customer's integration. Through supply chain integration, a company will be able to implement value added activities and meet customer's requirements. The importance of supply chain integration for value creation and business performance improvement are also demonstrated by Frohlich and Westbrook (2001) and Flynn, Huo and Zhao (2010) as well as Ataseven and Nair (2017) who indicated that the wider integration of a focal company with its suppliers and customers simultaneously will lead to a higher the degree of performance of the focal company.

It is also important to take note that integrative relationship allows companies to enhance their capabilities in terms of innovation and value creation through expanding the scope of economies of scale (Childerhouse & Towill, 2011). Coordination and sharing of information through frequent interactions will lead to effective decision making. As evidence, the success of supply chain integration is indirectly derived from the integration of logistics, business process or activities and companies, within a company as well as between companies (Qi & Chu, 2009). Subsequently, this will enhance and improve external relationships with both suppliers and customers.

For companies to integrate with their supply chain members effectively, there must exist first certain soft attributes of social capital such as trust and commitment (Johnson, 2013) that may facilitate the functioning of independent and interdependent supply chain integration members (Robson, Skarmeas & Spyropoulou, 2006). For the purpose of this study, the soft attributes from the social capital aspects that influence the process of integration of supply chain members within and between organisations are considered. Glaser-Segura and Anghel (2008) observe that social capital is perceived as critical in supply chain management practices as it permits the creation of value-added activities leading to business performance improvement. Fundamentally, there must be specific social capital factors that may promote or facilitate the execution of such integration process (Glaser-Segura & Anghel, 2008) or behaviour. This is because, there is substantial empirical work relating social capital to the collaboration process that demonstrates that social capital is always associated with shared vision, trust, commitment, and other soft aspects (Autry & Griftis, 2008; Cousins, Handfield, Lawson & Petersen, 2006; Cousins & Menguc, 2006; Krause et al., 2007; Lawson et al., 2008). This eventually results to superior value creation to the company.

This study will be concentrating on the concept of integration as many scholars have acknowledged the importance of integration in improving business performance. The term integration (combining to an integral whole) is used interchangeably and complementary to other supply chain elements like coordination (organising several activities), collaboration (working jointly) and cooperation (joint operation) in which the loss of generality will not become the issue in the supply chain context (Arshinder et al., 2008; Qi, Huo, Huang & Yeung, 2017). In a nutshell, these terms have commonalities of concept and functions where supply chain integration refers to fragmented or different entities working together to create seamless flow of information and physical products along the supply chain to achieve common goals and mutual benefits. Therefore, for this study, supply chain integration is defined as the ability of a focal firm to integrate the different entities of different units or departments and across companies in supply chain process, in order to improve efficiency or company's operational performance**.** Hence, the relationship between social capital in supply chain is further address to determine further the extent of integration in the food supply chain network in Malaysia. This study therefore looks into the relationship between food processing manufacturer and its key supply chain members for exchanging and sharing of tangible and intangible resources that comprise internal cross functions whilst addressing the implications of supply chain social capital and supply chain integration. Supply chain social capital encompasses structural, relational and cognitive capitals which are perceived as the enablers that facilitate the formation of supply chain integration. This emerges from the works of Flynn et al., (2010); Frohlich and Westbrook, (2001); Lockström et al., (2010); Pagell, (2004) and Zhao et al., (2008). The objectives of the study are therefore to identify the influence supply chain structural capital, relational capital and cognitive factors on the supply chain integration process in the food processing industry.

