OLA RIDES ANALYSIS

1. Introduction

This document presents a comprehensive analysis of Ola ride data sourced from Kaggle. The objective is to understand booking patterns, ride performance, cancellations, payment preferences, and customer ratings. Data was cleaned, transformed, and analyzed using **Power Query** and visualized through an analytical dashboard.

2. Data Source

Dataset Used

- **Platform:** Kaggle

- **Dataset Link:** https://www.kaggle.com/datasets/stevenkk/ola-analysis?resource=download

- **Dataset Content:** Includes ride details, payment modes, locations, ride distances, customer ratings, cancellations, and vehicle categories.

	Drop_Location	V_TAT	C_TAT	Canceled_Rides_by_Customer	Canceled_Rides_by_Driver	Incomplete_Rides	Incomplete_Rides_Reason	Booking_Value	Payment_Method	Ride_Distance	Driver_Rat
2	RT Nagar	N/A	N/A	N/A	Personal & Car related issue	N/A	N/A	444	N/A	0	N/A
3	Varthur	203	30	N/A	N/A	No	N/A	158	Cash	13	4.1
4	Varthur	238	130	N/A	N/A	No	N/A	386	UPI	40	4.2
5	Vijayanagar	N/A	N/A	Driver is not moving towards pickup location	N/A	N/A	N/A	384	N/A	0	N/A
6	Chamarajpet	252	80	N/A	N/A	No	N/A	822	Credit Card	45	4
7	Vijayanagar	231	90	N/A	N/A	No	N/A	173	UPI	41	3.4
8	Whitefield	133	40	N/A	N/A	No	N/A	140	Cash	49	3.2
9	Sarjapur Road	N/A	N/A	N/A	Personal & Car related issue	N/A	N/A	344	N/A	0	N/A
10	Peenya	N/A	N/A	N/A	N/A	N/A	N/A	839	N/A	0	N/A
11	Varthur	N/A	N/A	N/A	Personal & Car related issue	N/A	N/A	893	N/A	0	N/A
12	Jayanagar	35	55	N/A	N/A	No	N/A	164	Cash	46	4.5
13	Rajajinagar	238	95	N/A	N/A	No	N/A	399	Cash	18	3.9
14	Yelahanka	126	35	N/A	N/A	No	N/A	330	UPI	8	3
15	Banashankari	N/A	N/A	N/A	Personal & Car related issue	N/A	N/A	427	N/A	0	N/A
16	MG Road	70	95	N/A	N/A	No	N/A	378	UPI	18	4.8
17	HSR Layout	126	95	N/A	N/A	No	N/A	343	UPI	23	3.7
18	BTM Layout	N/A	N/A	N/A	N/A	N/A	N/A	366	N/A	0	N/A
19	Langford Town	140	40	N/A	N/A	No	N/A	401	Cash	8	3.3
20	RT Nagar	42	30	N/A	N/A	No	N/A	343	UPI	17	3
21	Sarjapur Road	245	70	N/A	N/A	No	N/A	2014	Cash	33	4.2
22	Hulimavu	84	25	N/A	N/A	No	N/A	650	Cash	34	4.9
23	Jayanagar	168	65	N/A	N/A	No	N/A	231	Cash	2	3.2

3. Data Preprocessing

a. Missing Data

- Initial inspection revealed missing values in multiple columns.

					Vehicle_Type	Avg Distance			
1	Date						Booking_Status		
2	Time				Prime Sedan	15.76	Canceled by Driver	18434	
3	Booking_ID				Bike	15.53	Success	63967	
4	Booking_Status				Prime SUV	15.27	Canceled by Customer	10499	
5	Customer_ID				eBike	15.58	Driver Not Found	10124	
6	Vehicle_Type				Mini	15.51		103024	
7	Pickup_Location				Prime Plus	15.45			
8	Drop_Location				Auto	6.24		27.72%	
9	V_TAT								
10	C_TAT								
11	Canceled_Rides_by_Customer								
12	Canceled_Rides_by_Driver								

July | Sheet1 | Sheet2 | +

b. Data Cleaning (Power Query)

Performed the following operations:

1. Removed rows with missing values to ensure the accuracy of analysis.

2. Ensured all numeric fields were correctly typed.

3. Reformatted date and category columns for consistency.

4. Verified that no duplicates were present.

Dataset:

Empty Rows:

Remove Null Values Rows:

