



Ola & Uber Ride Booking & Cancellation Analysis

A comprehensive SQL-based analysis examining ride booking patterns, cancellation trends, revenue performance, and operational efficiency using real-world styled Ola & Uber ride data.

Project Scope & Data Preparation

01

Database Setup

Created OLA database and Ride_Booking_Cancellation table, loaded dataset from CSV using LOAD DATA INFILE.

02

Data Cleaning

Replaced NULL values, converted V_TAT and C_TAT to INT, converted ratings to FLOAT, removed unnecessary columns.

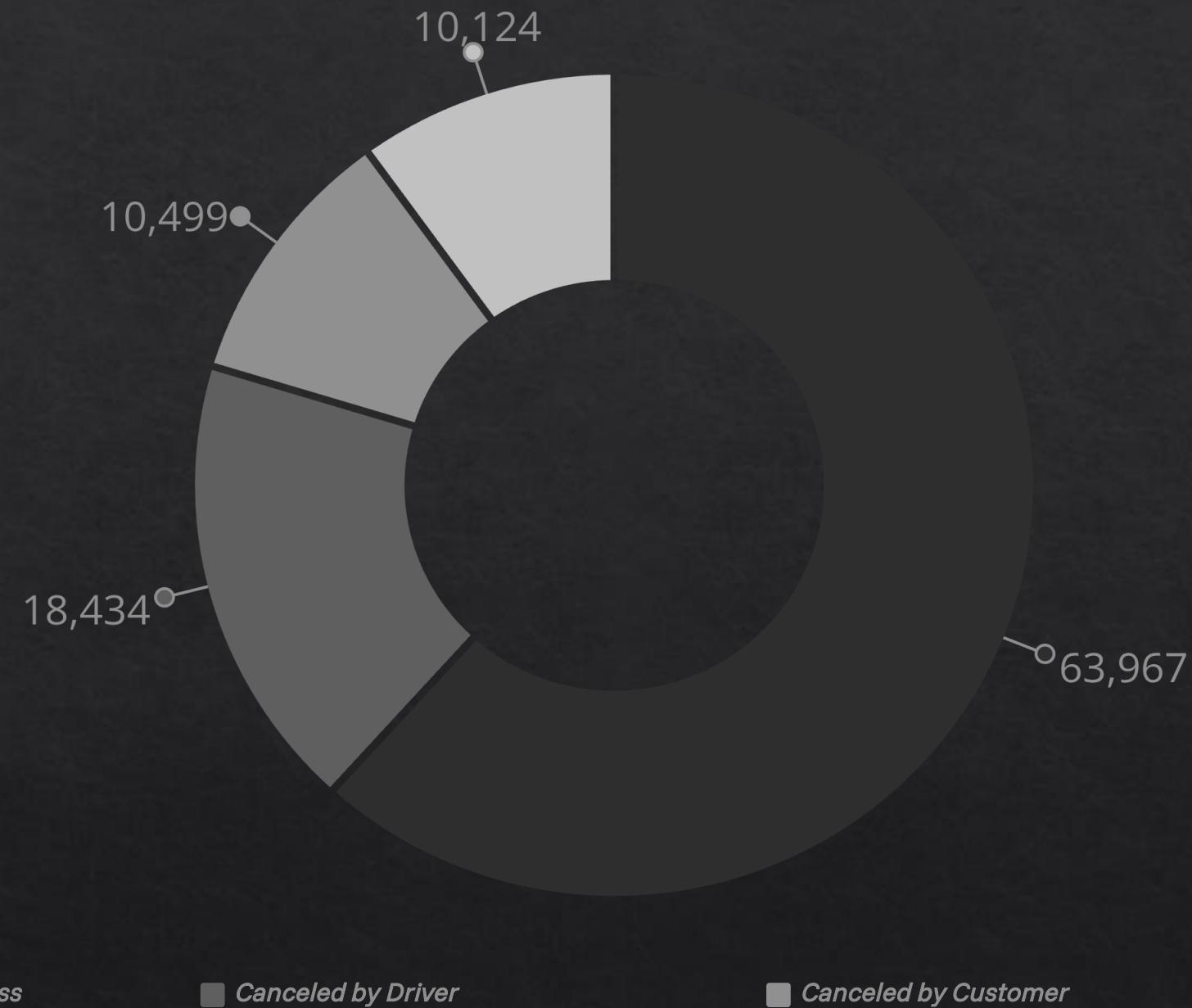
03

Data Enhancement

Added derived Ride_Status column to classify rides as Success or Cancelled, ensured consistency in formats and naming.

