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Supply Chain Management and Logistics: How Important Interconnection Is for Business Success

Md. Rasidul Islam*, Md. Estiak Ibne Monjur, Tawhid Akon

Department of Civil Engineering, College of Civil Engineering and Architecture, China Three Gorges University, Yichang, China

Email: *captain140154@gmail.com, mestiak507@gmail.com, tawhidakon2015@gmail.com

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Abstract

The seamless connection, between logistics and supply chain management plays a role in the success of businesses operating in today's changing global marketplace. The purpose of this study is to explore the synergies between these two areas focusing on their link and how they contribute to operational effectiveness and efficiency across different industries. To ensure cost-effective fulfillment supply chain management relies heavily on logistical operations that encompass everything from sourcing raw materials to delivering the final product. This paper delves into the intricacies of this interconnection highlighting the significance of collaboration integrating technology sharing real-time data and strategic planning. Furthermore, we will demonstrate how aligning supply chain management and logistics harmoniously fosters agility, resilience, and responsiveness. By utilizing case studies and factual evidence, we will illustrate how these interconnected disciplines enable adaptability to market changes while enhancing customer satisfaction and gaining an edge. Ultimately, this report asserts that the interdependence between logistics and supply chain management serves as an enabler for company success in a complex global landscape with high demands. The insights presented in this article aim to benefit practitioners, policymakers, and researchers by providing an understanding of this relationship while paving the way, for innovation, growth, and sustainability in today's world.

Keywords

Supply Chain Management, Logistics, Interconnection, Business Success

1. Introduction

Nowadays, economy logistics and supply chain management have become crucial components of a company's competitive strategy. These practices were in-

itially limited to contexts, where logisticians, under Napoleon Bonaparte, were responsible, for overseeing troop accommodations (Van Creveld, 2004). The idea of logistics has gone through changes becoming more extensive and encompassing economic activities. It now involves the management of movements of goods, services, and essential information, from the production site to the point of consumption. This makes it a vital component, for the functioning of any organization (Bowersox, 2007).

According to (Jain et al., 2009), Supply chain management (SCM) involves the coordination of business processes and activities, across a network of organizations. These networks, which can vary in size and the types of products they handle, play a role in transforming materials into finished goods and delivering them to customers. In today's economy, achieving efficiency in SCM is essential, for gaining a long-term competitive edge and meeting the demands of the supply chain effectively (Aitken, Christopher, & Towill, 2002).

According to the research of (Mentzer et al., 2001; Esper et al., 2010), in today's business, landscape companies no longer operate as entities. Rather, it is an integral part of a dynamic and interconnected supply chain. This perspective acknowledges that all businesses are involved in the movement of goods, services, funds, and knowledge both upstream and downstream (Lambert, 2004). This perspective highlights the importance of understanding the structure of the supply chain, which consists of three elements: suppliers, network architecture characteristics, and different types of links connecting activities, within the supply chain.

Logistics plays a role, in supply chain operations as it enhances the efficiency of the chain by fostering long-term voluntary cooperation among independent actors, in the supply chain (Schmoltzi & Wallenburg, 2012; Cruijssen et al., 2007). Based on the research, the convergence of supply chains helps facilitate collaboration and coordination, among participants, in the supply chain network (Balcik et al., 2010; Maon et al., 2009; van Wassenhove, 2006). However, as (Zurita, 2017) we can see, putting this integration into practice is filled with challenges because of its complexities.

The paper proposes that even though there may be challenges, in embracing supply chain integration it is still an element for successful supply chain management. Supply chain management emphasizes the connection between parts of a business coordinating activities across the supply chain and the importance of efficient logistics. Therefore by tackling the intricacies of integration and fostering collaboration among supply chain partners, companies can enhance their performance, in supply chain management. This framework provides context, importance, and a transparent indication of the research's emphasis, on the connection, between logistics and supply chain management. It offers readers a roadmap.

1.1. Research Background

Business enterprises are actively striving for effectiveness in a time of expansion

and fierce rivalry. Logistics and supply chain management (SCM) have emerged as areas, in facilitating the flow of goods and information. Supply chains are growing increasingly intricate due to factors, like sourcing, diverse consumer needs, and digital transformations. As a result, having a coordinated and seamless logistics system is crucial.

1.2. Research Meaning

This research delves into the relationship, between supply chain management and logistics. Its main focus is to highlight the significance of connections between these areas for achieving success. Interconnection in this context refers to the synchronized integration and coordination of operations and processes, across the supply chain starting from sourcing materials to delivering the final product. This seamless flow is made possible by operations that expedite the process.

1.3. Research Importance

The significance of this study lies in its attempt to provide an understanding of how integration impacts supply chain management and logistics. When companies face challenges, like disruptions and shifts in customer behavior an integrated system, for logistics and supply chain management can offer flexibility, cost-effectiveness, and quicker response times. Moreover acknowledging the advantages of interconnected operations can enable companies to harness advancements following transformations thereby ensuring competitiveness and facilitating growth.

1.4. Main Objectives

- Explore the progression of logistics and its role, in supply chain management (SCM).
- To understand how the integration of logistics and supply chain management impacts outcomes.
- To assess the advancements, in technology that are facilitating the interconnectedness of supply chains.
- To explore real-life examples of integration, between logistics and supply chain management (SCM).