A^B_C Date	ABC 123 Column2	ABC 123 Column3	ABC 123 Column4	A^B_C Vehicle_Type	1.2 Avg Distance
Time	null	null	null	Prime Sedan	15.76493917
Booking_ID	null	null	null	Bike	15.53307871
Booking_Status	null	null	null	Prime SUV	15.27451382
Customer_ID	null	null	null	eBike	15.58058855
Vehicle_Type	null	null	null	Mini	15.5101017
Pickup_Location	null	null	null	Prime Plus	15.44747399
Drop_Location	null	null	null	Auto	6.238088783
V_TAT	null	null	null	null	null
C_TAT	null	null	null	null	null
Canceled_Rides_by_Customer	null	null	null	null	null
Canceled_Rides_by_Driver	null	null	null	null	null
Incomplete_Rides	null	null	null	null	null
Incomplete_Rides_Reason	null	null	null	null	null
Booking_Value	null	null	null	null	null
Payment_Method	null	null	null	null	null
Ride_Distance	null	null	null	null	null
Driver_Ratings	null	null	null	null	null
Customer_Rating	null	null	null	null	null
null	null	null	null	null	null
null	null	null	null	null	null
null	null	null	null	null	null
null	null	null	null	null	null
null	null	null	null	null	null
null	null	null	null	null	null
null	null	null	null	null	null

A^B_C Date	ABC 123 Column2	ABC 123 Column3	ABC 123 Column4	A^B_C Vehicle_Type	1.2 Avg Distance
Time	null	null	null	Prime Sedan	15.76493917
Booking_ID	null	null	null	Bike	15.53307871
Booking_Status	null	null	null	Prime SUV	15.27451382
Customer_ID	null	null	null	eBike	15.58058855
Vehicle_Type	null	null	null	Mini	15.5101017
Pickup_Location	null	null	null	Prime Plus	15.44747399
Drop_Location	null	null	null	Auto	6.238088783

c. Final Dataset Status

- All missing rows removed

- Data transformed and cleaned

- Loaded into Power BI for visualization
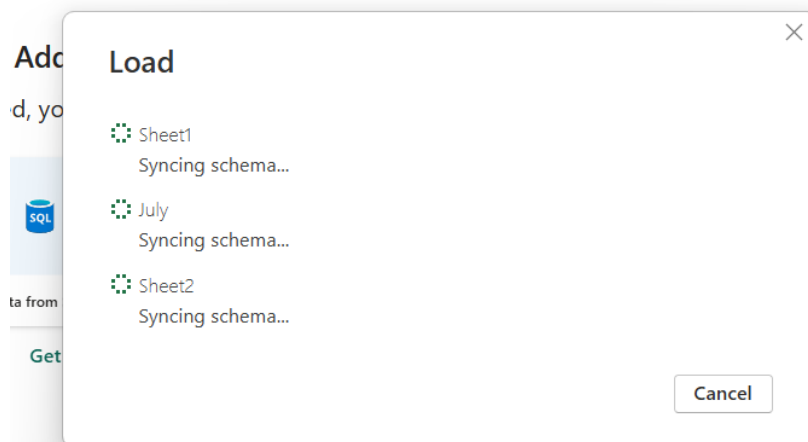
4.Data Visualisation

