



# FedEx Logistics Performance Analysis

Optimizing Global Supply  
Chain Operations Through  
Data-Driven Intelligence

# Logistics inefficiencies are systemic, but targeted interventions can recover margins and reliability.

Total Shipments

**10,324**

Total Freight Cost

**\$130.5M**

On-Time Delivery (OTD)

**88.51%**

Avg Delay (Late)

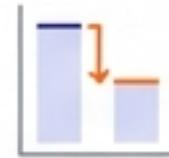
**21.4 Days**

## The Stability Gap



While OTD averages ~89%, month-to-month volatility exposes the network to unpredictable service failures.

## Margin Leakage



A significant volume of low-value shipments incur freight costs exceeding 10% of their value, directly eroding gross margins.

## Vendor Risk



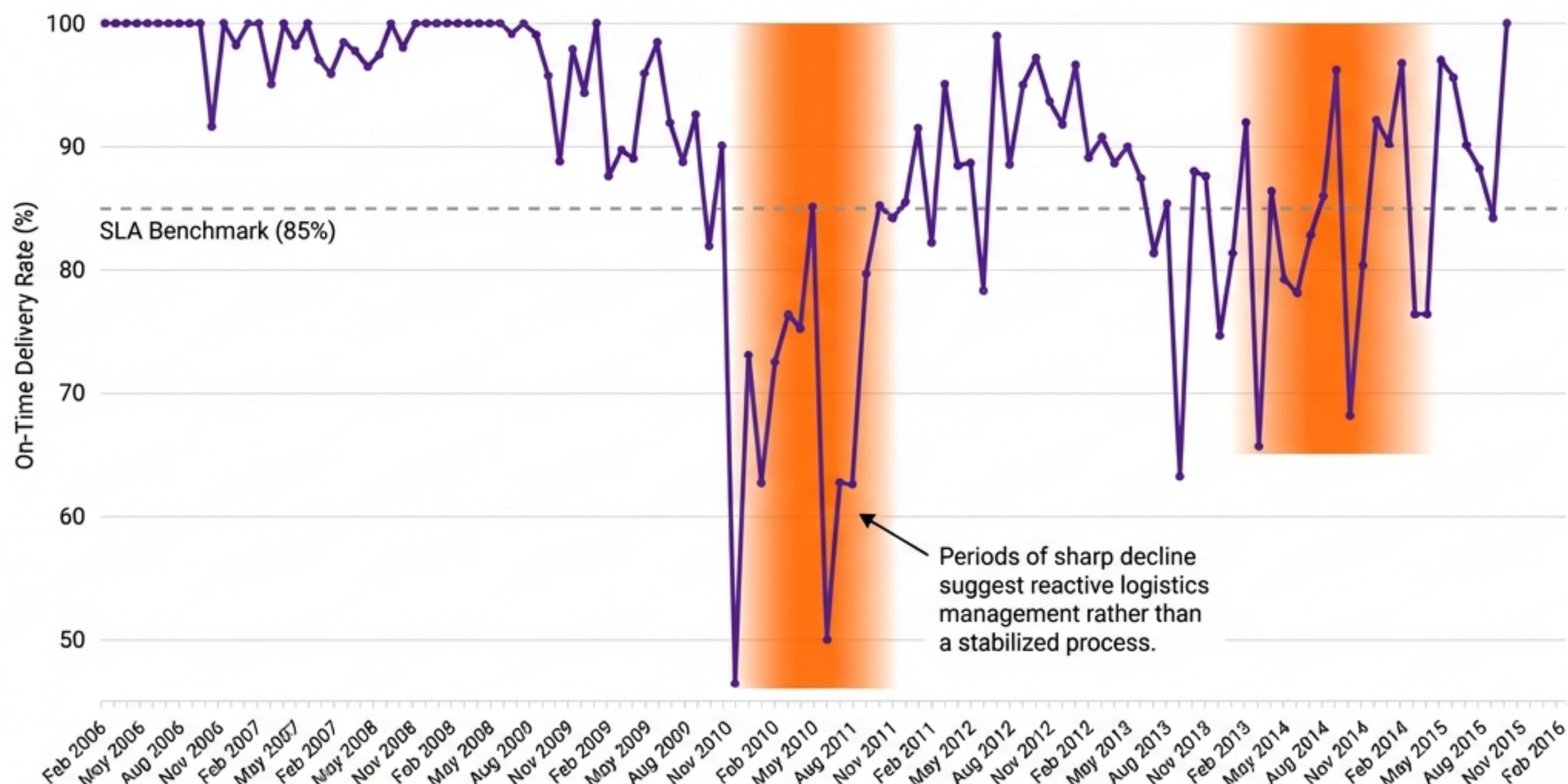
A specific cluster of vendors occupies the “Critical Risk” quadrant (High Cost / High Delay), necessitating immediate governance review.

**Strategic Opportunity:** Shifting from reactive tracking to proactive mode optimization and vendor consolidation will stabilize lead times and reduce cost-to-serve.

