



# International Journal of Innovative Research in Science Engineering and Technology (IJIRSET)

*(A Monthly, Peer Reviewed, Refereed, Scholarly Indexed, Open Access Journal)*



**Impact Factor: 8.699**

**Volume 14, Issue 8, August 2025**

# Evaluation of the D2D Logistics Network, the Backbone of the Indian Newspaper Industry and a SWOT Analysis of the Prevalent Distribution System

Dr. Sreedhar P. Nair

Head of the Research Department, Department of Commerce, St. Michael's College, Cherthala, Kerala Affiliated to the University of Kerala, India

**ABSTRACT:** The newspaper industry in India still holds a significant space in the media and information scenario of the country irrespective of the dominant role of the digital media. The industry largely depends on the dynamic and professional Door-to-Door (D2D) logistics network. This system of logistics functions like a well-oiled machine to deliver the daily newspaper to millions of people across the country in all seasons. Neither geographical constraints nor adverse weather conditions hinder this system of logistics. The system ensures the uninterrupted distribution of the daily newspaper to the vast majority people in the country. This paper intends to examine the functional efficacy, impediments and the general influence of the complex network of D2D logistics by considering it as the irrefutable vertebrae of the newspaper industry. In addition to this, a SWOT analysis (Strengths, Weaknesses, Opportunities and Threats) of the current system logistics is conducted to examine in detail the merits, intrinsic drawbacks, major hindrances and the future prospects. In its concluding remarks, the paper highlights the essentiality to streamline and endure this vibrant network of logistics for the effective functioning of the press industry in India.

**KEYWORDS:** D2D Logistics, Newspaper Industry, India, Supply Chain, Last Mile Delivery, Print Media, SWOT Analysis, Distribution Network.

## I. INTRODUCTION

The newspaper industry has such an impact on public life in the country that it is said that a day in India begins with the arrival of a newspaper in the home every morning. Even as new technologies emerge in the field of digitalization, the Indian newspaper industry remains a prominent industry in the world. The excellence of printing technology, along with the expertise of newspaper workers, and an efficient, systematic, and constantly operating logistics network, stand as the pillars of the Indian newspaper industry. The Indian newspaper industry's D2D logistics system is a complex and robust supply chain system that extends from printing presses to the door steps of people. The paper intends to conduct a thorough assessment of the rampant D2D supply chain logistics system. It explores the fundamental mechanism, evaluates the efficacy and ascertains the numerous obstacles tackled by this system of logistics. Beyond this assessment, a comprehensive SWOT analysis is conducted to pinpoint the inherent pros and cons, various growth avenues and major threats of the system. The inferences drawn will accentuate the significant stature of this logistics and deliver valuable information on relevant refurbishing strategies for its advancement.

## II. THE INDIAN NEWSPAPER INDUSTRY: A CONTEXTUAL OVERVIEW

The newspaper industry in India is a distinct segment in the context of its nature, size, dimensions and perspectives. The press industry in the country extends numerous dailies, periodicals, languages and geographical regions. Compared to the declining phenomenon of the newspaper industry in other parts of the world as a result of the thriving influence of the digital information systems and social media, the print media in India enjoys a unique position with ample readership base and circulation. Lack of internet reach in certain areas and habitual morning dailies are the prominent reasons for the preference of newspapers over the digital media.



The operational schedule of the industry is rigid and time bound. The key components of the daily cycle are comprised of collection of news, editing, printing, sorting and distribution of the papers. It has to complete the entire process within a short span of time in order to make the papers ready for distribution in the early morning in various parts of the country. The whole system of the industry functions on a war foot basis regularly to deliver the newspapers in the hands of the readers on right time. Any delay in this process will affect the credibility and readership of the concerned newspaper. The time sensitive attribute of the industry creates severe work pressure on the logistics network. Speed and accuracy are the crucial components that determine the effectiveness of a logistics system. Other major aspects are the cost and price factors of newspapers. Readers always anticipate reasonable price for newspapers and are not interested in increasing their daily expenses. Increasing the price of newspapers for meeting the cost of operation is not ideal for the newspaper industry. Therefore, the industry has to maintain a cost-efficient logistics system that ensures maximum speed and accuracy.