1.5. Main Contributions

- An in-depth examination of the relationship, between supply chain management (SCM) and logistics highlights their interconnectedness.
- A comprehensive analysis of the benefits associated with integrating logistics and supply chain management, which encompass cost reduction, increased efficiency, and improved customer satisfaction.
- A comprehensive look, at the advancements in the industry, provides valuable insights, for companies seeking to leverage them for improved integration.

• Valuable recommendations, for companies seeking to enhance the connectivity of their logistics and supply chains.

1.6. Limitations of This Article

- The study primarily relies on existing data that may not comprehensively address the challenges faced by organizations.
- The main emphasis is placed on the importance of integration of dwelling, and on the challenges or barriers that may hinder its achievement.
- Regional differences can limit the applicability of real-life case studies to areas or industries.

The article is well organized to lead readers towards a grasp of the relationship, between supply chain management and logistics and how it impacts the success of businesses. Here is the structure of the article: In the Introduction section, we provide an introduction, to the background of the research highlighting its significance, relevance, goals, contributions, and limitations. It establishes the framework, for the discussions. The literature review thoroughly examines the literature focusing on research findings and areas that need further exploration. It explores the progression of logistics and the development of supply chain management, over time and how they are interconnected and complex. In the discussion section, we delve into the impact of logistics and interconnected management of the supply chain with a focus, on how it influences customer satisfaction and overall business success. Analysis Based on existing research and the author's observations a thorough exploration of the subject is provided, offering insights, into implications and theoretical foundations. Recommendations for future research are the shortcomings highlighted in the literature review lead to a set of suggestions indicating paths, for scholarly pursuits, in this field. The article concludes by bringing the discussions, analyses, and findings restating the importance of the research and providing concluding reflections, on the possibilities of the topic.

2. Literature Review

2.1. The Evolution of Supply Chain Management and Logistics

Logistics has come a way since its origins, as a term associated with how Napoleon Bonaparte housed his troops (Van Creveld, 2004) Corporate activities encompass a range of functions including the management of product flow, service provision, and information processing (Bowersox, 2007). These advancements have had an impact, on the growth and importance of supply chain management (SCM) making it an essential aspect of company planning (Jain et al., 2009).

2.2. The Importance of Integration

The performance of a supply chain is determined by every aspect of its opera-

tions, including procedures organizations, and end-to-end delivery (Mentzer et al., 2001; Esper et al., 2010). Furthermore, (Lambert, 2004) it is important to understand the structure of the supply chain network, which includes its participants, structural dimensions, and process links.

2.3. Logistics Role in Supply Chain Management

The logistics aspect of supply chain management (SCM) plays a role, in determining the effectiveness of the chain. It can foster term relationships between independent participants, in the supply chain (Cruijssen et al., 2007; Schmoltzi & Wallenburg, 2012).

2.4. Supply Chain Integration Challenges

Supply chain integration is undoubtedly important. Implementing it in practice can be challenging due, to the complexities involved (Zurita, 2017). Other academics, such as (Balcik et al., 2010; Maon et al., 2009; van Wassenhove, 2006) there is also a challenge, in bringing aspects of humanitarian logistics to achieve better results.

2.5. Impact on Business Success

Many studies (Esper et al., 2010; Mentzer et al., 2001) the significance of supply chain management (SCM), in the success of companies has been proven. Nowadays businesses cannot function independently; they need to operate as interconnected supply chains. This makes effective SCM crucial, for establishing a lasting edge (Aitken, Christopher, & Towill, 2002).

This analysis of literature discusses the areas where supply chain management and the connection, between logistics, impact a company's performance. It covers the development of SCM the role of integration and the challenges that come with it. The assessment also highlights how SCM plays a role, in maintaining a company's advantage.

2.6. Logistics and the Value of Supply Chain Integration

The logistics industry has transformed its usage, as a military term to describe soldier housing during Napoleon Bonaparte's reign (Van Creveld, 2004). Today logistics encompasses the overseeing and coordination of products and goods, by the business industry from their production location to their destination (Bowersox, 2007). Logistics in a context plays a role, in supply chain management (SCM). It encompasses the management of company processes and operations related to coordination and organization (Jain et al., 2009). Supply chain management (SCM) goes beyond logistics. It involves the coordination of processes, across businesses to transform raw materials into finished products and deliver them efficiently to customers (Aitken, Christopher, & Towill, 2002).

To achieve success, in supply chain management (SCM) it is essential to have a level of integration. Nowadays companies no longer operate independently; instead, they function as interconnected supply chains that rely on the coordination of aspects such, as upstream and downstream flows of goods, services, financial matters, and data (Mentzer et al., 2001; Esper et al., 2010). To achieve integration it is necessary to have an understanding of the arrangement and organization of the supply chain, which includes its participants, structural aspects, and interconnected processes (Lambert, 2004). Integrating components is crucial, to achieving success in the supply chain. Logistics, which plays a role in supply chain management can greatly impact the performance of the chain by promoting long-term and voluntary collaborations, among independent suppliers (Cruijssen et al., 2007; Schmoltzi & Wallenburg, 2012). Integrating SCM smoothly can pose challenges. Many practical obstacles arise when trying to carry out tasks due, to integration issues causing individuals in the chain to often face difficulties, in completing duties (Zurita, 2017). However, despite these challenges integration plays a role, in supply chain management (SCM). It acts as the element that connects components of the supply chain ultimately enhancing overall efficiency and enabling organizations to achieve their goals more effectively (Maon et al., 2009; van Wassenhove, 2006; Balcik et al., 2010). Efficient management of logistics plays a role, in supply chain operations. It can truly unlock its maximum benefits through integration. Despite the challenges they may bring, when logistics and supply chains are integrated they pave the way for achieving success, in today's market. The advantages of supply chain logistics become most apparent through the activities carried out within company operations. The logistical processes that come with procedures as mentioned in sources are condensed and presented in Table 1. Since logistics can provide benefits in the supply chain it is crucial to identify stages where logistical operations occur. This occurs when a company's strategic goals are directly linked to supply chain management.