The dataset includes key columns: Booking Status, Vehicle Type, Pickup/Drop Locations, Booking Value, Payment Method, Ride Distance, Driver & Customer Ratings, V_TAT, and C_TAT.

Ride Completion Overview



Out of 103,024 total rides analyzed, **62.09% were successfully completed**, while 37.91% were cancelled due to various reasons. Driver cancellations represent the largest failure category at 17.89%, followed by customer cancellations at 10.19%.

Top Performing Pickup Locations

1 Banashankari

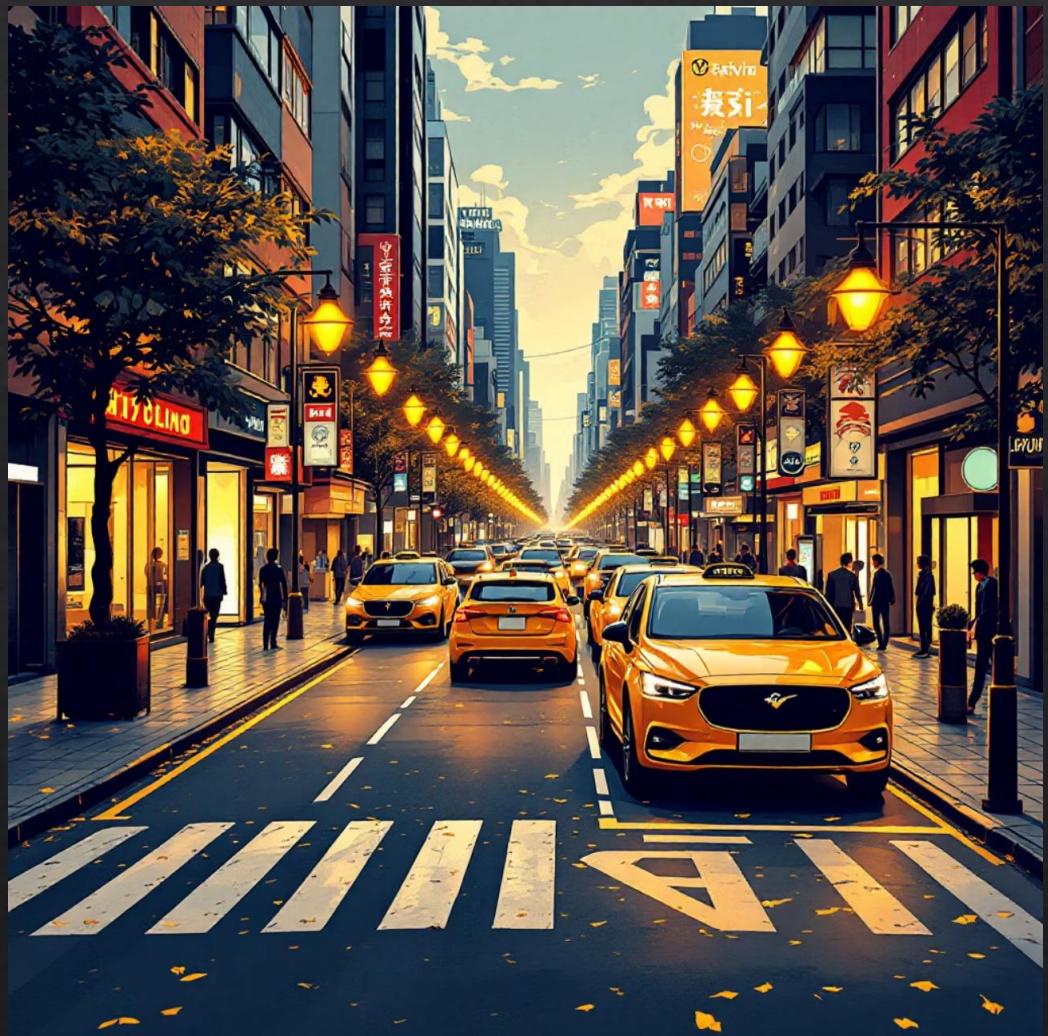
Leading pickup location with 2,201 total rides, demonstrating high demand in this area.