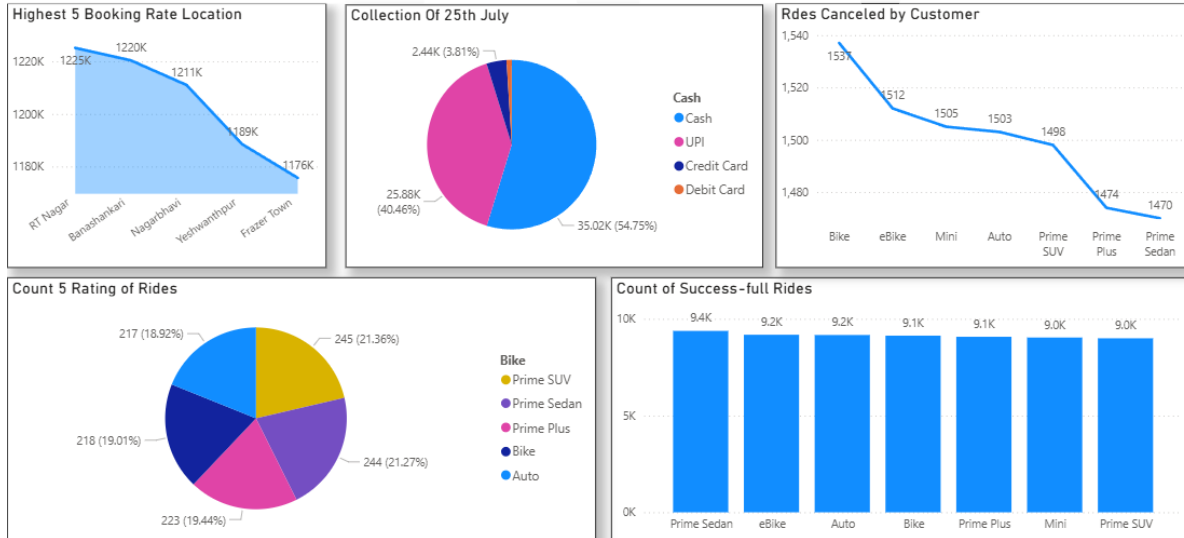# 5. Card-Wise Metrics

5.1 Overall Booking Value
- Total Booking Value: 57M
- Indicates high demand for Ola rides and strong revenue generation in the analyzed period.

5.2 Average Ride Distance
- 14.19 km
- Customers generally use Ola for medium-distance travel.

5.3 Average Distance of Successful Rides
- **15.53 km**
- Successful rides have slightly longer distances, suggesting:
  - Shorter trips may face higher cancellation rates
  - Longer journeys are more reliable and completed more consistently

6. FACTOR-WISE ANALYSIS

6.1 Highest Booking Rate by Location

1. RT Nagar – 1,225K
2. Banashankari – 1,220K
3. Nagavara – 1,211K
4. Yelahanka – 189K
5. Fraser Town – 1,176K

Insights
- RT Nagar & Banashankari are the top-performing areas.
- Yelahanka shows very low demand, indicating:
  - Lower population density OR
  - Lower service availability OR
  - Preference for alternative transport modes

6.2 Payment Collection on 25th July

| Payment Mode	Amount	Share
Cash	35.02K	54.75%
UPI	25.88K	40.46%
Credit Card	2.44K	3.81%
Debit Card	Minimal/Negligible	<1%
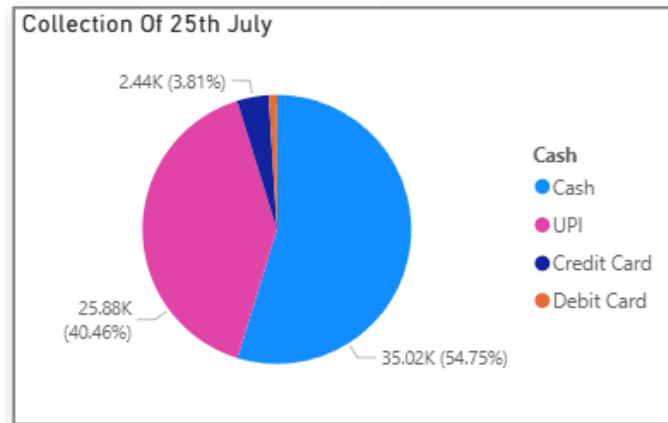
Insights
- Cash remains the dominant payment mode.
- UPI usage is high (40.46%), showing strong adoption of digital payments.
- Card payments are extremely low — a potential area for improvement.

6.3 Customer Ride Cancellations

Cancelled rides across vehicle types:

Ride Type	Cancellations
Bike	1,537
eBike	1,512
Mini	1,505
Auto	1,503
Prime SUV	1,498
Prime Plus	1,474
Prime Sedan	1,470
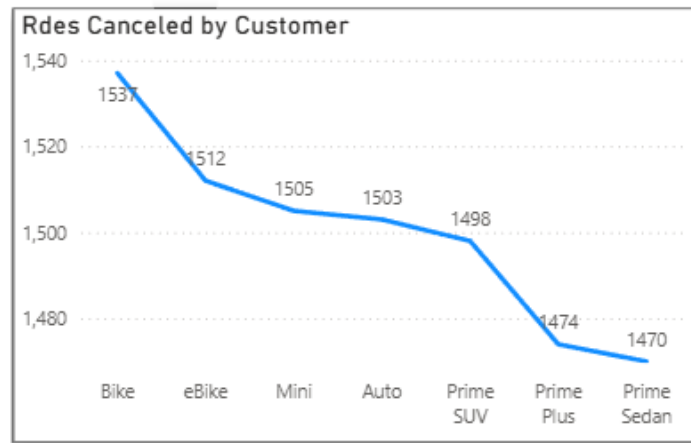
Insights
- Bikes & eBikes have the highest cancellations, likely due to:
    - Weather issues
    - Rider comfort concerns
    - Pickup difficulties
- Sedan and premium rides have the lowest cancellations, reflecting:
    - Higher reliability
    - Better ride comfort
    - Strong customer preference

