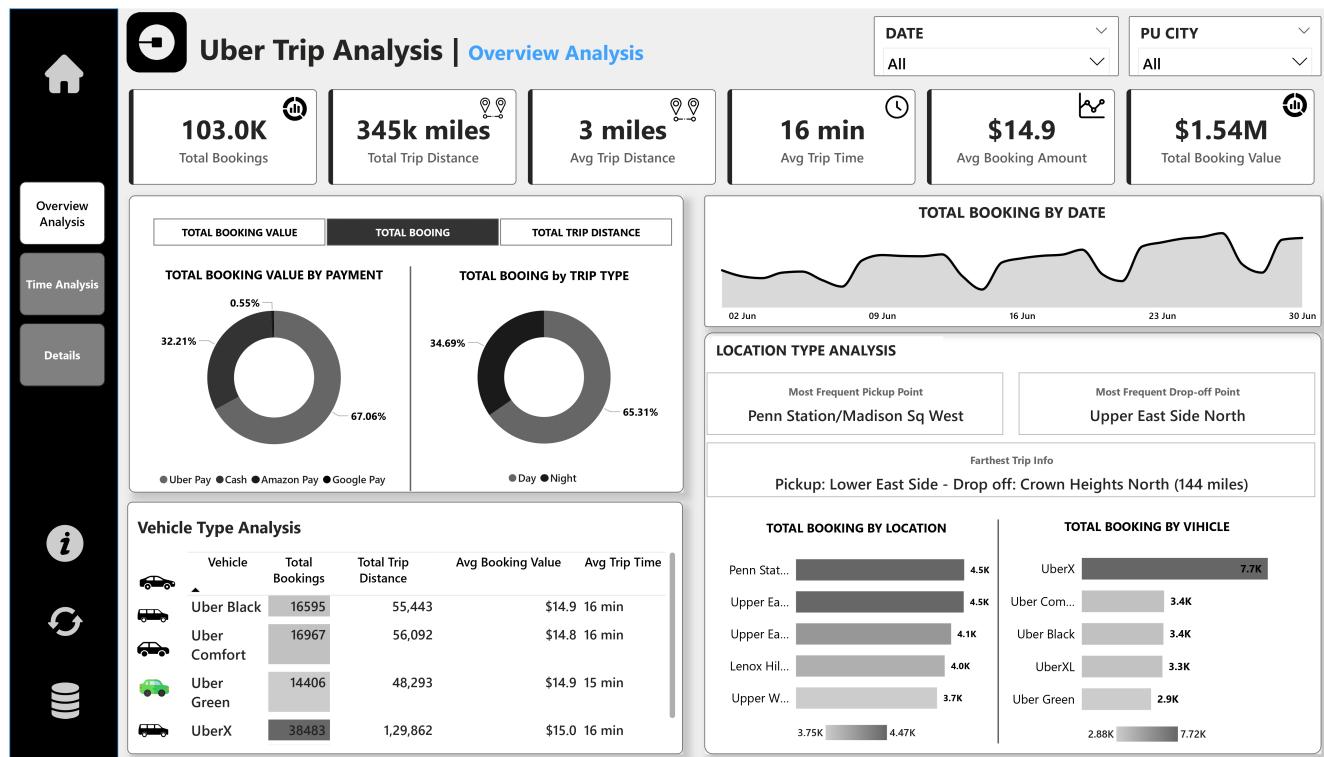


🚗 Uber Trip Analysis Report



📊 Project Overview

This Uber Trip Analysis is a deep-dive dashboard project using Power BI to analyze **103,000+ Uber rides** across various metrics: time, location, vehicle type, and payment method. The data was cleaned, structured, and visualized using interactive dashboards categorized into three main sections:

1. Overview
2. Time Analysis
3. Detailed Trip Data

This project helps uncover **key trends, passenger behavior**, and **operational insights** for optimization.

🔍 Summary

❖ Key Findings

- **103K+ total trips** recorded.
- **Total revenue:** ~\$1.54 million.
- **UberX** is the most used vehicle (38K+ bookings).
- **Peak usage time:** 2 PM – 6 PM, especially on weekends.
- **Top Pickup:** Penn Station / Madison Square West.
- **Top Drop-off:** Upper East Side North.
- **Farthest trip:** 144 miles (Lower East Side → Crown Heights North).