In Table 1, we can see the advantages of logistics and its integration, into business operations. Logistics encompasses activities, like Customer Relationship Management (CRM) Supplier Relationship Management (SRM) Customer Service Management (CSM), and Demand Management. These are a few examples of business processes but many others are closely linked to logistical responsibilities. Some additional examples include order fulfillment, managing the production process creating and marketing products, and handling returns.

2.7. Integrating Logistics Efforts with Corporate Business Objectives

Ensuring that the various logistical operations are, in line, with the business strategy is an aspect of effective corporate management. This enables companies to gain an advantage in today's changing and unpredictable market (Gunasekaran, Patel, & McGaughey, 2004). Efficiently managing and organizing services, goods, and data transfers, within and, between businesses is the focus of logistics management (Christopher, 2016). On the other hand corporate business strategy

Table 1. Depicts the link between logistics operations and business activities.

Process	Logistics Activities	Contributions
Customer Relationship Management (CRM)	 Provide information, about the business's capabilities in terms of logistics and pricing. Conduct a SWOT analysis to evaluate logistics. Strengths, weaknesses, opportunities, and threats are some of the factors to consider when assessing capabilities and expenses. Evaluate the value of the company's solutions. 	 We carefully record all the expenses related to logistics. We calculate the cost of serving each client and customer group. The expertise, in logistics is translated into outcomes. To stay management comprehends and harnesses the capabilities of logistics. Senior management is aware of the strengths and weaknesses of competitors. Management has a grasp, of how logistics companies generate and market advantages to their clients.
Supplier Relationship Management (SRM)	 Provide information regarding the costs associated with production and logistics. Specify the services related to logistics that the provider will offer along, with the performance indicators (KPIs) involved. 	 The total price, for owning purchased items covers the cost of logistics. Supplier PSAs handle logistics challenges based on vendor categorization.
Customer Service Management	 Developing metrics to assess the performance of levels of logistics services offered to clients and consistently monitoring and evaluating their effectiveness. Establishing protocols for responding to any circumstances such, as failures or changes, and leveraging existing logistics capabilities to support the business in rectifying service issues experienced by clients. 	 We can quickly. Address any logistical issues that may arise. Having logistics skills helps us efficiently recover from service disruptions.
Demand Management	 Find out the information and limitations regarding anticipating demand, in logistics. Identify the areas where logistical operations are prone to disruptions. Analyze the costs associated with logistics and explore the impact of consumption, on logistics. Seek opportunities to enhance the adaptability of the logistics system. 	 The forecasting method takes into account the needs in terms of both speed and level of detail covering timeframes, types of goods, and geographical areas. The synchronized system, for sales and operations planning (S&OP) includes not only information but also capacity data.

Source: Adapted from https://doi.org/10.24191/jeeir.v5i4.8838.

refers to the plan and goals that a company sets to gain an edge, over its competitors (Porter, 1980). For a company to flourish these two components must be interconnected and aligned in harmony. The alignment of logistics, with the company's strategy, has been recognized as a factor, in achieving business success (Morash & Clinton, 1998). Logistics can play a role, in enhancing customer satisfaction and bolstering a company's edge. For instance, by guaranteeing delivery times logistics can contribute to customer happiness and loyalty thereby boosting the business's competitiveness (Christopher, 2016).

Various approaches require logistics setups. To reduce expenses a cost leadership strategy might prioritize logistics operations while a differentiation strategy might call for a customer-focused logistics approach to provide value to customers (Porter, 1980). In years multiple studies have discovered that prosperous organizations tend to align their logistics operations with their company strategy (Tracey, 2004). Logistics is often seen as an aspect that can positively impact a company's performance rather than just being a routine operational task (Stank, Keller, & Closs, 2001). Despite recognizing the importance of alignment numerous businesses continue to face challenges, in achieving it. These challenges may stem from an understanding of the role of logistics, and complexities, in monitoring logistics performance or organizational resistance to change (Bhatnagar & Teo, 2009). In today's business landscape, logistics activities must be, in sync, with the overall corporate strategy. This synchronization does not enhance the organization's productivity. Also contributes to the successful execution of corporate strategies and boosts the firm's overall competitiveness.

2.8. Supply Chain Management and Business Processes

Supply chain management (SCM) refers to the management of supply chain activities aiming to create value, for customers and gain an advantage, over rivals in the long run (Chopra & Meindl, 2016). It includes the processes that transform materials into completed products, such, as acquiring and purchasing, production and transportation along, with the technology systems that enable the coordination of all these activities (Figure 1).



Source: http://www.techtarget.com/searcherp/definition/supply-chain-management-SCM.

Figure 1. Supply chain management.