# Delivery performance averages 89% but suffers from significant operational volatility.

## Monthly On-Time Delivery Trend

Tracking delivery reliability and stability over time

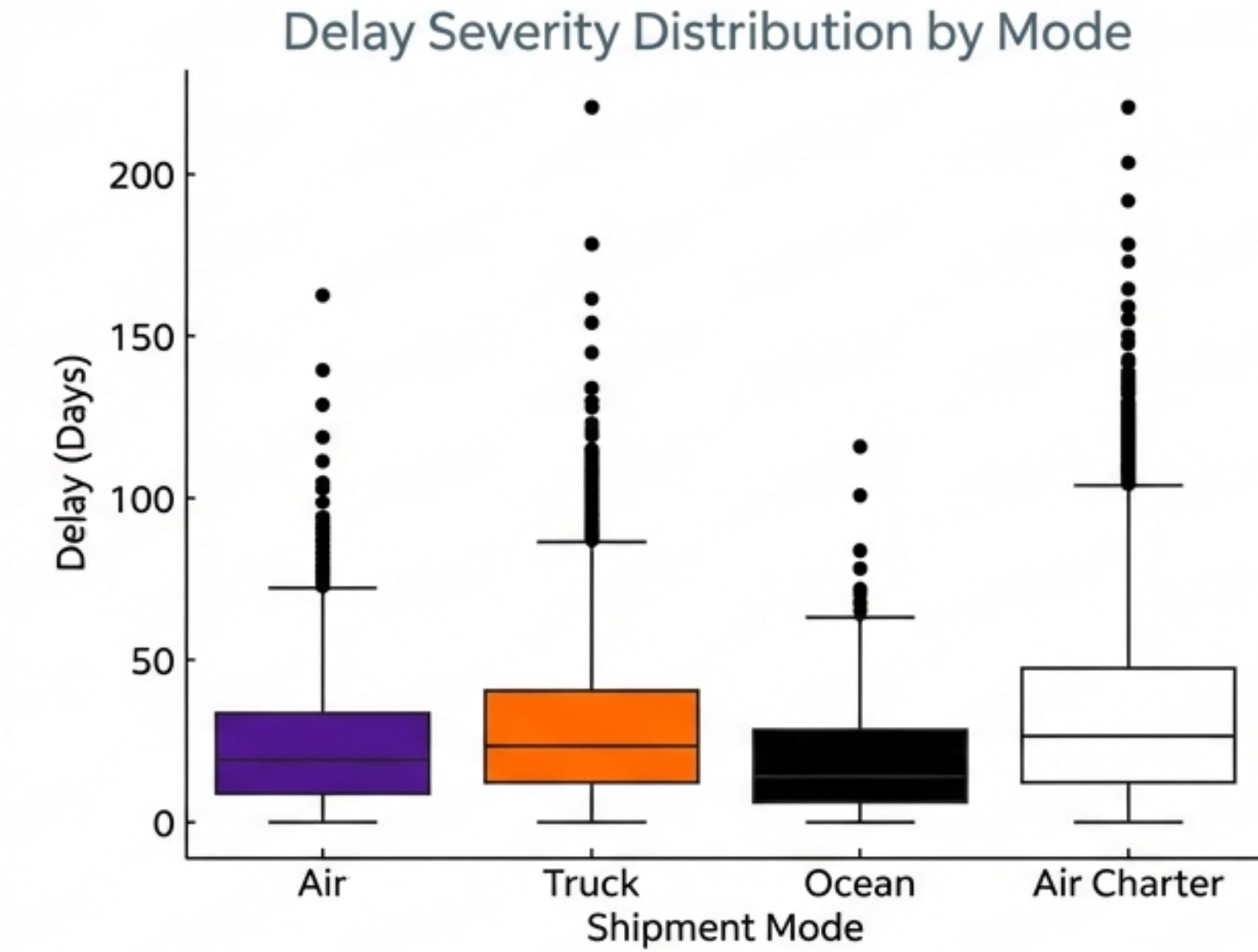
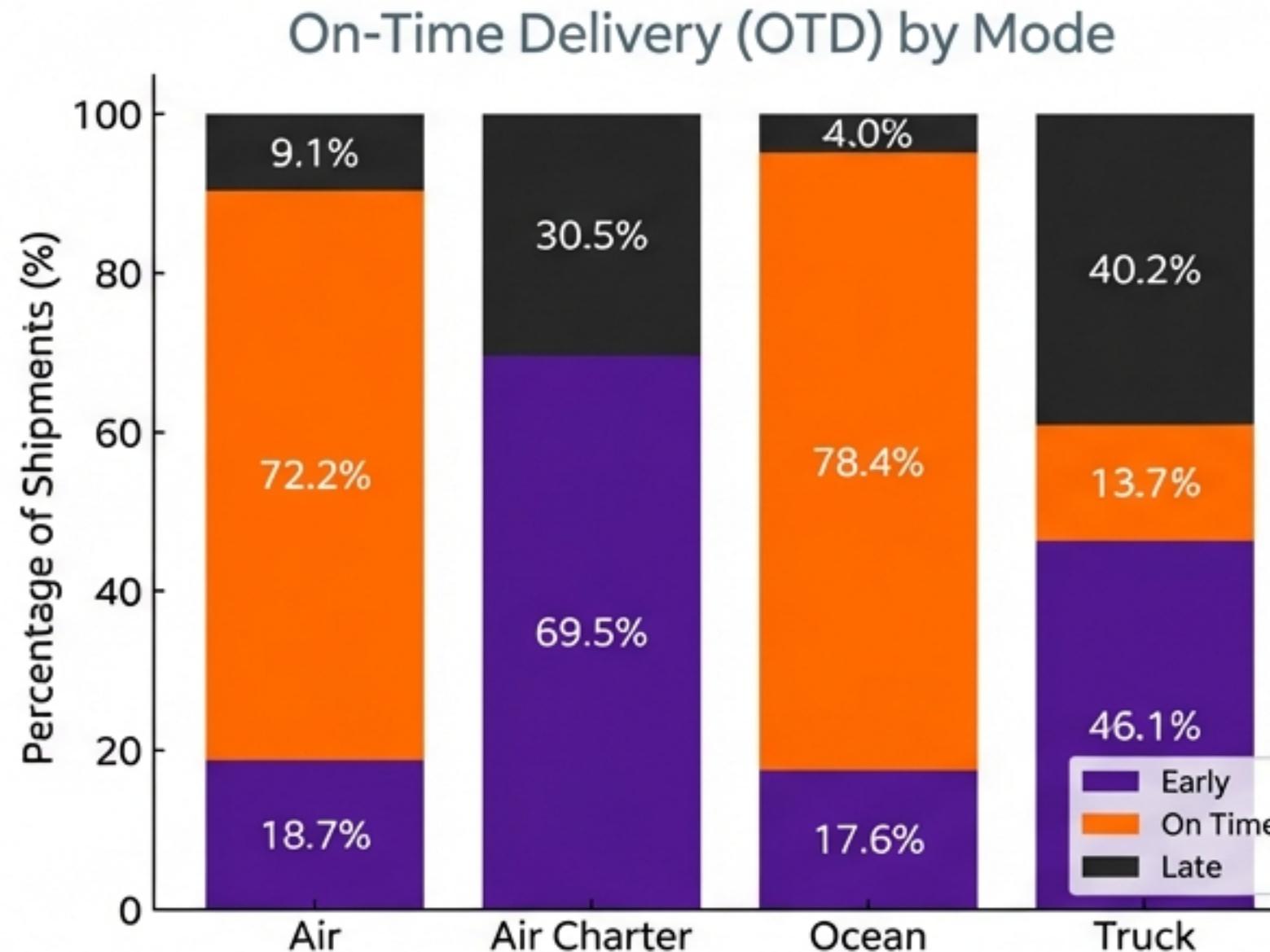


