

Supply chain integration for competitive advantage on grocery industry: Systematic literature review

Yun Yun^{a*} and Yudi Aziz^a

^aUniversitas Padjajaran, Bandung Indonesia, Universitas Jenderal Achmad Yani, Cimahi Indonesia

ABSTRACT

Article history:

Received December 1, 2020
Received in revised format
December 18, 2020
Accepted December 20 2020
Available online
December 20 2020

Keywords:

Competitive Advantage
Supply Chain Integration
Grocery Industry

This article discusses the literature review related to supply chain integration and competitive advantage in grocery products. This paper is designed to analyze the existing literature about research topics using Systematic literature review, total final sample includes 29 articles published during 2011 to 2021. The article uses papers indexed in the Scopus database. The publishers of the articles include Tylor and Francis, Emerald, Elsevier, MDPI, SAGE and Growing Science. In supplier integration, it focuses on providing food ingredients by minimizing waste from loss of food product yields and balancing the supply of food raw materials so that there is no excess food supply. Internal integration focuses on how the creation of added value from food products can be optimally provided to create optimal benefits from food. This paper seeks to contribute to and analyze limited articles on supply chain integration and competitive advantage on Grocery Product.

© 2020 Growing Science Ltd. All rights reserved.

1. Introduction

Food Security in any country is very important for the welfare of the people in society. Food needs must be met since it is a basic need. So, every country must be able to meet food needs to maintain food security for the people of that country. The highly competitive environment of the grocery-retailing sector has made companies look for a competitive advantage (Giménez & Ventura, 2003). Problems in gaining competitiveness are often influenced by inconsistent information between upstream and downstream supply chain partners (Prajogo & Olhager, 2012). Supply chain partners may have to estimate their market demand based on incomplete information and maintain a higher inventory of their products or components in order to respond promptly to market changes. As a result, this will lead to an increase in production costs and a decrease in the profit margins of working partners. This is known as the “bullwhip effect”. Thus, many studies have highlighted that information sharing is one of the important factors for effective supply chain practices (Wu et al., 2014).

The Grocery supply chain has a long channel from upstream to downstream, where in these channels there are farmers, collectors, manufactures, distributors, retailers, thus, requiring good supply chain integration to efficiently flow products from upstream to downstream. The purpose of supply chain management is to integrate the activities of partnering firms and to create a seamless supply chain (Mahmood Hosseini et al., 2012). It is necessary to eliminate a member of the supply chain who does not give value added for efficiency flow product form the supplier to the end user. All entities' value chains become integral parts of organization to provide customer satisfaction and leverage competitive advantage together (Zhang et al., 2015). The grocery retail supply chain focuses on cost efficiency so that it can provide products in large quantities at low prices charged to consumers (Dreyer et al., 2016).

Supply chain integration can provide benefits for small entrepreneurs, especially in the food and beverage sector. The food and beverage industry requires a continuous supply of raw materials and consistent supplier support is needed to supply these

* Corresponding author

E-mail address: yun14001@mail.unpad.ac.id (Y. Yun)

raw materials. One of the problems with food products is the breadth of the food supply chain from suppliers to consumers so that the costs incurred are inefficient. In addition, food products have a large distribution capacity so that the rate of product loss reaches 20% from suppliers to consumers (Ratnamurni & Yun, 2020).

When companies distrust their supply partners, it keeps them at a distance from their network and partners in the supply chain. Integration is also severely hampered by conflicts of purpose and interests in the supply chain. Sometimes in a company there is a conflict of purpose with different departments having different goals and objectives which hinders a good synchronization system. In addition, an important risk associated with integration in the supply chain is the possibility of trade secrets being disclosed and leaked to competing companies which can be costly for some organizations because such information can be detrimental when used to gain a competitive advantage (Kumar et al., 2017).

Customer preferences are changing rapidly in today's business market. In addition, the benefits to the organization are temporary, the product life cycle is shortened, and the challenges related to competitive advantage increase. Due to dynamic capabilities, organizational agility enables organizations to respond to challenges, increase competition and respond to unexpected events. Organizations can operate freely because of agility. Agility is important for organizations because the external environment is unstable and uncertain (Thongrawd et al., 2020)

Good cooperative relationships are developed by the modern retail market, by building good cooperation with local wholesalers, including collectors as intermediaries and farmers, to ensure the supply of products from certain fresh farms in modern supermarkets. The retail market cooperates directly with producers directly so that they can carry out activities purchased effectively. So that neither the producer nor the cooperative can supply their products directly to the modern supermarket, as long as they can meet standards that have been set by the modern retailer. Here the role of Logistics management makes an important contribution in the modern retail form of inventory management, management of information systems, management of warehousing and transportation. Grocery products from the supplier, manufacturer and distributor not all relationship necessarily evolve to the highest level as virtual integration (Mackelprang et al., 2014)

The purpose of this paper is : (1) How is the development of the literature discussing the measurement of supply Chain Integration and Competitive advantage in the Grocery Industry during 2011 to 202. (2) What dimensions have researchers developed in the context of supply Chain Integration and Competitive advantage on Grocery Industry? (3) What theory can be developed to address the research supply Chain Integration and Competitive advantage on Grocery Industry?

