

SUPPLY CHAIN MANAGEMENT AND LOGISTICS: THE SIGNIFICANCE OF INTEGRATION FOR CORPORATE OPERATIONS

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ABSTRACT

By connecting the logistical tasks as they relate to important business processes, this conceptual paper highlights the significance of integration in supply chain management (SCM). Business processes are frequently created at the strategic level but are never accurately defined in SCM or logistics. Logistics and supply chain management (SCM) are not directly related to strategic business operations like demand management, customer relationship management (CRM), supplier relationship management (SRM), and customer service management (CSM). The research that highlights the value of integration and the ways in which business processes can be pertinent to the implementation of crucial logistics tasks in the context of the supply chain is identified in this study.

1. INTRODUCTION

According to Van Creveld (2004), the word logistic was originally derived from the word "logistician," which referred to the chef de l'ogis's job of locating lodging for the troops during Napoleon Bonaparte's reign. However, the practice of logistics has changed over time, and in the commercial sector, it currently refers to the control of the movement of goods or services from their site of origin to their point of consumption. Bowersox (2007) asserts that logistics is involved in a variety of significant tasks that facilitate the movement of products, services, and associated data. The flow of activities implies that there must be some degree of integration across activities, which is where the significance of logistics in the context of supply chain management (SCM) is further established.

Jain et al. (2010) define the supply chain as the management of business processes or activities related to coordination, and the supply chain network has links. The networks are made up of several companies of various shapes, sizes, and product types that manufacture and distribute goods, and their functions include converting raw materials into finished goods and delivering those goods to end users through effective supply chain management (SCM). Because of the competitive market of today, effective SCM is the key to creating a sustainable competitive edge, as evidenced by the supply chain's responsiveness (Aitken, Christopher & Towill, 2002).

In accordance with Mentzer et al. (2001) and Esper et al. (2010), the majority of businesses today compete as supply chains rather than as independent businesses because all businesses are involved in the upstream and downstream flows of goods, services, finances, and information; individual businesses no longer operate in isolation, and their strategic orientation should not be wholly individualistic. Lambert (2004) highlights the importance of having a thorough understanding of how the supply chain network structure is configured. The three main components of a company's network structure are:

- The supply chain's participants
- The network's structural dimensions
- The various kinds of supply chain process linkages

This demonstrates the significance of integration since logistics' involvement in supply chain operations will affect the chain's overall efficacy. This is in line with a number of studies that define logistics as voluntary, long-term connections between two or more independent supply chain participants (Crujessen et al., 2007; Schmoltzi & Wallenburg, 2012). Balcik et al. (2010), Maon et al. (2009), and van Waghenvove (2006) have all demonstrated the significance of supply chain integration, particularly when it comes to connecting the concept of humanitarian logistics for improved goal achievement. In fact, a more robust supply chain management system could result from improved member coordination and collaboration within the larger network. Nevertheless, from a practical standpoint, integration remains doubtful because its complexity may make it difficult for chain members to explicitly carry out particular tasks. According to Zurita (2017), Malaysian food processing industries do not integrate, which results in integration challenges. However, this study demonstrates that integration remains a crucial element of SCM in spite of its complexity.

2. LITERATURE REVIEW

A business organization can no longer function and endure on its own in the fiercely competitive world of today (van Heck & Vervest, 2007; Tatarynowicz et al, 2015). No organization can be a closed system due to globalization, and supply chains require cooperation for logistical tasks that are part of supply chain management (SCM). One of the most important components of supply chain management is logistics, and a company's degree of success may be impacted by how well it functions (Bowersox et al., 2013). The scope of logistics expands beyond the functional level to the business processes level due to the growing complexity of shipping out items and serving businesses in an increasingly worldwide supply chain. Logistics professionals are aware that supply chain operations have a propensity to grow and are involved in a wide range of SCM tasks and duties (Stank et al., 2005). Because of this, the scope of logistics operations increasingly takes into account important SCM business processes, and logistics has a direct impact on the efficacy and efficiency of these processes. Therefore, in order to comprehend the fundamental ramifications, the significance of supply chain integration needs to be underlined even more.

