

# Booking Data Analysis OF JULY 2024

### ABOUT US

Ola is India's largest mobility platform and one of the world's largest ride-hailing companies, serving 250+ cities across India, Australia, New Zealand, and the UK. The Ola app offers mobility solutions by connecting customers to drivers and a wide range of vehicles across bikes, auto-rickshaws, metered taxis, and cabs, enabling convenience and transparency for hundreds of millions of consumers and over 1.5 million driver-partners.

#### WORKFLOW DIAGRAM

Data Cleaning with
Python and Export
the Cleaned Data
for Future Use

Data Cleaning Database Creation

Create Database using PostgreSQL and dump the Cleaned Data

Analysis the Data with SQL Query to find the Answer

SQL Analysis EDA: Data Visualization

Using Python, applied Exploratory Data Analysis to create Visualization

### SQL ANALYSIS

Retrieve all successful bookings: Here, we have shown successful bookings by Booking ID. [ \*\* Due to limited space, we have shown 10 data only \*\* ]

	Booking_ID character varying	Booking_Status character varying		
1	CNR2940424040	Success		
2	CNR2982357879	Success		
3	CNR1797421769	Success		
4	CNR8787177882	Success		
5	CNR3612067560	Success		
6	CNR4787583516	Success		
7	CNR7943634301	Success		
8	CNR4524472111	Success		
9	CNR8181602032	Success		
10	CNR8090918544	Success		

Find the average ride distance for each vehicle type: Here, we have shown average ride distance by Vehicle Types. Average ride distance measured in Km. "Prime Sedan" covered the most average distance, i.e. 15.76 KM.

	Vehicle_Type character varying	avg_ride_distance numeric
1	eBike	15.5805885529157667
2	Auto	6.2380887834632328
3	Bike	15.5330787068612740
4	Prime Sedan	15.7649391678429791
5	Prime Plus	15.4474739919766098
6	Mini	15.5101017042330951
7	Prime SUV	15.2745138178096213

Get the total number of cancelled rides by customers: Here, we have shown total number of cancelled rides by customers, i.e. 10499.

	no_of_canceled_rides bigint
1	10499

List the top 5 customers who booked the highest number of rides: Here, we have shown top 5 customers who booked the highest number of rides. Customer ID – CID954071 booked the greatest number of rides, i.e. 5.

	Customer_ID character varying	total_rides bigint	a
1	CID954071		5
2	CID387617	-	4
3	CID356460	-	4
4	CID836942	4	4
5	CID309168	_	4

Get the number of rides cancelled by drivers due to personal and car-related issues: Here, we have shown the number of rides cancelled by drivers due to personal and car-related issues, i.e. 6542.

	count_canceled_by_driver bigint
1	6542

Find the maximum and minimum driver ratings for Prime Sedan bookings: Here, we have shown the maximum and minimum driver ratings for Prime Sedan bookings. The minimum rating was: 3.0 & maximum rating was: 4.9

	minimum_rating text		maximum_rating text	â
1	3.0		4.9	

Retrieve all rides where payment was made using UPI: Here, we have shown the all rides where payment was made using UPI. [ \*\* Due to limited space, here we have shown 10 results. ]

	Date character varying	Time character varying	Booking_ID character varying	Payment_Method character varying
1	30-07-2024	19:59:00	CNR2982357879	UPI
2	13-07-2024	04:42:00	CNR8787177882	UPI
3	27-07-2024	13:18:00	CNR4524472111	UPI
4	16-07-2024	09:54:00	CNR8181602032	UPI
5	02-07-2024	10:25:00	CNR8090918544	UPI
6	09-07-2024	11:11:00	CNR9975925287	UPI
7	19-07-2024	21:18:00	CNR4443921904	UPI
8	25-07-2024	03:44:00	CNR7194303296	UPI
9	15-07-2024	17:11:00	CNR6494005067	UPI
10	14-07-2024	05:25:00	CNR7142279862	UPI

Find the average customer rating per vehicle type: Here, we have shown the average customer ratings per vehicle type. "Prime Sedan" had the highest average customer ratings: 2.52

	Vehicle_Type character varying	avg_customer_rating numeric		
1	eBike	2.4708760799136069		
2	Auto	2.4843849542527957		
3	Bike	2.4877574682853635		
4	Prime Sedan	2.5227465214761041		
5	Prime Plus	2.4740735704086489		
6	Mini	2.4823735568993953		
7	Prime SUV	2.4550255885363357		

Calculate the total booking value of rides completed successfully: Here, we have shown the total booking value of rides completed successfully.