2. Previous Literature on Supply Chain Integration and Grocery Product Supply Chain

2.1 Supply Chain Integration

In the literature, understanding of the construct of Supply chain integration has been described as different in any situation supply chain. According to Chen et al. (2019), *Supply Chain Integration is described as The strategic collaboration with key supply chain partners and an effective and efficient management of intra- and inter-organizational activities related to the flow of products, services, information, finance and joint decision-making.* Various literatures identify that internal integration, supplier integration, consumer integration, and information integration are key in measuring Supply Chain Integration (Kumar et al., 2017) . The integration process can be divided into two measures; one is vertical integration - the company's information reach extends to tighten up to a clean job; another is horizontal integration - the range of green product design activities extends from process integration to alliances with the entire supply chain. Furthermore, five attributes are proposed for measuring process integration in SCA, which include the reduction of the dispersion of toxic and hazardous materials; infrastructure in place to encourage eco-innovation in shortening timeframes; proactively updating the mix of manufacturing processes available in the supply chain network; effectiveness of master production schedules; vertical integration in the supply chain (Lii & Kuo, 2016). As discussed above, many researchers have found the performance benefit of Integration. Researchers have posited various dimension supply chain integration within construct as internal integration, supplier integration and customer integration.

2.2 Competitive Advantage

Competitive advantage is defined as “the strategic advantage of a company over its competitors in the industry, which allows it to do more than competitors and rival firms” (Porter, 2011). So, initially, Porter has suggested four main competitive strategies: a differentiation strategy, a cost leadership strategy, a differentiation focus, and a cost focus strategy. The first two strategies, namely, differentiation and cost leadership are strategic weapons and are considered as the sovereign logic of competitive advantage. However, a focus strategy is not that special on its own, it is something a duplicate company adds to another strategy of looking in depth about a market or customer. A focused strategy is associated with a narrow market that may not produce above reasonable performance (Porter, 2011) . Companies can gain competitive advantage and superior performance using two main strategies: differentiation and cost leadership (Lechner & Gudmundsson, 2014). The Differentiation Strategy allows companies to gain a differential-based advantage by offering unique and new products to customers. Newness and novelty can be incorporated into product features, design and structure (Porter, 1998) Cost Leadership Strategy enables companies to achieve cost-based advantages by reducing various costs associated with materials, product development, marketing, operational, supplier, wages and costs. management which in turn provides higher

performance benefits (Porter, 2011). The strategy also refers to the business strategy that has the most significant role in SMEs.

3. Methodology

The methodology of literature review in this paper using systematic literature review (SLR) and meta-analysis techniques. Systematic literature reviews are considered original work because they are conducted using a rigorous methodological approach. a systematic literature review aims to Bcomprehensively locate and synthesize research that bears on a particular question, using organized, transparent, and replicable procedures at each step in the process (Palmatier et al., 2018) Management research is different from medical and engineering research; management is a nascent field, so it is still developing its research agenda and focus (Denyer & Tranfield, 2009). Systematic reviews are helpful as a way to find out the development of research on the topic (Usman et al., 2021). The process of Systematic literature review has seven stage: 1) Formulation of question to answer the objective of research, 2) determining the research location in the database of journal, 3) determining the selected journals by inclusion and exclusion criteria, 4) conducting analysis and synthesis, 5) report on the results of the study that will be used as material for further research selection and evaluation of the third study, analysis and synthesis

Steps 1: Identify the questions of critical objective with the Structure literature review (SLR).

This paper discusses topics about supply chain integration (SCI) and competitive advantage (CA) in the grocery industry from 2011 to 2021. This paper focuses on building the construct about supply chain integration and competitive advantage to determine the dimensions about SCI and CA which are relevant in the grocery industry.

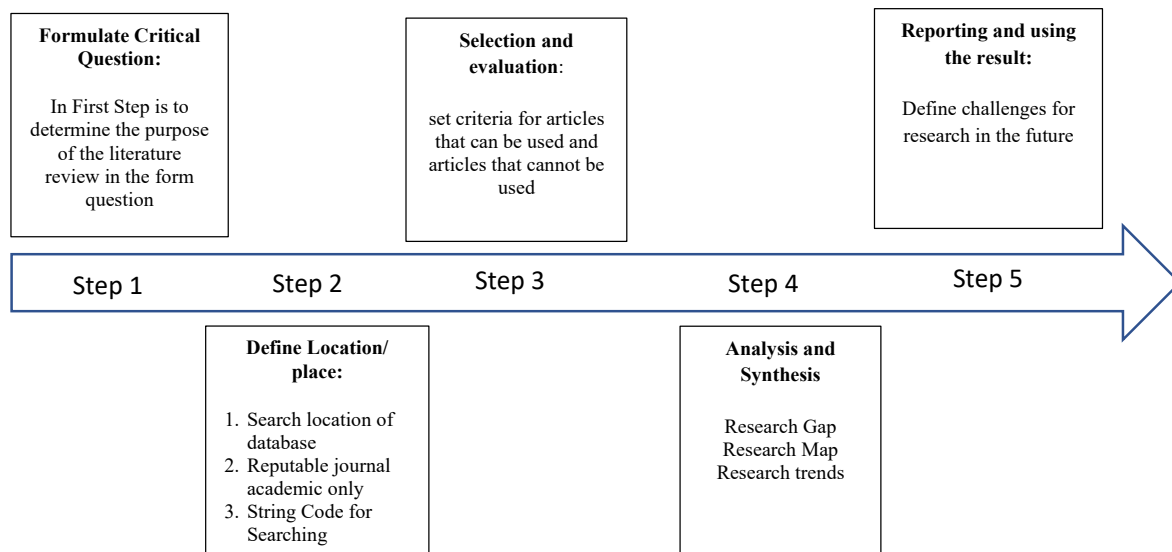


Fig. 1. SLR Roadmap

Source(s): Adapted by Denyer and Tranfield (2009)