6.4 Ride Rating Distribution

Distribution of ride ratings:
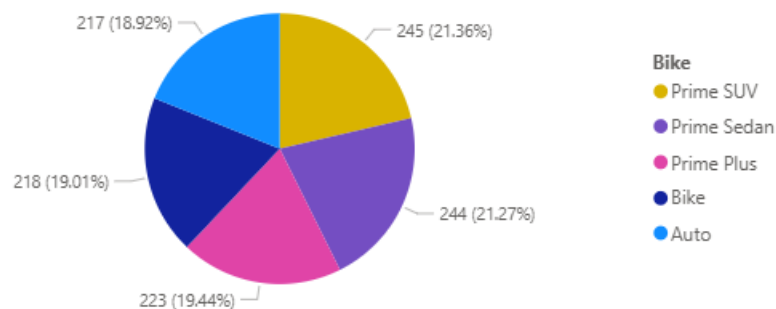Prime SUV: 245 rides (21.36%)
Prime Sedan: 244 rides (21.27%)
Prime Plus: 223 rides (19.44%)
Bike: 218 rides (19.10%)
Auto: 217 rides (18.92%)

Insights
- Premium segments (SUV, Sedan, Plus) dominate high ratings → better ride experience.
- Auto and Bike have slightly lower ratings → might indicate discomfort or inconsistent service.

6.5 Count of Successful Rides

Successful rides per category of vehicle:

Ride Type	Successful Rides
Prime Sedan	9.4K
eBike	9.2K
Auto	9.2K
Bike	9.1K
Prime Plus	9.1K
Mini	9.0K
Prime SUV	9.0K
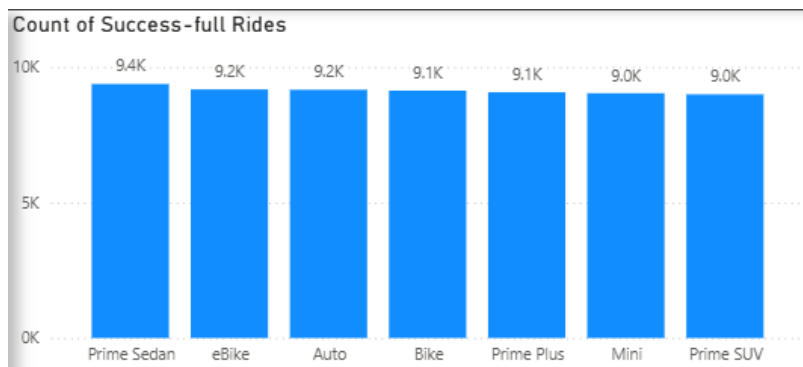
Insights

- Prime Sedan is leading in successful rides.
- All categories show rather consistent performance.
- Premium and regular segments have similar success rates, showing stable operations.

7. Final Summary

Strengths

- High booking value (57M) indicates strong market demand.
- UPI payments growing rapidly, close to 40%.
- Premium rides (SUV, Sedan, Plus) show:
    - High ratings
    - Lower cancellations
    - Strong customer preference

Weaknesses

- Bikes and eBikes account for the greatest proportion of cancellations.
- Yelahanka has considerably low booking counts.
- **Card payments** are very low, suggesting:
    - User inconvenience
    - Limited awareness/offers

Opportunities

- Improve customer experience for Bike/Auto rides.
- Increase digital adoption by providing discounts on card payments.

- Target campaigns in underperforming locations such as Yelahanka.

8. Conclusion

- The Ola Rides Analysis reveals a healthy operational performance with strong booking volumes, satisfied customers in premium segments, and significant digital payment adoption. However, targeted improvements in cancellations, location outreach, and payment diversification can further enhance Ola's overall service efficiency and user experience.