

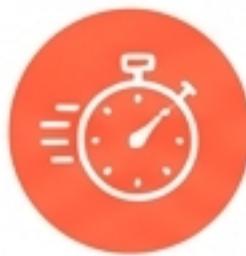
Food Delivery Analytics: Unlocking Operational Efficiency

A data-driven case study on 50,000+ orders to optimize demand planning, menu strategy, and delivery reliability.

The Challenge: Managing Volatility at Scale



Demand Uncertainty: How do we predict staffing needs across different times and days?



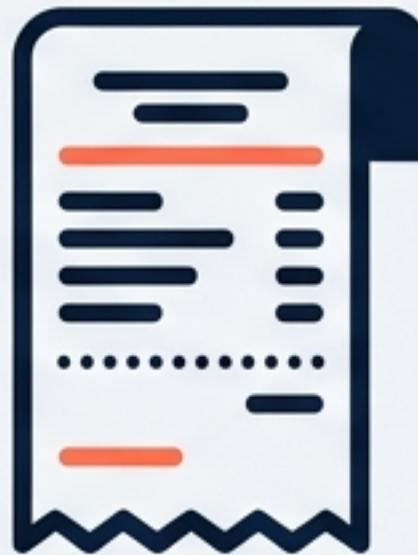
Delivery Consistency: Does raw speed drive customer satisfaction, or is reliability the real key?



Goal: Analyze real-world Zomato data to derive actionable operational insights.



