

Indian Road Freight Delays, Operational Cost and Driver Retention and Turnover for Mid-Sized Fleets: An Exploratory Analysis

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Abstract

Road freight in India plays a critical role in supporting the economic development of the country, accounting for almost 70% of the total freight transport. Truck drivers remain the backbone of this sector, with several job-related issues. Challenges related to delays in loading and unloading, documentation, long work hours, lack of communication and unavailability of resting places along the highways are key issues.

The study was based on a mixed-method approach that involved the gathering of both primary qualitative and secondary information from the Indian logistics firms. An observation of a mid-sized fleet was also conducted and noted in a fact sheet. The findings indicated that the unavailability of resting facilities, long working hours, unpredictable schedules and poor conditions of trucks are major reasons behind job dissatisfaction and low retention among mid-sized companies. Indian road-based logistics firms are recommended to boost their efforts to digitalise documents and provide drivers with AI-enabled suggestions about the time of loading and unloading to reduce delays, congestion and turnover rate.

1.0 Introduction

Indian road freight is one of the largest logistics mechanisms in the country, with thousands of drivers, companies and freight vehicles (trucks). This can be justified by the fact that 70% of freight transport in India is based on road-based trucks (Niti Aayog, 2022). The total logistics cost of India, due to an excessive dependency on road-based transport, is also huge, accounting for 7.97% of the GDP (Gross Domestic Product) (PIB, 2025). Most of the road-based transport is also dependent on mid-sized fleets of companies, as it helps them ensure sustainable operational costs and delivery to the interior (rural, semi-urban areas) of the country.

However, there are two issues related to the mid-sized fleet usage for logistics, including turnaround delays. The mid-sized entrepreneurs also provide third-party logistics such as 3PL, with a high rate of driver turnover

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(Benjatanont & Tantuico, 2020). For mid-sized fleets, this dependency can also push up the cost per trip and cause delays, which may hurt how customers see the brand.

This paper will explore the cost of delays, loading/unloading problems and driver turnover for mid-sized firms in an exploratory analysis of mid-sized fleets in India to provide strategic suggestions for reducing turnover and reducing delivery delays.

2.0 Literature Review

2.1 Working condition and retention of drivers

Retention of drivers in a mid-sized logistics firm in India is crucial to ensure higher profitability and long-term sustainability of the business. According to Fatorachian & Pawar (2025), a mid-sized logistics company faces serious issues in adopting advanced technologies such as artificial intelligence (AI) and GPS-based route planning. Resistance from drivers in India against the digitalisation of operational services and the distribution of duties in mid-sized firms is a key reason. For example, Netradyne, a Bangalore-based tech company, launched its sensor-based driver monitoring system “Driver-i” to monitor their performance (TOI, 2025). However, this idea got resistance from local Indian truck drivers over fear of losing personal choices and constant monitoring, while driving on a highway.

From the perspective of the Resource-Based View (RBV) model, it can help a logistics firm to gain and maintain competitive advantages by focusing on strategic exploration of available resources (Sahu et al. 2025). An increase in the use of advanced technologies in Indian conditions, with low education rates among truck drivers at mid-sized logistics firms, can lead to delays, high workload, and physical and mental strain.

2.2 Operational inefficiency due to loading/unloading delays

The delays in loading and unloading of the goods to be delivered and truck age are other key issues, impacting the retention of drivers and increasing logistics costs. de Vries and Roy (2025) analysed more than 27,000 trips in India, and found that drivers of trucks older than 7 years have a 20% higher chance of leaving the job at any given time. On the other hand, truck turnaround time (TAT), which is the time it takes for the vehicle to deliver goods and return to its base station, impacts driver retention due to operational inefficiency. For instance, operational restrictions across the ports of India and delays connected with loading and unloading of goods can lengthen turnaround times and raise costs. The interviews in this study point the same way, with one driver describing unloading queues at Mumbai port as frustrating and leaving little rest time (Table 2). For a mid-sized logistics firm in India which depends entirely upon the fleet of trucks, ensuring documentation as per legal requirements therefore leads to operational delays, with the threat of high driver turnover and low retention.

2.3 Financial and workforce consequences for turnaround delays

The turnaround delays of the fleet of trucks due to regulatory hurdles, lack of truck maintenance and loading/unloading issues also have consequences for driver retention. In India, the country already faces a shortage of 2.2 million skilled truck drivers, with approximately 3.6 million driving partners and 6 million trucks (Katiyar, 2026). Moreover, the high dependency of the country's logistics sector on road-based transport, with trucks as the main pillar, further complicates the problem and leads to economic losses. Therefore, ensuring better coordination and reduction of costs per trip is essential to improve operational sustainability.

