

The Significance of Integration for Business Operations in Logistics and Supply Chain Management

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ABSTRACT

This conceptual paper connects the logistical functions as they relate to important business processes to highlight the significance of integration in supply chain management (SCM). Business processes are frequently developed at the strategic level but are never precisely identified in SCM or logistics. Logistics and SCM are not directly related to demand management, customer relationship management (CRM), supplier relationship management (SRM), and customer service management (CSM). This essay identifies the literature that has discussed the value of integration and how business processes can be useful when carrying out important logistics tasks in the context of supply chains.

Keywords: Logistics, customer relationship management, supplier relationship management.

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INTRODUCTION

The term “logistician,” which was used historically to describe the chef de l’ogis’s job of providing accommodations for the troops under Napoleon Bonaparte, is where the word logistic was formed (Van Creveld, 2004). However, logistics as a profession has developed, and in the realm of business, logistics refers to the control of the flow of goods or services from production to consumption. To transmit commodities, services, and related information, logistics are involved in a wide range of crucial tasks, according to Bowersox (2007). In the context of supply chain management (SCM), this is where the significance of logistics is further established because the flow of activities implies that some level of integration between activities is required.

According to Jain *et al.* (2010), the supply chain is a network of links that is used to manage business operations or activities related to coordinating. The network includes numerous businesses that produce and distribute goods of various shapes, sizes, and varieties. These networks’ tasks include converting raw resources into completed goods and transporting those goods to the final consumers via efficient and effective SCM. As evidenced by the supply chain’s reactivity, an effective SCM is focused on creating a durable competitive edge in today’s congested market (Aitken, Christopher & Towill, 2002). Nowadays, most enterprises compete as supply chains rather than standalone

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businesses. This is consistent with the explanation of supply chains provided by Mentzer *et al.* (2001) and Esper *et al.* (2010) because all businesses participate in the upstream and downstream flow of goods, services, money, and information. Businesses no longer work in silos, and their strategic direction should not be entirely personal. The importance of having a thorough knowledge and understanding of the configuration of the supply chain network topology is emphasized by Lambert (2004). The following three elements make up a company’s network structure: the supply chain’s constituents, the network’s structural parameters, and the various process links that can be found inside.

This demonstrates the value of integration because supply chain activities that include logistics will affect the supply chain’s overall effectiveness. This is consistent with some academic studies that define

logistics as long-term, consensual partnerships between two or more independent supply chain participants (Cruijessen *et al.*, 2007; Schmoltzi & Wallenburg, 2012). According to (Balcik *et al.* 2010), (Maon *et al.* 2009), and (van Wassenhove 2006), the significance of supply chain integration is well established, particularly when linking the concept of humanitarian logistics for the better achievement of goals. A more robust SCM may result from improved member coordination and collaboration within the larger supply chain network. From a practical standpoint, integration is still debatable because it could be challenging for chain members to specifically carry out certain activities because of integration's complexity. According to Zurita (2017), Malaysian food processing industries are not integrated, which contributes to integration challenges. However, this research illustrates that integration is still a crucial element of SCM despite the difficulties.

A business organization can no longer function and survive on its own in today's highly competitive climate (van Heck & Vervest, 2007; Tatarynowicz *et al.*, 2015). Because of globalization, no company can be a closed system. In terms of supply chains, the logistical tasks required by SCM necessitate collaboration to assure efficient supply chains. One of the fundamental components of SCM is logistics, and a firm's level of performance may be impacted by how effectively it uses logistics (Bowersox *et al.*, 2013). The scope of logistics broadens to the business processes level rather than only the functional level due to the growing complexity of supplying to businesses and shipping out items in an increasingly worldwide supply chain. Those working in logistics are aware that supply chain operations tend to grow as they take on more and more SCM-related duties (Stank *et al.*, 2005). As a result, a wide range of logistics activities increasingly take important SCM business processes into account, and logistics directly impacts the efficiency and effectiveness of these processes. Therefore, it is crucial to underline the significance of supply chain integration to comprehend the key implications.