## Insight Rail

The historical trend shows an average OTD of 88.5%, but the inconsistency requires deeper analysis.

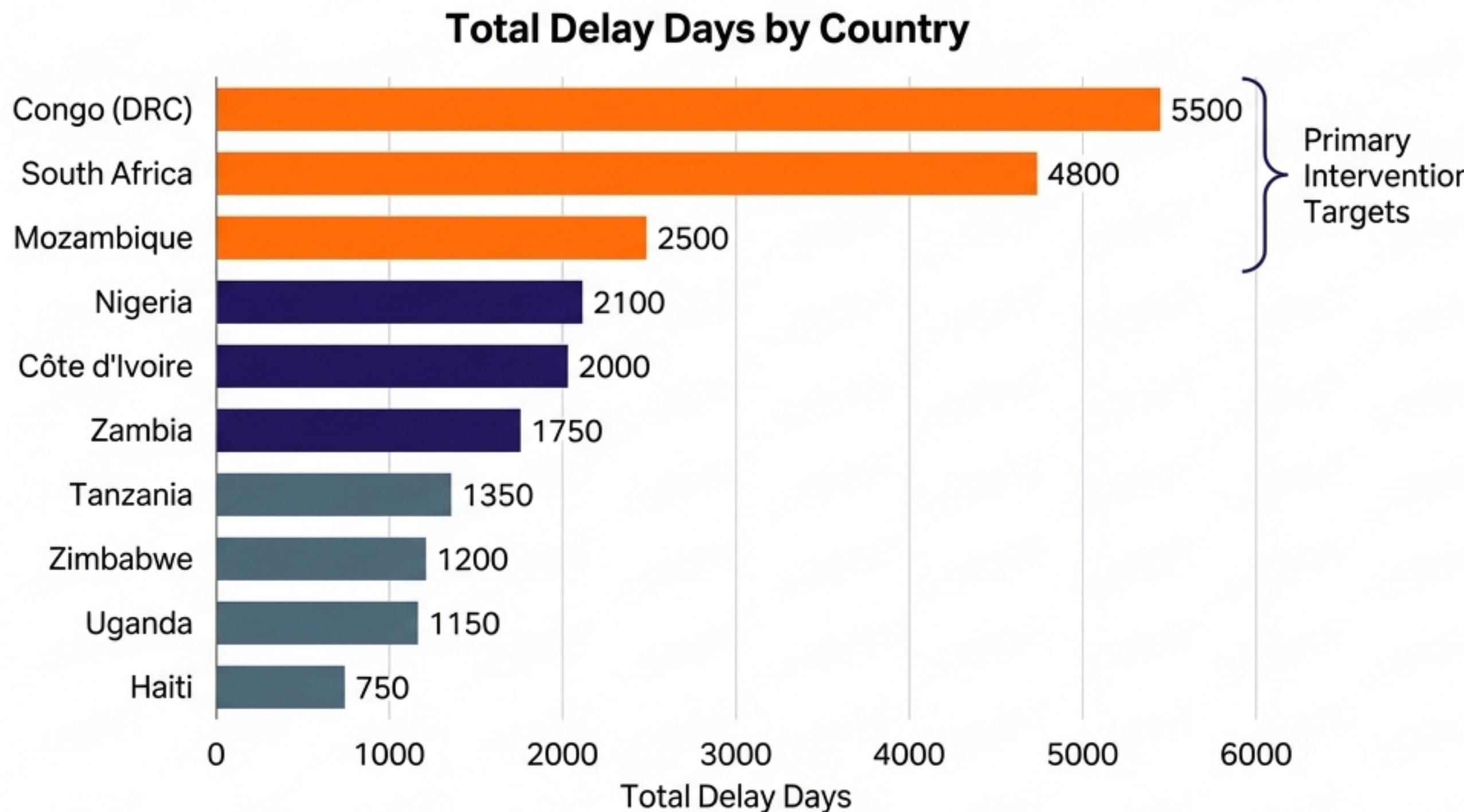
We are not consistently hitting the reference benchmark of 85% in a stable manner; we are oscillating around it.

# Premium modes like Air Charter and Truck drive a disproportionate share of service failures.



Ocean freight, while slower, is statistically more predictable. Air Charter and Trucking exhibit extreme variability (outliers extending >100 days), making them the primary drivers of SLA breaches despite their higher cost.