3 RT Nagar

Close third with 2,135 rides, showing consistent demand patterns.

2 Yeshwanthpur

Second highest with 2,139 rides, indicating strong commercial activity.



Revenue Performance by Vehicle Type

<i>Vehicle Type</i>	<i>Revenue (in rupees)</i>
<i>Prime Sedan</i>	₹433,795,150.00
<i>eBike</i>	₹419,536,746.00
<i>Auto</i>	₹419,303,218.00
<i>Prime Plus</i>	₹416,258,695.00
<i>Bike</i>	₹412,873,344.00
<i>Mini</i>	₹401,384,763.00
<i>Prime SUV</i>	₹404,775,645.00

Prime Sedan leads revenue generation with ₹433.8M from 9,379 successful rides, followed closely by eBike and Auto categories. All vehicle types show relatively balanced performance, indicating diverse customer preferences.

Revenue Loss from Failed Rides

₹3.1M

eBike Loss

*5,636 failed rides resulting
in highest revenue loss*

₹3.1M

Mini Loss

*5,516 cancelled rides
impacting bottom line*

₹3.0M

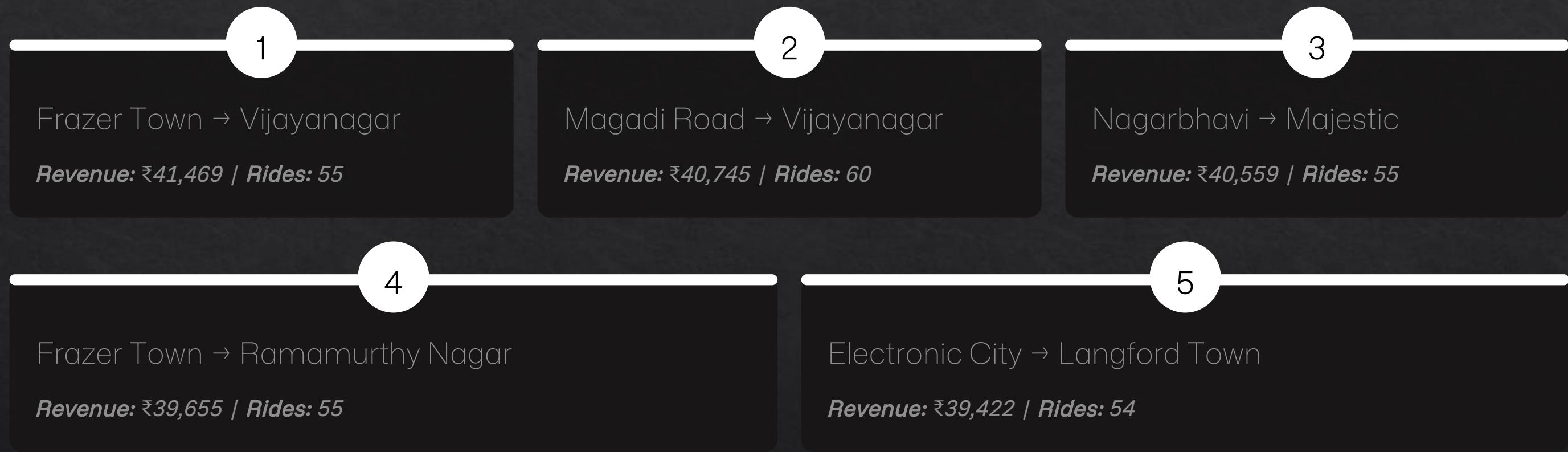
Prime Sedan Loss

*5,498 failed bookings
despite high demand*

Failed rides across all vehicle types resulted in significant revenue loss, with eBike, Mini, and Prime Sedan categories each losing over ₹3M. Total estimated loss from cancellations exceeds ₹21M.



