Final Updated Recommended Analysis Questions

Theme: Data Science and Analytics

Problem Statement : Develop a food delivery analytics dashboard with delivery times, customer ratings, and order patterns.

1. Delivery Efficiency & Operations :

1. What is the average delivery time across all orders?
2. What % of deliveries were on-time vs delayed (compare delivery_time with expected_delivery_time)?
3. Which delivery partners have the best/worst delivery times (avg delay per partner)?
4. Do delivery times vary by city (city-level performance)?
5. What are the peak load hours (time of day/week) where delivery delays are highest?
6. Build a time series trend of average delivery times over weeks/months – shows operational changes/scalability.

2. Customer Experience & Ratings :

1. Which restaurants have the highest/lowest ratings (with min review threshold)?
2. Is there a correlation between late deliveries and lower ratings?
3. Do higher-rated restaurants get more repeat customers/orders?
4. Which cities have the best/worst average restaurant ratings?
5. Create a ratings vs delivery time scatter analysis - Are customers rating restaurants lower when food is late?

3. Order Patterns & Business Insights :

1. What are the top 10 most ordered dishes overall?
2. Which days/hours are peak demand periods (order volume time-series)?
3. Which cities generate the highest revenue and which are underperforming?
4. Which restaurants generate the most revenue (total sales from orders)?
5. What is the average basket size (order value per customer) and how does it vary by city?
6. Who are the top 10 customers by spend and order frequency?
7. Use time-series forecasting to predict future order demand (hourly/daily).

4. Scalability & Strategic Insights :

1. Delivery partner load analysis - Which partners are handling the most orders per day/week?
2. City-level growth potential - Which cities are showing consistent rise in orders (time series)?

3. Profitability estimation - Which restaurants/cities give highest revenue per delivery partner?
4. Customer segmentation - Frequent vs one-time customers - Retention vs acquisition insight.