# A small cluster of countries accounts for the majority of the network's total delay impact.



## Insight Rail

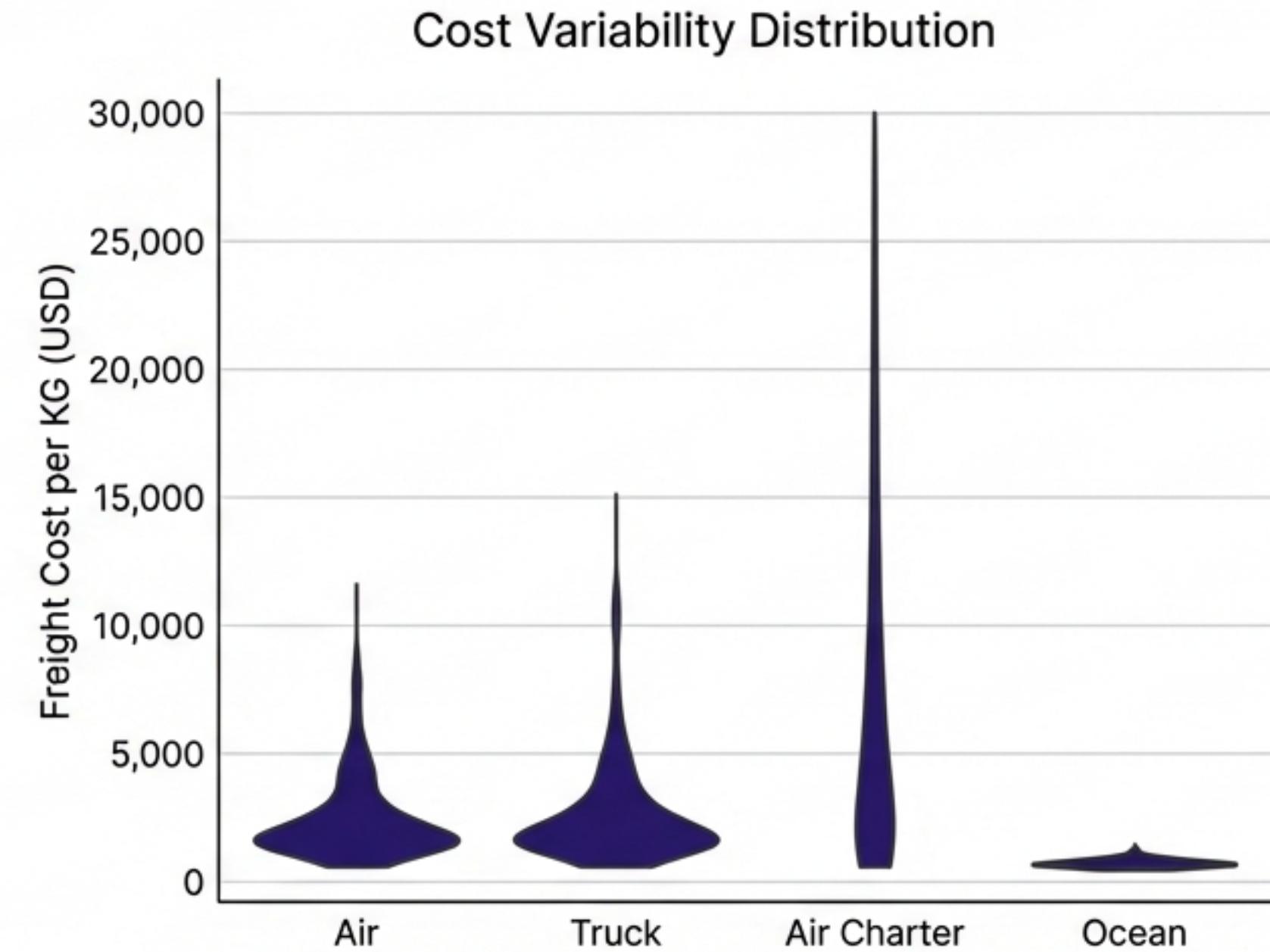
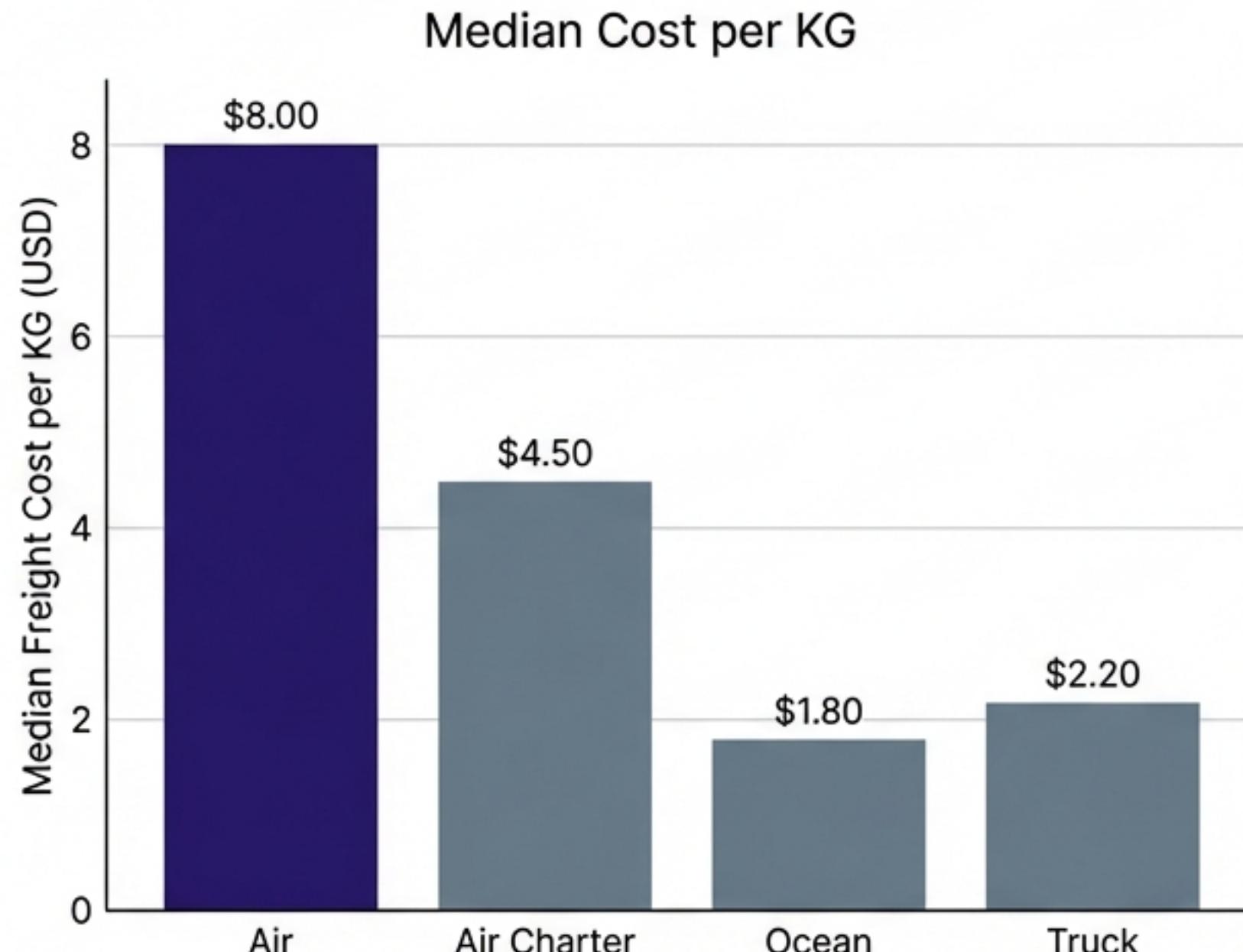
The Pareto Principle in action.