3.0 Methodology

3.1 Research Design

Research design is the overall plan, linked with the collection, measurement and analysis of data to address a specific issue. An inductive approach was followed, which allowed the gathering of primary qualitative, as well as secondary data (Sharma et al. 2023). The research design was exploratory for this paper, to understand the reasons why truck drivers are leaving mid-sized logistics firms in India. An *exploratory* research design allowed the collection of data through interviews, along with secondary information from industry sources, to analyse the area of interest (Anderson & Lightfoot, 2022). Therefore, following an exploratory research design to analyse driver retention and turnaround delays in the Indian freight sector was justified.

The research paradigm in this research was *pragmatism*. Pragmatism allows the collection and analysis of a broad spectrum of data, both qualitative and secondary observational, to arrive at a conclusion (Hampson & McKinley, 2023). By following this paradigm, an analysis of mid-sized logistics firms in India, based on interviews with drivers, company operational data and a fleet observation, was possible and justified.

3.2 Data Collection and Analysis Strategy

The unit analysis of driver retention and turnaround delays, as well as its impact on the operational outcome of mid-sized logistics firms, was two-fold. It involved analysing the retention of drivers, as well as turnaround costs for individual trips.

Primary qualitative data were generated through *semi-structured interviews* with drivers and fleet managers of mid-sized road-based logistics firms. The interview questions involved pay and incentives for drivers, trip frequency, working hours, waiting time, supervisor behaviour and reasons for leaving. On the other hand, secondary information from mid-sized freight businesses and observations of a mid-sized fleet were also included in this research. Operational data from mid-sized firms include loading/unloading timestamps and driver retention records.

In relation to the sampling of participants to be allowed for the interview, a *purposive* sampling strategy was implemented. This helps to narrow down the number of participants and brings consistency in the results. A total of 5 truck drivers and fleet managers were interviewed online, with 5 questions being asked.

The key inclusion criteria for the selection of secondary information included sources published since 2022, published on company websites, and strictly linked to road-based logistics firms.

The analysis of secondary qualitative operational data and interviews includes thematic analysis to ensure better extraction of findings and address the key issues related to driver retention and turnaround delays within Indian freight companies.

3.3 Research ethics

All the participants selected for the interview signed a consent form, with a declaration of data protection. This enhances transparency and quality of findings, and ensures the protection of sensitive company information. Moreover, all the fleet observations were written in a document, categorised as an evidence sheet, to maintain transparency.

4.0 Results

4.1 Interview

Q1: What are the main reasons for you to consider leaving the fleet?

Participant	Response
Respondent 1	Long working hours above 8 hours per day, limited time to visit home and low incentives
Respondent 2	Unpredictable trips and delayed payment from the vendor
Respondent 3	Unavailability of driver resting facilities on highways makes the job difficult for me
Respondent 4	The condition of the trucks is very poor, with a chance of police challan on the highways; it needs to be paid from my own salary
Respondent 5	Availability of better salary, stable schedule and incentives at other companies

Table 1: Response against question 1

(Source: Self-developed)

Q2: How do loading and unloading delays affect your working experience?

Participant	Response
Respondent 1	I feel that waiting time for drivers was high at the picking location, making the trip stressful
Respondent 2	Delays at warehouses often extend the working day and reduce rest time
Respondent 3	Unloading queues at Mumbai port were particularly frustrating, with low rest time
Respondent 4	Delays related to documentation sometimes take more time than loading, making the journey stressful
Respondent 5	Unpredictable arrival and departure times led to delays, with low resting time

Table 2: Response against question 2

(Source: Self-developed)

Q3: What are the main reasons for turnaround delays at your organisation?

Participant	Response
Respondent 1	I believe that the biggest problems are vehicle queues and insufficient loading staff at the warehouses
Respondent 2	Potential errors in documentation and waiting time approval
Respondent 3	Queues at the weighbridge and security checks before dispatch are major hurdles
Respondent 4	Poor coordination between warehouse and transport teams causes unnecessary detention
Respondent 5	Overcrowded customer warehouses are the major cause of delay

Table 3: Response against question 3

(Source: Self-developed)

Q4: What financial impact do these delays have on each trip?

Participant	Response
Respondent 1	Extra waiting time at the delivery location increases fuel-related costs
Respondent 2	Delay in one trip could lead me to a situation where I miss my next trip, causing financial loss at the personal level
Respondent 3	Unproductive vehicle after detention by policy causes financial loss
Respondent 4	Delays due to traffic jams on highways increases fuel cost and reduce rest time
Respondent 5	Repeated delays reduce overall fleet utilisation and profitability

Table 4: Response against question 4

(Source: Self-developed)

Q5: What improvement do you expect from the organisation to improve driver retention and reduce turnaround delays?

