🚕 OLA Ride Insights

Business-Focused Analytics & Revenue Protection Report

Business Context

OLA is a large-scale ride-hailing platform operating in a high-volume, low-margin environment. Profitability does not come from ride bookings alone — it depends on **successful ride completion, driver reliability, and payment discipline**.

Even a **small percentage of ride failures** leads to:

- Revenue leakage
- Customer churn
- Driver dissatisfaction
- Operational inefficiency

This project was designed to **diagnose where OLA is losing money and trust** and provide **data-driven fixes**.

Dataset Overview

The dataset contains **103,024 ride bookings** for **July 2024**, with each record representing one attempted ride.

Key attributes:

- Booking date & time
- Booking status (Success / Cancelled / Driver not found)
- Vehicle type (Mini, Prime, Auto, Bike, etc.)
- Booking value
- Cancellation indicators
- Payment method
- Ratings
- Pickup & drop locations

The data was first cleaned in **Excel (Power Query + EDA)** and then transformed into an **analytics-ready SQL layer**.

Why Data Cleaning Was Critical

The raw data contained:

- Date & time stored as text
- Mixed cancellation flags
- UTF-8 corrupted column names
- Rating fields stored as strings

If this data was directly used in Power BI, trends would be:
❌ Inaccurate
❌ Slow
❌ Misleading

So, we built a **SQL analytics layer**:

Raw Data → vw_ola_clean → Business Views → Power BI

This ensured:

- Correct time series
- Accurate cancellation %
- Reliable revenue numbers
- Enterprise-grade BI pipeline

The Real Business Problem

Most ride-sharing companies think their problem is:

"How do we get more bookings?"

But OLA's real problem is:

"How do we convert bookings into completed, paid rides?"

Because:

- Marketing can bring users
- Drivers can accept rides
- But **cancellations destroy profit**

So, the project focused on:

Business Risk	**Data Metric**
Revenue leakage	Lost Booking Value
Driver reliability	Driver cancellations
Customer frustration	Customer cancellations

Business Risk	Data Metric
Peak time chaos	Hour-wise cancellation
Fraud risk	Cash vs UPI behaviour

Booking Funnel Health

From 103,024 bookings:

Status	Share
Successful rides	~62%
Driver cancelled	~18%
Customer cancelled	~10%
Driver not found	~10%

38% of all bookings do not become revenue

This is catastrophic for a ride-hailing business.

Revenue Leakage

Total potential booking value: **₹35 Million**
Revenue lost due to cancellations: **₹15.95 Million**

That means:

Almost 45% of potential revenue is lost before completion

This is not a marketing problem.
This is an **operations & reliability crisis**.

Peak Hours Are the Biggest Risk

Peak hours (7–10 AM, 6–10 PM) should be the most profitable.

But data shows:

- Peak hours have **higher cancellation rate**
- Peak hours have **higher revenue loss**

This means:

When demand is highest, OLA fails to deliver service.

This creates:

- Customer churn
- App uninstalls

- Social media complaints
- Driver-customer conflict

Vehicle Type Does NOT Solve the Problem

Every vehicle type (Mini, Auto, Prime, Bike, etc.) shows:

- Similar cancellation rates (~28%)
- Similar lost revenue

So:

This is not a “bad vehicle category” problem
It is a **platform-wide operational problem**

Root Cause: Why Do Drivers Cancel?

Top reasons:

1. Personal convenience
2. Customer reliability
3. Payment risk
4. Long distance

Drivers behave economically:

- They avoid risky customers
- They avoid long or low-value trips
- They avoid cash uncertainty

This means:

OLA’s driver incentive & payment system is misaligned with business goals.

Why Do Customers Cancel?

Top reasons:

1. Driver not moving
2. Driver asking customer to cancel
3. Change of plans
4. AC not working
5. Wrong address

This proves:

Driver behaviour directly creates customer churn.

Payment Risk

Cash rides generate the most revenue —
but also the highest cancellation risk.

This is classic platform risk:

- Cash = fraud
- Cash = disputes
- Cash = driver manipulation

UPI rides are safer, faster, and more reliable.

Ratings Are Misleading

Both customer and driver ratings are ~4.0 across vehicles.

But cancellations are very high.

This means:

Ratings only capture **successful rides** — not the painful failures.

So management cannot rely on ratings alone.

Final Diagnosis

OLA is not failing because of:

- Low demand
- Bad pricing
- Weak vehicles

OLA is failing because of:

Execution risk between booking and pickup

What This Project Actually Delivers

This is not a dashboard.
This is a **Revenue Protection & Operational Intelligence System**.

It tells OLA:

- Where money is leaking
- Why rides fail
- Which hours are risky
- Which payments cause fraud
- How drivers and customers interact