Total booking was - 32829985

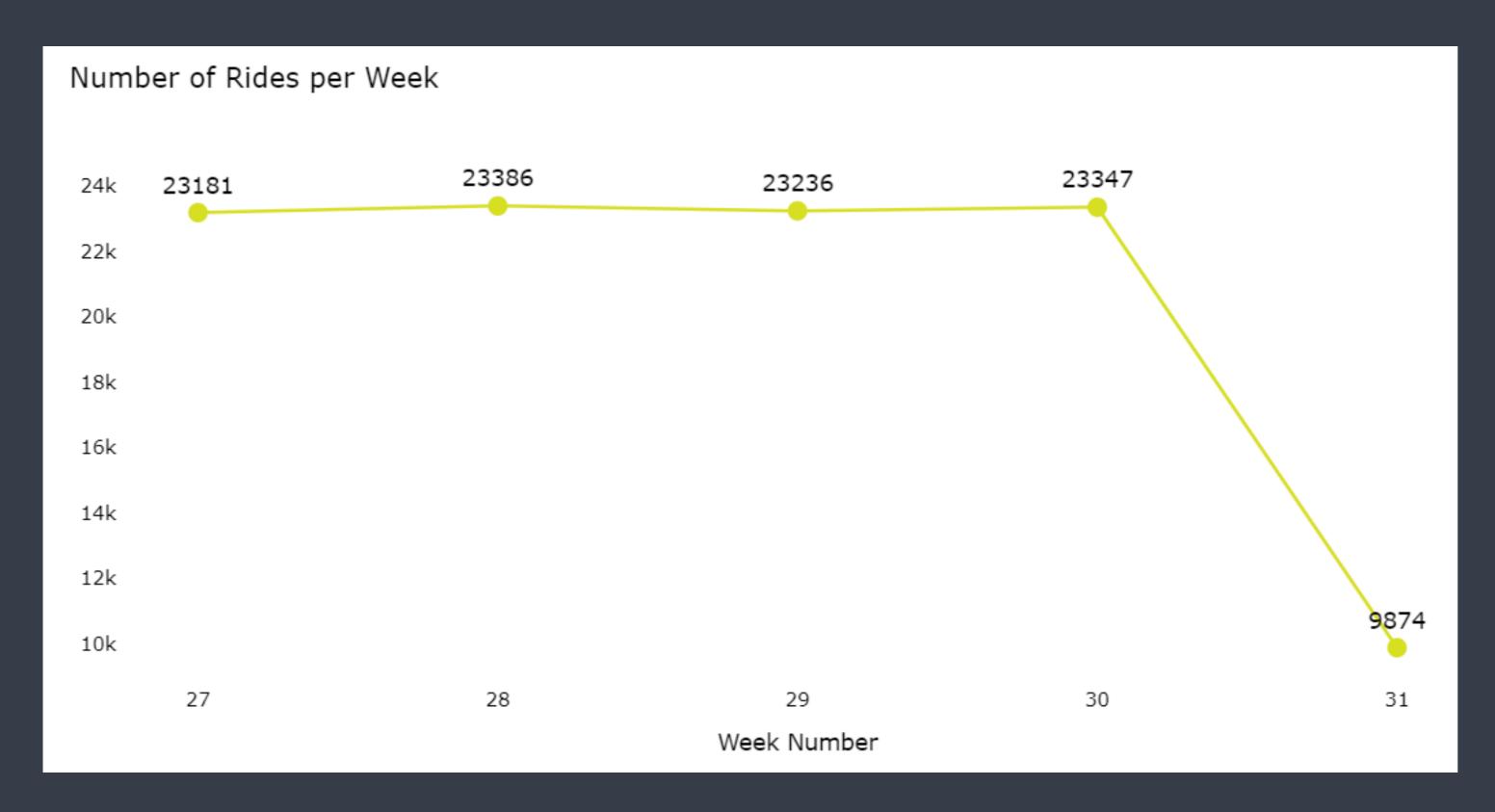
	total_booking numeric
1	32829985

List all incomplete rides along with the reason : Here, we have shown the list of all incomplete rides along with the reason. [ \*\* Due to limited space, here we have shown 10 results. ]

	Booking_ID character varying	Incomplete_Rides character varying	Incomplete_Rides_Reason character varying
1	CNR7153255142	Yes	No
2	CNR2395710036	Yes	No
3	CNR5374902489	Yes	No
4	CNR5030602354	Yes	No
5	CNR6328453219	Yes	No
6	CNR3914552212	Yes	No
7	CNR3211335290	Yes	No
8	CNR4306636052	Yes	No
9	CNR6003663433	Yes	No
10	CNR2998177390	Yes	No

## EDA - Visualization

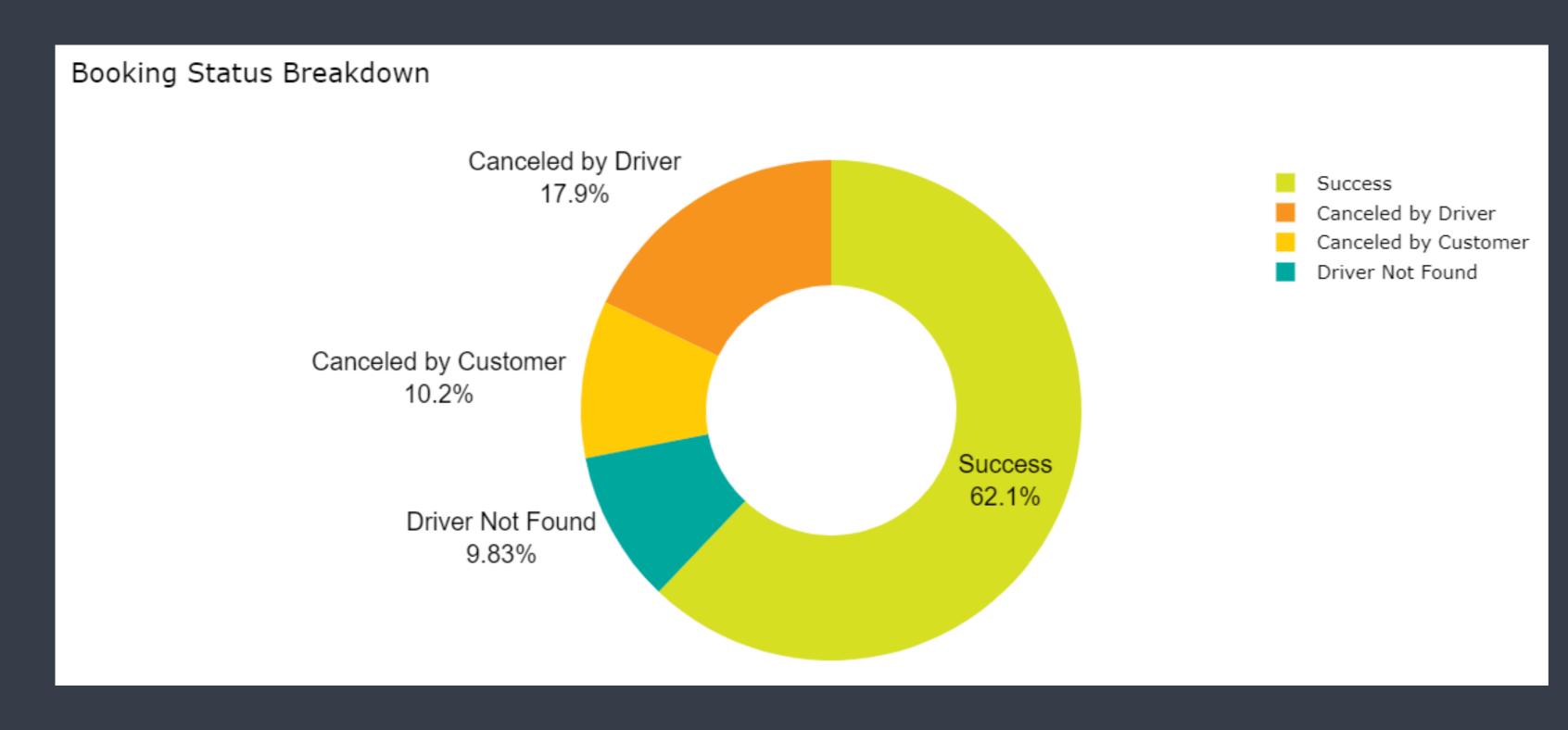
Ride Volume Over Time: A time-series chart showing the number of rides per week >>>