Fixing issues in just these top 3 markets would resolve a disproportionate amount of the global delay volume.

This is not a global failure; it is a localized operational breakdown.

# Unit cost structures vary by mode, but variability within modes suggests procurement inefficiencies.

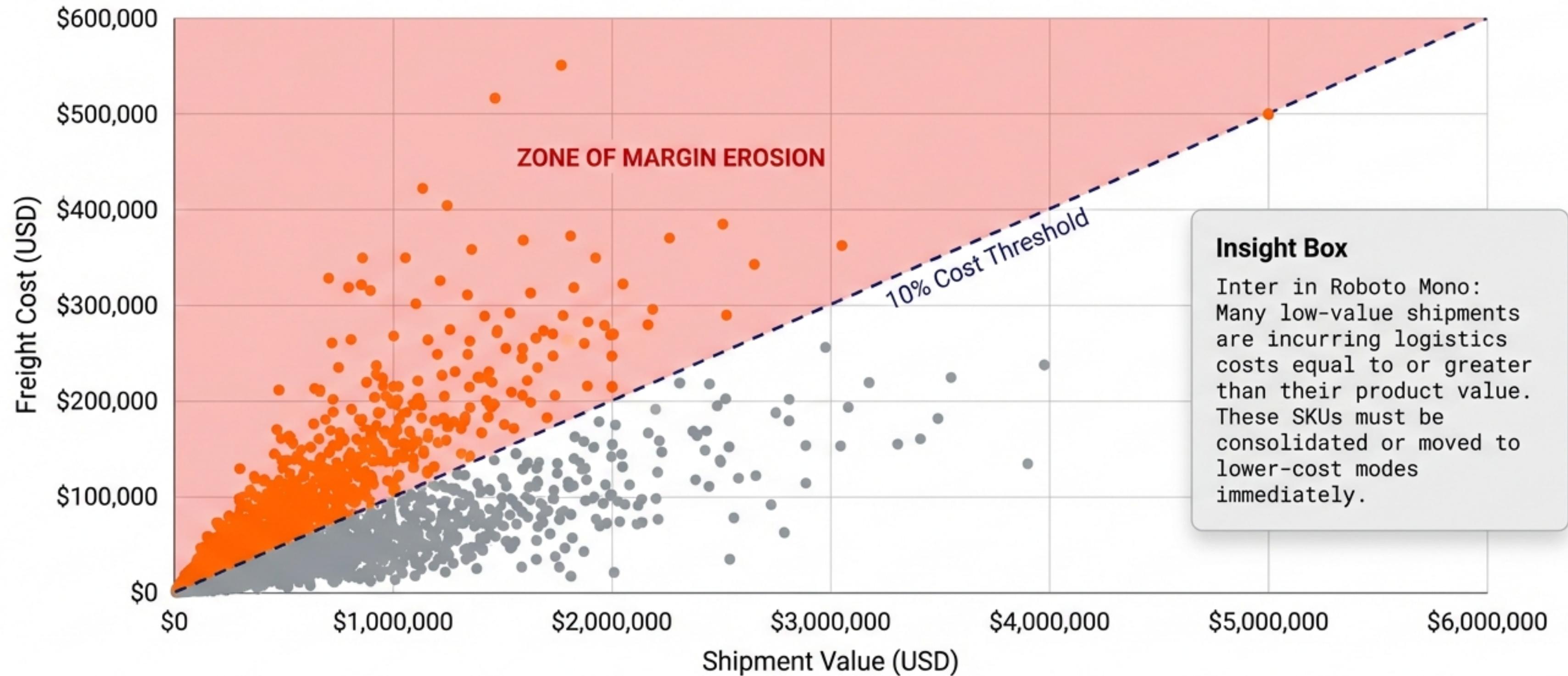
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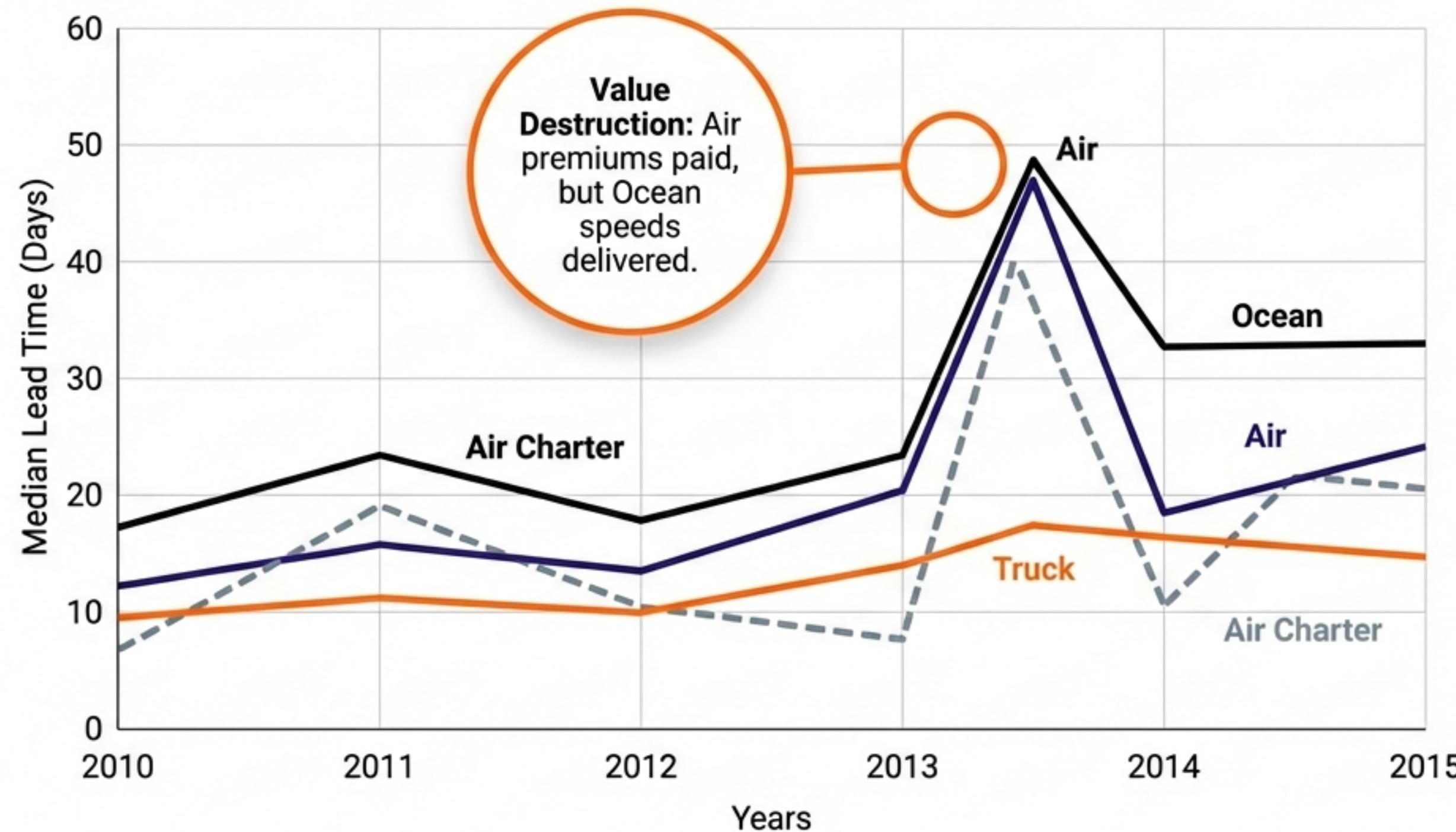
## Insight Box

The extreme vertical stretch in the Air Charter violin plot indicates massive inconsistency in pricing. We are paying vastly different rates for similar services, suggesting a lack of standardized routing guides or contract enforcement. In Inter.