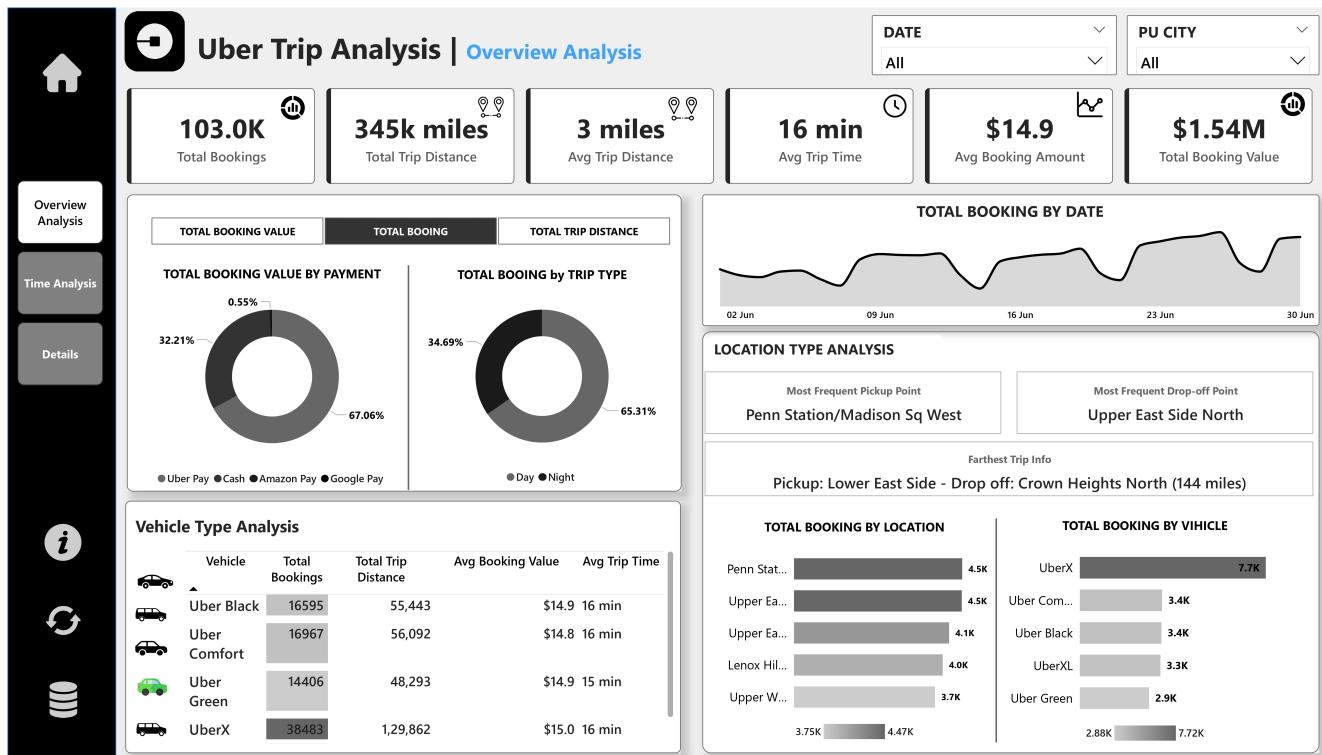
📈 Supporting Data

- **Average Trip Distance:** 3 miles
- **Average Trip Duration:** 16 minutes
- **Average Booking Amount:** \$14.9
- **Payment Types:**
 - Uber Pay – 67%
 - Cash – 32%
 - Amazon & Google Pay – 1% combined
- **Trip Type:**
 - Day Trips – 65%
 - Night Trips – 35%

Recommendations, Report & Insights

- **Peak Optimization:** Add incentives for users during peak afternoon hours.
- **Fleet Management:** Increase UberX vehicles during weekends and in dense pickup zones.
- **Digital Payment Promotion:** Push digital wallets by offering micro-discounts.
- **Route Focus:** Add more vehicles on popular routes like *Penn Station → Upper East Side*.