### **III. DECONSTRUCTING THE D2D LOGISTICS NETWORK: FROM PRESS TO READER**

The D2D logistics network for Indian newspapers is a multi-tiered, often informal yet highly effective system. It involves several key stages and stakeholders:

- **Printing Press:** Newspapers are printed overnight at various regional presses.
- **Primary Transportation:** Bundles of newspapers are loaded onto trucks or vans immediately after printing. These vehicles transport the bundles from the printing press to various district or city-level distribution hubs. This phase emphasizes speed and bulk transport.
- **Distribution Hubs/Depots:** These are central points, often simple warehouses or open spaces, where bundles from the primary transport are offloaded. Here, the large bundles are sorted and broken down into smaller, route-specific bundles.
- **Secondary Transportation to Agents/Hawkers:** From the distribution hubs, smaller vehicles (often auto-rickshaws, vans, or even bicycles) transport these sorted bundles to local newspaper agents or direct to the hawkers' collection points within specific localities.
- **The Last Mile: Hawkers/Delivery Agents:** This is the most crucial and labour-intensive part of the D2D chain. Thousands of newspaper hawkers, often starting their day in the pre-dawn hours, collect their assigned bundles. They then sort papers manually by street, building, or individual subscriber, often bundling multiple publications for a single household. Using bicycles, two-wheelers, or walking, they ensure precise and timely delivery to individual doorsteps. This human element is the true D2D component.
- **Payment Collection & Returns:** Hawkers also play a role in collecting monthly subscriptions directly from readers and handling returns of unsold or damaged newspapers back up the chain for credit.

The decades old complex logistics system succeeds on traditional know-how, regional expertise, social relationships, and a high extent of social harmonisation which is deprived of the application of modern technology in its operations.

### **IV. EVALUATION OF THE D2D LOGISTICS NETWORK**

The examination of the D2D logistics system of the newspaper industry of India unveils a structure that is both extremely strong and intrinsically defied.

#### **4.1. Effectiveness**

- **Unparalleled Coverage:** The system efficiently reaches the whole parts of the vast nation covering small villages and metropolitan cities providing an extensive dissemination of information. This coverage of the network is unmatched by any other system of logistics in the country.
- **Firmness in keeping Time:** In spite of the complexities in the logistics network, newspapers are delivered at early morning, in order meet the demands of the readers.
- **Reasonable Price:** As a result of the large volume of demand and the utilisation of casual labour, the cost of the delivery of a single newspaper is considerably low, which is significant while evaluating the profit of the industry.
- **Customer Service:** Hawkers often build strong relationships with their customers, providing personalized service, handling queries, and adapting to specific delivery instructions.

**4.2. Efficiency**

- **Manual and Labor-Intensive:** While effective, the efficiency is derived more from human dexterity and informal coordination than from technological optimization. Sorting, bundling, and route planning are largely manual processes.
- **Limited Real-time Tracking:** There is virtually no real-time tracking of individual deliveries or even bundles once they leave the primary distribution hubs, leading to a lack of data-driven insights.
- **High Dependency on Individuals:** The system relies heavily on the individual commitment and local knowledge of hawkers and agents. Any disruption (e.g., hawker illness, labour disputes) can immediately impact delivery.
- **Returns Management:** The process for handling unsold or damaged copies (returns) can be inefficient, leading to pilferage or improper disposal, and impacting overall profitability.

**4.3. Challenges**

- **Rising Costs:** Fuel prices, labour wages, and vehicle maintenance costs are steadily rising, putting pressure on the already thin margins.
- **Labor Scarcity and Attrition:** The demanding hours (pre-dawn), low wages, and physical nature of the job make it increasingly difficult to attract and retain new hawkers, especially in urban areas where alternative opportunities exist. Younger generations are less inclined towards this profession.
- **Infrastructure Limitations:** Poor road conditions in some areas, traffic congestion in cities, and lack of dedicated logistical infrastructure (e.g., proper sorting centres) can hinder smooth operations.
- **Weather Dependency:** Rain, fog, and extreme temperatures can severely disrupt delivery schedules and damage newspapers.
- **Lack of Formalization & Skill Development:** The informal nature means a lack of formal training, standardized processes, and professional development for the delivery workforce.
- **Data Deficit:** Without digital tracking or centralized data collection, it's difficult to optimize routes, predict demand accurately, or identify systemic inefficiencies.

**4.4. Impact**

- **Economic Impact:** The network supports a vast ecosystem of employment, from drivers and depot staff to thousands of hawkers, contributing significantly to the informal economy.
- **Social Impact:** It ensures access to information and education, playing a vital role in informing the populace, shaping public opinion, and upholding democratic principles.

**V. SWOT ANALYSIS OF THE PREVALENT D2D SYSTEM**

A systematic analysis of the D2D logistics network highlights its inherent characteristics and the external forces shaping its future.