IV. Linking Supply Chain Social Capital Dimensions and Supply Chain

In relation to the association between structural aspect of social capital and supply chain integration process, previous studies have demonstrated the positive impact on these relationships. Yim and Leem (2013) and Min et al. (2008) are amongst the supply chain researchers who have provided evidence concerning the positive

relationship between structural capital and the collaboration or the integration of supply chain practices. Hence, it can be postulated that,

H1: Supply chain structural capital positively facilitates the implementation of supply chain integration

Empirical evidence by Sambasivan et al. (2011) showed that higher level of relational capital such as trust and commitment positively affect the implementation of strategic alliances. Interestingly, Cousins and Menguc (2006) confirmed that the socialisation process is considered essential for the development of business relationships and the enhancement of a supply integration strategy. Socialisation process will allow companies in the supply chain system to understand how each of the company in the system works through open communication and frequent interaction. This phenomenon subsequently will lead to knowledge sharing through conferences, joint teaming, social events and site-visits. Based on this, relational capital that constitutes trust, commitment and socialisation should be present in the supply chain relationships, which in turn will create value to the supply chain system. Hence, based on the above, it can be postulated that,

H2: Supply chain relational capital positively facilitates the implementation of supply chain integration

Yunus (2012) provides important research finding on the relationship between customer focus and supply chain integration effort where he finds that customer focus is critical in influencing the success of supply chain integration, specifically in the food industry. The concept of customer focus appears to be important in increasing the success of supply chain integration efforts where it leads to customer satisfaction. This in turn will allow companies to increase their capability to sustain customer loyalty through collaborating internally and externally (Yunus, 2012). As such, the above descriptions support the important role of cognitive capital on supply chain integration effort. A conceptual theoretical framework by Min et al. (2008) strongly suggest that cognitive capital of social capital is a prerequisite of collaboration. However, the relationships of the two factors have not been empirically tested. Hence, it can be postulated that,

H3: Supply chain cognitive capital positively facilitates the implementation of supply chain integration

The adoption of the social capital theory in supply chain management research could help to demonstrate how social capital dimensions are leveraged through supply chain strategic relationship management (supply chain integration) in order to create value to customers and therefore resulting to competitive advantage and efficient operational performance. On the basis of the above arguments, this study attempts to investigate the link between structural capital, relational capital and cognitive capital which are essentially the dimensions for supply chain social capital and supply chain integration.

V. Methodology

This research employed the quantitative method of the survey as a means of collecting data. The survey method is adopted in a majority of empirical studies, especially for those research attempting to collect data for describing a large population or sample size (Babbie, 2003). In the present study, data were analysed by using the Statistical Package for Social Science (SPSS) software using descriptive and inferential statistics through path analyses as means of testing the hypotheses presented.

Table 1: Proportionate Stratified Sampling

Region	Population		Proportionate Stratified Sample		Distributed Questionnaires	
	Number	Percentage	Number	Percentage	Number	Percentage
Central	736	45%	140	45%	270	45%
Southern	372	23%	72	23%	137	23%
Northern	403	24%	75	24%	145	24%
East-Coast	134	8%	25	8%	48	8%
Total	1645	100%	312	100%	600	100%

The unit of analysis for this study was the food manufacturers in Malaysia. The sampling technique used in this study was stratified random sampling. This technique was used to select the study sample, with the strata defined by location (region). This technique involved a two step-process in which the population was divided into sub-population or strata. Basically, the strata were established based on the member's shared criteria or characteristics (Hair et al, 2007). In the present study, the target population was divided into four strata (central region, northern region, southern region, east-coast region). The selection of elements from each strata or region was based on proportionate stratified sampling. Therefore, in the present study, the determination of sample size drawn from each stratum was proportional to the relative size of that stratum in the target population (food processing manufacturers) as indicated in Table 1.

The mail survey method was utilized in this study and the total number of distributed questionnaires through mail survey was 600 and from this total number, only 203 were returned. However, only 184 questionnaires were considered usable as they have met the criteria for data analysis. Out of the 203 questionnaires received, 12 questionnaires were considered unusable as the number of questions not answered for each questionnaire was more than 25percent. This requirement was highlighted by Sekaran and Bougie (2013). Another six respondents were not under the required categories. Table 2 demonstrates the breakdown of population, sample size and questionnaire response number of this study.