Logistics and the Importance of Integration in Supply Chain

It is well known that today's competitive, flexible business climate necessitates collaboration amongst firms and places greater emphasis on the benefits of synergy than on individualized goals (Kamal & Irani 2014, Gupta & Ramesh 2015, Danese & Romano 2011). To succeed, all parties involved in the supply chain must work together at the highest level. SCM serves as the cornerstone for businesses to become more competitive, claims Ballou (2007). In actuality, supply chain against supply chain rather than company against firm is how true competitiveness is assessed in today's practice (Simon et al., 2015). The integration of logistics, business processes or activities, and companies—both inside and between companies—is an indirect factor in supply chain integration success (Qi & Chu, 2009). As a result, external relationships with suppliers and customers will be strengthened and improved. As a result, supply chain planning is currently viewed as a way to increase profits.

The various tasks carried out in organizational procedures are the greatest way to observe the advantages of logistics in supply chains. According to numerous publications, Table 1 lists the logistical tasks that are a part of various processes. Given that supply chains may benefit from logistics, it is important to pinpoint the critical procedures where logistical operations are carried out. This is the point at which businesses' strategic orientations and SCM are intimately related.

Table 1 Linking business procedures to logistics operations

Process	Process	Process
Customer Relationship Management (CRM)	<p>Give a thorough explanation of the company's present logistical expenses and capabilities.</p> <p>2. Analyze the logistics using the SWOT method.</p> <p>Costs and capabilities include opportunities, risks, vulnerabilities, and strengths.</p> <p>3. Determine the value that the company's logistics services provide.</p>	<ul style="list-style-type: none"> ● Costs associated with logistics are meticulously recorded. ● Every important client and customer segment's cost-to-serve is determined. ● Logistics skills are converted into certain deliverables. ● To compete, top management is aware of and makes use of logistics capabilities. ● Top management is aware of the logistics advantages and disadvantages of rivals.
Supplier Relationship Management (SRM)	<p>Describe the expenses associated with supply logistics.</p> <p>Describe the logistics service the supplier will offer and its performance metrics.</p>	<ul style="list-style-type: none"> ● Management is aware of how logistics services add value and convey this to clients. ● When calculating the total cost of ownership of bought commodities, logistics expenses are taken into account. ● Based on supplier segmentation, supplier PSAs take logistics into account.

Customer Service Management	<ol style="list-style-type: none"> 1. Establish performance metrics and track the effectiveness of the various tiers of logistical services provided to clients. 2. Establish protocols for reacting suitably to every event (failures, modifications) in light of the logistics capabilities currently in place and assist the business in recovering from customer service setbacks. 	<ul style="list-style-type: none"> ● Failures connected to logistics can be promptly identified and fixed. ● Recovering from possible service breakdowns is accomplished through logistics skills.
Demand Management	<ol style="list-style-type: none"> 1. Describe the requirements and limitations for logistical data in order to estimate demand. 2. Determine possible locations where logistics operations could be interrupted. 3. Determine the expenses of logistics and examine the effects of demand variability on logistics. 4. Look for ways to increase the flexibility of the logistics system. 	<ul style="list-style-type: none"> ● In terms of timeliness and level of detail, covering time horizon, products, and geographical locations, the forecasting process meets the logistics needs. □ ● Information and capabilities related to logistics are part of the synchronized (S&OP) process.

The advantages of logistics are discussed in Table 1, along with how the operations might be incorporated into businesses' operational procedures. Lambert et al. (2008) describe the typical logistics-related tasks that are essential to many corporate operations, including demand management, supplier relationship management, customer relationship management, and customer relationship management (CRM, SRM, and CSM). These are just a handful of the crucial organizational procedures; there are many more that are connected to logistics-related tasks. According to Lambert et al. (2008), these include order fulfillment, manufacturing flow management, product development and commercialization, and returns management.

Furthermore, a logistics organizational development cycle model was presented by Bowersox and Closs (1996) and Bowersox et al. (2013), emphasizing that the process-oriented structure is the most advanced kind of structure. These scholars contend that logistics both contributes to and is a process, such as the creation of new products, the processing and fulfillment of consumer orders, and order delivery.

As a result, logistics operations can be carried out in supply chain tasks and work in tandem with other business processes.

Logistics operations in line with corporate business strategies

According to Marchesini and Alcantara (2016), logistical operations ought to be incorporated into the process to aid in the execution of key strategies. Logistics and corporate strategic goals must be complementary and in line. It is often known that logistics capabilities make the biggest contributions to overall business strategy and performance. In actuality, companies can increase their competitiveness by generating unique client value through logistical comprehension and alignment. Thus, it is crucial to make sure that the company's strategic directions and logistics capabilities complement each other in order to achieve success (Morash et al, 1996; Yazdanparast et al, 2010).