Logistics and the Value of Supply Chain Integration

It has been shown that the current collaborative, agile environment for corporate organizations emphasizes the benefits of synergy more than individualized goals (Kamal & Irani 2014, Gupta & Ramesh 2015, Danese & Romano 2011). For the supply chain to be successful, all parties involved must work together closely. SCM, following (Ballou, 2007), is the cornerstone for

businesses to become more competitive. Today's reality is that supply chain competition, rather than company against company, is used to measure true competitiveness (Simon *et al.*, 2015). The integration of business processes, activities, and organizations within and between companies indirectly contributes to the success of supply chain integration (Qi & Chu, 2009). This will subsequently strengthen and improve external ties with suppliers and clients. As a result, supply chain management is currently considered a source of profit contribution.

Coordination of Logistics Operations With Corporate Business Strategies

According to (Marchesini and Alcantara 2016), logistical operations should be integrated into the process to help implement significant plans. Logistics must be in line with and compatible with corporate strategic objectives. It is widely understood that logistics capabilities are the most significant contributions to overall corporate strategy and performance. In fact, by developing differentiated customer value, firms may become more competitive by understanding and aligning logistics. Therefore, it's crucial to ensure that the company's strategic directions and logistics capabilities are compatible with success (Morash *et al.*, 1996; Yazdanparast *et al.*, 2010).

Orientation Toward the Supply Chain and Business Process

Before the adoption of supply chain management, there must first be a supply chain orientation. Supply chain orientation is the recognition of the relationship between the systematic and strategic implications of the activities involved in managing different streams of a supply chain, both upstream and downstream of the focal company, according to (Mentzer *et al.* 2001) and (Esper *et al.* 2010). All supply chain member organizations should focus on the supply chain when implementing strategic and functional SCM.

The Implications of Customer Value and Logistics

In the end, logistics in supply chains necessitate that client needs be satisfied. Logistics activities can produce customer value through effectiveness, efficiency, and/or differentiation (Fugate, Metzger & Stank, 2010; Yazdanparast *et al.*, 2010). This implies that efficient logistics result in better goods and services that match the value buyers envision. Effectiveness is the capacity to meet anticipated targets for logistical objectives such

as meeting customer expectations for stock availability, accelerating the ordering process, and giving product warranties. As a result, the quality of logistics services is related to how well the organization can meet client expectations, as stated in the Product and Service Agreements (PSAs) (Fugate *et al.*, 2010).

The usage of resources must be optimized for logistical efficiency to occur. In addition, differentiation is the capacity to offer clients the most unique value while also getting an advantage over other businesses. Therefore, differentiation is the capacity to distinguish oneself from rivals by providing clients with higher value (Stahl & Bounds, 1991; Fugate *et al.* 2010).

Ballou (2007) asserts that the goal of logistics in the context of supply chain management is to deliver better quality and more affordable customer service. Logistics management significantly affects the efficacy and efficiency of business operations to satisfy customer requirements since logistics services are focused on recognizing and meeting the logistic demands of customers (Kohn, McGinnis & Kara, 2011). This is the thesis of this study because business processes are now more heavily weighted in the management of supply chains, changing how logistics is currently viewed. Integration is also required since, in the larger context of SCM, the relationship between business processes and logistics cannot be achieved without it.

DISCUSSION

The significance of comprehending the idea of integration is related to what has been covered in this discussion. Integration has been proven to be crucial in SCM, particularly for value generation and enhancing business performance, as shown by Frohlich and Westbrook (2001) and Ataseven and Nair (2017). They concluded that greater supplier and customer integration inside a focal firm will result in improved performance. The significance of integration in supply chains indicates how well members of the network perform their roles as they try to get products and services from the place of origin to the final consumers. However, relatively few studies have connected supply chain integration to business operations (Lambert *et al.*, 2008). Therefore, it is necessary to determine the value of integration in SCM in the context of important business operations.