	July 2024						
Мо	Tu	We	Th	Fr	Sa	Su	
1	2	3	4	5	6	7	
8	9	10	11	12	13	14	
15	16	17	18	19	20	21	
22	23	24	25	26	27	28	
29	30	31					

\*\* Note: Week No. 31 had only three days. So, the number of rides naturally lower than other weeks.

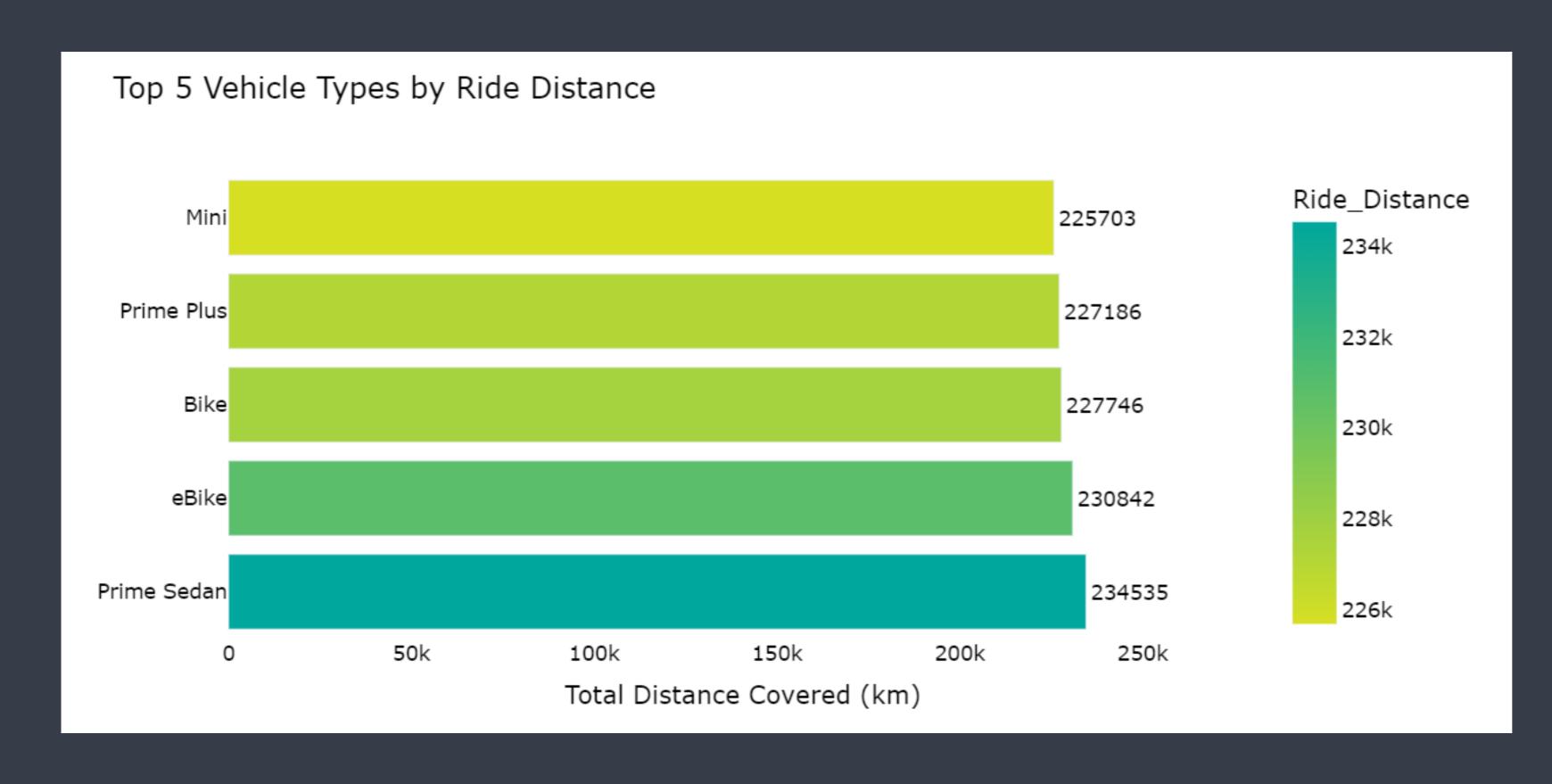
Booking Status Breakdown: A pie or doughnut chart displaying the proportion of different booking statuses (success, cancelled by the customer, cancelled by the driver, etc.).