On the side, business processes refer to a series of organized activities or tasks that aim to deliver a specific product or service to targeted customers. These processes play a role, in any business as they greatly influence its profitability and ability to attract customers. The interplay between supply chain management (SCM) and business processes is of importance, and plays a crucial role in achieving corporate success. Instance needs to have procurement strategies in place to acquire the resources, for production at the right price, time, and quality level (Trkman & McCormack, 2009). Likewise, the implementation of manufacturing techniques can lead to cost reduction, enhanced product quality, and a boost, in consumer satisfaction and loyalty (Gunasekaran, Patel, & Tirtiroglu, 2001). In addition, it is essential to manage the logistics operations involved in storing and moving items to guarantee accurate delivery of products to clients. Any delays or errors, in the delivery process could lead to customer dissatisfaction and potential loss of business (Christopher, 2016). Integrating information systems, in supply chain management (SCM) allows for the flow of information between corporate activities. This integration has benefits, including enhancing the accuracy of demand forecasting simplifying inventory management, and fostering collaboration with suppliers and consumers. Ultimately these improvements contribute to a level of efficiency and effectiveness, in the supply chain (Fabbe-Costes & Jahre, 2008).

In the world of business, SCM plays a role, in operational aspects. The successful integration and efficient management of these processes are vital, for attaining efficiency and gaining an edge.

2.9. Implications for Customer Value and Logistics

Customer value and logistics are connected concepts that have an impact, on supply chain management. Creating value, for customers is an aspect of how businesses operate. It heavily relies on the effectiveness of logistical operations (Flint, Larsson, Gammelgaard, & Mentzer, 2005). The concept of customer value refers to the benefits that customers perceive when they acquire and use a product or service. These benefits encompass aspects such, as the quality of the product its price, convenience, after-sales service, and overall experience (Woodruff, 1997). Continuously delivering value to customers is crucial, to fostering satisfaction, loyalty, and advocacy all of which contribute to the growth and long-term viability of a company (Parasuraman & Grewal, 2000).

Consequently, when logistics is integrated into supply chain management it has effects, on creating and improving customer value. Companies that can effectively handle their logistics operations are more likely to deliver customer value gain an advantage and attain long-term success (Figure 2).

2.10. Literature Gap

There is a shortage of research, on the relationship between supply chain management (SCM) and logistics. It is crucial to grasp the significance of this



Source: https://slideplayer.com/slide/13125142/.

Figure 2. Providing value to customers.

interconnection as it is not only beneficial but essential for modern business success. The need to understand this synergy becomes more pronounced due to the rapid advancements, in technology and the ever-evolving global business landscapes.

To address this void the present study seeks to:

- Develop a story that goes beyond the separate descriptions of logistics and supply chain management emphasizing their interdependent connection.
- Explore the impact of this link in the world taking into account its implications, for productivity, flexibility, and growth.
- An integrated approach, to logistics and supply chain management (SCM), has the potential to significantly transform the success of businesses, across industries. To illustrate this point let's explore some examples from sectors.

To bridge the existing gaps in understanding this research suggests that a seamless integration of logistics and supply chain management (SCM) is crucial to realize the benefits of SCM. The objective is to provide companies with a path, towards optimizing the capabilities of a supply chain and logistics system.

3. Sources of Information

The majority of the information presented in this paper is sourced from data sources, like published books, peer-reviewed academic journals, reputable websites, and industry reports. Although the author's observations and interpretations are included they are well supported by literature and empirical evidence.

3.1. Method of Search and Selection

To thoroughly investigate and gather information on the subject we conducted a review of the literature. This approach allowed us to compile and examine a range of studies and their respective findings in a manner.

3.2. Platforms Used

We utilized platforms to gather a range of literature. These platforms included databases such, as JSTOR, Google Scholar, and ScienceDirect. Additionally, we

accessed industry reports, from logistics and supply chain management organizations through their websites.

3.3. Ensuring Comprehensiveness

We set up notifications, on the selected databases to keep us informed about any publications that meet our research criteria. We also conducted reviews every two weeks to make sure we didn't overlook any papers.

3.4. Nature of the Papers

We primarily emphasized peer-reviewed publications to guarantee the reliability of the information. However, we also considered articles that haven't undergone peer-reviewed industry reports and policy documents to provide a rounded viewpoint.

3.5. Keywords and Criteria

The main terms utilized were "Supply Chain Management", "Logistics", "Interconnection", and "Business Success". These keywords were frequently combined through the use of operators to refine the search.

3.6. Language

The search was restricted to English language publications to maintain consistency and ensure thorough comprehension.

3.7. Collected Works

For this research, we examined a total of 75 papers, 12 industry reports, 5 policy documents, and 20 other relevant publications.

3.8. Time Frame

To ensure the research's relevance and applicability, to business environments we focused on literature from the decade specifically from 2010, to 2021.

4. The Importance of Technology in Logistics and Supply Chain Management for Business Success

In today's evolving business environment the effective use of technology plays a role, in the success of logistics and supply chain management (SCM) (Figure 3). Implementing technology across industries enables companies to enhance productivity improve customer satisfaction and boost profitability (Bharadwaj, 2023). Technological advancements, like intelligence (AI) the Internet of Things (IoT), and blockchain have revolutionized the field of logistics and supply chain management (SCM). AI enables businesses to analyze volumes of data make forecasts and automate repetitive tasks. This ultimately enhances decision-making processes, and improves efficiency (Rai et al., 2023). IoT devices offer the ability to track and monitor objects in time reducing the chances of loss or

Importance

- 1. Competitive advantage
- 2. Collecting and evaluating data
- 3. Decision making and report generation
- 4. Rapid response

Benefits

- Information availability and visibility in supply chain
- 2. Single point of contact for information
- 3. Enables quick decision making based on supply chain
- 4. Allows collaboration with partners

Source: https://www.aeologic.com/blog/benefits-of-technology-in-supply-chain-management/.