Table 2:Total Number of Population, Sample Size, and Response Rate

Population	**Sample Size**	**Final Responses**
1645	312	184

A 6-point Likert scales instead of 5-point or 7-point was use for this study, with the level ranging from 6 for "strongly agree" to 1 "strongly disagree" which were also supported by Chomeya, (2010) who reported that the trend of discrimination and reliability of a 6-point Likert scale was significantly higher than a 5-point Likert scale. Besides that, one of the benefits that can be obtained from the choice of a 6-point Likert scale is that the selection of the middle box by the respondents can be avoided (Cook, 2005) as compared to 5-point or 7-point Likert scale. Importantly, the use of a 6-point scales can potentially overcome the issue on central tendency error (Cooper & Schindler, 2003). The probability of a central tendency error is high especially in Asian countries as most of the respondents in these countries tend to rank their priority in the neutrality dimension (Trompenaars & Hampden-Turner, 1997). Furthermore, it has been established that the selection of the mid-point is a result of satisficing (Krosnick, 1999) which has vague meaning (Sarina, 2010). This may explain that either the respondents are "neutral", had "no opinion", had "no care", and "don't know" (Sarina, 2010). Therefore, the use of a 6-point Likert scale was deemed appropriate for this study.

VI. Findings and Discussion

The data were examined for normality whereby this test was performed in order to identify the skewness of data. Such assessment could be based on the value of skewness and kurtosis. While the range of acceptable values for skewness is -1 to 1, it was proposed that the acceptable range of kurtosis is -2.0 to 2.0 (Hair et al. 2007). The result of high value of skewness would lead the researcher to further check for potential outliers. However, in this study, potential outliers were detected through boxplots for each of the observed variables. It was found that there was no extreme outlier detected in the data set and this in turn accounted for a total of 184 data to be analysed further for the main analysis.

Table 3 presents the result of the test of skewness and kurtosis of the observed variables of this study. From the table, the result indicates that the skewness and kurtosis values for some variables were not within the suggested value. The variables that did not meet the normality assumption were social capital relational and social capital cognitive. Such result provides justification on the possible use of PLS path modelling for the main data analysis. The above is consistent with (Chin, 1995) who asserts that PLS path modelling distributional assumption is relaxed in a sense that this technique does not rely on normality assumption. However, as a preliminary analysis, this study only presents the hypotheses testing based on the output of the path coefficients.

Table 3: The Skewness and Kurtosis of the Variables

Variables	**Skewness (±1)**	**Kurtosis (±2)**
Supply chain Structural	0.346	-0.804
Supply chain Relational	-2.13	0.625
Supply chain Cognitive	-3.58	2.306
Supply Chain Integration	0.257	0.031

The normality tests then allowed for further analyses of lower order and second order model followed by the structural model analyses. All these ultimately lead to the path coefficients as indicated in Table 4.

Table 4: Hypotheses Testing

Hypothesis	***Relationship***	***Path Coefficients***	***t-values***	***Result***
H1	*SC Structural → SC Integration*	*0.258*	*5.4743****	*Supported*
H2	*SC Relational → SC Integration*	*0.350*	*5.3955****	*Supported*
H3	*SC Cognitive → SC Integration*	*0.352*	*4.4499****	*Supported*

*Note: * p <.10, ** p<.05, *** p<.01*

H1: Supply chain structural capital structural positively facilitates the implementation of supply chain integration

This relationship is statistically significant with a path coefficient of 0.258 *(p<.01)*. Hence, it can be empirically concluded that there exists positive relationships between supply chain structural capital and supply chain integration. In general, this result supports the hypothesis (H1) supply chain structural that is represented by IT technical and IT management as the enabler to the implementation of supply chain integration. Importantly, such result reinforces the notion put forth by Gunasekaran and Ngai (2004) and Fink and Neumann (2009) that IT technical and skills of the employees are essential for the successful application of IT in supply chain management.

