OLA DATA ANALYSIS REPORT

Qu 1. Retrieve all successful bookings.

Ans - CREATE VIEW Successful_Bookings AS SELECT * FROM ola_booking

WHERE Booking_Status = 'Success';

select * from Successful_Bookings;

Booking_Status	Customer_ID	Vehicle_Type	Pickup_Location	Drop_Location	V_TAT	C_TAT	Cancelled_Rides_by_Customer	Cancelled_Rides_by_Driver	Incomplete_Rides	Incomplete_Rides_Reason	Booking_Va
Success	CID677211	Prime SUV	Mysore Road	Varthur	42	120	null	null	No	null	240
Success	CID112515	Prime SUV	Bellandur	Hosur Road	301	115	null	null	No	null	455
Success	CID201887	Auto	Chickpet	RT Nagar	119	110	null	null	No	null	372
Success	CID443421	Auto	KR Puram	Richmond Town	189	25	null	null	No	null	181
Success	CID603728	eBike	Cox Town	Koramangala	147	135	null	null	No	null	460
Success	CID798730	Bike	RT Nagar	[illegible]	182	50	null	null	No	null	2534
Success	CID962164	Prime Sedan	Yeshwanthpur	[illegible]	168	75	null	null	No	null	224
Success	CID322457	eBike	Peenya	Cox Town	98	95	null	null	No	null	502
Success	CID305239	Prime Sedan	Koramangala	Vijayanagar	91	110	null	null	No	null	978

INSIGHT-

This data provides the core foundation of OLA's operations, confirming that a diverse range of vehicle categories (Auto, Prime SUV, Bikes, etc.) are successfully completing trips. This specific filtered dataset of successful bookings will serve as the primary baseline for all future revenue and financial calculations.

Qu 2. Find the average ride distance for each vehicle type.

Ans - CREATE VIEW Average_Distance AS

SELECT Vehicle_Type, AVG(Ride_Distance) AS Average_Distance

FROM ola_booking GROUP BY Vehicle_Type;

SELECT * FROM Average_Distance;

Vehicle_Type	Average_Distance
Prime SUV	15.2950
Auto	6.2053
eBike	15.7414
Mini	15.5033
Prime Plus	15.2206
Bike	15.8755
Prime Sedan	15.6621

INSIGHT-

The data reveals a distinct customer behavior pattern: 'Auto' rides are predominantly used for short, local commutes (averaging ~6.2 km), while all other vehicle categories (both cabs and bikes) are consistently preferred for longer trips averaging around 15 km. OLA can leverage this trend to optimize vehicle deployment by ensuring higher availability of Autos near local transit hubs and residential markets.

Qu 3. Get the total number of cancelled rides by customers.

Ans- CREATE VIEW Canceled_by_Customer AS

SELECT COUNT(*) FROM ola_booking

WHERE Booking_Status = 'Canceled by Customer';

SELECT * FROM Canceled_by_Customer;

count(*)
4079

INSIGHT-

The data highlights a significant volume of rides (4,079 bookings) cancelled directly by customers. This high cancellation rate points to potential operational inefficiencies, such as excessive driver wait times or drivers forcing off-app payments. OLA needs to investigate the specific cancellation reasons to improve user experience and minimize revenue loss.

Qu 4. List top 5 customers who booked the highest number of rides.

Ans- CREATE VIEW Top_Customers AS SELECT

Customer_ID, COUNT(Booking_ID) AS Total_Rides

FROM ola_booking GROUP BY Customer_ID ORDER BY Total_Rides DESC LIMIT 5;

SELECT * FROM Top_Customers;

Customer_ID	Total_Rides
CID219102	3
CID189965	3
CID266327	3
CID328887	3
CID225210	3

INSIGHT-

The analysis of top customers indicates a very low repeat-booking rate, with the highest frequency being only 3 rides per customer. This highlights a critical need to focus on customer retention. OLA should introduce targeted loyalty programs, subscription passes, or repeat-ride discounts to incentivize users to use the platform more frequently.

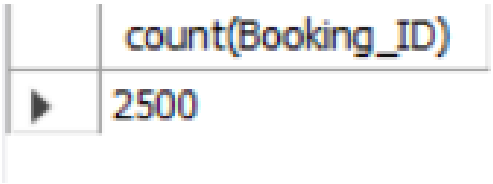
Qu 5. Get the number of rides cancelled by driver due to personal & car related issue.

Ans- CREATE VIEW Canceled_ride_by_Driver AS

SELECT COUNT(Booking_ID) FROM ola_booking

WHERE Cancelled_Rides_by_Driver = 'Personal & Car related issue';

SELECT * FROM Canceled_ride_by_Driver;



	count(Booking_ID)
▶	2500

INSIGHT-

This analysis reveals that 2,500 bookings were lost due to driver-end cancellations cited as personal or vehicle issues. This indicates a gap in fleet reliability and driver availability. OLA should consider implementing stricter vehicle maintenance checks and analyzing driver cancellation patterns to ensure that 'personal reasons' are not being used as an excuse to avoid certain routes or low-fare trips.

Qu 6. Find the maximum and minimum drivers rating for Prime Sedan Bookings.