Figure 3. Technology's role in logistics and supply chain management.

damage and increasing customer satisfaction (Mehmood et al., 2023). Meanwhile, blockchain provides a transparent platform, for transactions that have the potential to reduce fraud and increase the credibility of supply chains (Kshetri, 2023).

Moreover, the impact of automation and robotics, on logistics and supply chain management is significant. For instance, automated warehouses can effectively handle stock management by reducing errors and improving speed (Pfohl et al., 2023). On the side, drones and autonomous vehicles can speed up deliveries while also being more cost-effective and reliable (Bibby & Dehe, 2018). Moreover, the utilization of services and cloud computing has facilitated businesses in overseeing their supply chains. Organizations can leverage internet technologies to engage with suppliers, customers, and logistics providers in time making collaboration and information sharing much easier (Helo & Hao, 2023). The Internet of Things allows businesses to promptly respond to changes, in consumer behavior by offering versatile IT solutions (Gunasekaran et al., 2023).

However for technology integration to be successful, in logistics and supply chain management it is crucial to have an understanding of the organization's needs a supportive infrastructure, and a culture that embraces change (Schönsleben, 2023). In today's paced world technology plays a role, in boosting the productivity and effectiveness of logistics and supply chain management. It serves as a tool that helps companies foster innovation and achieve success in the constantly evolving global marketplace.

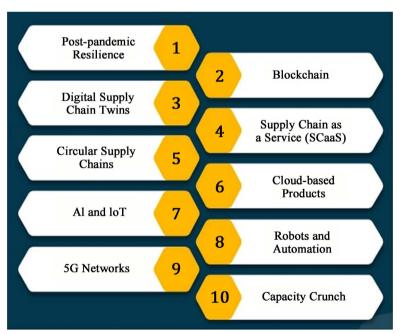
5. The Logistics and Supply Chain Management of the Future for Business Success

The success of corporations, in today's changing economy relies heavily on the adoption of technology, sustainability, and resilience in logistics and supply chain management (SCM) (Figure 4). These factors play a role, in shaping the



future of SCM (Ivanov, 2020). The logistics and supply chain management land-scape is anticipated to transform due, to technological advancements. Artificial intelligence (AI) and machine learning (ML) will increasingly be integrated into supply chain operations offering benefits such, as analytics improved forecasting, and automated decision-making capabilities (Choi et al., 2023). The Internet of Things (IoT) has the potential to expand significantly offering real-time monitoring and improved transparency, across supply chains (Li et al., 2023). Blockchain technology holds the promise of enabling transparent transactions thereby fostering trust among partners, in the supply chain (Saberi et al., 2023).

Moreover, the progress made in robotics and self-driving vehicles can significantly transform warehouse and delivery operations resulting in improved efficiency and reduced expenses (Kumar et al., 2023). The advancement of platforms and cloud-based solutions is expected to enhance the efficiency of supply chain operations and promote collaboration. This will be achieved by enabling seamless information exchange and streamlining decision-making processes (Helo & Hao, 2023). Sustainability is an aspect of logistics and supply chain management, in the future. There is a growing awareness of the impact that supply chains have on social sustainability. Consumers' governments and investors are putting pressure on businesses to implement practices (Gold et al., 2023). Companies must prioritize reducing carbon emissions minimizing waste and ensuring labor practices in their supply chains. The concept of an economy, where materials are reused and recycled is expected to have a role, in shaping future supply networks (Geissdoerfer et al., 2023).



Source

 $\frac{https://www.selecthub.com/supply-chain-management/supply-chain-management-future}{-trends/}.$

Figure 4. Key supply chain trends.

In light of events, such, as the COVID 19 it has become evident that having a resilient supply chain is crucial for businesses to overcome disruptions. To effectively navigate through hazards and interruptions companies should focus on creating robust supply networks. This might involve expanding their sources of supplies maintaining buffer inventories and investing in technologies that enhance agility (Ivanov, 2022). Finally the key, to achieving success in logistics and supply chain management lies at the intersection of advancements, sustainability, and adaptability. Organizations that can navigate this terrain effectively will be, in a position to thrive in the global economy.

6. Discussion

The success of a company relies on executing and overseeing supply chain activities, logistics, and supply chain integration. An analysis of papers and industry research reveals a consensus, on the significance of logistics, in enhancing consumer value propositions and driving business profitability (Christopher, 2016; Bowersox, Closs, & Cooper, 2002). Our conversation is centered on the idea that logistics is not a task but rather a vital part of the comprehensive network of business operations, within the supply chain (Mentzer et al., 2001). When companies successfully incorporate logistics activities into their supply chain they can operate with efficiency and effectiveness. This leads to the creation of customer value a stronger competitive position and increased profitability.