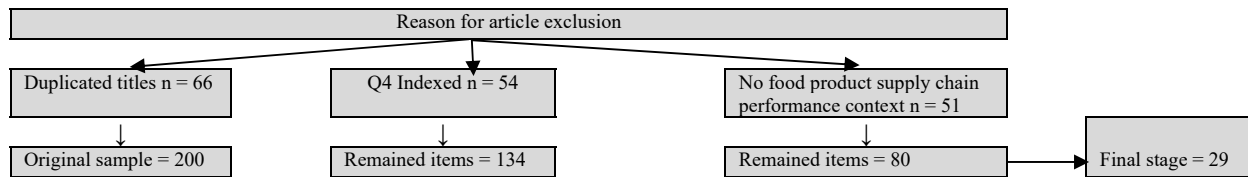


Fig. 2. Step-by-step Articles Selection Process

Authors only used reputable journals with minimum indexed Q3 ranking on the Scopus. Based on the search criteria, authors collected 995 articles from 200 articles indexed on Scopus.

Table 1
Recapitulation Literature Review

No	Author	Findings	Method/Analysis tools	Research
1	Tarigan et al., 2021	The company always tries to integrate information systems as a tool during the pandemic because the interaction of cross-functional parties can be reduced but it is still possible for the company to coordinate internally and externally.	Quantitative Tools: PLS-SEM	Manufacturing company in Indonesia
2	Hongxiong Yang & Wang, 2021	Strategy in supply chain integration is a key strategy to improve supply chain efficiency in a synergistic manner and increase company competitiveness.	Qualitative Comparative analysis Method	Manufacturing company in Tianjin, China
3	Jamaludin, 2021	There are direct and indirect effects of SCM on Company Performance through Competitive Advantage.	SEM	Small and Medium Enterprises (SMEs) in Bandung
4	Abbas & Hussien, 2021	the green supply chain management dimension has a significant positive effect on the competitive advantage of the restaurant, while the green environment and equipment dimensions have a significant positive effect on operational performance. In addition, operational performance has a significant positive effect on company performance.	Quantitative Analysis and SEM	Restaurant in Egypt
5	Al-kamel et al., 2021	This study finds that supply chain integration, especially internal integration, has a significant positive impact on the company's competitive advantage, indicating that companies can effectively improve their competitiveness through internal coordination and integration.	Principal componen analysis (PCA) and Factor Analysis	Services Industry
6	Huo et al., 2021	information sharing moderates the relationship between supplier learning and flexibility performance. Our findings contribute to the literature and offer a new framework for understanding the relationship between information sharing, supply chain learning, and flexibility performance. These findings also provide managers to seek competitive advantage through information sharing and supply chain learning.	SEM	Manufacturing company in China
7	Rudyanto et al., 2020	The results of the study indicate that Supply Chain Integration has an effect on Company Performance; while Internal Integration and Customer Integration have more influence on improving the Company's performance than Supplier Integration. The implications of this research help improve the literature on Supply	Analisis Faktor	Travel Agency
8	Agrawal & Singh, 2020	OBS has a significant effect on supply chain performance	the partial least square path approach of structural equation modeling	the experts of electronics industry, India
9	Asamoah et al., 2021	There is a direct and indirect effect of IoS on supply chain performance and supply chain capabilities as a mediator variable.	Multivariate analysis (SEM)	manufacturer, distributor in Fast Moving Consumer Goods (FMGG)
10	Dev et al., 2020	operational excellence in terms of integration between information technology I4.0 and CE oriented RL represented by the ReSOLVE model.	Taguchi experimental design framework	virtual world in I4.0 Environment
11	Sukati et al., 2020	Operational integration in a strong company is an important foundation in creating supply chain performance before the company's external coordination.	Multivariate model analysis with Structural Equation Modeling (SEM)	Tourism Company in Salalah Oman
12	Kang & Na, 2020	Amid increasing attention to SE in a social and cultural context, the need to develop a business model suitable for the Korean market and ways to promote the model, once completed, has been suggested. In this situation, SE companies apply their strategic management processes to the model in an effort to actively adapt to changing consumption. In particular, these companies are eager to establish and implement strategies that can increase the level of effectiveness and efficiency of shared value on the basis of customer relationships.	Confirmatory Factor Analysis	Sharing Economy Business
13	Hong Yang et al., 2020	The findings provide a theoretical basis for inter-organizational knowledge sharing participants who choose appropriate relational mechanisms to promote knowledge trading, and it also guides inter-organizational knowledge trading among project-based supply chain members in practice.	Multivariate model analysis with Structural Equation Modeling (SEM)	Student in Guangzo dan Wuhan
14	Gunasekaran et al., 2017	Supply chain and information technology provide benefits in competitive advantage, especially in response and efficiency.	Literature Review-pre-determined method	previous published studies

Table 1
Recapitulation Literature Review (Continued)