# 'Margin Leakage' occurs when freight costs exceed 10% of shipment value.



# Rising lead times in premium modes suggest we are paying for speed we aren't receiving.

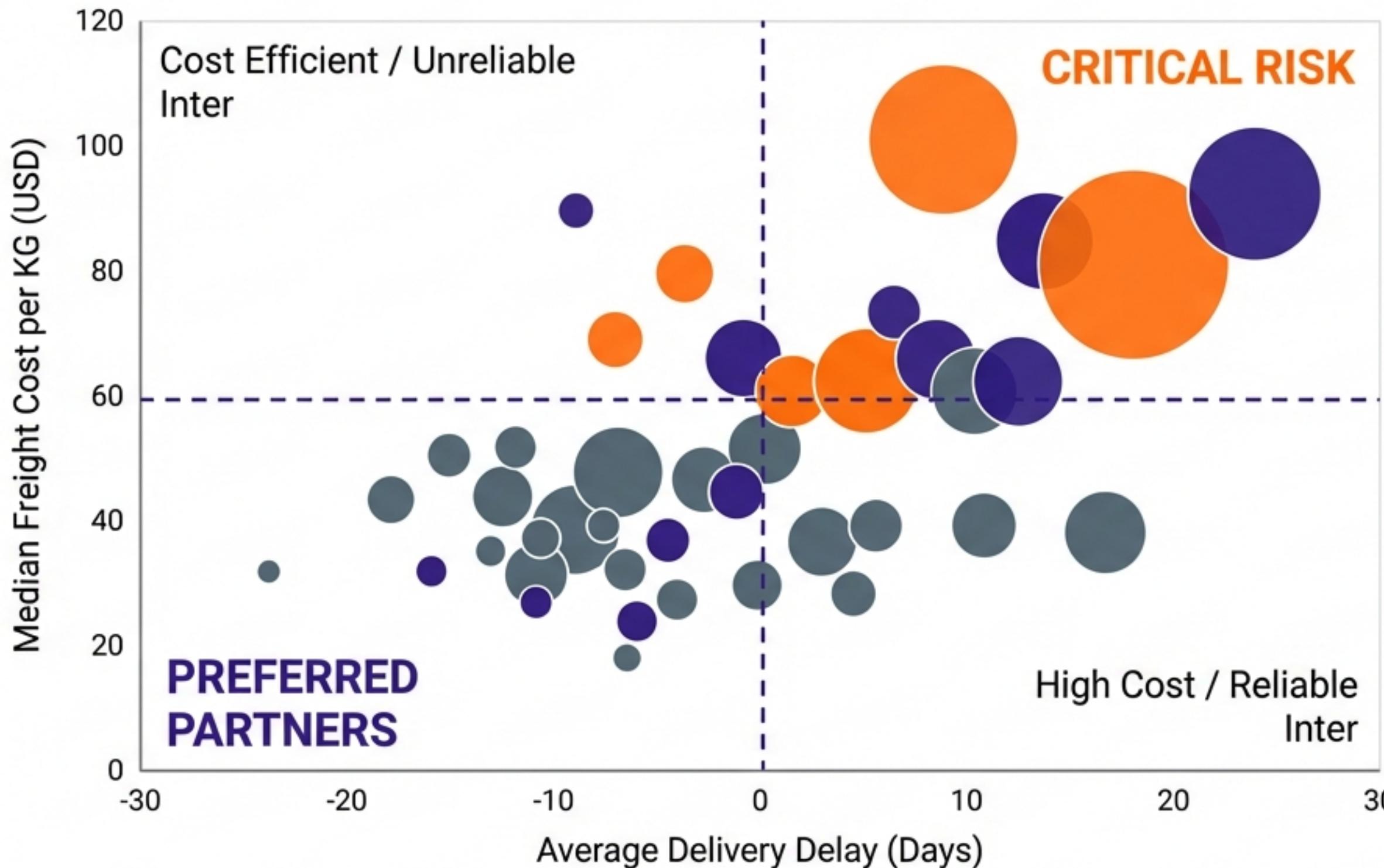


## Insight Rail

Inter in Roboto Mono:  
Lead times are trending up in certain modes. If we pay for Air but get Ocean speeds due to congestion or processing delays, the cost premium becomes pure waste.