However, concerns still need to be resolved in the real world. Because of how intricately the supply chain works, integration is never a simple process. It can be challenging to guarantee complete integration in the

context of various supply chain ecosystems. Zurita (2017) discovers in her research that the adoption of supply chain integration is facilitated by the use of customer focus, a new dimension of a cognitive construct based on an understanding of social capital. This kind of comprehension is required to further emphasize the significance of integration in supply chains. This conceptual paper fundamentally lays out the prospect of enhancing integration in SCM into strategic areas of important business processes, even though it only gave a brief evaluation of research on how integration might be further extended into business processes. Operations are simply one aspect of logistics and should include strategic aspects.

On a more pragmatic note, according to Msimangira and Venkatraman (2014), supply chain management integration cannot be accomplished without incorporating the SCM idea into the organizational culture. Given that SCM requires both intra- and inter-organizational capabilities, achieving this goal may not be simple. Additionally, securing the cooperation of all parties involved may be quite difficult. However, according to Bagchi and Chun (2005), supply chain integration affects operational performance, and it has also been demonstrated that the degree of integration affects a firm's costs and efficiency. Researchers and practitioners have also been particularly interested in the significance of supply chain integration for enhancing business performance as a way to achieve corporate sustainability (Ou *et al.*, 2016).

2011; Basnet & Wisner, 2012; Flynn, *et al.*, 2010). Because sustainability is a determining factor in addressing a firm's longevity, this further emphasizes the necessity to focus on supply chain integration as a strategic facet for the long-term survival of organizations. Strategic business process implementation necessitates a comprehensive planning approach, including crucial SCM elements. Therefore, creating a holistic SCM framework that considers integration, business processes, and logistics requirements can bring enterprises closer to performance efficiency.

CONCLUSION

The significance of dealing with integration in the context of SCM is discussed in this conceptual study. But more crucially, this article discusses the connection between strategic business processes and logistics as a component of supply chain operations. A framework that takes into account supply chain integration, logistical operations, and important strategic processes



resulting in effective performance in supply chains needs to further undertake empirical evaluations of the pertinent dimensions.