No	Author	Findings	Method/Analysis tools	Research
15	Cheng et al., 2016	There is a significant effect between integration and inter plant coordination.	Quantitative with International Manufacturing Strategy Survey (IMSS VI)	plants in a manufacturing network
16	Kang et al., 2018	The results also reveal that intra- and inter-organizational SMP is significantly and positively related to sustainability performance (i.e. economic, environmental and social performance) and serves as a complement to jointly improve environmental and social performance.	SEM	Manufacture in many country
17	Vanpoucke et al., 2017	This research shows that operational integration is necessary to capture the benefits of information exchange. In addition, the impact of using information technology is stronger for upstream integration.	PLS-SEM	Assembling Industry.
18	Huo et al., 2016	The study finds that organizational commitment is positively related to the three dimensions of SCI. Manager's multi-skilling and employee's multiskilling are positively related to internal integration. We also find several interactive effects. The results show that internal integration is related to customer and supplier integration and that internal and customer integration are related to competitive performance.	PLS-SEM and regression	manufacturers in 10 countries
19	Kaliani Sundram et al., 2016	The results are useful in integrating SCMPs and SCI on improving SCP.	Sobel test as well as a bootstrapping approach	electronics firms in Malaysia
20	Saleh & Roslin, 2015	The results indicate that commitment and socialization have become significant elements to facilitate the execution of SCI practices among firms in food processing industry.	Literature Review	Food Processing Industry
21	Ralston et al., 2015	This work studies how firms may align their internal and external supply chain integration strategies with customers and suppliers. The internal and external integration strategies affect the firm's ability to respond to customer demand, as well as operational and financial performance.	Literature Review-Structure Conduct Performance	Industrial organization economics literature
22	Mellat-Parast & Spillan, 2014	The results indicate that logistics/supply chain strategy is the main driver of logistics and supply chain integration and logistics decisions. Furthermore, the findings imply that logistics/ supply chain process integration is the most significant predictor of firm's competitive position	Structural equation modeling is used to determine the effect of two sets of logistics and supply chain integration practices	Manufacturing firms
23	Chin et al., 2014	The results help small business on how to improve their supply chain integrations.	Structural equation modeling methods	Malaysian small- and medium-sized manufacturers
24	Fosso Wamba, 2012	The importance of business process renovation and complementary investments during the adoption of RFID technology, in order to achieve high level of business value from the technology is investigated.	A multi-method approach	Retail supply chain
25	Droge et al., 2012	The results indicate that customer integration mediates the linkages from product modularity and process modularity to delivery performance, as well as mediating the relationship between process modularity and support performance. In contrast, supplier integration mediates the relationship between process modularity and delivery performance only.	Canonical correlation analysis and effects decomposition	Product Modular
26	Carvalho et al., 2012	Operational and economic performance measures are proposed to facilitate the monitoring of the influence of these practices on supply chain performance. The influence of the proposed agile and resilient practices on supply chain competitiveness is also examined in terms of time to market, product quality and customer service.	Literature Review	Analysis Journal
27	Koçoğlu et al., 2011	Findings of the study provide useful insights on how organizations should benefit from information sharing to improve their SCP.	SEM technique	Turkish Manufacturing Firm
28	Wong et al., 2013	The study indicates how exploration and exploitation of external and internal knowledge can be facilitated by internal and external integrations, and their complementary effects on product innovation, which was previously less understood.	Structural equation modeling methods	Thai automotive industry
29	Kwamega et al., 2018	SCMP relates positively to both financial and internal process performance. Also, it was discovered that SCI completely or partially mediates the effects of SCMP on the two variables of the firms performance, and this difference could be attributed to the different cultural settings.	Statistical Package for Social Sciences 22.0 version and LISREL 8.0 were used to test hypotheses	South African Journal of Business Management

Step 4: Analysis and Synthesis

Several studies to explain the benefits of supply chain integration include gaining competitive advantage, improving performance, providing efficiency in the supply chain by increasing flexibility in delivery times, responding to customer demands, eliminating the bullwhip-effect, reducing transaction costs and paying attention to information sharing. . Meanwhile, the purpose of integration in the supply chain according to (Droge et al., 2012) is to optimize supply chain activities both within the company and collaboration between suppliers and customers (Koçoğlu et al., 2011). The integration carried out with suppliers and customers at automotive companies in Thailand is crucial for the company because it is able to secure the components and spare parts needed so as to produce timely and reliable deliveries. In addition, integration is able to maintain company flexibility in product specifications, volume production, customization of selected products and product changes in order to compete with other companies (Wong et al., 2013).

