OLA Trips Analysis In Power BI Dashboard

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Github

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Objective

The Objective is to analyze Ola data to gather insights on customer and driver issues, created using Power BI and MySQL.

SQL Questions

1. Retrieve all successful bookings:
2. Find the average ride distance for each vehicle type:
3. Get the total number of cancelled rides by customers:
4. List the top 5 customers who booked the highest number of rides:
5. Get the number of rides cancelled by drivers due to personal and car-related issues:
6. Find the maximum and minimum driver ratings for Prime Sedan bookings:
7. Retrieve all rides where payment was made using UPI:
8. Find the average customer rating per vehicle type:
9. Calculate the total booking value of rides completed successfully:
10. List all incomplete rides along with the reason:

Power Bi Questions

1. Ride Volume Over Time
2. Booking Status Breakdown
3. Top 5 Vehicle Types by Ride Distance
4. Average Customer Ratings by Vehicle Type
5. cancelled Rides Reasons
6. Revenue by Payment Method
7. Top 5 Customers by Total Booking Value
8. Ride Distance Distribution Per Day
9. Driver Ratings Distribution
10. Customer vs. Driver Ratings

Columns in the Dataset

- Date
- Time
- Booking_lD
- Booking _ Status
- Customer ID
- Vehicle_Type
- Pickup_Location
- Drop_Location
- V TAT
- TAT
- cancelled_Rides_by_Customer
- cancelled_Rides_by_Driver
- Incomplete _ Rides
- Incomplete_Rides_Reason
- Booking _ Value
- Payment_Method
- Ride Distance
- Driver_Ratings
- Customer_Rating

SQL Answers

1) Retrieve Succesfull bookings

```
CREATE VIEW successfull_bookings AS (
SELECT * FROM bookings
WHERE Booking_Status = "Success"
);

SELECT * FROM successfull_bookings;
```

2) Find the average ride distance for each vehicle type

```
CREATE VIEW avg_distance AS (
SELECT vehicle_type, round(AVG(ride_distance),2) AS
avg_distance
FROM successfull_bookings
GROUP BY vehicle_type
);
```

3) Get the total number of cancelled rides by customer:

```
CREATE VIEW cancelled AS (
SELECT COUNT(*) AS cacelled_bookings FROM bookings
WHERE Booking_status = "Canceled by Customer"
);

SELECT * FROM cancelled;
```

4) Retrieve all rides where payment was made using UPI:

```
CREATE VIEW payment_by_upi AS (
SELECT * FROM bookings
WHERE Payment_Method = "UPI"
);

SELECT * FROM payment_by_upi;
```

5) List the top 5 customers who booked the highest number of rides:

```
CREATE VIEW top5 AS (
SELECT customer_id, COUNT(booking_id) AS
number_of_books
FROM bookings
GROUP BY customer_id
ORDER BY COUNT(booking_id) DESC
LIMIT 5
);

SELECT * FROM top5;
```

6) Get the number of rides cancelled by drivers due to personal and car-related issues:

```
CREATE VIEW personal_reason AS (
SELECT * FROM bookings
WHERE  Canceled_Rides_by_Driver  =
"Personal & Car related issue"
);

SELECT * FROM personal_reason;
```

7) Find the maximum and minimum driver ratings for Prime Sedan bookings:

```
CREATE VIEW low_min AS (
SELECT MIN(driver_ratings) AS min_driver_rating,
MAX(driver_ratings) AS max_driver_ratings
FROM bookings
);

SELECT * FROM low_min;
```

8) Find the average customer rating per vehicle type:

```
CREATE VIEW rating_by_vehicle AS (
SELECT vehicle_type, round(AVG(customer_rating),2) AS avg_rating
FROM bookings
GROUP BY vehicle_type
);

SELECT * FROM rating_by_vehicle;
```

9) Calculate the total booking value of rides completed successfully:

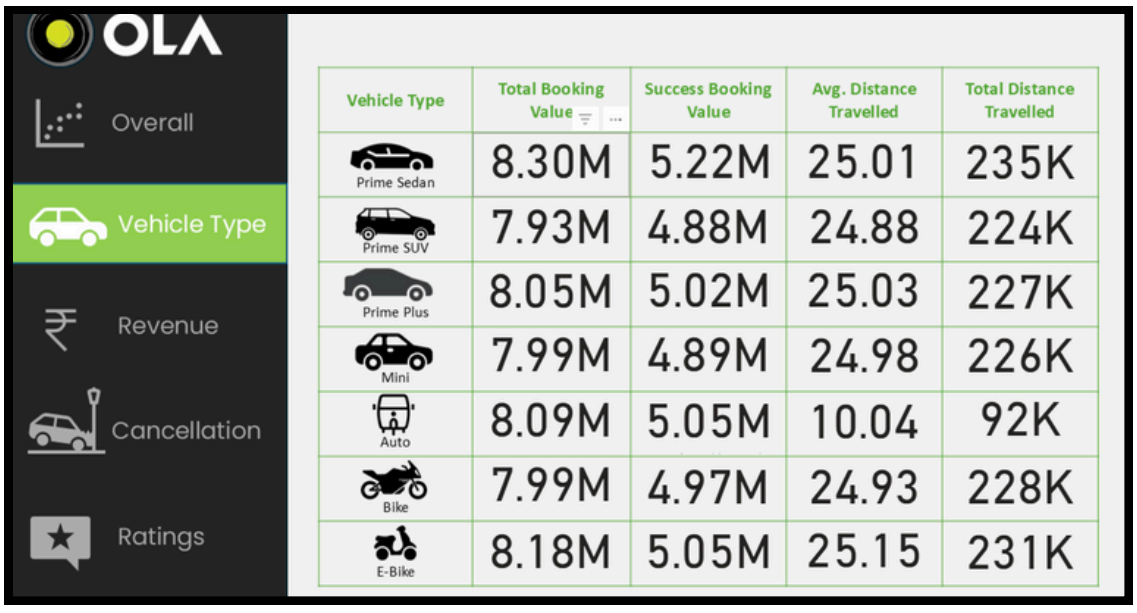
```
CREATE VIEW total_booking_values AS (
SELECT SUM(booking_value) AS total_value
FROM bookings
WHERE Incomplete_Rides != "No"
);

SELECT * FROM total_booking_values;
```

10) List all incomplete rides along with the reason:

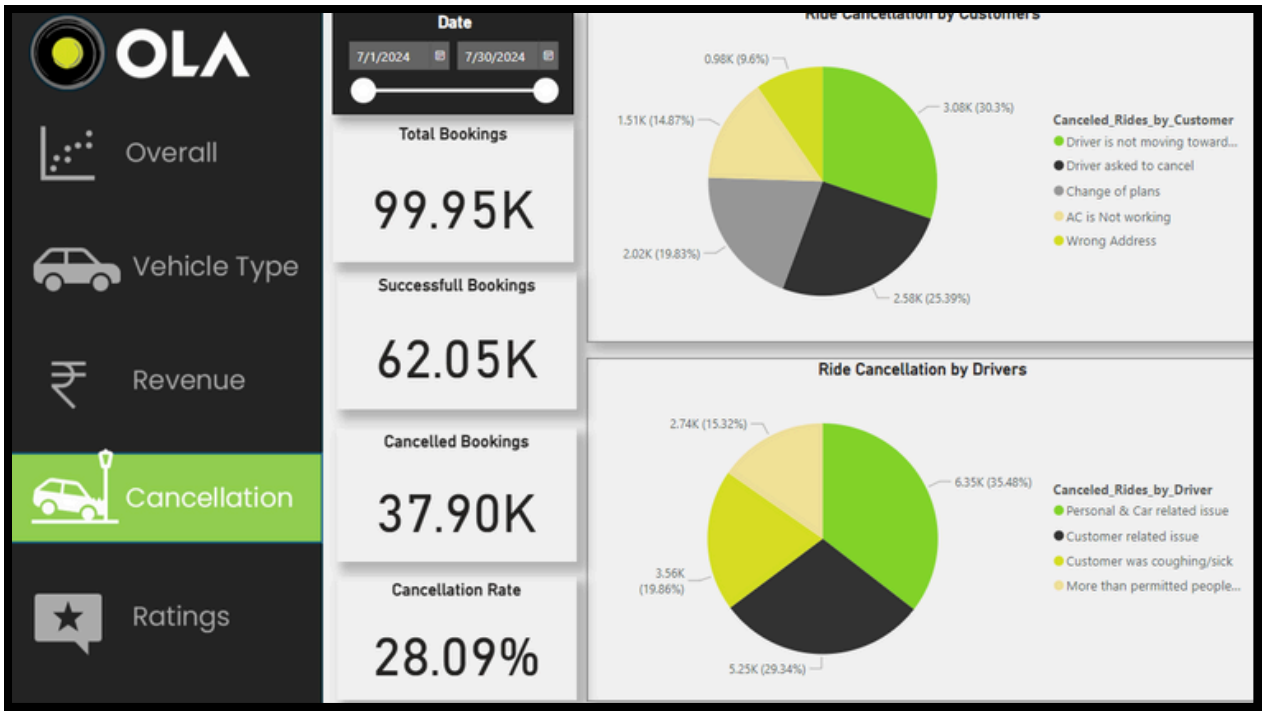
```
CREATE VIEW reason AS (
SELECT
booking_id,customer_id,vehicle_type,pickup_location,drop_location,inc
omplete_rides,incomplete_rides_reason
FROM bookings
WHERE Incomplete_rides = "No"
);

SELECT * FROM reason;
```