\*\* Note: Booking status – "Success" had most percentage, i.e. 62.1 %

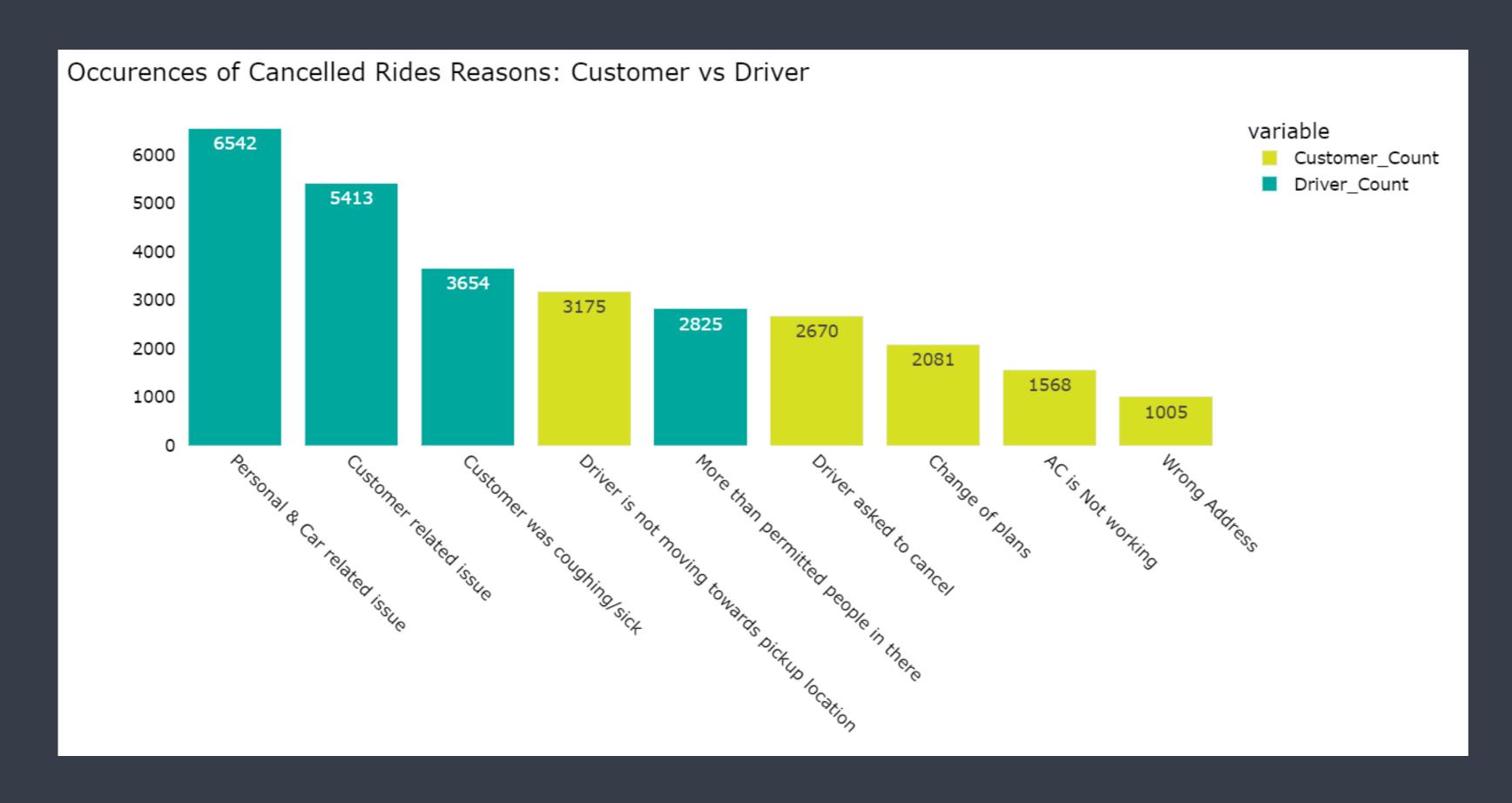
The next one was "Cancelled by Driver", i.e. 17.9 %, which mean, in some cases might be driver did not want to go to the destination or some problems occurred due to booking issue with customers.

Top 5 Vehicle Types by Ride Distance: A bar chart ranking vehicle types based on the total distance covered.



\*\* Note: "Prime Sedan" covered more distance than other vehicle types. It covered 234535 KM