In this study, there has been a focus, on the importance of aligning logistics activities with the corporate business strategy. This alignment ensures that the logistics operations are not efficient but strategically positioned to support and achieve the organization's goals and objectives (Fabbe-Costes & Jahre, 2008). Despite acknowledging the significance of integration and alignment the execution of these concepts, in real-world scenarios often poses obstacles. These challenges can arise due to a grasp or appreciation for the significance of logistics organizational divisions and constraints, on resources (Fabbe-Costes & Jahre, 2008; zur Muehlen & Shapiro, 2010).

Moreover the increasing intricacy of the global business landscape marked by paced technological advancements fluctuating customer preferences and intensified competition presents an additional level of complexity when it comes to effective management of logistics and supply chains. However, it is not achievable but also imperative, for companies aiming to excel in today's competitive environment to overcome these challenges and harness the potential of logistics and supply chain management.

7. Author's Opinion

7.1. Author's Interpretation of Existing Research

The importance of integrating logistics and supply chain management for achieving success, in businesses has been emphasized in works. Mentzer et al.

(2001), Esper et al. (2010) present an argument that modern firms compete as supply networks rather than standalone entities. I believe that this perspective signifies a shift in operations and strategy where the interconnectedness, within supply chains becomes a crucial determinant of success (Figure 5).

In terms of organization, operations, purchasing and logistics will likely come together under the umbrella of supply chain management. The influence of supply chain management will have an impact, on business organizations. While logistics used to have a scope supply chain management requires managing a wide range of operations within the organization. To achieve the collaboration indicated by supply chain management firms may need to restructure themselves. The organizational structure depicted in Figure 1 is expected to evolve for organizations seeking a framework. In the future purchasing and production along with logistics will be supervised by supply chain management of being grouped with marketing and finance as they sometimes were in the past. If companies aim to establish coordination in their flow of goods they may opt for a formal system where a supply chain liaison at the company's leadership takes responsibility for coordinating supply chain activities across different functions within the company. Since it is not possible to have frameworks among legally separate companies involved in the supply chain channel committees will be formed by participants, in the supply chain channel to coordinate their activities.

7.2. Author's Observations

In my experience working with companies, I have observed that organizations that focus on an approach, to managing their supply chain and logistics tend to outperform their competitors. This holistic strategy not only helps reduce costs but also enhances market responsiveness and customer satisfaction. Additionally, I have noticed that the effective utilization of technology plays a role in enabling this integration indicating the necessity for transformation, in optimizing the supply chain.

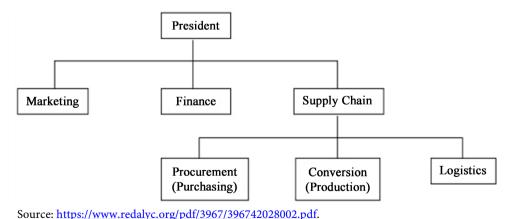


Figure 5. A supply chain management for future organization.

7.3. Identification of Research Gaps

While the current body of research adequately discusses the advantages of combining logistics and supply chain management it falls short in providing an evaluation of the obstacles and limitations that arise when implementing this integration. For instance, the intricacies and challenges related to handling data ensuring privacy, and establishing trust among organizations, in the context of transformation have not been fully explored yet.

7.4. Discussion of Practical Implications

In my opinion, after analyzing the research findings I believe that companies can gain an edge by focusing on enhancing the integration of their supply chain and logistics. They must invest in technology to automate and optimize processes, which would lead to visibility and collaboration across the entire supply chain. Additionally, companies need to prioritize data management and implement trust-building strategies to overcome any challenges related to integration.

7.5. Suggestions for Future Study

In the future, it would be beneficial for researchers to delve into the obstacles and factors that contribute to the integration of supply chain and logistics. Examining real-life examples and comparing industries could offer knowledge. Additionally considering the rising significance of emerging technologies such, as intelligence and blockchain in enhancing supply chain integration studying their impact, on fostering integration would be worthwhile.

8. Conclusion

The relationship, between supply chain management and logistics, plays a role in the success of organizations. Through this analysis, it has become clear that interconnectivity goes beyond linking parts of the supply chain. Instead, it involves establishing a connection where each element enhances efficiency, profitability, and competitiveness, for businesses.

To start with the importance of interconnected supply chains has been emphasized. Companies can enhance efficiency, enhance customer service and maximize profits by facilitating communication and collaboration throughout the stages of the supply chain. Moreover, this implies that the overall performance of the supply chain is determined by the synchronized functioning of all its components, as an entity rather than being influenced solely by individual elements.

Furthermore, the introduction and integration of devices, into supply chains, like the Internet of Things (IoT) intelligence (AI) and Blockchain, have significantly transformed traditional processes. Improved visibility provided by these technologies has created more interconnected, responsive, and customer-centric supply chains. As a result, their resilience and agility have been greatly enhanced.

It has also highlighted the importance of connecting supply chain plans, with strategies. In today's changing business landscape, this alignment enables companies to swiftly adapt to market shifts and meet consumer demands making them more competitive and resilient. The focus is on considering the supply chain as a part of the company that contributes to its strategic objectives rather than as a separate entity. Additionally, it has been proven that integrating processes within and across the supply chain brings cost savings, improved flexibility, and increased customer satisfaction. However, achieving integration requires overcoming technological and cultural barriers. This calls for research, in the field to address these challenges.