Focus on the Supply Chain and Business Procedures

The deployment of supply chain management is preceded by supply chain orientation. Supply chain orientation, according to Mentzer et al. (2001) and Esper et al. (2010), is the recognition of the connection between the strategic and methodical consequences of the activities engaged in managing different supply chain streams, both upstream and downstream of the focal organization. All supply chain member organizations should incorporate supply chain orientation into their strategic and functional implementations of SCM.

Implications for Logistics and Customer Value

In the end, supply chain logistics require that the needs of customers be satisfied. Logistics operations can create value for customers by being efficient, effective, and/or differentiating (Fugate, Metzger & Tank, 2010; Yazdanparast et al, 2010). This is the notion that superior products and services that satisfy customers' value perceptions are the result of efficient logistics. The capacity to meet the anticipated target of the logistic goals, such as meeting customer demands for stock availability, expediting the ordering process, and ensuring product warranty, is known as effectiveness. Accordingly, the degree of logistical services is related to the business's capacity to satisfy client demands, which results in efficacy as specified in the Product and Service Agreements (PSAs) (Fugate et al., 2010).

Optimizing the usage of resources is crucial for logistics to be efficient. To put it another way, differentiation is the capacity to give clients the most unique value while also obtaining a competitive edge over other businesses. Accordingly, differentiation is the capacity to set oneself apart from rivals by providing clients with a better deal (Stahl & Bounds, 1991; Fugate, et al., 2010).

In the framework of supply chain management, logistics seeks to offer lower-cost, higher-quality customer service (Ballou, 2007). Logistics management has a direct impact on the efficacy and efficiency of business processes to satisfy customer requirements, as logistics services are designed to identify and satisfy consumers' logistics demands (Kohn, McGinnis & Kara, 2011). This is the contention of this study since supply chain management today views logistics from a different angle, emphasizing business processes. Therefore, integration is necessary because without it, the relationship between business operations and logistics within the larger framework of supply chain management will not be established.

3. DISCUSSION

The significance of comprehending the idea of integration is related to what has been covered here. As Frohlich and Westbrook (2001) and Ataseven and Nair (2017) have shown, integration is crucial in SCM, particularly for value generation and business performance improvement. They proved that greater performance results from a focal company's broader integration with its suppliers and customers at the same time. The execution of tasks by participants in the supply chain network as they work to transfer goods and services from the place of origin to the end consumers demonstrates the significance of integration in supply chains. Few studies, nevertheless, have connected business processes with supply chain integration (Lambert et al., 2008). Therefore, it is necessary to demonstrate the value of integration in SCM in relation to important business operations.

However, there are still problems that need to be resolved in practice. Integration is never a simple undertaking due to the intricacies of supply chain operations. Ensuring complete integration can be challenging in the setting of diverse supply chain environments. Nonetheless, Zurita (2017) discovers in her research that supply chain integration is made easier by customer attention, a novel aspect of cognitive constructs based on knowledge of social capital. In essence, this type of comprehension is required to further emphasize the significance of supply chain integration. This conceptual study has effectively laid down the prospect of improving integration in SCM into strategic areas of important business processes, despite the fact that it has only briefly reviewed studies on how integration might be further extended into business processes. Logistics should be expanded to include more strategic aspects in addition to operations.

Practically speaking, supply chain management integration is impossible without the organization's culture embracing the SCM concept, according to Msimangira and Venkatraman (2014). Given that SCM requires both intra- and inter-organizational competences and that gaining the support of all stakeholders may be quite difficult, this may not be a simple task. However, according to Bagchi and Chun (2005), supply chain integration affects operational performance, and the degree of integration has also been demonstrated to affect a firm's efficiency and cost. Furthermore, as a way to achieve corporate sustainability, scholars and practitioners have shown a strong interest in the significance of supply chain integration for enhancing business performance (Ou et al., 2010; Flynn et al., 2010; Basnet & Wisner, 2012). Because sustainability is in fact a qualifying criteria when addressing a firm's longevity, this further emphasizes the necessity of concentrating on supply chain integration as a strategic facet for long-term survival of organizations. Strategic business process adoption necessitates a comprehensive planning approach that incorporates key SCM components. Organizations will therefore get closer to performance efficiency by creating a comprehensive SCM framework that takes integration, business processes, and logistics demands into account.

4. CONCLUSION

The significance of addressing integration in the context of SCM is described in this conceptual study. But more significantly, this article discusses how supply chain operations, including logistics, are linked to key business processes. More empirical research on the pertinent aspects is required in a framework that takes logistical operations, supply chain integration, and important strategic processes that result in efficient supply chain performance into account.

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