

# 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

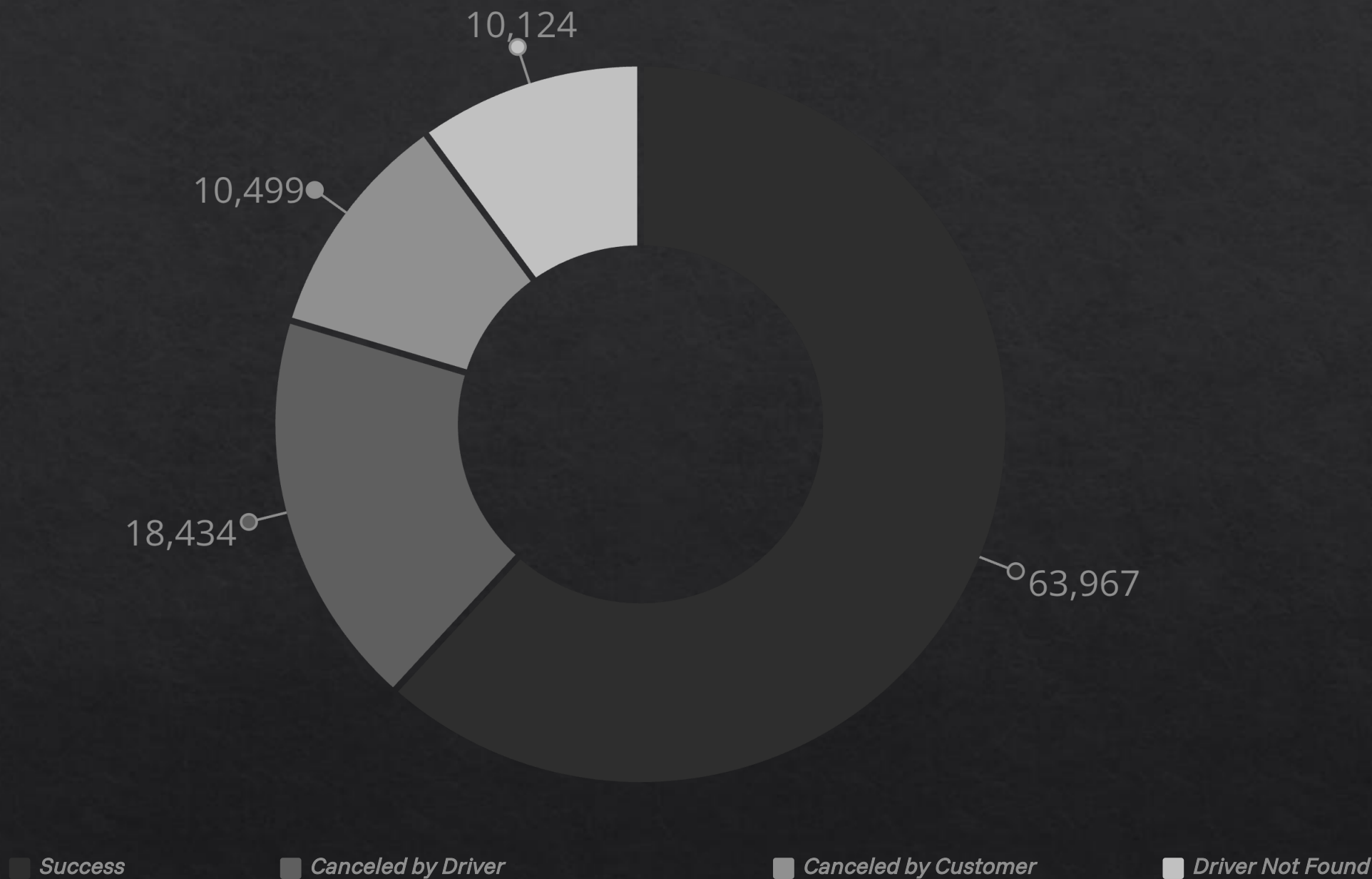
## Data Enhancement

*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.*

## 2 Yeshwanthpur

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

## 3 RT Nagar

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





# Revenue Performance by Vehicle Type

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

1

Frazer Town → Vijayanagar

**Revenue:** ₹41,469 | **Rides:** 55

2

Magadi Road → Vijayanagar

**Revenue:** ₹40,745 | **Rides:** 60

3

Nagarbhavi → Majestic

**Revenue:** ₹40,559 | **Rides:** 55

4

Frazer Town → Ramamurthy Nagar

**Revenue:** ₹39,655 | **Rides:** 55

5

Electronic City → Langford Town

**Revenue:** ₹39,422 | **Rides:** 54

*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.*