**5.1. Strengths of the D2D Logistics**

- **(S1) Extensive Network Reach:** Unparalleled geographical coverage, reaching remote villages and dense urban localities daily.
- **(S2) Cost-Effectiveness (Per Unit):** Highly optimized for low-cost, high-volume delivery, crucial for the newspaper's low price point.
- **(S3) Speed and Timeliness:** Designed for rapid, pre-dawn delivery, meeting the stringent time requirements of a daily publication.
- **(S4) Localized Knowledge & Relationships:** Hawkers possess intimate knowledge of routes, customer preferences, and local shortcuts, crucial for efficient last-mile delivery.
- **(S5) High Human Capital (Informal):** A vast, dedicated, albeit informal, workforce committed to the daily task.
- **(S6) Resilience & Adaptability:** Proven ability to navigate challenges like local protests, weather disruptions, and resource constraints through informal coordination and improvisation.

**5.2. Weaknesses of the D2D Logistics**

- **(W1) Manual & Labor-Intensive Processes:** Heavy reliance on manual sorting, bundling, and route planning, leading to inefficiencies and potential errors.

- **(W2) Low Application of Modern Technology:** The low utilisation of advanced technologies such as GPS tracking, digital payment systems, reduces the efficiency and transparency of the network.
- **(W3) Lack of Standardization:** Service-related complaints arise in certain situations due to lack of professional dealings by the casual workforce.
- **(W4) Highly Dependent on small vendors:** The selling of newspapers largely depends on small vendors across the country. So, the industry is exposed to absenteeism and shutdown, local disputes and other regional issues.
- **(W5) Lack of Data and Service Analytics:** Lack of up-to-date service data on delivery status, sales returns, cash dealings and customer feedback are major drawbacks of the network.
- **(W6) Problems in Proper Management of Returns:** The system faces lot of problems in handling unsold or damaged copies. This is a major concern resulting in financial losses and environmental issues.
- **(W7) Impoverished Working Conditions and Low Wages:** Lack of adequate wages and financial benefits to the casual labourers and other people in the logistics network results in low morale, absenteeism and high attrition. The issue adversely affects the newspaper distribution process.

### **5.3. Opportunities of D2D Logistics**

- **(O1) Technology Adoption:** Integration of GPS for route optimization, mobile apps for delivery tracking, digital payment collection, and centralized data management.
- **(O2) Diversification of Services:** Leveraging the existing last-mile network for delivering other small parcels (e-commerce, local businesses), creating new revenue streams for hawkers and publishers.
- **(O3) Professionalization & Training:** Formal training programs for hawkers in customer service, basic logistics, and digital tool usage to improve efficiency and reduce attrition.
- **(O4) Centralized Hub & Spoke Models:** Optimizing distribution hubs with better sorting technology and consolidation strategies.
- **(O5) Sustainable Practices:** Implementing electric vehicles for last-mile delivery, optimizing routes to reduce fuel consumption, and better waste management for unsold copies.
- **(O6) Collaboration with E-commerce Players:** Partnering with e-commerce companies for reverse logistics or last-mile delivery in areas where the traditional logistics infrastructure is weak.

### **5.4. Threats of D2D Logistics**

- **(T1) Digital Disruption & Declining Readership:** The primary and most significant threat; increasing internet penetration and smartphone usage are shifting consumers towards digital news, impacting print circulation.
- **(T2) Rising Operational Costs:** Continuous increase in fuel prices, labour wages, and vehicle maintenance costs puts severe pressure on the industry's profitability.
- **(T3) Shortage of Workforce and Labor Issues:** The system faces problems due to insufficiency of manpower due to low wages and service benefits. Difficulty in keeping the uninterrupted and consistent services of the small vendors and hawkers are also creates problems in ensuring smooth functioning of the logistics.
- **(T4) Environment Protection Regulations:** Stringent environment protection norms for usage of standardised vehicles and scientific waste management necessitates the replacement of outdated delivery vehicles with the new ones. This adds to the cost of logistics.
- **(T6) Supply Chain Disruptions:** Unexpected events like heavy rainfalls, flood, natural calamities or regional curfews can interrupt the regular distribution schedule.

## **VI. TOWARDS MODERNIZATION AND SUSTAINABILITY: RECOMMENDATIONS**

The SWOT analysis presents clear about the pros and cons of the D2D logistics. The following recommendations throws light on the essential steps for ensuring sustainability and enhancing competitiveness of the prevalent system of newspaper logistics.