The Data Foundation



50,000+
Orders Analyzed



12,000+
Unique Restaurants

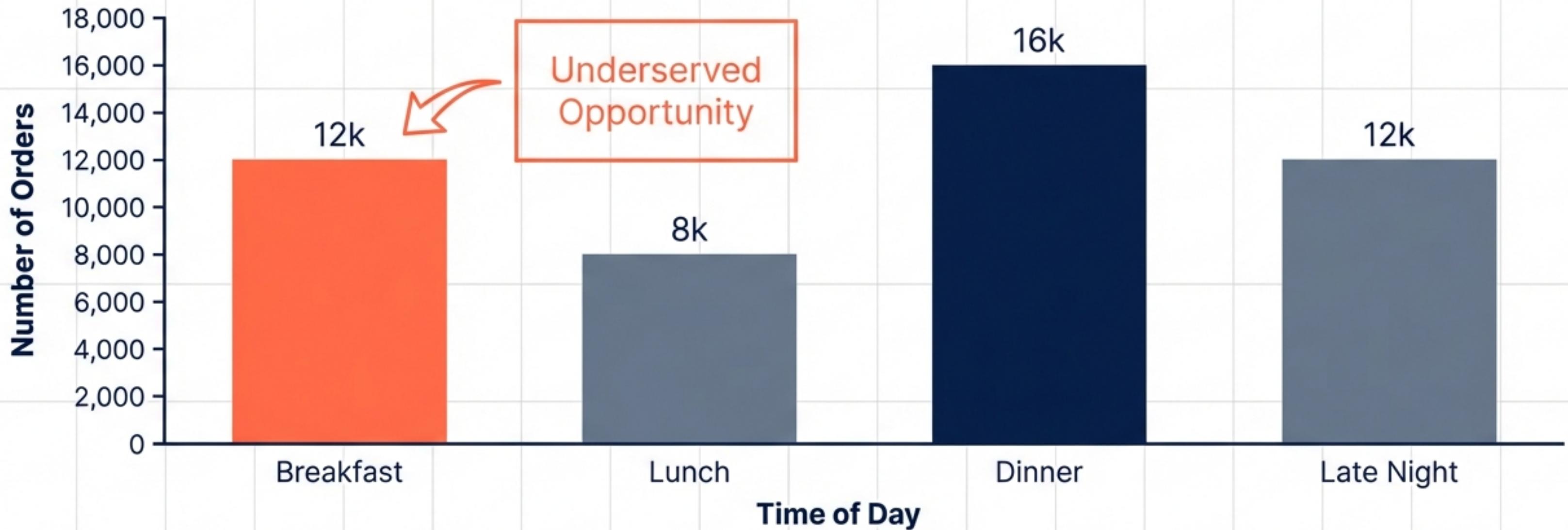


Key Metrics:
Timestamps, Latency,
Ratings, Cost

The Analytical Approach



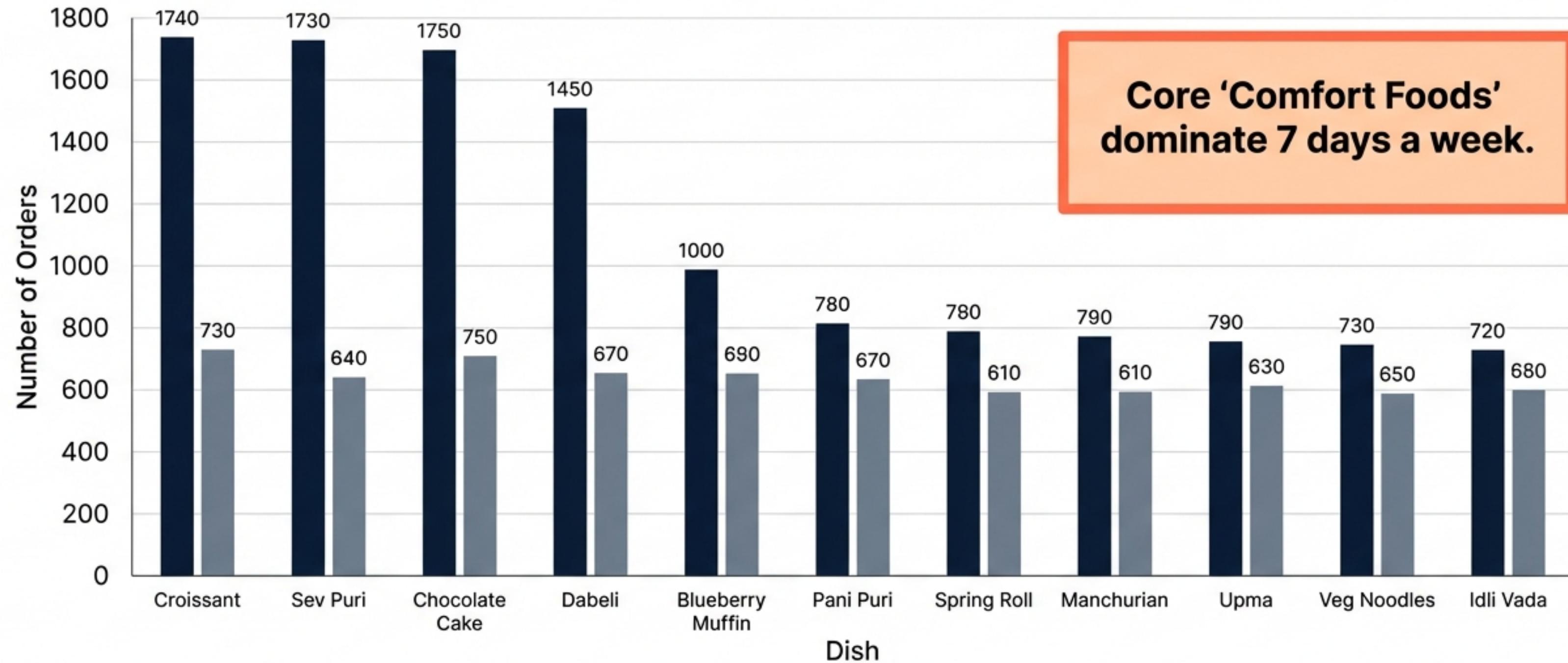
Dinner is King, but Breakfast Beats Lunch



Insight:

