EPRA International Journal of Environmental Economics, Commerce and Educational Management
Journal DOI: 10.36713/epra0414 |ISI I.F Value: 0.815|SJIF Impact Factor (2026): 8.752 ISSN: 2348 – 814X
Volume: 13 | Issue:5 | May 2026 -Peer Reviewed Journal

SUPPLY CHAIN MANAGEMENT – DTDC LOGISTICS

Shiva M
Sri Muthukumaran Institute of Technology, Chennai, Tamil Nadu

INTRODUCTION

Supply Chain Management (SCM) refers to the systematic coordination and management of activities involved in sourcing, procurement, production, transportation, warehousing, and delivery of goods and services. SCM ensures that products move efficiently from suppliers to customers while minimizing costs and maximizing customer satisfaction. In today's competitive business environment, effective supply chain management plays a major role in improving operational efficiency, reducing delays, maintaining product quality, and enhancing customer relationships. Modern organizations use advanced technologies, digital tracking systems, and logistics networks to improve supply chain performance and gain a competitive advantage.

The logistics industry is one of the most important sectors supporting supply chain management because it connects manufacturers, suppliers, retailers, and consumers through transportation and distribution services. Companies focusing on supply chain excellence can improve customer satisfaction, increase profitability, and achieve sustainable business growth.

INDUSTRY PROFILE

The logistics and supply chain industry is a rapidly growing sector that contributes significantly to the economic development of a country. The industry includes transportation, warehousing, inventory management, courier services, freight forwarding, and distribution management. The rise of e-commerce, globalization, and technological advancements has increased the importance of logistics and supply chain operations across the world.

In India, the logistics industry has experienced tremendous growth due to increasing industrialization, digital commerce, infrastructure development, and government initiatives such as Digital India and GST implementation. The industry supports various sectors including manufacturing, retail, healthcare, agriculture, and e-commerce. Modern logistics companies use technologies such as GPS tracking, warehouse automation, artificial intelligence, and digital supply chain systems to improve operational efficiency and customer service.

The logistics sector also focuses on last-mile delivery, reverse logistics, cold chain transportation, and international shipping services. Companies are investing heavily in technology and innovation to reduce transportation costs, improve delivery speed, and enhance customer satisfaction. The growing demand for online shopping and faster deliveries has further increased the importance of efficient supply chain management in the logistics industry.

COMPANY PROFILE

DTDC Logistics, officially known as DTDC Express Limited, is one of India's leading integrated logistics and courier service providers. The company was established in 1990 and has grown from a domestic courier company into a global logistics organization. DTDC operates through a franchise-based business model and has developed one of the largest logistics and delivery networks in India.

The company provides a wide range of services including domestic courier services, international shipping, warehousing, e-commerce logistics, cargo transportation, reverse logistics, and supply chain solutions. DTDC serves both B2B and B2C customers and supports industries such as retail, manufacturing, healthcare, and e-commerce. The company has access points across India and operates globally through strategic partnerships and international branches.

DTDC focuses on innovation, technology integration, and customer satisfaction. The company uses real-time shipment tracking, automated sorting systems, digital platforms, and warehouse management systems to improve operational efficiency. DTDC also emphasizes sustainability, women empowerment, and social responsibility within the logistics industry. The organization has introduced next-day delivery services, cold chain logistics, and technology-enabled logistics solutions to meet changing customer expectations.

The vision of DTDC is to become the most admired logistics partner through smarter and customer-focused solutions. Its mission is to lead the logistics industry through innovation, operational excellence, and continuous improvement. The company has established a strong reputation for reliability, efficiency, and service quality in the Indian logistics sector.

REVIEW OF LITERATURE

Bhat and Rajashekhar (2021) identified that quality management practices and operational efficiency are important factors influencing supply chain performance in logistics organizations. The study highlighted that benchmarking and employee adaptability are critical for successful supply chain implementation.

Kumar et al. (2020) analyzed supply chain practices in manufacturing and logistics industries and concluded that customer satisfaction and timely delivery are the major objectives of effective supply chain management. The study emphasized the importance of inventory control and transportation efficiency.

Shahin and Dabestani (2020) examined the role of leadership and organizational support in logistics and supply chain systems. The study found that strong leadership and process improvement significantly enhance supply chain performance and operational success.

Mishra et al. (2018) explained that traceability and information sharing are essential components of modern supply chain logistics management. The study highlighted that tracking systems improve transparency, coordination, and customer satisfaction within logistics operations.