Step 5: Reporting and Using Results

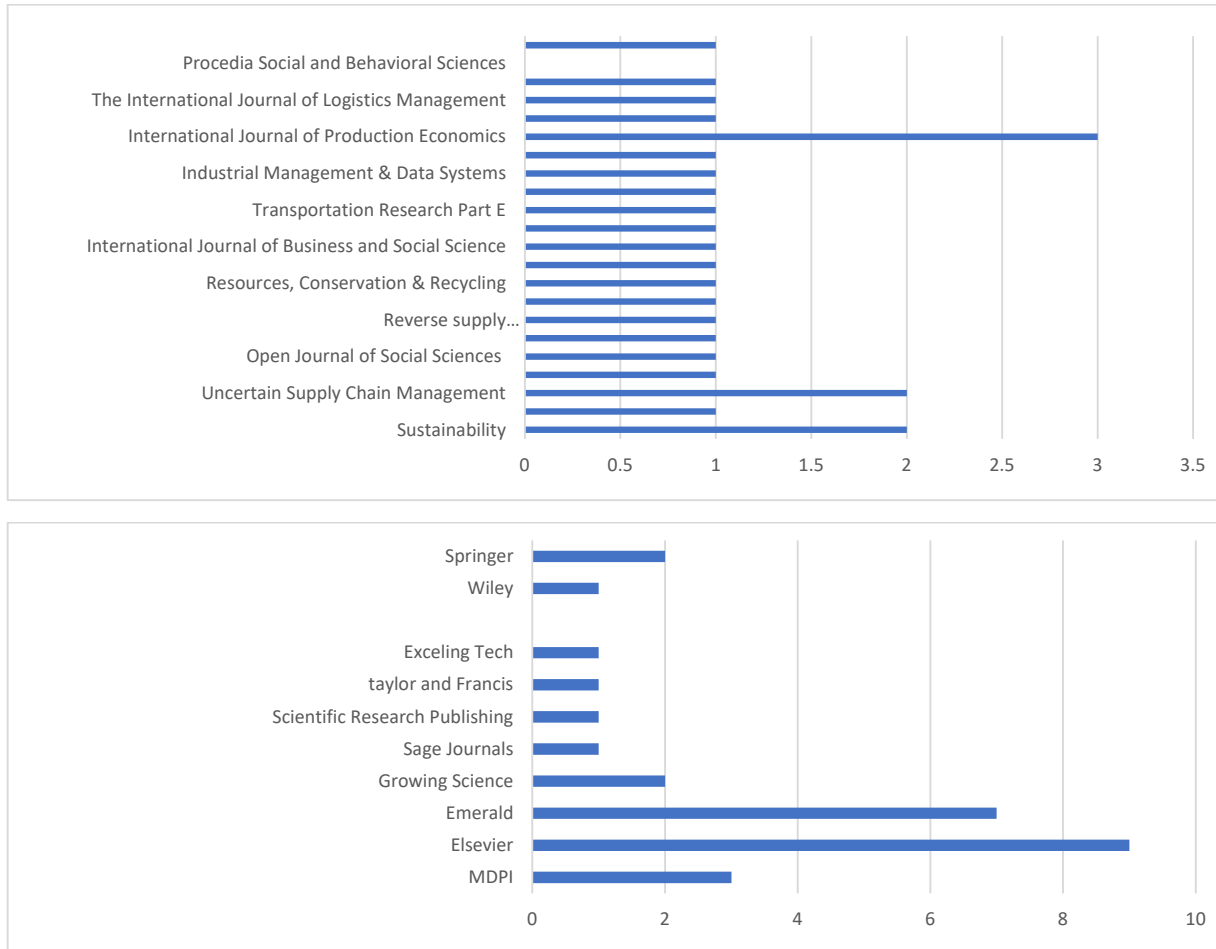


Fig. 3. Distribution of Articles and Publisher

Key findings

The horticultural commodity supply chain structure includes supply chain members, supply chain activities and supply chain flow patterns. Dimensions of supply chain integration consisting of supplier integration, internal integration and customer integration. In supplier integration, it concentrates more on providing food ingredients by minimizing waste from loss of food product yields and balancing the supply of food raw materials so that there is no excess food supply. Internal integration focuses on how the creation of added value from food products can be optimally provided to create optimal benefits from food. Meanwhile, customer integration focuses on product delivery on time and in the right quantity and quality so that food products sent to consumers can be consumed optimally.

Dimension of supply chain integration (Chen et al., 2017) is (1) characterized by efficient process, (2) Supply chain can

quickly adjust the products according to market demand, (3) Supply chain information flows smoothly in the supply chain, (4) Suppliers have satisfactory on-time delivery records and order fulfillment rates (Shakeel et al., 2018).

Dimensions of SCI include: (1) Supplier integration, (2) internal integration and (3) customer integration (Novais et al., 2019). SCI consist of (1) information flow, (2) integration partners, (3) Physical Flow Integration, (4) Financial Flow integration (Yu, et al., 2020) includes: (1) Supplier system integration, (2) customer system integration, (3) Supplier process integration, (4) customer process integration, (5) supplier and customer system integration.

Several studies have been accomplished to explain the benefits of supply chain integration include gaining competitive advantage, improving performance, providing efficiency in the supply chain by increasing flexibility in delivery times, responding to customer demands, eliminating the bullwhip-effect, reducing transaction costs and paying attention to information sharing. Meanwhile, the purpose of integration in the supply chain according to Droge et al. (2012) is to optimize supply chain activities both within the company and collaboration between suppliers and customers (Koçoğlu et al., 2011).

The integration carried out with suppliers and customers at automotive companies in Thailand is crucial for the company because it can secure the components and spare parts needed to produce timely and reliable deliveries. In addition, integration can maintain company flexibility in product specifications, volume production, customization of selected products and product changes to compete with other companies (Wong & Boon-Itt, 2008).

