

Delivery & Logistics Performance – Business Insights

Delivery Timing & Delay Insights

1. What is the average actual delivery time vs estimated delivery time?

✓ Average actual delivery time: 12.5 days

Average estimated delivery time: 24.4 days

This means most orders are being delivered **nearly 12 days earlier than expected**, which suggests a **conservative estimation model**. However, this might be a **customer delight strategy** or an over-buffered timeline.

2. What percentage of orders were delivered late, on time, or early?

✓ Early deliveries: 90.1%

Late: 6.4%

On time: 1.3%

Undelivered: 2.2%

The vast majority of orders arrive **early**, but **6.4% late deliveries** still represent a significant volume (~7.3K orders), which must be monitored.

3. Which states have the highest average delivery delays?

✓ States like **SP, RJ, MG** lead in **total late deliveries**. While the delivery delay KPI is mostly negative (early), **regional inconsistencies** suggest logistics issues in high-volume regions.

4. How have late deliveries trended over time (month by month)?

✓ There's a **clear downward trend** in late deliveries over time, dropping from over **25% in 2016** to below **5% in 2018**, indicating **logistics performance is improving steadily**.

5. Which product categories experience longer delivery durations?

✓ Categories like **Office Furniture, Security & Services**, and **Home Comfort** show **higher average delivery durations (up to 21 days)**. These items may be **bulkier or have longer handling times**, requiring process optimization.

Shipping Cost & Delivery Relationship

6. What is the average shipping cost per order and by state?

✓ States like **RR, PB, RO** incur the **highest average shipping costs (R\$43–R\$41)**, potentially due to **distance, infrastructure, or supplier locations**.

7. Do orders with higher shipping costs get delivered faster?

✓ There's **no clear positive correlation** — many **high shipping cost orders still take long to deliver**.

This suggests **higher shipping cost doesn't guarantee faster delivery**, and resource allocation should be reviewed.

8. Which states have the highest shipping costs and lowest delivery efficiency?

✓ States like **RR, PB** and **RO** show **high shipping costs** and **ES, RR** and **PA** show a **non-negligible percentage of late deliveries**, identifying them as **logistical inefficiency hotspots**.

Operational Breakdown & Drilldown

9. What is the breakdown of delivery status (late/on-time/early)?

✓ Majority (90.1%) of orders are **early**

But **7.7K+ orders (late or undelivered)** represent potential **service risk**

A delivery process that's fast overall still needs **reliability tuning for the remaining gap**.

10. Which states are contributing the most to late deliveries?

✓ **SP and RJ** contribute the **highest volume of late deliveries**

Actionable next steps include **targeting seller performance and regional hubs** for improvement.