Project Insights – Ride Hailing Analysis (Power BI & SQL)

Overall Performance

- The platform recorded **103,024 total bookings** and generated **₹56.53 million in total revenue**.
- The **cancellation rate is around 28%**, which means almost **1 out of every 3 rides gets cancelled**.
- The **average driver rating is 4.0**, showing that customers are generally satisfied when rides are completed.

Insight:
The business has good demand and revenue, but the high cancellation rate is a major problem and leads to loss of revenue and poor user experience.

Peak Demand Analysis

- Ride demand is **consistent throughout the day**.
- Slightly higher demand is seen during **office hours and evening time**.
- There is no sharp drop in rides at any particular hour.

Insight:
Demand is predictable, which means the company can plan driver availability better to reduce cancellations during busy hours.

Location-Based Insights

- Highest ride demand and revenue come from locations like:
  - Yeshwanthpur
  - Vijayanagar
  - Tumkur Road
  - Whitefield
  - Sarjapur Road

Insight:
Revenue is concentrated in a few high-demand areas. These locations should have more drivers available to avoid long wait times and cancellations.

Vehicle Type Analysis

- All vehicle types receive **almost equal number of bookings**.
- **Prime Sedan generates the highest revenue**, even though booking count is similar to other vehicles.

- Auto rides cover **shorter distances**, while car rides cover **longer distances**.
- **Insight:**
  Customers do not strongly prefer one vehicle type, but premium vehicles earn more revenue per ride.

Distance Travelled

- Cars (Prime, Mini, SUV) travel an average of **around 25 km per ride**.
- Auto rides travel **around 10 km per ride**.

Insight:
Autos are mainly used for short trips, while cars contribute more to total distance and revenue.

Cancellation Analysis

- **Driver cancellations (18.4K)** are much higher than **customer cancellations (10.5K)**.
- Cancellation rate is almost the same for all vehicle types.
- **Cash and unknown payment methods** have the highest cancellation rates.
- Digital payments like **UPI and cards** have lower cancellations.

Insight:
Most cancellations are operational issues such as driver availability, long pickup distance, and payment preference, rather than vehicle-related problems.

Ratings Analysis

- Average ratings for all vehicle types are close to **4.0**.
- No major difference in ratings between vehicle categories.

Insight:
Customer satisfaction is good when rides are completed. Reducing cancellations will further improve ratings.

Business Recommendations

- Improve driver allocation in high-demand areas using demand heatmaps.
- Reduce driver-side cancellations by limiting long pickup distances.
- Encourage digital payments (UPI/cards) to reduce ride cancellations.
- Offer incentives to drivers during peak hours.
- Promote premium vehicles to increase revenue per ride.
- Apply controlled surge pricing to avoid customer cancellations.