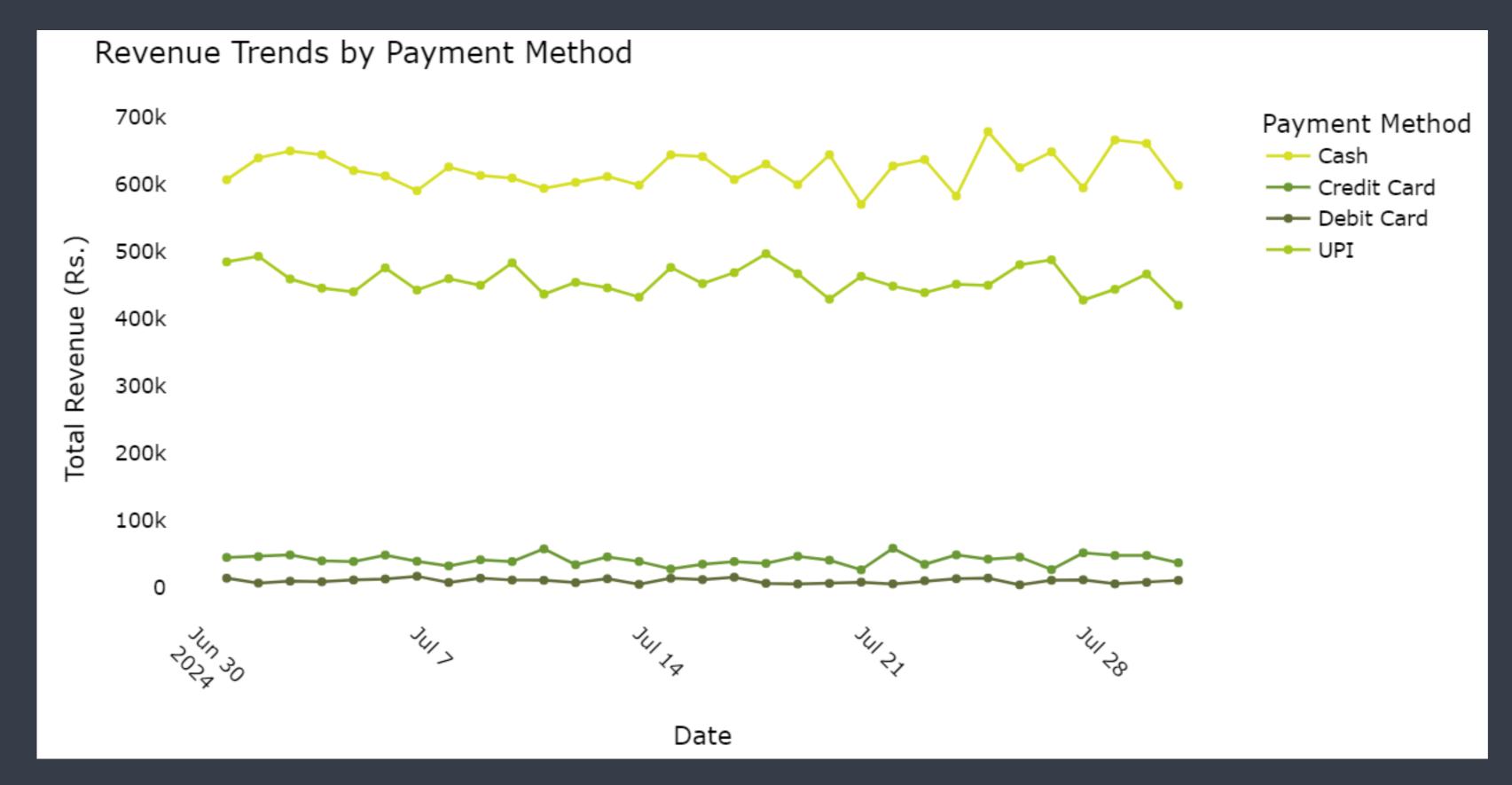
Cancelled Rides Reasons: A bar chart that highlights the common reasons for ride cancellations by customers and drivers.



\*\* Note: "Personal & Car related issue" was the most frequent reason for cancellation by Driver, which happened 6542 times.

"Driver is not moving towards pickup location" was the most frequent reason for cancellation by Customer, which happened 3175 times.

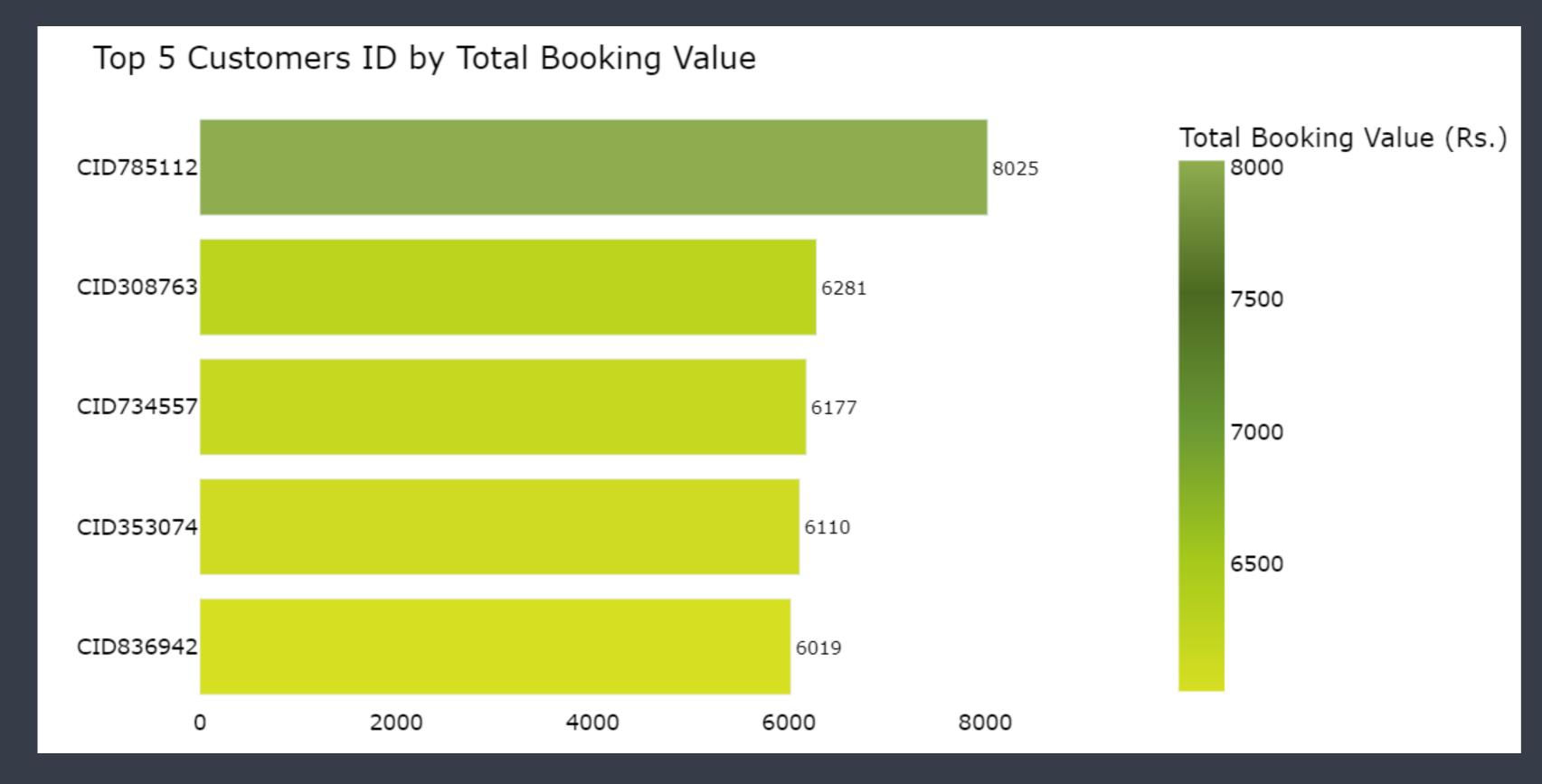
Revenue by Payment Method: A multi-line chart displaying total revenue based on payment methods (Cash, UPI, Credit Card, etc.)