High-Value Revenue Routes



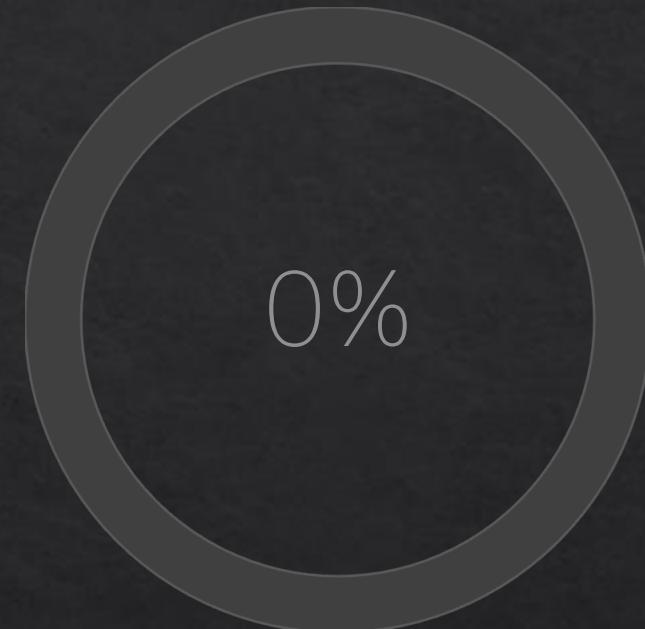
These premium routes generate the highest revenue per ride, averaging ₹730+ per trip. Strategic focus on these corridors could maximize profitability.

Critical Finding: Distance-Based Cancellations



Short Distance

Rides under 5 km show alarmingly high cancellation rates



Medium Distance

Rides between 5-15 km have zero cancellations



Long Distance

Rides over 15 km maintain perfect completion rates

- ☐ **Critical Insight:** Short-distance rides (under 5 km) account for 45,498 bookings but suffer an **85.84% cancellation rate**. This represents the single largest operational challenge, with 39,057 cancelled short trips.

Operational Efficiency Metrics

Driver Rating Impact

*Rides with low driver ratings (0-3) show **100% cancellation rates**, while medium (3-4) and high-rated (4-5) drivers maintain zero cancellations.*

Peak Cancellation Time

10 AM experiences the highest cancellation volume with 1,718 cancelled rides, indicating supply-demand mismatch during morning rush.

Vehicle TAT Analysis

- **Prime Sedan:** Highest V_TAT at 107.58 mins
- **Prime SUV:** Most efficient at 103.64 mins
- **Average C_TAT:** 52-54 mins across all types

Payment Preferences

Cash dominates with 35,022 transactions, followed by UPI (25,881) and Credit Card (2,435).

Strategic Recommendations



Incentivize Short Rides

Implement driver bonuses for rides under 5 km to address the 85.84% cancellation rate and recover ₹21M+ in lost revenue.



Optimize Operations

Reduce V_TAT for Prime Sedan and Mini categories through better routing algorithms and driver training programs.



Dynamic Pricing

Apply surge pricing on high-revenue routes like Frazer Town → Vijayanagar to maximize profitability on premium corridors.



Peak Hour Supply

Increase driver availability around 10 AM to handle peak cancellation periods and improve customer satisfaction.

Implementing these data-driven strategies could potentially recover millions in lost revenue while significantly improving operational efficiency and customer experience across both platforms.