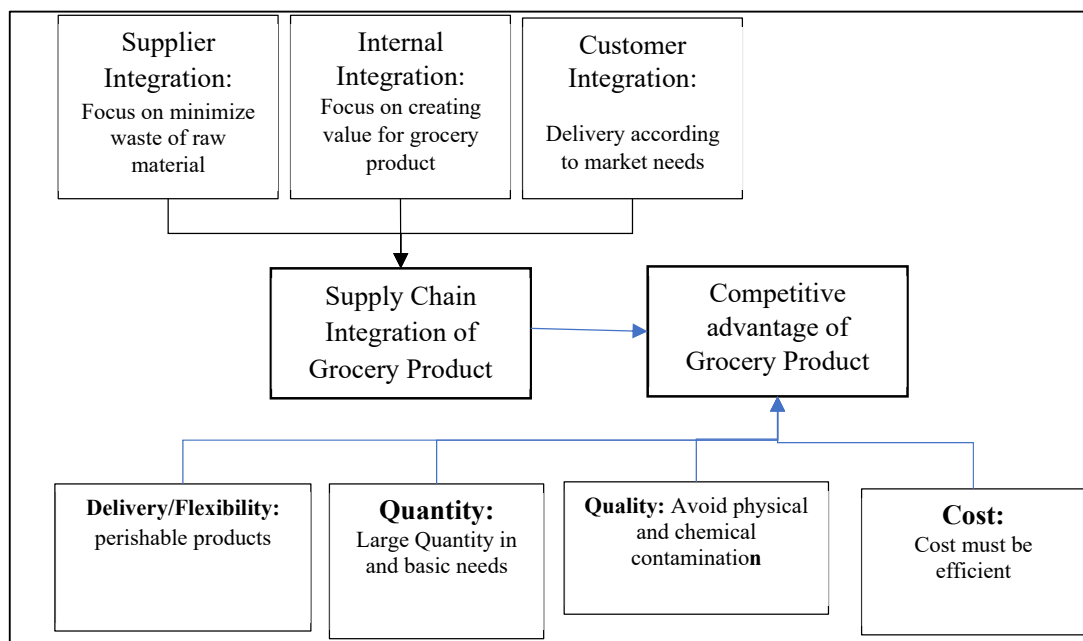


Fig. 4. Variables and Dimensions

4. Discussion

The supply chain integration pattern involves primary members, namely farmers, cooperatives, distributors and retailers. The first flow of organic vegetable commodities is that farmers as suppliers sell to cooperatives. Organic vegetables grown by farmers are products that will be harvested according to the schedule and products determined by the cooperative. The harvested products are then sold to the cooperative. Products from farmers are sorted and packaged by the cooperative properly so as not to damage the packaged organic vegetable products. The next process is that the products that have been sorted and packaged are stored in a storage room that has a refrigeration device. The product will then be distributed to the distributor using a pick-up car provided by the Cooperative. The distributor does not carry out the packaging and sorting process anymore. The next process the distributor will distribute to retailers. In the food commodity supply chain, there are several parties involved either directly, namely suppliers from organic horticultural farmers, then manufactures, namely cooperatives, distributors, then for retailers, namely Modern supermarkets and finally consumers. Parties that are not directly involved are packaging companies that supply manufacturing, namely . The horticultural product supply chain uses a retail storage distribution network type with customer pickup.

6. Conclusion

Supply Chain Integration provides a competitive advantage. building a strong supply chain will provide a competitive advantage along the supply chain network from upstream to downstream. Dimension of Supply chain integration to measure

the grocery industry can use supplier Integration, internal integration and customer integration. Variable competitive advantage in the grocery industry can use dimension: flexibility/ delivery, Quantity, Quality and Cost.

References

- Abbas, T. M., & Hussien, F. M. (2021). The effects of green supply chain management practices on firm performance: Empirical evidence from restaurants in Egypt. *Tourism and Hospitality Research*, 21(3), 358–373. <https://doi.org/10.1177/14673584211011717>
- Agrawal, S., & Singh, R. K. (2020). Outsourcing and reverse supply chain performance: a triple bottom line approach. *Benchmarking*, 28(4), 1146–1163. <https://doi.org/10.1108/BIJ-09-2020-0498>
- Al-kamel, A., Al-masbhi, G., & Chen, J. (2021). The Effect of Supply Chain Integration on Achieving Competitive Advantage in Service Industry. 510–525. <https://doi.org/10.4236/jss.2021.99037>
- Asamoah, D., Agyei-Owusu, B., Andoh-Baidoo, F. K., & Ayaburi, E. (2021). Inter-organizational systems use and supply chain performance: Mediating role of supply chain management capabilities. *International Journal of Information Management*, 58(June), 102195. <https://doi.org/10.1016/j.ijinfomgt.2020.102195>
- Carvalho, H., Azevedo, S. G., & Cruz-Machado, V. (2012). Agile and resilient approaches to supply chain management: Influence on performance and competitiveness. *Logistics Research*, 4(1–2), 49–62. <https://doi.org/10.1007/s12159-012-0064-2>
- Chen, C., Gu, T., Cai, Y., & Yang, Y. (2019). Impact of supply chain information sharing on performance of fashion enterprises: An empirical study using SEM. *Journal of Enterprise Information Management*, 32(6), 913–935. <https://doi.org/10.1108/JEIM-04-2019-0104>
- Chen, L., Zhao, X., Tang, O., Price, L., Zhang, S., & Zhu, W. (2017). Supply chain collaboration for sustainability: A literature review and future research agenda. *International Journal of Production Economics*, 194(April), 73–87. <https://doi.org/10.1016/j.ijpe.2017.04.005>
- Cheng, Y., Chaudhuri, A., & Farooq, S. (2016). Interplant coordination, supply chain integration, and operational performance of a plant in a manufacturing network: a mediation analysis. *Supply Chain Management: An International Journal*, 21(5), 550–568. <https://doi.org/10.1108/SCM-10-2015-0391>
- Chin, T. A., Hamid, A. B. A., Raslic, A., & Heng, L. H. (2014). The Impact of Supply Chain Integration on Operational Capability in Malaysian Manufacturers. *Procedia - Social and Behavioral Sciences*, 130, 257–265. <https://doi.org/10.1016/j.sbspro.2014.04.030>
- Denyer, D., & Tranfield, D. (2009). *Producing a systematic review*. In the Sage handbook of organizational research methods (pp. 671–689). Sage Publications Ltd.
- Dev, N. K., Shankar, R., & Qaiser, F. H. (2020). Industry 4.0 and circular economy: Operational excellence for sustainable reverse supply chain performance. *Resources, Conservation and Recycling*, 153(January 2019), 104583. <https://doi.org/10.1016/j.resconrec.2019.104583>
- Dreyer, H. C., Strandhagen, J. O., Hvolby, H. H., Romsdal, A., & Alfnes, E. (2016). Supply chain strategies for speciality foods: a Norwegian case study. *Production Planning & Control*, 27(11), 878–893. <https://doi.org/10.1080/09537287.2016.1156779>
- Droge, C., Vickery, S. K., & Jacobs, M. A. (2012). Does supply chain integration mediate the relationships between product/process strategy and service performance? An empirical study. *International Journal of Production Economics*, 137(2), 250–262. <https://doi.org/10.1016/j.ijpe.2012.02.005>
- Fosso Wamba, S. (2012). Achieving supply chain integration using RFID technology: The case of emerging intelligent B-to-B e-commerce processes in a living laboratory. *Business Process Management Journal*, 18(1), 58–81. <https://doi.org/10.1108/14637151211215019>
- Giménez, C., & Ventura, E. (2003). Supply Chain Management as a Competitive Advantage in the Spanish Grocery Sector. *The International Journal of Logistics Management*, 14(1), 77–88. <https://doi.org/10.1108/09574090310806558>
- Gunasekaran, A., Subramanian, N., & Papadopoulos, T. (2017). Information technology for competitive advantage within logistics and supply chains: A review. *Transportation Research Part E: Logistics and Transportation Review*, 99, 14–33. <https://doi.org/10.1016/j.tre.2016.12.008>
- Huo, B., Haq, M. Z. U., & Gu, M. (2021). The impact of information sharing on supply chain learning and flexibility performance. *International Journal of Production Research*, 59(5), 1411–1434. <https://doi.org/10.1080/00207543.2020.1824082>
- Huo, B., Ye, Y., Zhao, X., & Shou, Y. (2016). The impact of human capital on supply chain integration and competitive performance. *International Journal of Production Economics*, 178, 132–143. <https://doi.org/10.1016/j.ijpe.2016.05.009>
- Jamaludin, M. (2021). The influence of supply chain management on competitive advantage and company performance. *Uncertain Supply Chain Management*, 9(3), 696–704. <https://doi.org/10.5267/j.uscm.2021.4.009>
- Kaliani Sundram, V. P., Chandran, V. G. R., & Awais Bhatti, M. (2016). Supply chain practices and performance: the indirect effects of supply chain integration. *Benchmarking*, 23(6), 1445–1471. <https://doi.org/10.1108/BIJ-03-2015-0023>
- Kang, M., Yang, M. G. (Mark), Park, Y., & Huo, B. (2018). Supply chain integration and its impact on sustainability. *Industrial Management & Data Systems*, 118(9), 1749–1765. <https://doi.org/10.1108/IMDS-01-2018-0004>
- Kang, S., & Na, Y. K. (2020). Effects of strategy characteristics for sustainable competitive advantage in sharing economy businesses on creating shared value and performance. *Sustainability (Switzerland)*, 12(4). <https://doi.org/10.3390/su12041397>