\*\* Note: "Cash" was the mostly trending revenue generator and the next one was "UPI".

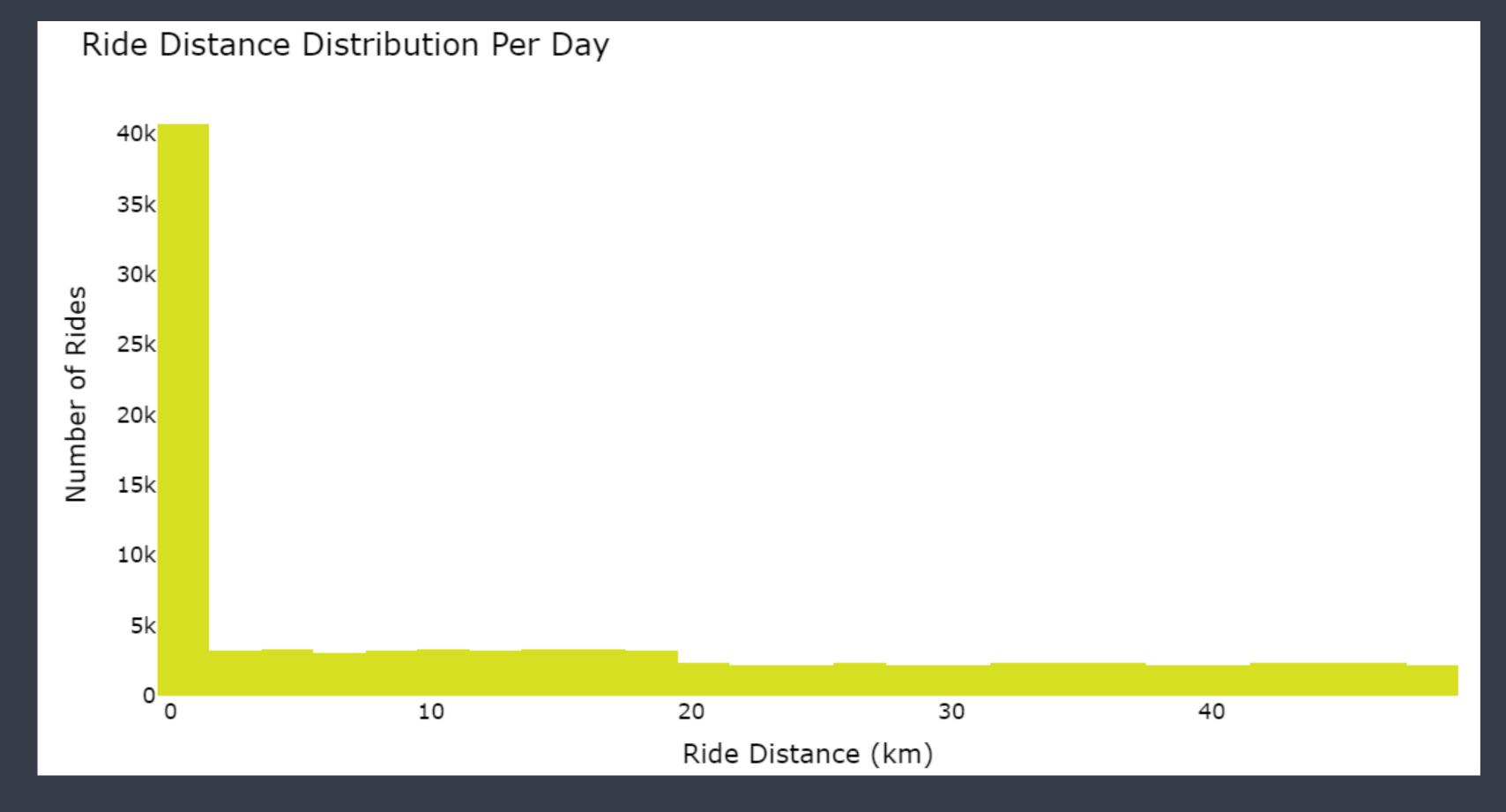
Where as "Debit & Credit Card" was least responsible for revenue generator.

Top 5 Customers by Total Booking Value: A leaderboard visual listing customers who have spent the most on bookings.