In addition to the above, the significant role of supply chain structural from the aspect of IT infrastructure in facilitating the implementation of supply chain integration process such as information flow integration, physical flow integration and financial flow integration have been demonstrated by Rai, Patnayakuni and Seth (2006). Also, Agan (2011) and Agan (2005) have provided evidence on the importance of IT infrastructure on the success of supply chain integration in terms of demand management, order fulfilment, customer service, procurement and new product development. The above studies have adopted the dominant theoretical perspective of the resource-based view (RBV) in strategic management into supply chain management discipline to explain factors that could lead to the success of supply chain integration process.

On the other hand, from the perspective of social capital, Yim and Leem (2013) have studied the impact of structural capital on supply chain integration. This study has demonstrated the positive relationship between the two variables. It is noticed that this study investigated the impact of structural capital (represented by network use and network appropriateness) on supply chain integration (information sharing, collaboration and resource sharing) of various industries in Korea. However, IT infrastructure element has been neglected in this study although this element has been considered essential for the success of supply chain integration process as asserted by Gunasekaran and Ngai (2004), Rai et al. (2006) as well as Patnayakuni, Rai and Seth (2008).

Therefore, information technology (IT) infrastructure is perceived as an essential input to improve inter-organisational coordination and this notion has been supported by Sanders and Premus (2005) and Sanders (2008). Indeed, through efficient information technology (IT) infrastructure, information sharing between participants (suppliers, customers and internal cross-functional) could be achieved. Prominently, investment in information technology (IT) infrastructure is essential especially in managing supply chain activities as it may

influence the efficiency of supply chain integration process. Generally, the finding on supply chain social capital structural that comprises IT technical and IT management is positively correlated with supply chain integration in the food processing industry in Malaysia.

H2: Supply chain relational capital positively facilitates the implementation of supply chain integration

Empirical result shows strong evidence on the significant relationship between supply chain social capital relational and supply chain integration. As compared to supply chain structural variable, the supply chain relational variable demonstrates impressive result in the relationship link with supply chain integration at path coefficient value of 0.350 ($p<0.01$). Hypothesis H2 provides support to the importance of social capital relational as an enabler in implementing supply chain integration strategy.

The study by Näslund (2012) has stated that supply chain integration can be measured based on the flows (physical, information, financial), processes and activities, technologies and systems, and integration of actors (structures and organizations). Supply chain integration research has been studied based on various theoretical lenses such as the resource dependency theory (Liao, 2008), resource-based view (Swink, Narasimhan & Wang, 2007), transaction cost theory (Wang, Yeung & Zhang, 2011) and social capital theory (Krause et al., 2007; Villena, Revilla & Choi, 2011). However, based on the previous empirical research, it was demonstrated that trust is crucial in facilitating such integration process. Such research result provides a strong support to the present study that illustrates significant relationship between trust and the integration strategy between supply chain members. In another study, relational dimension of trust is found to positively influence the level of cooperative performance (Xiao, Zheng, Pan & Xie, 2010) and such result is consistent with the study conducted by Zhang and Huo (2013). In the study, trust with customers or suppliers of 617 manufacturers in China significantly influenced supply chain integration. Furthermore, higher levels of inter-organizational cooperative behaviours such as shared planning and flexibility in coordinating activities were found to be strongly linked to the supplier's trust in the buyer firm (Johnston, McCutcheon, Stuart & Kerwood, 2004). Hence, it can be interpreted that the positive outcome of integration is highly dependent on the development of trust along the supply chain network and this is also supported by Sahay (2003).

Finding from this study has also provided empirical evidence that commitment is a super ordinate enabler of supply chain integration initiative. Such finding supports previous work of Salam (2011) on companies in various industrial sectors, particularly in Thailand and "Henry" Jin, Fawcett and Fawcett (2013) as well as Wu, Chiang, Wu and Tu (2004) that stressed the importance of affective commitment, normative commitment and continuance commitment on SC integration process. Thus, it can be concluded that commitment has become an important enabler to integrate business models especially to mobilize resources, change expectations as well as to make it safe to explore integration opportunities ("Henry" Jin et al., 2013) .