REFERENCES

- Aitken, J., Christopher, M., & Towill, D. (2002). Understanding, implementing and exploiting agility and leanness. *International journal of Logistics*, 5(1), 59-74.
- Azmi, I., Hamid, N. A., Hussin, M. N. M., & Ibrahim, N. I. (2017). Logistics and supply chain management: The importance of integration for business processes. *Journal of emerging economies and Islamic Research*, 5(4), 73-80.
- Ataseven, C., & Nair, A. (2017). Assessment of supply chain integration and performance relationships: A meta-analytic investigation of the literature. *International journal of production economics*, 185, 252-265.
- Bagchi, P. K., & Virum, H. (1998). Logistical alliances: trends and prospects in integrated Europe. *Journal of Business logistics*, 19(1), 191.
- Bagchi, P. K., Chun Ha, B., Skjoett-Larsen, T., & Boege Soerensen, L. (2005). Supply chain integration: a European survey. *The international journal of logistics management*, 16(2), 275-294.
- Ballou, R. H. (2007). The evolution and future of logistics and supply chain management. *European business review*.
- Balcik, B., Beamon, B. M., Krejci, C. C., Muramatsu, K. M., & Ramirez, M. (2010). Coordination in humanitarian relief chains: Practices, challenges and opportunities. *International Journal of production economics*, 126(1), 22-34.
- Basnet, C., & Wisner, J. (2014). Nurturing internal supply chain integration. *Operations and Supply Chain Management: An International Journal*, 5(1), 27-41.
- Bowersox, D. J., Closs, D. J., & Helferich, O. K. (1996). *Logistical management* (Vol. 6). New York: McGraw-Hill.
- Bowersox, D.J., Closs, D. J., Cooper, M. B. & Bowersox, J. C. (2013), *Supply Chain Logistics Management*, 4th ed., McGraw-Hill Higher Education, NewYork, NY.
- Bowersox, D. J. (2007). *Supply chain logistics management*, McGraw-Hill Higher Education, New York, NY.
- Morash, E. A., Droge, C. L., & Vickery, S. K. (1996). Strategic logistics capabilities for competitive advantage and firm success. *Journal of business Logistics*, 17(1), 1.
- Bowersox, D.J., Closs, D.J. & Cooper, M.B. (2007), *Supply Chain Logistics Management*, McGraw-Hill, Boston, MA.
- Christopher, M. (1992). *Logistics, the strategic Issues*. London: Chapman and Hall
- Cruijessen, F., Dullaert, W. & Fleuren, H. (2007) Horizontal cooperation in transport and logistics: a literature review. *Transportation Journal*, 46(3), 22-39.
- Esper, T. L., Defee, C. C., & Mentzer, J. T. (2010). A framework of supply chain orientation. *The international journal of logistics management*.
- Flynn, B. B., Huo, B., & Zhao, X. (2010). The impact of supply chain integration on performance: A contingency and configuration approach. *Journal of operations management*, 28(1), 58-71.
- Frohlich, M. T., & Westbrook, R. (2001). Arcs of integration: an international study of supply chain strategies. *Journal of Operations Management*, 19(2), 185-200.
- Fugate, B. S., Mentzer, J.T., & Stank, T. P. (2010), Logistics performance: efficiency, effectiveness, and differentiation. *Journal of Business Logistics*, 31(1), 43-62.
- Gentry, J.J. (1996). The role of carriers in buyer-supplier strategic partnerships: a supply chain management approach. *Journal of Business Logistics*, 17 (2), 35-55.
- Ghoshal, S., & Bartlett, C. A. (1990). The multinational corporation as an interorganizational network. *Academy of management review*, 15(4), 603-626.
- Gupta, U., & Ramesh, A. (2015). Analyzing the barriers of health care supply chain in India: the contribution and interaction of factors. *Procedia-Social and Behavioral Sciences*, 189, 217-228.
- Jain, J. (2010). Dangayach, GS-Agarwal, G.-Banerjee, S. (2010). „Supply Chain Management: Literature Review and Some Issues”. *Journal of Studies on Manufacturing*, 1(1), 11-25.
- Kohn, J. W., McGinnis, M. A., & Kara, A. (2011). A structural equation model assessment of logistics strategy. *The International Journal of Logistics Management*.
- Mustafa Kamal, M., & Irani, Z. (2014). Analysing supply chain integration through a systematic literature review: a normative perspective. *Supply Chain Management: An International Journal*, 19(5/6), 523-557.
- Lambert, D. M. (2004). The eight essential supply chain management processes. *SUPPLY CHAIN MANAGEMENT REVIEW*, V. 8, NO. 6 (SEPT. 2004), P. 18-26; *ILL*, 8(6).
- Lambert, D. M. (2008). Supply chain management: processes, partnerships, performance. *Supply Chain Management Inst.*
- Nalluri, S. K., & Parasaram, V. K. B. (2015). Automating Software Builds with Jenkins: Design Patterns and Failure Handling. *International Journal of Technology, Management and Humanities*, 1(01), 16-33. <https://doi.org/10.21590/ijtmh.01.02.03>
- Marchesini, M. M. P., & Alcântara, R. L. C. (2016). Logistics activities in supply chain business process: A conceptual framework to guide their implementation. *The International Journal of Logistics Management*, 27(1), 6-30.
- Maon, F., Lindgreen, A., & Vanhamme, J. (2009). Developing supply chains in disaster relief operations through cross-sector socially oriented collaborations: A theoretical model. *Supply chain management: an international journal*, 14(2), 149-164.
- Mentzer, J. T., DeWitt, W., Keebler, J. S., Min, S., Nix, N. W., Smith, C. D., & Zacharia, Z. G. (2001). Defining supply chain management. *Journal of Business logistics*, 22(2), 1-25.