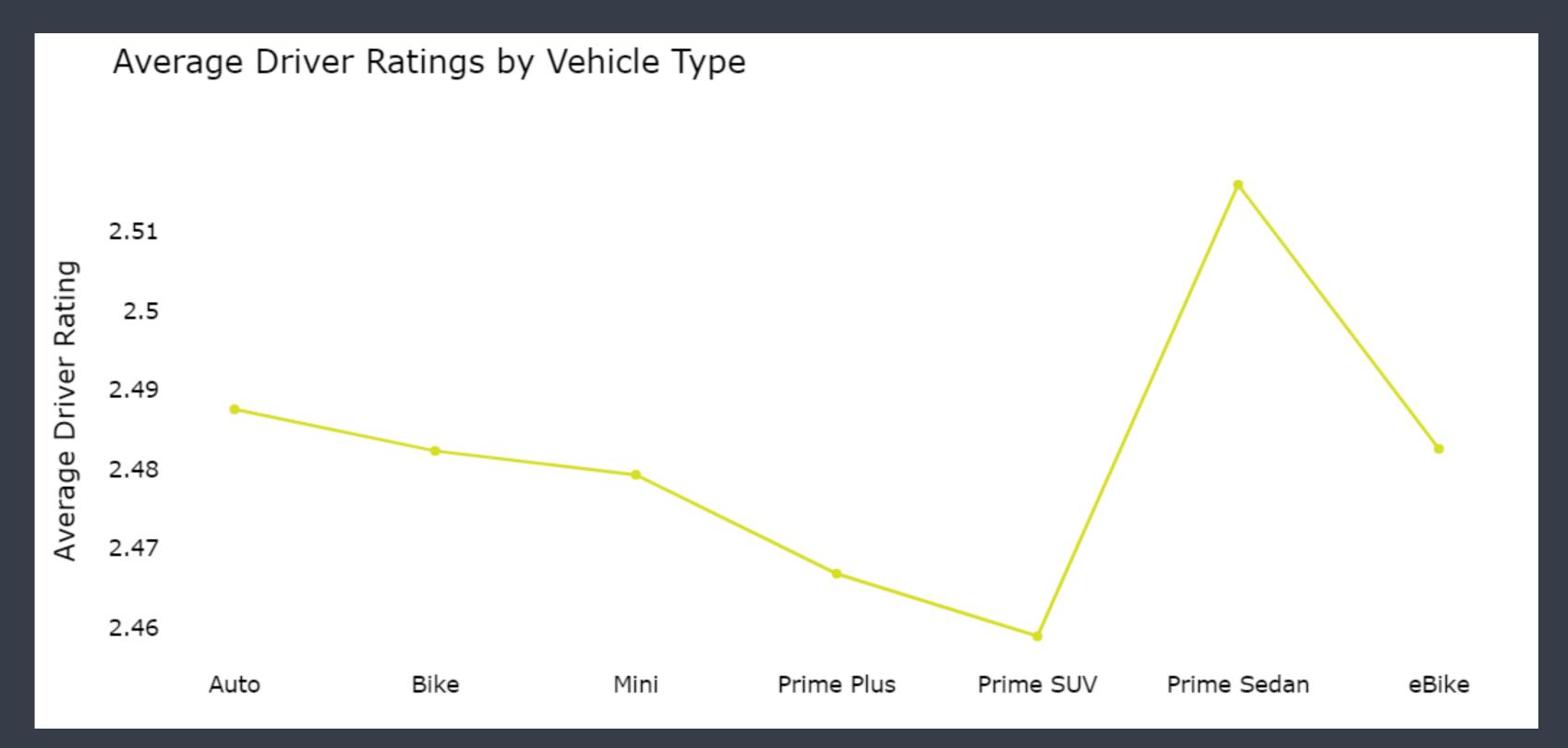
\*\* Note: "CID785112" was the top customer with highest booking values, i.e. Rs. 8025.

Ride Distance Distribution Per Day: A histogram showing the distribution of ride distances for different Dates.



\*\* Note: Between "0 to 1 KM", more than 40K rides booked. So, we assume that, up to 1 KM, most passengers travelled by OLA in July.

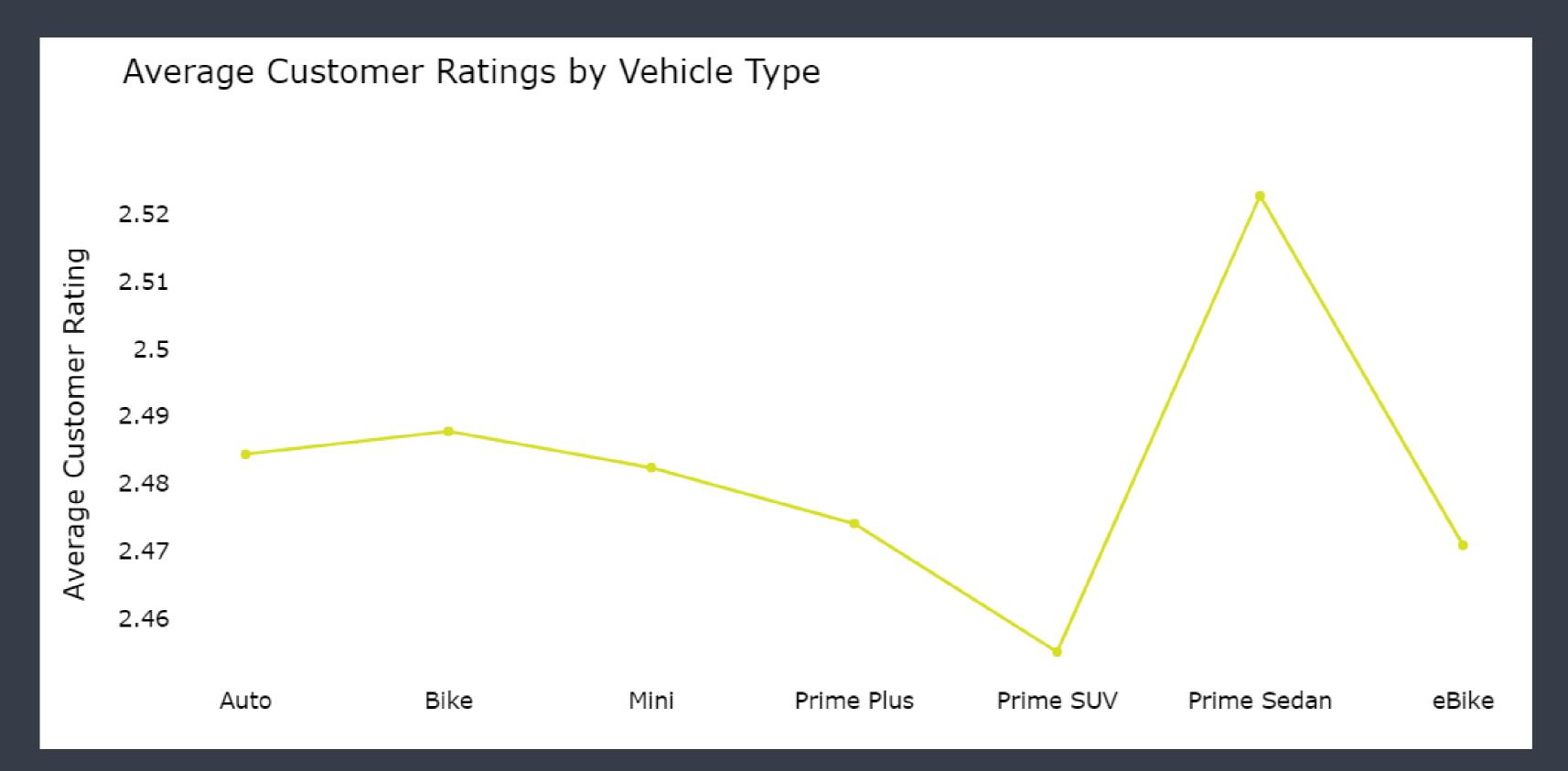
Driver Rating Distribution: A line chart visualizing the spread of driver ratings for different vehicle types.