Supply networks have recently been recognized as sources of value, than just cost centers. By creating and delivering value to customers, integrated supply chains can give companies an advantage and set them apart in the market. This analysis has shed light on the importance of interconnectedness in supply chain management and logistics for performance. However, it also highlights the need for research on this subject particularly focusing on the limitations of integration and the increasing role of digital technology. The purpose of this analysis is to stimulate discussions and investigations, into this topic.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

References

Aitken, J., Christopher, M., & Towill, D. (2002). Understanding, Implementing, and Exploiting Agility and Leanness. *International Journal of Logistics: Research and Applications*, 5, 59-74. https://doi.org/10.1080/13675560110084139

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, 22-34. https://doi.org/10.1016/j.ijpe.2009.09.008

Bharadwaj, A. (2023). IT Capabilities and Firm Performance: A Contingency Theory of Information Technology. *European Journal of Information Systems*, 26, 273-289.

Bhatnagar, R., & Teo, C. C. (2009). Role of Logistics in Enhancing Competitive Advantage: A Value Chain Framework for Global Supply Chains. *International Journal of Physical Distribution & Logistics Management, 39*, 202-226. https://doi.org/10.1108/09600030910951700

Bibby, L., & Dehe, B. (2018). Defining and Assessing Industry 4.0 Maturity Levels—Case of the Defense Sector. *Production Planning & Control, 29*, 1030-1043. https://doi.org/10.1080/09537287.2018.1503355

Bowersox, D. J. (2007). Supply Chain Logistics Management. McGraw-Hill/Lwin, an Imprint of The McGraw-Hill Companies, Inc. https://industri.fatek.unpatti.ac.id/wp-content/uploads/2019/03/259-Supply-Chain-Logistics-Management-Donald-J.-Bowersox-David-J.-Closs-M.-Bixby-Cooper-Edisi-1-2002.pdf

Bowersox, D. J., Closs, D. J., & Cooper, M. B. (2002). Supply Chain Logistics Management.

- McGraw-Hill.
- Choi, T. M., Wallace, S. W., & Wang, Y. (2023). Big Data Analytics in Operations Management. *Production and Operations Management, 27,* 1868-1883. https://doi.org/10.1111/poms.12838
- Chopra, S., & Meindl, P. (2016). Supply Chain Management: Strategy, Planning, and Operation. Pearson.
- Christopher, M. (2016). Logistics & Supply Chain Management. Pearson UK.
- Cruijssen, F., Dullaert, W., & Fleuren, H. (2007). Horizontal Cooperation in Logistics: Opportunities and Impediments. *Transportation Research Part E: Logistics and Transportation Review*, 43, 129-142. https://doi.org/10.1016/j.tre.2005.09.007
- Esper, T. L., Fugate, B. S., & Davis-Sramek, B. (2010). Firm Size and Its Impact on Firm-Level Supply Chain Integration. *Journal of Business Logistics*. https://doi.org/10.1002/j.2158-1592.2008.tb00067.x
- Fabbe-Costes, N., & Jahre, M. (2008). Supply Chain Integration and Performance: A Review of the Evidence. *The International Journal of Logistics Management*, *19*, 130-154. https://doi.org/10.1108/09574090810895933
- Flint, D. J., Larsson, E., Gammelgaard, B., & Mentzer, J. T. (2005). Logistics Innovation: A Customer Value-Oriented Social Process. *Journal of Business Logistics*, *26*, 113-147. https://doi.org/10.1002/j.2158-1592.2005.tb00196.x
- Geissdoerfer, M., Savaget, P., Bocken, N. M., & Hultink, E. J. (2023). The Circular Economy—A New Sustainability Paradigm? *Journal of Cleaner Production*, *143*, 757-768. https://doi.org/10.1016/j.jclepro.2016.12.048
- Gold, S., Hahn, R., & Seuring, S. (2023). Sustainable Supply Chain Management in "Base of the Pyramid" Food Projects—A Path to Triple Bottom Line Approaches for Multinationals? *International Business Review, 22,* 784-800. https://doi.org/10.1016/j.ibusrev.2012.12.006
- Gunasekaran, A., Patel, C., & McGaughey, R. E. (2004). A Framework for Supply Chain Performance Measurement. *International Journal of Production Economics, 87,* 333-347. https://doi.org/10.1016/j.ijpe.2003.08.003
- Gunasekaran, A., Patel, C., & Tirtiroglu, E. (2001). Performance Measures and Metrics in a Supply Chain Environment. *International Journal of Operations & Production Management*, 21, 71-87. https://doi.org/10.1108/01443570110358468
- Gunasekaran, A., Subramanian, N., & Papadopoulos, T. (2023). 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
- Helo, P., & Hao, Y. (2023). Digital Supply Chain Management: A Literature Review and a Proposed Framework. *International Journal of Production Economics, 210,* 57-70.
- Ivanov, D. (2020). Predicting the Impacts of Epidemic Outbreaks on Global Supply Chains: A Simulation-Based Analysis on the Coronavirus Outbreak (COVID-19/SARS-CoV-2) Case. *Transportation Research Part E: Logistics and Transportation Review, 136,* Article 101922. https://doi.org/10.1016/j.tre.2020.101922
- Ivanov, D. (2022). Viable Supply Chain Model: Integrating Agility, Resilience and Sustainability Perspectives—Lessons from and Thinking beyond the COVID-19 Pandemic. Annals of Operations Research, 319, 1411-1431.
- Jain, V., Wadhwa, S., & Deshmukh, S. G. (2009). Select Supplier-Related Issues in Modelling a Dynamic Supply Chain: Potential, Challenges and Direction for Future Research.