Dashboard Breakdown



1. Overview Analysis

This page provides a high-level business summary.

➊ KPIs:

- **Total Bookings:** 103,044
- **Total Trip Distance:** 345,000 miles
- **Total Revenue:** \$1.54 million
- **Avg Booking Value:** \$14.9
- **Avg Trip Time:** 16 minutes

➋ Bookings by Payment Type:

- Uber Pay – 67.06%
- Cash – 32.21%
- Amazon Pay – 0.55%
- Google Pay – negligible

Insight: Digital payments dominate. Consider removing less-used options.

➌ Bookings by Trip Type:

- **Day** – 65.31%
- **Night** – 34.69%

Insight: Daytime has higher usage; evening discounts can increase night bookings.

➍ Bookings by Vehicle Type:

Vehicle	Bookings	Trip Distance	Avg Value	Avg Time
UberX	38,483	129,862 mi	\$15.0	16 min
Uber Comfort	16,967	56,092 mi	\$14.8	16 min
Uber Green	14,406	48,293 mi	\$14.9	15 min
Uber Black	16,595	55,443 mi	\$14.9	16 min

Insight: UberX is the most preferred, while Uber Green has the shortest trip time.

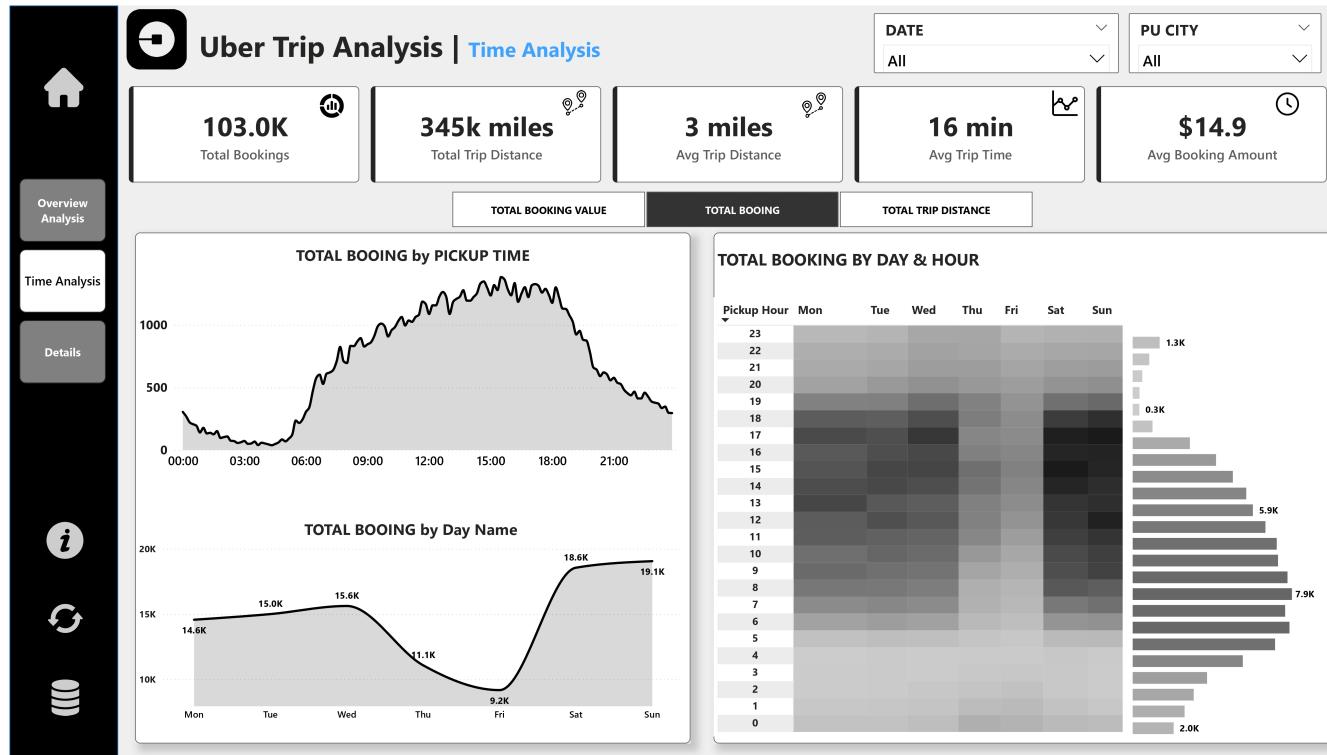
➎ Popular Pickup & Drop-off Points:

- **Pickup:** Penn Station / Madison Square West
- **Drop-off:** Upper East Side North

➏ Farthest Trip:

- Pickup: Lower East Side
- Drop-off: Crown Heights North
- Distance: 144 miles

2. ⏳ Time Analysis



This page breaks down trip data by time and day.

⌚ Bookings by Hour:

Visualizes how bookings change over 24 hours. **Peak Hours:** 14:00 to 18:00 (2 PM – 6 PM)

⌚ **Insight:** Afternoon hours are most active. High demand between 3 PM – 6 PM.

⌚ Bookings by Day of Week:

- **Tuesday & Sunday** show highest ride activity.
- Mid-week (Wednesday) sees a dip in traffic.

Day	Bookings
Sunday	18.6K
Tuesday	19.1K
Wednesday	9.2K

⌚ **Insight:** Weekend strategies should target Sunday and Tuesday evening users.

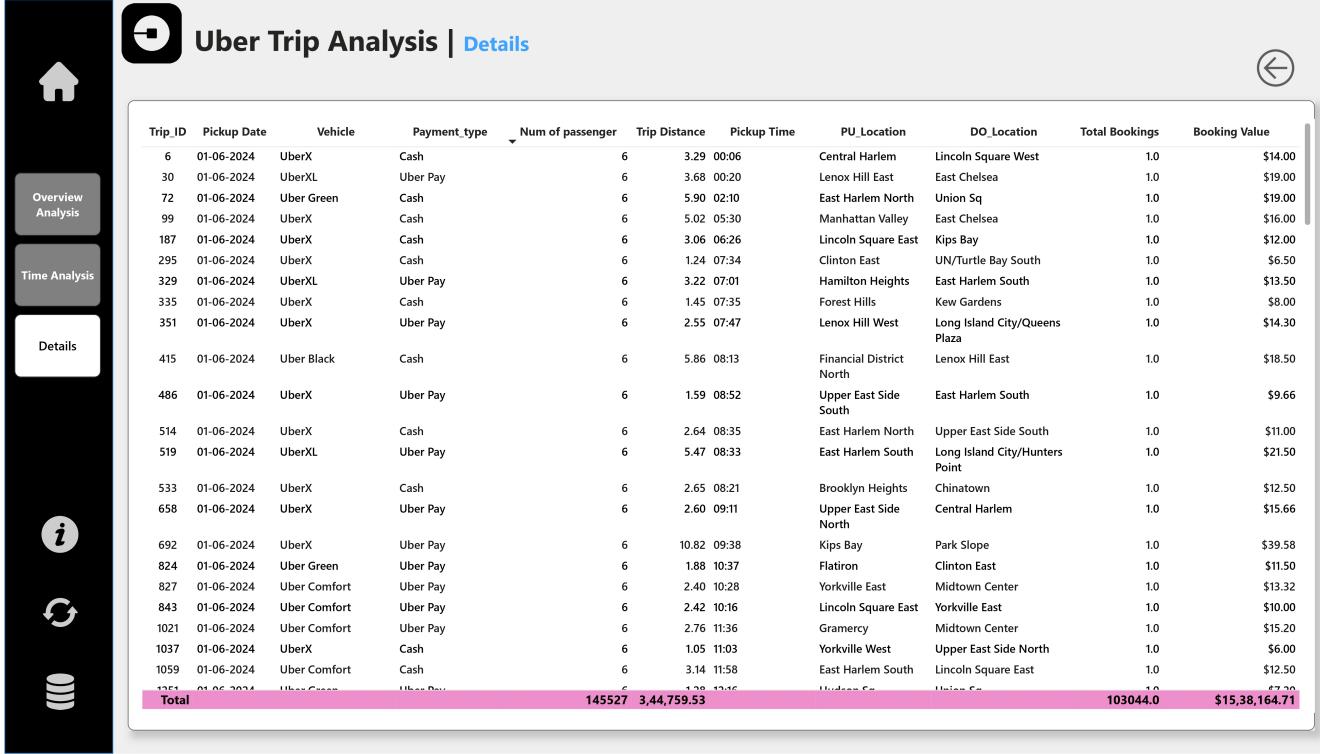
⌚ Bookings by Day & Hour Matrix:

Shows heatmap style of trip density across each hour and day. Example:

- **Friday 3 PM** – High
- **Saturday 6 PM** – Very High
- **Monday 4 AM** – Very Low

 **Insight:** Helps allocate drivers by hour/day combo.

3. Detailed Trip Data



The screenshot shows a user interface for 'Uber Trip Analysis'. On the left, there's a sidebar with icons for Home, Overview Analysis, Time Analysis, Details (which is selected), and other metrics. The main area is titled 'Uber Trip Analysis | Details' and contains a table of trip data. The table has columns: Trip ID, Pickup Date, Vehicle, Payment type, Num of passenger, Trip Distance, Pickup Time, PU_Location, DO_Location, Total Bookings, and Booking Value. The data shows various trips from different dates and locations, with a total summary at the bottom.

Trip ID	Pickup Date	Vehicle	Payment type	Num of passenger	Trip Distance	Pickup Time	PU_Location	DO_Location	Total Bookings	Booking Value
6	01-06-2024	UberX	Cash	6	3.29	00:06	Central Harlem	Lincoln Square West	1.0	\$14.00
30	01-06-2024	UberXL	Uber Pay	6	3.68	00:20	Lenox Hill East	East Chelsea	1.0	\$19.00
72	01-06-2024	Uber Green	Cash	6	5.90	02:10	East Harlem North	Union Sq	1.0	\$19.00
99	01-06-2024	UberX	Cash	6	5.02	05:30	Manhattan Valley	East Chelsea	1.0	\$16.00
187	01-06-2024	UberX	Cash	6	3.06	06:26	Lincoln Square East	Kips Bay	1.0	\$12.00
295	01-06-2024	UberX	Cash	6	1.24	07:34	Clinton East	UN/Turtle Bay South	1.0	\$6.50
329	01-06-2024	UberXL	Uber Pay	6	3.22	07:01	Hamilton Heights	East Harlem South	1.0	\$13.50
335	01-06-2024	UberX	Cash	6	1.45	07:35	Forest Hills	Kew Gardens	1.0	\$8.00
351	01-06-2024	UberX	Uber Pay	6	2.55	07:47	Lenox Hill West	Long Island City/Queens Plaza	1.0	\$14.30
415	01-06-2024	Uber Black	Cash	6	5.86	08:13	Financial District North	Lenox Hill East	1.0	\$18.50
486	01-06-2024	UberX	Uber Pay	6	1.59	08:52	Upper East Side South	East Harlem South	1.0	\$9.66
514	01-06-2024	UberX	Cash	6	2.64	08:35	East Harlem North	Upper East Side South	1.0	\$11.00
519	01-06-2024	UberXL	Uber Pay	6	5.47	08:33	East Harlem South	Long Island City/Hunters Point	1.0	\$21.50
533	01-06-2024	UberX	Cash	6	2.65	08:21	Brooklyn Heights	Chinatown	1.0	\$12.50
658	01-06-2024	UberX	Uber Pay	6	2.60	09:11	Upper East Side North	Central Harlem	1.0	\$15.66
692	01-06-2024	UberX	Uber Pay	6	10.82	09:38	Kips Bay	Park Slope	1.0	\$39.58
824	01-06-2024	Uber Green	Uber Pay	6	1.88	10:37	Flatiron	Clinton East	1.0	\$11.50
827	01-06-2024	Uber Comfort	Uber Pay	6	2.40	10:28	Yorkville East	Midtown Center	1.0	\$13.32
843	01-06-2024	Uber Comfort	Uber Pay	6	2.42	10:16	Lincoln Square East	Yorkville East	1.0	\$10.00
1021	01-06-2024	Uber Comfort	Uber Pay	6	2.76	11:36	Gramercy	Midtown Center	1.0	\$15.20
1037	01-06-2024	UberX	Cash	6	1.05	11:03	Yorkville West	Upper East Side North	1.0	\$6.00
1059	01-06-2024	Uber Comfort	Cash	6	3.14	11:58	East Harlem South	Lincoln Square East	1.0	\$12.50
1251	01-06-2024	Uber Green	Uber Pay	6	1.29	12:16	Hudson Yards	Union Sq	1.0	\$7.20
Total				145527	3,44,759.53				103044.0	\$15,38,164.71