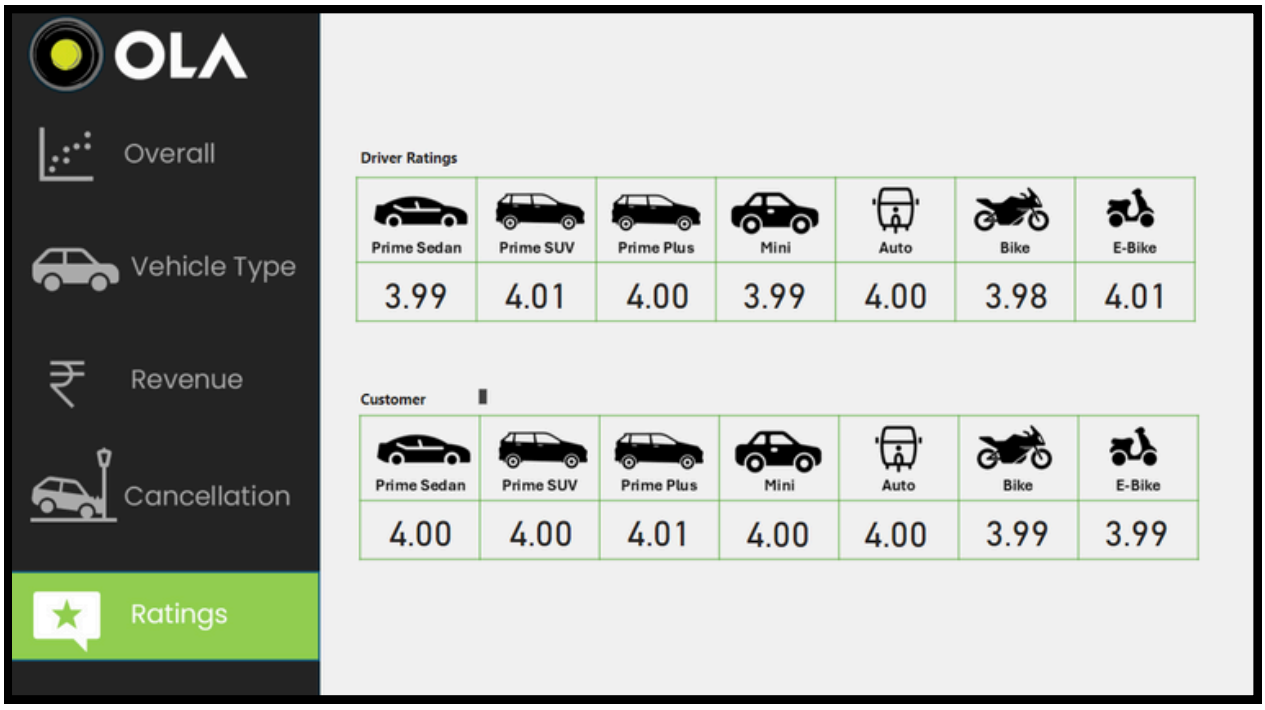
Power Bi

1. Ride Volume Over Time - A time-series chart showing the number of rides per day/week.
2. Booking Status Breakdown - A pie or doughnut chart displaying the proportion of different booking statuses (success, cancelled by the customer, cancelled by the driver, etc.).
3. Top 5 Vehicle Types by Ride Distance - A bar chart ranking vehicle types based on the total distance covered.
4. Average Customer Ratings by Vehicle Type - A column chart showing the average customer ratings for different vehicle types.
5. cancelled Rides Reasons - A bar chart that highlights the common reasons for ride cancellations by customers and drivers.
6. Revenue by Payment Method - A stacked bar chart displaying total revenue based on payment methods (Cash, UPI, Credit Card, etc.).
7. Top 5 Customers by Total Booking Value - A leaderboard visual listing customers who have spent the most on bookings.
8. Ride Distance Distribution Per Day - A histogram or scatter plot showing the distribution of ride distances for different Dates.
9. Driver Ratings Distribution - A box plot visualizing the spread of driver ratings for different vehicle types.
10. Customer vs. Driver Ratings - A scatter plot comparing customer and driver ratings for each completed ride, analyzing correlations.




OLA
Overall
Vehicle Type
Revenue
Cancellation
Ratings
Ride Value By Payment Method
Total Booking Value
20M
10M
0M
null
Cash
UPI
Credit Card
Debit Card
Payment Method
Date
7/1/2024
7/30/2024
Top 5 Customers
Customer_ID
Sum of Booking_Value
CID635848 4976
CID588543 5007
CID785112 5081
CID974848 5107
CID933539 5314
Total 25485
Ride Distance by Date
Ride Distance
60K
40K
20K
0K
Jul 07
Jul 14
Jul 21
Jul 28
Date


OLA
Overall
Vehicle Type
Revenue
Cancellation
Ratings
Date
7/1/2024
7/30/2024
Total Bookings
99.95K
Successfull Bookings
62.05K
Cancelled Bookings
37.90K
Cancellation Rate
28.09%
0.98K (9.6%)
3.08K (30.3%)
1.51K (14.87%)
2.02K (19.83%)
2.58K (25.39%)
Canceled_Rides_by_Customer
Driver is not moving toward...
Driver asked to cancel
Change of plans
AC is Not working
Wrong Address
Ride Cancellation by Drivers
2.74K (15.32%)
6.35K (35.48%)
3.56K (19.86%)
5.25K (29.34%)
Canceled_Rides_by_Driver
Personal & Car related issue
Customer related issue
Customer was coughing/sick
More than permitted people...


OLA
Overall
Vehicle Type
Revenue
Cancellation
Ratings
Driver Ratings
Prime Sedan 3.99
Prime SUV 4.01
Prime Plus 4.00
Mini 3.99
Auto 4.00
Bike 3.98
E-Bike 4.01
Customer
Prime Sedan 4.00
Prime SUV 4.00
Prime Plus 4.01
Mini 4.00
Auto 4.00
Bike 3.99
E-Bike 3.99