Le and Fan (2023) discussed the use of digital twins and advanced technologies in logistics and supply chain systems. The study concluded that digital transformation improves operational visibility, efficiency, and decision-making in logistics management.

Phillipson (2024) analyzed the impact of quantum computing and advanced technologies on logistics optimization. The research emphasized that technology-driven supply chain systems can reduce transportation costs and improve route planning and inventory management.

RESEARCH METHODOLOGY

Research methodology refers to the systematic process used for collecting, analyzing, and interpreting information related to the study. The present study on Supply Chain Management at DTDC Logistics adopted a descriptive research design to understand logistics operations, transportation systems, warehousing activities, and customer service efficiency.

Both primary and secondary data were used for the study. Primary data was collected through questionnaires and employee interactions regarding supply chain practices, inventory management, delivery efficiency, and customer satisfaction. Secondary data was collected from company reports, websites, journals, books, and research articles related to logistics and supply chain management.

The sampling technique used for the study was simple random sampling. Employees from different operational departments such as transportation, warehousing, customer service, and inventory management were selected as respondents. Statistical tools such as percentage analysis, chi-square test, correlation analysis, and ANOVA were used to analyze the collected data and interpret the results effectively.

DATA ANALYSIS

The analysis of the study showed that a majority of employees were satisfied with DTDC's supply chain operations and logistics management systems. Employees agreed that the company maintains an efficient transportation network and effective warehouse operations. Most respondents expressed positive opinions regarding delivery speed, inventory handling, and shipment tracking systems.

The study also indicated that technology integration has improved operational efficiency within the organization. Employees appreciated real-time tracking systems, automated logistics processes, and digital communication systems. A majority of respondents agreed that the organization provides adequate training and support for improving operational performance.

However, certain respondents expressed concerns regarding workload pressure, delivery deadlines, and transportation delays during peak business periods. Some employees suggested improvements in warehouse infrastructure, route optimization, and employee welfare measures to further improve supply chain efficiency and customer satisfaction.

FINDINGS

The study identified several important findings regarding supply chain management practices at DTDC Logistics:
The company maintains a strong logistics and transportation network across India.
Technology integration and digital tracking systems have improved operational efficiency.
Employees are generally satisfied with warehouse management and inventory control systems.
Customer satisfaction is positively influenced by timely delivery and real-time shipment tracking.
Delivery pressure and workload increase during peak operational periods.
Efficient coordination between departments contributes to smoother supply chain operations.
Employees believe that continuous training and technological advancement improve logistics performance.
Effective supply chain management helps the organization maintain competitive advantage and customer loyalty.

SUGGESTIONS

DTDC Logistics can further improve its supply chain management practices by adopting advanced automation technologies and artificial intelligence for route optimization and warehouse management. The organization should focus on strengthening employee training programs to improve operational skills and customer handling capabilities.

The company can also improve employee satisfaction by reducing workload pressure during peak periods and providing better welfare facilities. Increasing warehouse capacity, improving inventory forecasting, and enhancing communication systems can further improve operational efficiency.

DTDC should continue investing in sustainable logistics practices, digital transformation, and customer-focused services. Regular feedback collection from employees and customers can help the organization identify operational challenges and implement continuous improvements.

CONCLUSION

Supply Chain Management plays a vital role in improving the operational performance and customer satisfaction of logistics organizations. The study conducted at DTDC Express Limited reveals that the company has established a strong logistics network supported by advanced technology, efficient transportation systems, and customer-oriented services.

The organization focuses on innovation, operational excellence, and supply chain efficiency to meet growing customer demands. Although certain operational challenges such as workload pressure and delivery delays exist, DTDC continues to improve its logistics systems and service quality through technological advancements and employee development initiatives.

Overall, the study concludes that effective supply chain management contributes significantly to organizational growth, operational efficiency, and customer satisfaction. DTDC Logistics has developed a strong position in the Indian logistics industry and continues to expand its capabilities through innovation and continuous improvement.

REFERENCES

1. *DTDC Official Website*
2. *DTDC Global Overview*
3. *Mishra, D.K., Henry, S., Sekhari, A., & Ouzrout, Y. – Traceability in Supply Chain Logistics Management.*
4. *Le, T.V., & Fan, R. – Digital Twins for Logistics and Supply Chain Systems.*
5. *Phillipson, F. – Quantum Computing in Logistics and Supply Chain Management.*
6. *Kumar et al. (2020) – Supply Chain and Quality Management Studies.*
7. *Shahin and Dabestani (2020) – Leadership and Process Improvement in Logistics.*
8. *Bhat and Rajashekhar (2021) – Quality Management Barriers in Industry.*