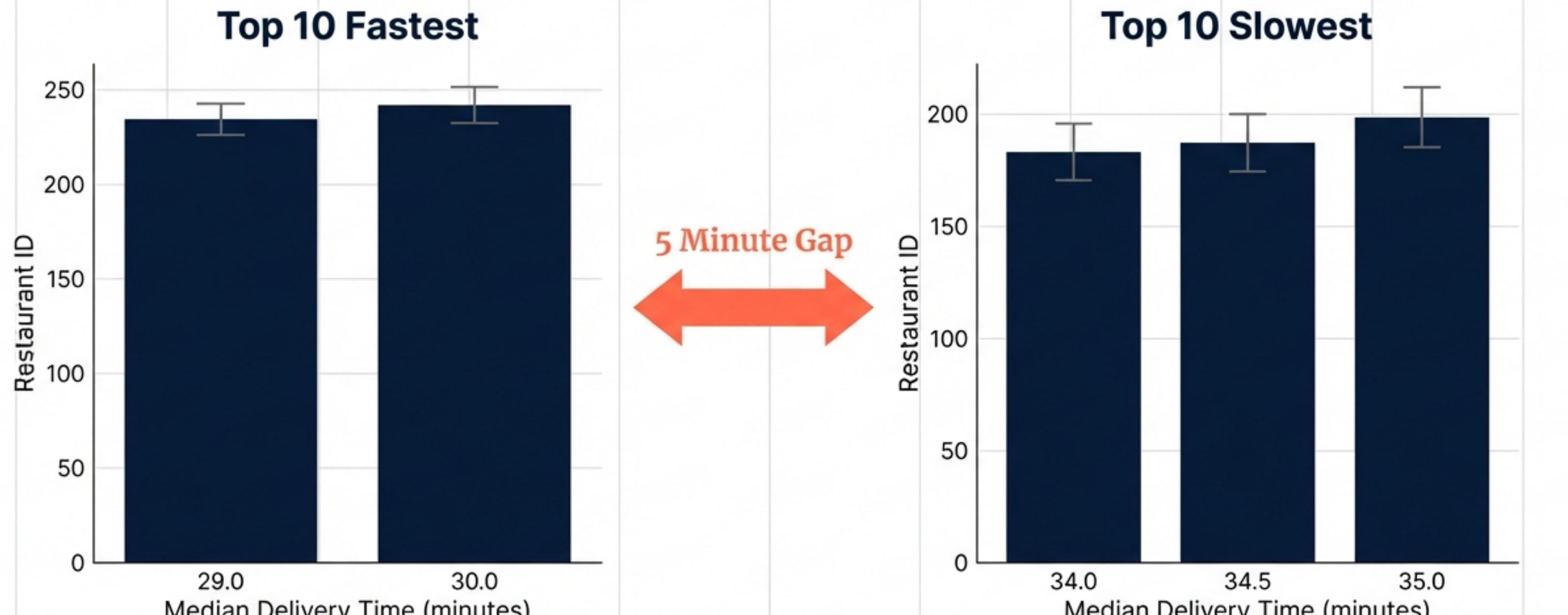
Lunch demand is surprisingly low (8k orders), likely due to office canteens.
Breakfast (12k) is a high-volume window ripe for targeted promotions.

Cravings are Consistent: Weekday vs. Weekend



Implication: Restaurants do not need complex rotating menus. Success comes from inventory stability for the 'Core 10' items rather than weekend specials.

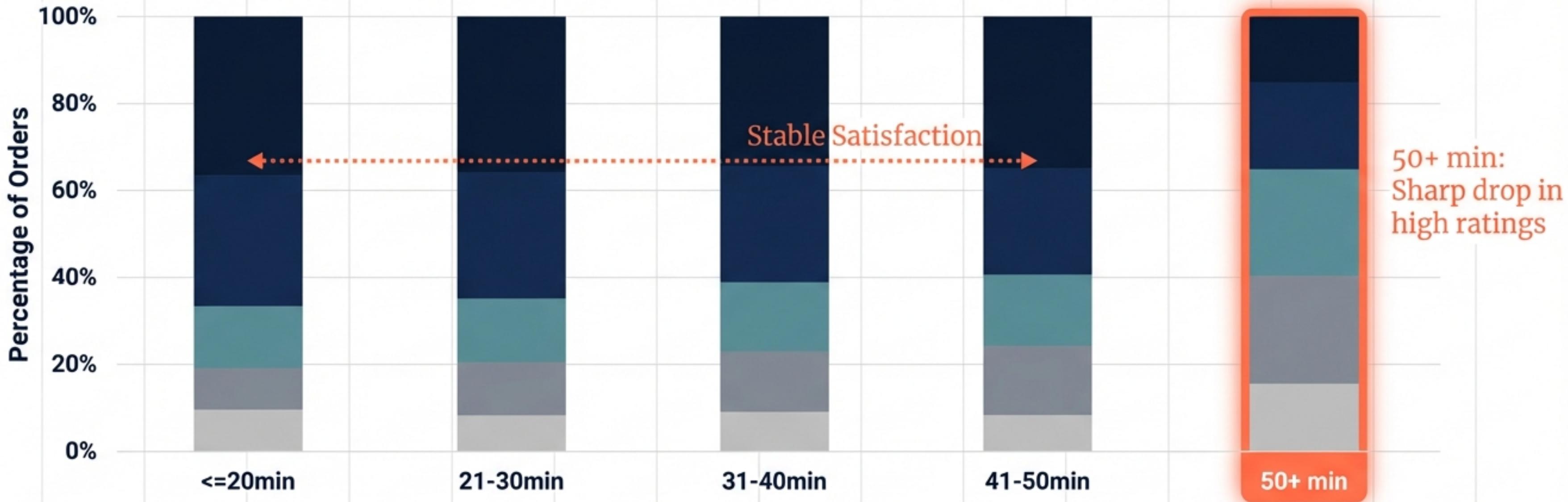
The “Slow” Gap is Narrow but Systemic



Takeaway: The gap isn't random. Slow restaurants cluster in a narrow range (~35 mins), indicating consistent process bottlenecks rather than one-off driver errors.