- Koçoğlu, I., Imamoğlu, S. Z., Ince, H., & Keskin, H. (2011). The effect of supply chain integration on information sharing: Enhancing the supply chain performance. *Procedia - Social and Behavioral Sciences*, 24, 1630–1649. <https://doi.org/10.1016/j.sbspro.2011.09.016>
- Kumar, V., Chibuzo, E. N., Garza-Reyes, J. A., Kumari, A., Rocha-Lona, L., & Lopez-Torres, G. C. (2017). The Impact of Supply Chain Integration on Performance: Evidence from the UK Food Sector. *Procedia Manufacturing*, 11(June), 814–821. <https://doi.org/10.1016/j.promfg.2017.07.183>
- Kwamega, M., Li, D., & Abrokwah, E. (2018). Supply chain management practices and agribusiness firms' performance: Mediating role of supply chain integration. *South African Journal of Business Management*, 49(1), 1–11. <https://doi.org/10.4102/sajbm.v49i1.317>
- Lechner, C., & Gudmundsson, S. V. (2014). Entrepreneurial orientation, firm strategy and small firm performance. *International Small Business Journal*, 32(1), 36–60. <https://doi.org/10.1177/0266242612455034>
- Lii, P., & Kuo, F. (2016). Int . J . Production Economics Innovation-oriented supply chain integration for combined competitiveness and firm performance. *International Journal of Production Economics*, 174, 142–155. <https://doi.org/10.1016/j.ijpe.2016.01.018>
- Mackelprang, A. W., Robinson, J. L., Bernardes, E., & Webb, G. S. (2014). The relationship between strategic supply chain integration and performance: A meta-analytic evaluation and implications for supply chain management research. *Journal of Business Logistics*, 35(1), 71–96. <https://doi.org/10.1111/jbl.12023>
- Mahmood Hosseini, S., Azizi, S., & Sheikhi, N. (2012). An Investigation on the Effect of Supply Chain Integration on Competitive Capability: An Empirical Analysis of Iranian Food Industry. *International Journal of Business and Management*, 7(5), 73–90. <https://doi.org/10.5539/ijbm.v7n5p73>
- Mellat-Parast, M., & E. Spillan, J. (2014). Logistics and supply chain process integration as a source of competitive advantage. *The International Journal of Logistics Management*, 25(2), 289–314. <https://doi.org/10.1108/IJLM-07-2012-0066>
- Novais, L., Manuel, J., & Ortiz-bas, Á. (2019). Computers & Industrial Engineering A systematic literature review of cloud computing use in supply chain integration. *Computers & Industrial Engineering*, 129(October 2017), 296–314. <https://doi.org/10.1016/j.cie.2019.01.056>
- Palmatier, R. W., Houston, M. B., & Hulland, J. (2018). Review articles: purpose, process, and structure. *Journal of the Academy of Marketing Science*, 46(1). <https://doi.org/10.1007/s11747-017-0563-4>
- Porter, E. M. (2011). *Competitive Advantage of Nations: Creating and Sustaining Superior Performance*. The Free Press.
- Porter, M. E. (1998). *Competitive Advantage: Creating and Sustaining Superior Performance*. Free Press.
- Prajogo, D., & Olhager, J. (2012). Supply chain integration and performance: The effects of long-term relationships, information technology and sharing, and logistics integration. *International Journal of Production Economics*, 135(1), 514–522. <https://doi.org/10.1016/j.ijpe.2011.09.001>
- Ralston, P. M., Blackhurst, J., Cantor, D. E., & Crum, M. R. (2015). A Structure-conduct-performance perspective of how strategic supply chain integration affects firm performance. *Journal of Supply Chain Management*, 51(2), 47–64. <https://doi.org/10.1111/jscm.12064>
- Ratnamurni, E. D., & Yun, Y. (2020). Competitive Advantage Model Through Integration of Supply Chains and Information Technology in SMEs in Cimahi City Competitive Advantage Model Through Integration of Supply Chains and Information Technology in SMEs in Cimahi City. April. <https://doi.org/10.36478/ibm.2020.116.122>
- Rudyanto, Soemarni, L., Pramono, R., & Purwanto, A. (2020). The influence of antecedents of supply chain integration on company performance. *Uncertain Supply Chain Management*, 8(4), 865–874. <https://doi.org/10.5267/j.uscm.2020.5.006>
- Saleh, Z. M., & Roslin, R. M. (2015). Supply Chain Integration Strategy: A Conceptual Model of Supply Chain Relational Capital Enabler in the Malaysian Food Processing Industry. *Procedia - Social and Behavioral Sciences*, 172, 585–590. <https://doi.org/10.1016/j.sbspro.2015.01.406>
- Shakeel, M., Jajja, S., Ali, K., & Farooq, S. (2018). International Journal of Production Economics Impact of supply chain risk on agility performance : Mediating role of supply chain integration. *International Journal of Production Economics*, 205(September 2017), 118–138. <https://doi.org/10.1016/j.ijpe.2018.08.032>
- Sukati, I., Sanyal, S., & Ba Awaain, A. M. (2020). Supply chain management practices and organizational performance: An investigation from service industry. *International Journal of Supply Chain Management*, 9(3), 207–213.
- Tarigan, Z. J. H., Siagian, H., & Jie, F. (2021). Impact of internal integration, supply chain partnership, supply chain agility, and supply chain resilience on sustainable advantage. *Sustainability (Switzerland)*, 13(10). <https://doi.org/10.3390/su13105460>
- Thongrawd, C., Ramanust, S., Narakorn, P., & Seesupan, T. (2020). Exploring the mediating role of supply chain flexibility and supply chain agility between supplier partnership, customer relationship management and competitive advantage. *International Journal of Supply Chain Management*, 9(2), 435–443.
- Usman, A., Azis, Y., Harsanto, B., & Azis, A. M. (2021). Airport service quality dimension and measurement: a systematic literature review and future research agenda. *International Journal of Quality and Reliability Management*. <https://doi.org/10.1108/IJQRM-07-2021-0198>
- Vanpoucke, E., Vereecke, A., & Muylle, S. (2017). Leveraging the impact of supply chain integration through information technology. *International Journal of Operations & Production Management*, 37(4). <https://doi.org/http://dx.doi.org/10.1108/IJOPM-07-2015-0441>
- Wong, C. W. Y., Wong, C. Y., & Boon-Itt, S. (2013). The combined effects of internal and external supply chain integration