\*\* Note: "Prime Sedan" got highest average Driver's rating among all vehicle types.

Where as, "Prime SUV" got average lowest rating by Drivers.

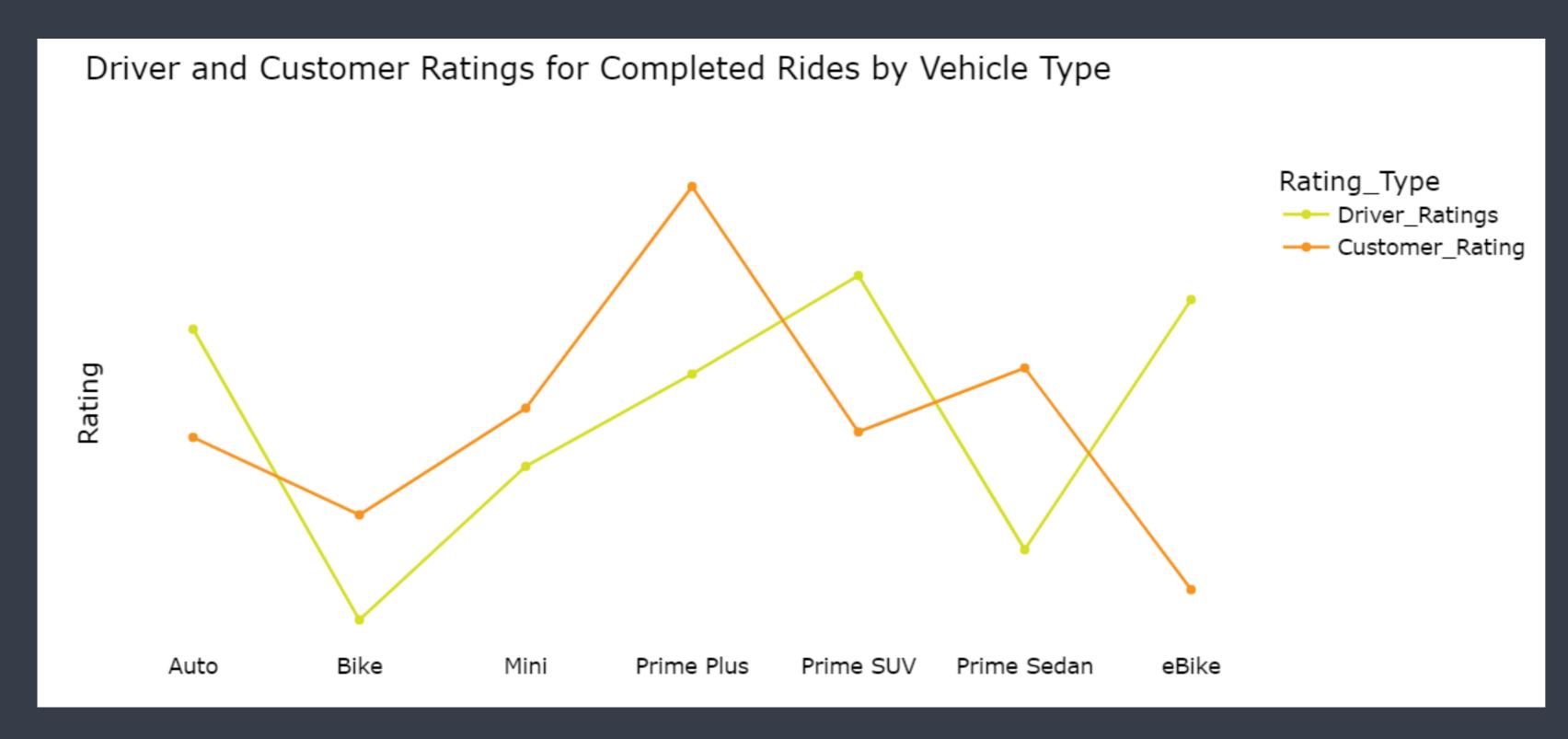
Customer Rating Distribution: A line chart visualizing the spread of customer ratings for different vehicle types.



\*\* Note: "Prime Sedan" got highest average Customer's rating among all vehicle types.

Where as, "Prime SUV" got average lowest rating by Customers.

Customer vs. Driver Ratings: A line plot comparing customer and driver ratings for completed rides



\*\* Note: For 'Completed' Rides, Driver's highest rating was for "Auto", "Prime SUV" & "e-Bike".

Where as, Customer's highest rating was for "Prime Plus" & "Prime Sedan".

### SUMMARY

Here, with OLA booking dataset of July 2024, we have analyzed various section of business problems. We have gone through total rides in KM for each vehicle types, revenues by vehicle types, revenues by each customer, ratings of rides by drivers and customers, count of each type of booking status etc. Also, we have shown various graphs to easily understand the scenario of OLA cab rides in July 2024.



### THANK YOU!

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