Operational triggers must be set to downgrade modes when lead time differentials narrow.

# Vendor performance is highly stratified; exposure to “Critical Risk” partners must be reduced



## Insight Box

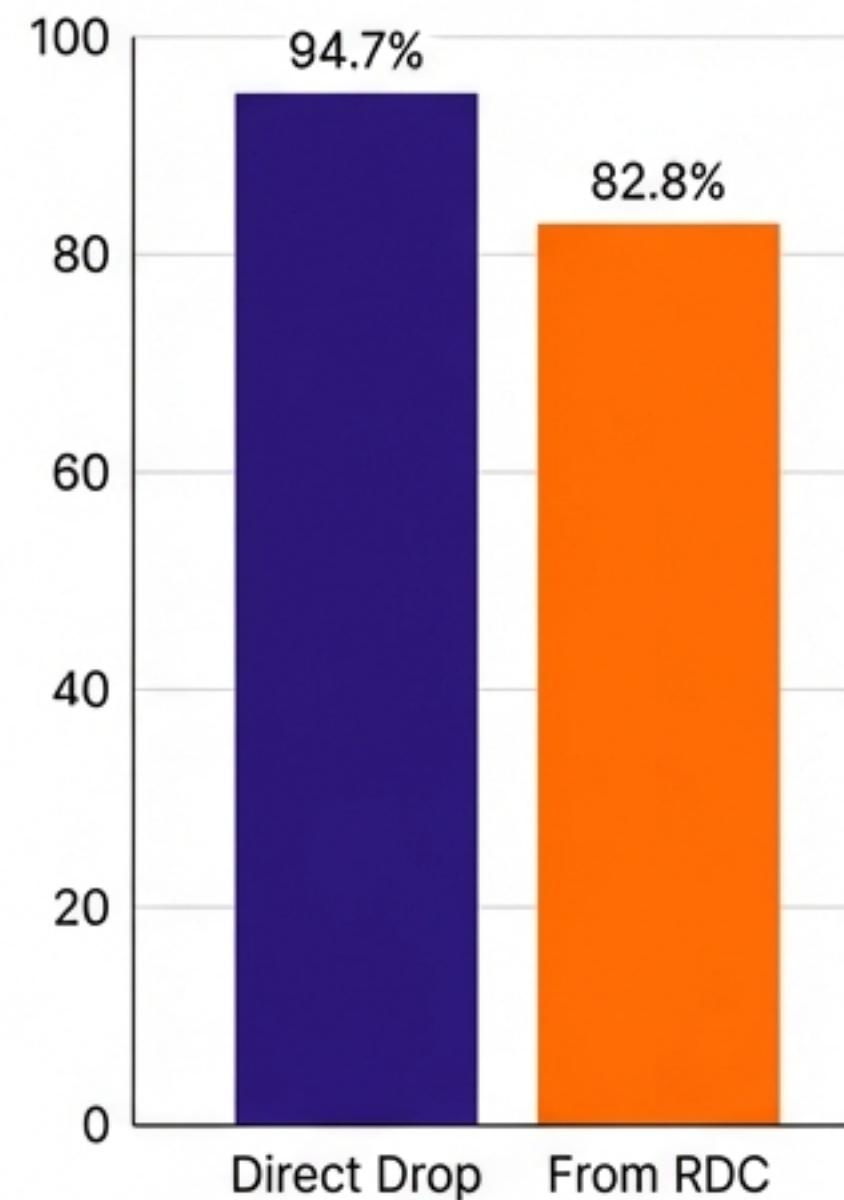
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Roboto Mono:  
A significant volume of  
shipments (indicated by  
bubble size) is currently  
managed by vendors in  
the Critical Risk  
quadrant.