Participant	Response
Respondent 1	Better work scheduling by the fleet managers and faster loading and unloading
Respondent 2	I expect a better financial incentive, based on punctuality and number of deliveries per week
Respondent 3	The development of better rest facilities at the warehouse locations and highways
Respondent 4	In my opinion, digital documentation can reduce delays during loading and unloading
Respondent 5	I think fleet managers should communicate respectfully to address drivers' concerns

Table 5: Response against question 5

(Source: Self-developed)

4.2 Operational data from freight Business

The annual report 2024-25 of VRL Logistics, located in Hubli, Karnataka, showed that the implementation of the "Hub and Spoke" model led to better retention of drivers and 81% of the fleet being debt-free, linked to better revenue collection (VRL Logistics, 2025). The firm, however, was not able to maintain an 8-hour work schedule for its drivers while delivering goods.

TCI Express, a listed logistics firm in Gurugram, India, was found to organise street plays under the leadership of fleet managers under its "Safe Safar" initiative. The annual report of the company reflects its initiatives for road safety and driver engagement, suggesting the significance of communication and managing safety awareness to support freight operation (TCI Express, 2025). This also highlights the importance of inclusive leadership to boost confidence among truck drivers working with mid-sized logistics firms and help in the smooth running of operations.

Navata Road Transport, headquartered in Vijayawada, Andhra Pradesh, showed that the company maintains a strong network of operations across 668 locations in Telangana, Andhra Pradesh, Odisha, Karnataka, Maharashtra and Gujarat in India (Navata, 2025). Moreover, the company's centralised GPS-based tracking system helps drivers reach destinations in the shortest possible way, without major hindrances.

4.3 Observations of a mid-sized fleet

Time-period	Total Number of drivers	Number of drivers on duty	Number of delivery delays	Number of drivers who newly joined	Number of drivers who left the job	Net income at month's end from observed shipper-side data (INR)
May 2026	500	450	30	N/A	10	1,00,00,000
June 2026	450	420	25	0	50	80,00,000
July 2026	480	460	55	50	20	90,00,000
August 2026	550	530	40	70	0	1,20,00,000

Table 6: Observed mid-sized fleet

(Source: Self-developed)

5.0 Discussion***Driver retention in relation to working condition***

The results indicated that long working hours, delays in deliveries and lack of resting time while on the highway are key reasons for poor driver retention among Indian logistics companies. For instance, respondent 1 said that "waiting time for drivers was high at the picking location, making the trip stressful", supported by respondent 3, stating "Unloading queues at Mumbai port were particularly frustrating, with low rest time". According to Kumar, Lakshman & Sudagani (2025), traffic restrictions in major cities hamper the delivery schedule of logistics companies in India and are a major reason for frustration among drivers. Other key reasons for potential poor driver retention are found to be a lack of salary increments and a communication gap with the fleet managers. In comparison, the observed fleet has been found to manage driver retention and net income in a reasonable manner. For instance, in August 2026, the fleet had a net income of INR 1,20,00,000, based on the data from the shipper's side.

Operational coordination and loading/unloading delays

Potential delays in the loading and unloading process of goods are a key reason behind the high percentage of turnover of truck drivers in India. The interview findings showed that respondent 2 said, "delay in one trip could lead me to a situation where I miss my next trip, causing financial loss at the personal level". Sahu, Pani & Santos (2022), stated that inadequate configuration of areas to conduct loading and unloading led to double-parked freight trucks and increased delivery time. On the contrary, the Hub and Spoke model of VRL Logistics led to better revenue collection, as 81% of the fleet became debt-free, directly influencing driver retention. Similarly, the fleet observations showed that retention held up in most months but dipped in June 2026, when 50 drivers left, compared with 10 in May, 20 in July and none in August. Therefore, despite the issues of operational coordination with fleet managers and loading and unloading issues, the logistics companies observed in India have found ways to high employee retention and profitability.

6.0 Conclusion

In conclusion, truck driver retention and delays in product delivery are key issues among Indian road-based logistics companies with a mid-sized fleet. Long working hours, lack of resting places and documentation problems are frequent issues faced by the drivers on the road. The fleet observations also indicate these issues, despite a generally low turnover rate. In this context, mid-sized logistics firms in India should boost their efforts to digitalise documents and give drivers AI-enabled suggestions on loading and unloading times, to reduce delays, congestion and turnover.

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Appendices

Appendix 1: Interview Questions

Q1: What are the main reasons for you to consider leaving the fleet?

Q2: How do loading and unloading delays affect your working experience?

Q3: What are the main reasons for turnaround delays at your organisation?

Q4: What financial impact do these delays have on each trip?

Q5: What improvement do you expect from the organisation to improve driver retention and reduce turnaround delays?