- **Adoption of Digital Technology:** Integrating the current logistics with adequate technologies is highly essential. GPS-enabled route optimization software, mobile apps for hawkers, digital payments, and centralized data analytics platforms are few major technologies ideal for streamlining the operations of current system of logistics.
- **Professionalization of Venders:** Offering appropriate training programs for the vendors to bring professionalisation in services facilitates smooth functioning of logistics. The modules of training programs should cover best logistics practices, customer relationship management, digital literacy and basic financial management.

- **Fair Financial Returns:** Better financial reruns, incentives and other benefits, are necessary to attract and retain skilled people in the logistics network.
- **Infrastructure Development:** Well-equipped delivery points with automated sorting facilities facilitates easiness and time saving in the process of sorting newspapers. fuel efficient delivery vehicles and the use of electric two-wheelers would strengthen the current logistics network.
- **ICT Based Decision Making:** Adoption of ICT enabled systems for collection and analysis of data on delivery operations, customer feedback, and market trends would help to give valuable support for effective decision making.
- **Teamwork:** Sharing of the logistics infrastructure and partnering with existing logistics companies help the printers and publishers to enhance their core competencies.

## **VII. CONCLUSION**

The D2D logistics network of the Indian newspaper industry is a typical case study of an informal but highly active supply chain. It stood as the vital support, facilitating the circulation of print media in every nook and corner of the nation. Its key sources of strengths include extensive reach, cost-efficiency, and the expertise of its crew. On the other hand, the analysis highlights the key weaknesses of the system such as outdated technology, and susceptibility to manpower issues. Besides, the industry suffers intense threats from digital explosion and increasing operational costs. It is highly essential for the press industry to adopt advanced technologies in its operations and professionalize the workforce to effectively meet the future challenges. The D2D logistics network need to switch over into a strong, efficient, and multi-faceted and digitalised delivery infrastructure in order to effectively meet the demands of the new era.

## **REFERENCES**

1. Deepika (2021), What is Door-to-Door Delivery Service? What are its Advantages? E-commerce Delivery, <https://nimbuspost.com/blog/what-is-door-to-door-delivery-service-what-are-its-advantages/>
2. Door-to-Door Logistics Services: A Comprehensive Guide, 2023, <https://www.articleted.com/article/943679/349248/Door-to-Door-Logistics-Services--A-Comprehensive-Guide>
3. Vikram V, A Study on Newspaper Industry Supply Chain Risk, Challenges and Control Needed to Sustain in the Digital Era, International Journal of Research in Business Studies, Vol. 7 (1), June. 2022
4. Newspaper Industry: An Embodiment of A Human Supply Chain, IIM Indore, 2016, <https://insideiim.com/newspaper-industry-an-embodiment-of-a-human-supply-chain>
5. Jain, V. S. M., & Jain, R. (2022). Designing the Reverse Logistics of Newspaper Collection from Household by a Paper Recycling Unit: A Linear Programming Model. iJournals: International Journal of Software & Hardware Research in Engineering ISSN:2347-4890, 10(8). Retrieved from <https://ijournals.in/journal/index.php/ijshre/article/view/170>
6. Ballou, R. H., & Srivastava, S. K. (2007). Business logistics/supply chain management: planning, organizing, and controlling the supply chain. Pearson Education India.
7. Sukanya Mahangare, Ganesh Gardi, Vaishnavi Kulbhaje, Samiksha Ganjane, Prof. Bhagyashree Kadam, A Survey Paper on the Newspaper Distribution Management System, International Research Journal of Modernization in Engineering Technology and Science, Vol 6(2),2024
8. S Cecily, Role of agents and subagents in the distribution of newspapers: A functional analysis, International Journal of Advanced Academic Studies Vol 4(1), 2022, 181-184
9. Hemalatha L, Prof. Vani C. Challenges in Distribution Network of Newspapers: A Study of Newspaper Distribution Agents in Tirupati, Available online in International Journal for Innovative Research in Multidisciplinary Field. 2018;4(11):28-36.
10. FICCI-KPMG/2015 Report 8.
11. [www.auditbureau.org](http://www.auditbureau.org)
12. [www.assets.ey](http://www.assets.ey)





INTERNATIONAL  
STANDARD  
SERIAL  
NUMBER  
INDIA



# INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH

IN SCIENCE | ENGINEERING | TECHNOLOGY

 9940 572 462  6381 907 438  [ijirset@gmail.com](mailto:ijirset@gmail.com)



[www.ijirset.com](http://www.ijirset.com)

Scan to save the contact details