Reliability Trumps Raw Speed

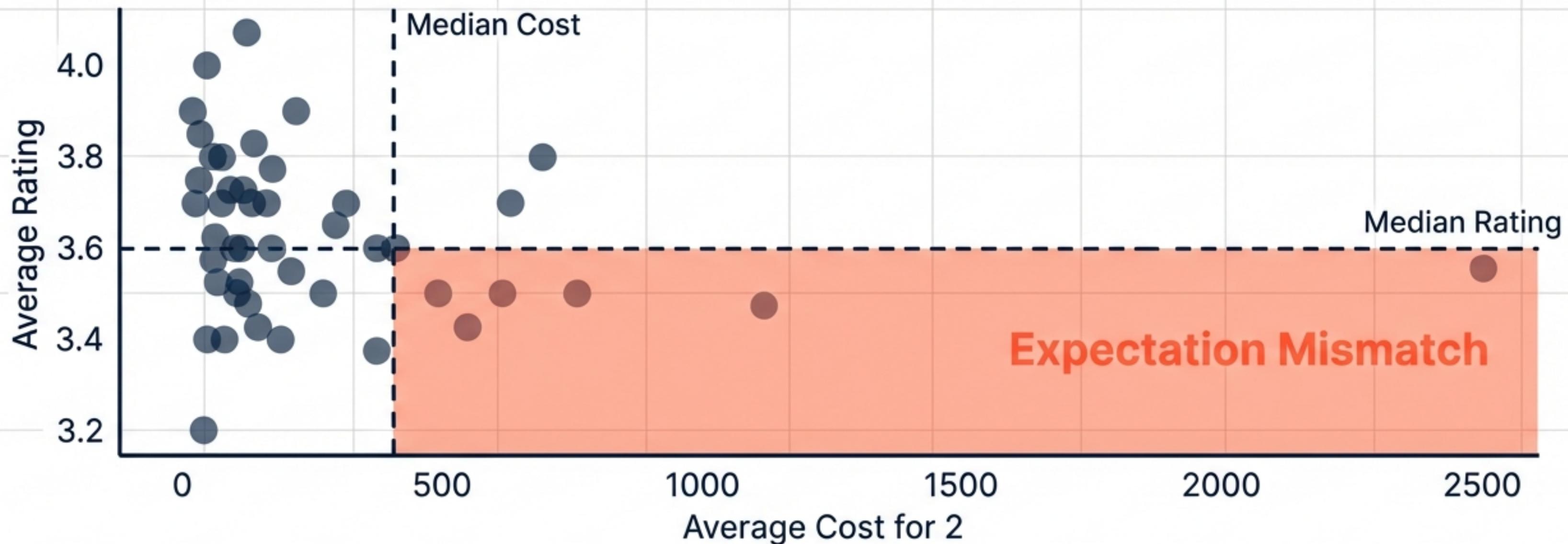
Customer Rating Distribution by Delivery Time



Insight: Satisfaction is **stable (~3.8 avg)** for deliveries taking 20 to 50 minutes. Customers punish volatility and extreme delays, but forgive a standard wait.

High Cost ≠ High Ratings

Expectation Mismatch: Cost vs Rating by Location



The Value Equation: Many expensive locations hover around average ratings. Premium pricing raises expectations; if the experience doesn't match the price tag, customers rate harsher than budget options.

Turning Insights into Action

For Restaurants



1. **Simplify Menus:** Focus inventory on the consistent "Core 10" items.
2. **Fix Process:** The "Slow" gap is only 5 minutes—audit kitchen hand-off times to close this gap.

For The Platform



1. **Target Breakfast:** An under-utilized high-volume window for marketing spend.
2. **Reward Consistency:** Use standard deviation of delivery time as a key performance metric, not just speed.

Key Takeaways



Demand is Predictable: Plan staff for Dinner peaks; market for Breakfast growth.



Consistency > Speed: Customers forgive a 35-minute wait if it's accurate; they punish volatility.



Value Sensitivity: Premium pricing requires premium execution—high cost alone does not buy high ratings.

Insight-Driven Data Analytics

This project demonstrates my ability to clean complex datasets, visualize trends, and derive business **logic** that improves the bottom line.

Open to roles in Data Analytics & BI