

# International Journal of Supply Chain Management (IJSCM)

**GREEN SUPPLY CHAIN AND ITS IMPORTANCE IN TODAY'S ERA INCLUDING  
COVID -PANDEMIC: NARRATIVE REVIEW METHOD**

Kaparathi Kranti Kumar



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Narrative Review Method**

Kaparathi Kranti Kumar  
HILTI, USA.

Corresponding Author's Email:  
[Krantikumar.kaparathi@hilti.com](mailto:Krantikumar.kaparathi@hilti.com)

**Article History**

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*Received 2<sup>th</sup> December 2022*  
*Received in Revised Form 28<sup>th</sup> December 2022*  
*Accepted 30<sup>th</sup> December 2022*

**Abstract**

**Purpose:** The current review investigates how green operations, design, manufacturing, reverse logistics, and waste management are impacted after covid-19 outbreak globally from the available literature.

**Methodology:** A qualitative literature search with integrative models were used by applying the SEARCH strategy criteria that we used came from a variety of different sources, such as Google scholar, Scopus, World of Science, PubMed, and other online databases. These sources have published the literature on the GSCM during the time of the avian influenza pandemic, as well as the challenges that the supply chain is currently facing and what the learning mantras are.

**Findings:** The present review outlines the existence of the Invariable. Panic resurrects the bullwhip. Some CEOs imagine a corporate whip. Product divisions protect themselves against higher allocations and source's pad. Supply is estimated by suppliers and manufacturers based on customer expectations. Things may be worse. Companies who are prepared with diverse sources and outside-in digital processes will succeed in the new economy.

**Unique Contribution to Theory, Practice and Policy:** By applying the current review gaps the new strategy can be implemented in logistics and supply chain companies for understanding the planning and implementation after post-pandemic.

**Keywords:** *Green Chain, Supply Management, Covid-19 Pandemic, Empowerment*

## **INTRODUCTION**

Green supply chain management, often known as GSCM, is an approach that integrates 4R1D into conventional supply chains, beginning with manufacturing and continuing all the way to end-of-life management (reduce, reuse, recycle, reclaim and degradable). The Global Supply Chain Management (GSCM) methodology is the result of recent advancements in Supply Chain Management. The purpose of this study is to investigate the literature on Green Supply Chain Management (GSCM) that has been published over the course of the previous two years. What are green supply chain practises, and what is the first step in building a more sustainable strategy? is a fundamental question commonly asked by environmentally aware firms. Sustainable green supply chain techniques combine the best of both worlds, conventional supply chain management with environmental awareness. The objective is to assist businesses in cutting down on carbon emissions and waste while increasing productivity and earnings. Manufacturing, buying, distribution, storage, and transportation are all points in the supply chain that might benefit from being green. There will be inquiries into a company's carbon footprint, recycling practises, and the environmental friendliness of its production and supply chains (1) .

The spread of COVID-19 has disrupted international logistics. Several nationwide shutdowns have halted or stopped raw materials and finished goods, severely impacting production. There have been no supply chain disruptions because of the pandemic. COVID-19 exposed vulnerabilities that had been hidden and led to staff shortages and financial losses for several companies. This accelerated and compounded issues in the supply chain. This survey was conducted by Ernst & Young LLP (EY US) in the year 2020. Participants included 200 C-suite supply chain executives from Fortune 1000 companies in the U.S. in industries such as consumer goods, retail, medical sciences, industrial products, automotive, and high technology. (2,4) .

In the wake of the COVID-19 pandemic, businesses in the United States are looking to strengthen their supply chains by working more closely with their suppliers and consumers and creating more resilient networks. To achieve this goal, they will retrain employees and use artificial intelligence and robotic process automation. And these survey findings reported that the Only 2% of firms surveyed stated they were prepared for the epidemic. 57% experienced serious disruptions, with 72% indicating negative effects (17% substantial, 55% mainly) which is relatively less (2).

## **MATERIAL AND METHODS**

The current research used integrative review study design, qualitative methods for understanding the aim . The SEARCH strategy criteria that we used came from a variety of different sources, such as Google scholar, Scopus, World of Science, PubMed, and other online databases. These sources have published the literature on the GSCM during the time from 2019 to 2021 years.

## **DISCUSSION**

### **Management of the Supply Chain**

The Supply Chain refers to the flow of resources as they are transported from their point of origin to the final consumer. According to Christopher, the Supply Chain generates value for

the end consumers in the form of goods and services via a variety of processes and activities. These are carried out by the network of businesses that spans the upstream and downstream links. The network, method, and activities could include things like buying, sourcing, and suppliers. (3) . This research studies indicates that news coverage of SC issues such risk, resilience, disruption, and sustainability varies by publication and COVID-19 infections. It confirms patterns and insights from individual experiences on a global scale and examines text mining's limits and opportunities. Based on media attention and the number of infections, we can split the time into three distinct phases: (1) the beginning of the crisis; (2) the peak and lockdown; and (3) the ongoing management of SCs. Study implications are premature since this epidemic is fresh, dynamic, and continuous. This study lays the groundwork for future, more in-depth investigations by revealing the limitations of and opportunities for enhancing existing approaches. As a result of its novel methodology and timely data, this empirical research has the potential to aid in the identification of trends and patterns that might inform further in-depth exploration (4, 5) .