Immediate action: Fire  
or Renegotiate.

Direct Drop fulfillment offers speed, but RDC fulfillment provides a safety buffer against severe delays.

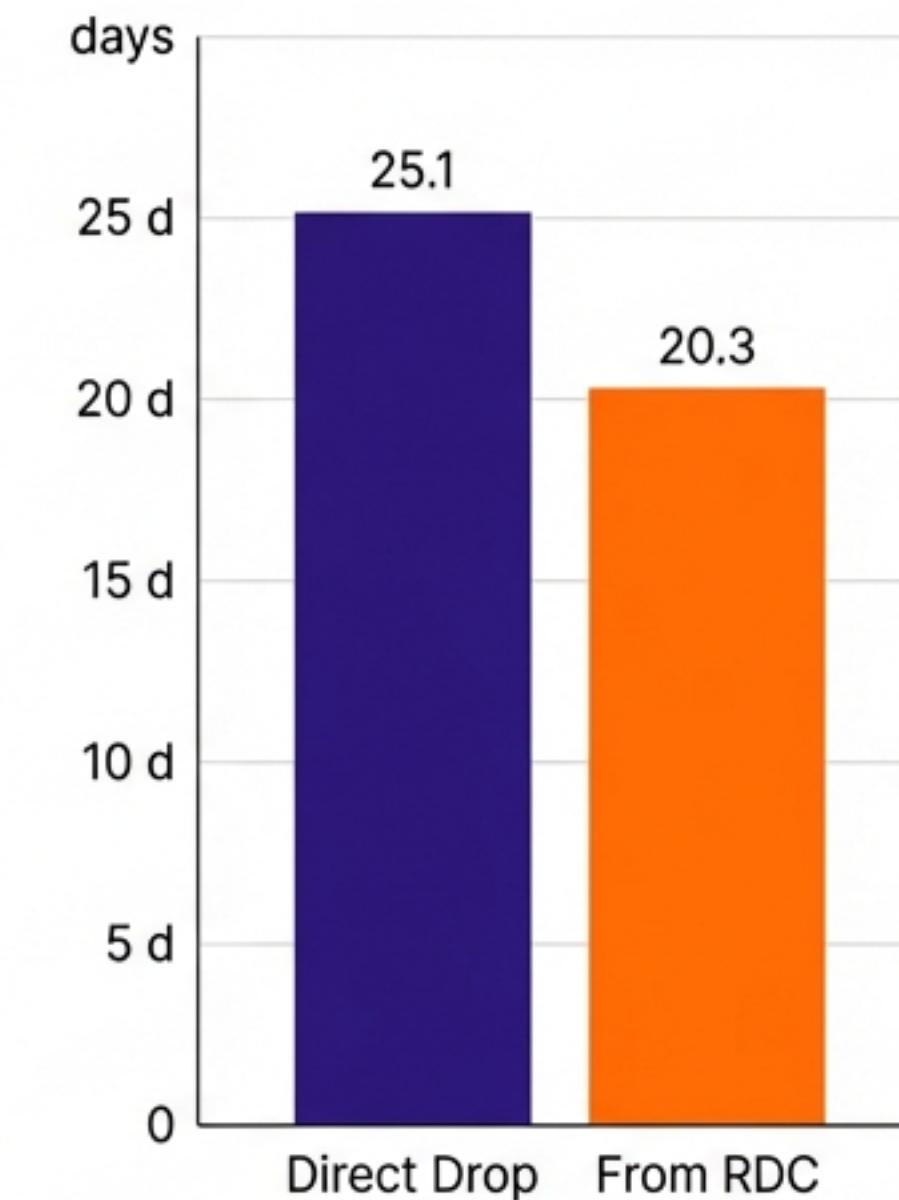
On-Time Delivery (%)



Median Freight Cost per KG



Avg Delay (Late Shipments Only)



Insight Rail

Direct Drop is "High Risk / High Reward." It fails less often, but when it does, the recovery time is significantly longer (25+ days).

RDCs should be used for critical inventory where supply continuity is more important than pure speed.

# Strategic Roadmap: Turning Data into Operational Resilience



## Optimize Modes

- Enforce **10% Freight-to-Value Cap.**
- Automatically flag shipments breaching this threshold.
- Restrict Air Charter usage to **high-urgency/high-margin SKUs** only.



## Mitigate Risk

- **Vendor Consolidation:** Shift volume from 'Critical Risk' vendors to **Preferred partners**.
- **Geographic Focus:** Launch process improvement teams in **Congo (DRC), South Africa, and Mozambique**.



## Strengthen Governance

- Implement **standardized routing guides** to reduce price variability.
- **Dynamic lead-time monitoring** to prevent paying air premiums during congestion periods.

# Implementation yields a predictable, cost-efficient supply chain



Shift from reactive logistics management to proactive, data-led optimization.