- *International Journal of Production Research, 47*, 3013-3039. https://doi.org/10.1080/00207540701769958
- Kshetri, N. (2023). Will Blockchain Emerge as a Tool to Break the Poverty Chain in the Global South? *Third World Quarterly, 38,* 1710-1732. https://doi.org/10.1080/01436597.2017.1298438
- Kumar, A., Luthra, S., Govindan, K., Kumar, V., & Haleem, A. (2023). Barriers in the Growth of Indian Automotive Industry: A Graph Theoretic Approach. *Benchmarking: An International Journal*, 20, 653-672.
- Lambert, D. M. (2004). Supply Chain Management. Prentice-Hall.
- Li, Z., Barenji, A. V., & Huang, G. Q. (2023). Toward a Blockchain Cloud Manufacturing System as a Peer-to-Peer Distributed Network Platform. *Robotics and Computer-Integrated Manufacturing*, 56, 199-210.
- 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, 149-164. https://doi.org/10.1108/13598540910942019
- Mehmood, Y., Ahmad, F., & Alnuem, M. A. (2023). An Exploration of IoT Platform for Supply Chain Management. *Journal of Sensors, 11*, No. 9. https://doi.org/10.52783/rlj.v11i9s.1571
- 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*, 1-25. https://doi.org/10.1002/j.2158-1592.2001.tb00001.x
- Morash, E. A., & Clinton, S. R. (1998). Supply Chain Integration: Customer Value through Collaborative Closeness versus Operational Excellence. *Journal of Marketing Theory and Practice*, 6, 104-120. https://doi.org/10.1080/10696679.1998.11501814
- Parasuraman, A., & Grewal, D. (2000). The Impact of Technology on the Quality-Value-Loyalty Chain: A Research Agenda. *Journal of the Academy of Marketing Science*, 28, 168-174. https://doi.org/10.1177/0092070300281015
- Pfohl, H. C., Yahsi, B., & Kurnaz, T. (2023). The Impact of Industry 4.0 on the Supply Chain. In W. Kersten, T. Blecker, & C. M. Ringle (Eds.), *Proceedings of the Hamburg International Conference of Logistics (HICL), Innovations and Strategies for Logistics and Supply Chains: Technologies, Business Models and Risk Management. Proceedings of the Hamburg International* (Vol. 20, pp. 31-58). Hamburg University of Technology (TUHH), Institute of Business Logistics and General Management.
- Porter, M. E. (1980). Competitive Strategy: Techniques for Analyzing Industries and Competitors. Free Press.
- Rai, A., Patnayakuni, R., & Seth, N. (2023). Firm Performance Impacts of Digitally Enabled Supply Chain Integration Capabilities. MIS Quarterly, 27, 225-246. https://doi.org/10.2307/25148729
- Saberi, S., Kouhizadeh, M., Sarkis, J., & Shen, L. (2023). Blockchain Technology and Its Relationships to Sustainable Supply Chain Management. *International Journal of Production Research*, 57, 2117-2135. https://doi.org/10.1080/00207543.2018.1533261
- Schmoltzi, C., & Wallenburg, C. M. (2012). Operational Governance in Horizontal Alliances of Logistics Service Providers. *International Journal of Physical Distribution & Logistics Management, 48,* 53-74. https://doi.org/10.1111/j.1745-493X.2011.03262.x
- Schönsleben, P. (2023). Integral Logistics Management: Operations and Supply Chain Management within and across Companies. CRC Press. https://doi.org/10.1007/978-3-662-65625-9

- Stank, T. P., Keller, S. B., & Closs, D. J. (2001). Performance Benefits of Supply Chain Logistical Integration. *Transportation Journal*, *41*, 32-46.
- Tracey, M. (2004). A Holistic Approach to NPD: New Insights. *Journal of Supply Chain Management*, 40, 37-55. https://doi.org/10.1111/j.1745-493X.2004.tb00177.x
- Trkman, P., & McCormack, K. (2009). Supply Chain Risk in Turbulent Environments—A Conceptual Model. *International Journal of Production Economics*, *119*, 247-258. https://doi.org/10.1016/j.ijpe.2009.03.002
- Van Creveld, M. (2004). Supplying War: Logistics from Wallenstein to Patton. Cambridge University Press. https://doi.org/10.1017/9780511816215
- van Wassenhove, L. N. (2006). Humanitarian Aid Logistics: Supply Chain Management in High Gear. *Journal of the Operational Research Society, 57*, 475-489. https://doi.org/10.1057/palgrave.jors.2602125
- Woodruff, R. B. (1997). Customer Value: The Next Source of Competitive Advantage. *Journal of the Academy of Marketing Science, 25,* 139-153. https://doi.org/10.1007/BF02894350
- zur Muehlen, M., & Shapiro, R. (2010). Business Process Analytics. In J. vom Brocke, & M. Rosemann (Eds.), *Handbook on Business Process Management 2* (pp. 137-157). Springer. https://doi.org/10.1007/978-3-642-01982-1 7
- Zurita, J. F. (2017). Social Capital Influence on Supply Chain Integration in the Food Processing Industry in Malaysia. *Journal of International Business, Economics and Entrepreneurship, 2,* No. 1. https://doi.org/10.24191/jibe.v2i1.14459