



SHIPMENT EFFICIENCY & DELAY INSIGHTS DASHBOARD



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Objective

The goal of this analysis was to evaluate shipment performance across a fleet of assets (trucks), identify key causes of delays, and propose data-driven insights to improve logistics operations.

Key Findings

- **Total Shipments Analyzed:** 1,000
- **Overall Delay Rate: 56.6%** of shipments experienced delays.

Top Delay Reasons:

- **Traffic** (47.4%) was the most common cause of shipment delays.
- **Weather** (13.3%) and **Mechanical Failure** (13.3%) also contributed.

Worst Performing Assets:

- Several trucks such as **Truck_2**, **Truck_10**, and **Truck_5** had consistently high delay counts.
- Indicates potential scheduling, routing, or maintenance inefficiencies.

Waiting Time Insights:

- Average waiting times were similar across all shipment statuses:
 - Delayed: 12,096 mins
 - Delivered: 11,925 mins
 - In Transit: 11,041 mins
- Suggests **waiting time is not the main cause of delays**.

Seasonal Delay Trends:

- Delay rates fluctuated across months, indicating **possible seasonal or demand-driven impacts**.

Recommendations

1. **Prioritize route optimization and traffic forecasting** to reduce delays.
2. **Investigate high-delay trucks** for maintenance, driver behavior, or route assignments.
3. **Further explore weather data integration** to anticipate disruptions.
4. Consider **real-time tracking dashboards** for delay alerts and proactive resolution.

Dashboard Screenshot