As a consequence of outsourcing and expanding manufacturing and SC operations, most firms rely heavily on worldwide suppliers and have become more complicated, making them particularly susceptible to SC interruptions. Both external, outside the control of the company events, such natural calamities (like the COVID-19 pandemic), and internal, within the control of the firm, events, like missing contingencies or mismanagement, may disrupt SC (6).

One definition of risk is "the anticipated result of an unknown occurrence." The likelihood of losses, their severity, their rate of occurrence, and their regularity all play significant roles in international security and safety Supply and demand concerns are two typical external hazards linked to SC interruptions (7) .They may face "risk of disruptions in the flow of components they require for their internal operations" due to supply uncertainty in the upstream/supplier sector Equally as crucial as the quality of the items acquired is the dependability of expected delivery schedules and the resilience of pricing in the face of unanticipated shortages. Organizations face demand uncertainty while dealing with customers, which is the possibility of a substantial and incalculable variation in the demand for products (8).

### **The Future Scope of GSCM**

The GSCM's scope ranges from the implementing and monitoring of the general environment management programmes to more creating or controlling practises implemented through various Rs (Reduce, Re-use, Rework, Refurbish, Reclaim, Recycle, Remanufacture, Reverse logistics, etc.) towards attaining a GSCM waste minimization is being considered as an important strategic. GSCM is an acronym that stands for "Global Supply Chain Management. "The activity that does not add value and is carried out in every process is referred to as waste. The primary adversary that people in the industrial and production industries often think about when they think of environmental protection (9).

In other words, the processes of manufacturing and production are seen as the causes of environmental damage, which manifests itself as the development of waste, the disturbance of ecosystems, and the depletion of natural resources.

The supply chain business is essential to every economy and serves as its backbone. More market accessibility drives increased rural and urban consumption, and a well-organized and

effective supply chain infrastructure helps reduce production costs and improve the convenience of doing business as well as the quality of the customer experience. The COVID-19 outbreak has cast a pall of doubt over the Indian economy as the year draws to a close. India's GDP expanded by 4.5% in the second quarter of FY20, the lowest annual pace in six years. India's GDP growth last dropped below 5% in 2013 (10,11).

Fear-uncertainty about COVID-19 affects green supply chain management (GSCM) and a firm's sustainability performance (economic, environmental, and social). It also analyses the moderating effect of CSR (internal and external) on COVID-19 and GSCM fear-uncertainty. 300 Egyptian managers were surveyed. Hypotheses and data were tested using PLS-SEM. COVID-19 fears boosted GSCM. External CSR reduces COVID-19 and GSCM fear-uncertainty. Non-CSR. GSCM boosts environmental and social performance. Unaffected economic performance. GSCM mediates between COVID-19 fear-uncertainty and a firm's E&S performance (11,12).

### **Important Consideration's After Covid-19 Impact on GSCM**

#### **Component Shortages are Rampant**

Covid, the Russia-Ukraine dispute, and the recent Japan disaster are a few instances of current shortages. Now, the planning team must ask the sourcing team the materials they can source before planning. Executives have recognised that the connection between supply chain and sourcing needs better (13).

#### **Disruption and Impact Visibility**

After running the MRP, shortages are often discovered. Interviewees said sourcing teams can't quickly identify scarcity implications, alternatives, suppliers, and sourcing methods. The difficulty point is not only researching alternatives but also simulating their influence on the integrated business strategy. Some lead times jumped, leaving organisations unprepared. Increasing lead times affect product supply continuity and new product launches (14).

#### **Contract Manufacturers & Suppliers**

Supply chain management can't be outsourced. Many corporations outsource most of their goods, using manual methods. Many processes struggle with contract manufacturer collaboration. Even for components that corporations manage themselves, contract manufacturers have little insight and control over procurement (15).

#### **Cyberspace**

Many of us have said for years that supply chains are networks of partners delivering goods and services to customers. Network issues need network fixes. Companies are joining cloud-based SaaS networks to communicate with manufacturers and suppliers. In volatile times, networks provide shared visibility and lock-step orchestration. Networks can reduce information latency and boost cooperation when integrated with correct business procedures (16)

#### **Gaps Filled from the Current Study**

- i. Every economy relies on its supply network. A well-organized supply chain infrastructure encourages rural and urban consumption.

- ii. As the year ends, the COVID-19 outbreak concerns India's economy. India's GDP grew 4.5% in Q2 FY20, the slowest rate in six years. In 2013, India's GDP growth fell below 5%.
- iii. When production facilities close, workers go on strike, or shipments are delayed, it may have a devastating impact on a country's economy.

## **CONCLUSION**

From the collected articles, the current review summarises that the Invariable exists. Panic revives bullwhip. Some executives envision an organisational bullwhip. Product divisions hedge for larger allocations and source's pad. Suppliers and manufacturers estimate supply based on customer assumptions. Things may deteriorate. Prepared companies with comprehensive sources and outside-in digital processes will thrive in the new economy.

**Conflicts of Interest:** None

**Funding:** None

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