In addition, the element of socialisation has provided empirical evidence to support the importance of socialisation in facilitating the implementation of SC integration strategy. This study is consistent with previous studies that have reported that socialisation is positively correlated with the establishment of supplier relationship of 111 manufacturing organizations in the United Kingdom (Cousins & Menguc, 2006). This study provides support on the significant relationship between socialisation and supply chain integration process and it is seen that socialisation is essential for the development of any significant strategic business relationships and the enhancement of supply integration strategy.

Generally, the finding on social capital relational that comprises trust, commitment and socialisation are positively correlated to the implementation of supply chain integration strategy, specifically in Malaysia's food processing industry. This finding is supported by Yim and Leem (2013) as well as Sambasivan, Siew-Phaik, Mohamed and Leong (2011) who demonstrated the significant relationship between relational factor on collaboration, resource and information sharing as well as strategic alliances initiatives.

H3: Supply chain cognitive capital positively facilitates the implementation of supply chain integration

Hypothesis H3 provides evidence on the important role of supply chain cognitive capital as an enabler that is represented by shared values and goals as well as customer focus to the establishment of supply chain integration. The cognitive construct demonstrates significant result with the relationship link with supply chain integration strategy at path coefficient of 0.352 ($p<.01$). Therefore, such result supports the importance of supply chain cognitive capital in facilitating supply chain integration. As predicted, this significant relationship is due to the sharing of common organisational values between supply chain members in terms of values, goals, and

customer focus, that subsequently increased supply chain performance. Such factors would impact the collaboration capability in facilitating the emergence of a common understanding of organisational values and goals (Li & Lin, 2006) as well as customer focus (Yunus, 2012) between supply chain networks. Importantly, this study also provided empirical evidence that customer focus as a new dimension of cognitive construct does help to facilitate the implementation of supply chain integration strategy. Such finding supports the conceptual research work by Lockström, Schadel, Harrison, Moser and Malhotra (2010) that was drawn from a case study on foreign automotive companies operating in China. Such dimension captures the essence of truly sharing information and shared meanings in terms of customer focus between supply chain networks. This, however, is manifested in the perceived importance of good quality product, zero tolerance for defects, continuous improvement philosophy and other elements that are linked with customer's value.

Generally, this hypothesis supports the relationship between supply chain cognitive capital that comprised of shared values and goals, and customer focus in facilitating the implementation of supply chain integration strategy and this finding is supported by Johnson (2013). Shared codes, language and narratives enable the company to achieve collaboration of the company with its supply chain members when a common understanding emerged and is in place. Krause et al (2007) and recent authors like Yim and Leem (2013) have also demonstrated significant relationship between shared values and goals and the establishment of partnership relationship as well as the collaboration process.

VII. Conclusion

This study provides evidence on the relevance and the importance of social capital constructs including structural (represented by IT elements), relational (represented by trust, commitment and socialisation) and cognitive (represented by shared values and goals, customer focus) as enablers to the supply chain of the food processing industry. The new dimension of shared customer focus that is incorporated in social capital cognitive construct as well as other important dimensions (shared values and goals) is consistent with the movement of the industry players towards becoming more customer focus or oriented. This can be achieved through supply chain integration initiatives without which supply chain members may find difficulties in executing common tasks necessary for coordination to take place. Future research should also incorporate aspects of best practices and link them with the benefits of supply chain integration in order to verify further the assertion that integration may well lead to best practices implementation in supply chain management. Managerially, this study provides some guidance for managers to make effective investment on the supply chain integration strategy by considering the importance of supply chain enablers from soft aspects. Essentially, the industry players must act upon the importance of behavioural attributes such as SC structural, SC relational and SC cognitive in ensuring the success of SC integration strategy implementation. Also, this study provides guidelines to the policy makers in developing relevant programs and conceptualizing practical strategic business models for successful SMEs, particularly in the food processing industry.

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