- on product innovation. *International Journal of Production Economics*, 146(2), 566–574. <https://doi.org/10.1016/j.ijpe.2013.08.004>
- Wong, C. Y., & Boon-Itt, S. (2008). The influence of institutional norms and environmental uncertainty on supply chain integration in the Thai automotive industry. *International Journal of Production Economics*, 115(2), 400–410. <https://doi.org/10.1016/j.ijpe.2008.05.012>
- Wu, I. L., Chuang, C. H., & Hsu, C. H. (2014). Information sharing and collaborative behaviors in enabling supply chain performance: A social exchange perspective. *International Journal of Production Economics*, 148, 122–132. <https://doi.org/10.1016/j.ijpe.2013.09.016>
- Yang, Hong, Chen, W., & Hao, Y. fei. (2020). Supply chain partnership, inter-organizational knowledge trading and enterprise innovation performance: the theoretical and empirical research in project-based supply chain. *Soft Computing*, 24(9), 6433–6444. <https://doi.org/10.1007/s00500-019-04548-5>
- Yang, Hongxiong, & Wang, Y. (2021). Research on the path of manufacturing enterprises supply chain integration from the configuration perspective. *Processes*, 9(10). <https://doi.org/10.3390/pr9101746>
- Zhang, C., Yu, W., & Wang, C. (2015). A comprehensive model for supply chain integration. *Benchmarking: An International Journal*, 22(6). <https://doi.org/10.1108/BIJ-05-2013-0060>



© 2020 by the authors; licensee Growing Science, Canada. This is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC-BY) license (<http://creativecommons.org/licenses/by/4.0/>).