FedEx Shipment Analysis Report

## Key Insights

1. Lead Time Distribution  
 The lead time varies significantly across vendors, with the majority of deliveries happening within 116.28 days. This suggests variability in vendor response times and fulfillment processes.  
  
2. Freight per KG  
 The freight per KG for certain vendors is considerably high — one reaching as much as 1128.47 USD/KG. These outliers highlight a potential for cost optimization, possibly due to special handling, expedited shipping, or inefficiencies.  
  
3. On-time Deliveries  
 Approximately 93.03% of all deliveries were completed on time. While this is a solid performance metric, a deeper look into the 6.97% of delayed deliveries may reveal vendor or route-specific issues worth addressing.

## Conclusion

From this analysis, it's evident that vendor performance heavily influences delivery lead times and costs. While a high rate of on-time delivery is promising, inconsistent lead times and outlier freight costs point to areas where operational improvements can be made. Addressing these issues can enhance supply chain reliability and reduce expenses.

## Recommendations

- Vendor Review & Renegotiation  
 Evaluate vendors with high freight per KG rates. Renegotiating terms or finding more cost-effective partners could help cut transportation costs.  
  
- Optimize Logistics Operations  
 Streamline the delivery process by better aligning procurement, logistics, and vendor timelines to reduce lead time inconsistencies.  
  
- Enhance Delivery Monitoring  
 Implement real-time tracking and routine vendor performance reviews to improve or maintain the current on-time delivery rate.