Ans- CREATE VIEW Max_Min_Rating AS

SELECT MAX(Driver_Rating) AS Max, MIN(Driver_Rating) AS Min

FROM ola_booking WHERE Vehicle_Type = 'Prime Sedan' AND Driver_Rating != 'null';

SELECT * FROM Max_Min_Rating;

	Max	Min
▶	5	3

INSIGHT-

The analysis of Prime Sedan bookings shows a service quality gap, with driver ratings ranging from a perfect 5 down to a minimum of 3. Since Prime Sedan is a premium offering, a rating of 3 indicates customer dissatisfaction that could lead to churn. OLA should implement targeted training for lower-rated drivers in this category or set a higher minimum rating threshold to maintain premium service standards.

Qu 7. Retrieve all rides where payment was made using UPI.

Ans- CREATE VIEW Payments_by_UPI AS

SELECT * FROM ola_booking WHERE Payment_Method = 'UPI';

SELECT * FROM Payments_by_UPI;

Booking_Date	Booking_Time	Booking_ID	Booking_Status	Customer_ID	Vehicle_Type	Pickup_Location	Drop_Location	V_TAT	C_TAT	Cancelled_Rides_by_Customer	Cancelled_Rides_by_Driver
2024-07-16 04:17:00	04:17:00	CNR1000917188	Success	CID201887	Auto	Chickpet	RT Nagar	119	110	null	null
2024-07-13 22:50:00	22:50:00	CNR1000967649	Success	CID603728	eBike	Cox Town	Koramangala	147	135	null	null
2024-07-28 22:16:00	22:16:00	CNR1002400486	Success	CID322457	eBike	Peenya	Cox Town	98	95	null	null
2024-07-09 03:36:00	03:36:00	CNR1003170189	Success	CID326402	Mini	Sarjapur Road	Chamarajpet	35	145	null	null
2024-07-01 03:36:00	03:36:00	CNR1003243021	Success	CID953482	Prime SUV	Bannerghatta Road	Indiranagar	231	100	null	null
2024-07-15 18:43:00	18:43:00	CNR1003635449	Success	CID613653	eBike	RT Nagar	Langford Town	147	125	null	null
2024-07-04 10:56:00	10:56:00	CNR1004398406	Success	CID138998	Bike	Frazer Town	Kammanahalli	294	105	null	null
2024-07-23 12:55:00	12:55:00	CNR1004654136	Success	CID784785	Mini	Basavanagudi	Basavanagudi	84	120	null	null
2024-07-14 17:43:00	17:43:00	CNR1004817801	Success	CID562025	Prime Sedan	Yelahanka	Cox Town	224	140	null	null
2024-07-28 01:43:00	01:43:00	CNR1005035605	Success	CID780772	eBike	Javanagar	Kengeri	287	65	null	null

count(*)
10289

INSIGHT-

The data shows a high adoption of digital payments, with 10,289 rides completed using UPI. This indicates a tech-savvy customer base and a reduced dependency on cash transactions. OLA can further encourage this trend by partnering with UPI service providers for exclusive cashback offers, which would streamline the payment process and improve driver settlement speed.

Qu 8. Find the average customer rating per vehicle type.

Ans- CREATE VIEW AVERAGE_RATING AS

SELECT Vehicle_Type, AVG(Customer_Rating) AS Average_Rating

FROM ola_booking WHERE Customer_Rating != 'null'

GROUP BY Vehicle_Type;

SELECT * FROM AVERAGE_RATING;

Vehicle_Type	Average_Rating
Prime SUV	3.99
Auto	4
eBike	3.99
Bike	3.98
Prime Sedan	3.99
Mini	4.01
Prime Plus	4

INSIGHT-

The analysis shows a very consistent customer satisfaction level across all vehicle types, with average ratings hovering around 4.0. Interestingly, the 'Mini' category holds the highest average rating of 4.01, suggesting it is the most well-received service in terms of price and quality balance. OLA can analyze feedback specifically for 'Mini' to implement those success factors across other categories to push the overall rating closer to 4.5.

Qu 9. Calculate the total booking value of rides completed successfully.

Ans- CREATE VIEW Total_Values AS

SELECT SUM(Booking_Value) AS Total_Booking_Value

FROM ola_booking WHERE Booking_Status = 'Success';

SELECT * FROM Total_Values;

Total_Booking_Value
13762477

INSIGHT-

This metric represents the total successful revenue generated, amounting to ₹1,37,62,477. As the primary financial indicator, this value is crucial for assessing OLA's market performance and profitability. Moving forward, this revenue data can be used to calculate the Return on Investment (ROI) for marketing campaigns and to plan strategic expansions into higher-earning zones.

Qu 10. List all incomplete rides along with the reason.

Ans- CREATE VIEW Incomplete_Rides AS

SELECT Booking_ID, Incomplete_Rides_Reason

FROM ola_booking

WHERE Incomplete_Rides = 'Yes';

SELECT * FROM Incomplete_Rides;

Booking_ID	Incomplete_Rides_Reason
CNR1013614931	Customer Demand
CNR1014982452	Vehicle Breakdown
CNR1015879654	Vehicle Breakdown
CNR1017297364	Vehicle Breakdown
CNR1024527142	Other Issue
CNR1033318953	Customer Demand
CNR1044820146	Customer Demand
CNR1056748515	Vehicle Breakdown

count(*)
1542

INSIGHT-

The analysis identifies a significant operational gap with 1,542 incomplete rides. The prevalence of 'Vehicle Breakdowns' as a primary reason suggests an urgent need for stricter vehicle fitness audits. OLA should implement automated maintenance alerts and provide immediate alternative ride support for these 1,542+ scenarios to safeguard customer trust and minimize service disruptions.