This table provides raw data per trip with filters.

❖ Key Columns:

- Trip ID
- Pickup Date & Time
- Vehicle Type
- Payment Type
- Pickup & Drop Location
- Trip Distance
- Booking Amount

❖ Use Cases:

- Analyze specific outlier trips.
- Audit data anomalies.
- Filter by vehicle or date for micro-analysis.

Example Entries:

Trip ID	Date	Vehicle	Pickup Location	Drop Location	Distance	Amount
6	01-06-2024	UberX	Central Harlem	Lincoln Sq. West	3.29 mi	\$14.00
30	01-06-2024	UberXL	Lenox Hill East	East Chelsea	3.68 mi	\$19.00

🏁 Conclusion

This Uber Trip Analysis gives a comprehensive look into booking trends, customer behaviors, payment preferences, and optimal scheduling. With strong visualization and insights, this dashboard can support both **operational** and **marketing decisions** for ride-hailing platforms.

📁 Files Included

- [Uber_Trip.pdf](#) – PDF export of Power BI dashboard
 - [Uber_Trip.pbix](#) – Fully interactive Power BI file
-

💡 How to Use

1. Open [Uber_Trip.pbix](#) in Power BI Desktop.
 2. Use slicers to filter by vehicle type, pickup city, or date.
 3. Navigate between:
 - **Overview** tab for KPIs
 - **Time Analysis** for hourly trends
 - **Details** for trip-level data
-

☑ What Is a “Decision Template”?

A **decision template** turns your dashboard into a tool that helps business users:

- Understand what's happening (KPIs, trends)
 - Know what actions to take (decisions)
 - Track performance over time (improvement)
-

⌚ Let's Build Decision Templates for Uber Dashboard

I convert each page into a **decision-oriented format** below:

1. Overview Analysis – Decision Template

Insight Area	Key Metric	Business Interpretation	Suggested Action
Bookings	103K+ total trips	High trip volume – healthy rider engagement	Continue current marketing efforts
Avg Booking Value	\$14.90	Moderate spend per trip	Explore premium service upselling
Total Revenue	\$1.54M	Strong performance	Set monthly target (e.g. \$2M)

Insight Area	Key Metric	Business Interpretation	Suggested Action
Most Used Payment	Uber Pay (67%)	Riders prefer digital payments	Promote app-based payments with loyalty offers
Vehicle Demand	UberX dominates	UberX is preferred for affordability	Optimize UberX driver availability
Farthest Trip	144 miles	Long-haul trip opportunity	Consider fixed rates or packages for long rides

2. Time Analysis – Decision Template

Insight Area	Trend/Metric	Business Interpretation	Suggested Action
Busiest Hours	5 PM – 6 PM	Evening surge is real	Incentivize drivers to stay active during peak hours
Top Days	Friday & Saturday	Weekend demand is high	Schedule more drivers; surge pricing opportunities
Low Activity Hours	Early morning (12 AM – 5 AM)	Less demand; cost inefficiency	Minimize supply or use smaller fleet during these hours

3. Trip Details – Decision Template

Insight Area	Observed Pattern	Business Interpretation	Suggested Action
Trip Range	Avg 3 miles, 16 min	Most trips are short-distance	Bundle short rides with discounts or quick pickups
Pickup/Drop Hotspots	Manhattan, Penn Station	Consistent zone demand	Place more drivers in those zones strategically
Booking Value	Higher on weekends & evenings	Pricing elasticity visible	Apply dynamic pricing model during high-value periods

Author

Name: Mohammad Ali **Tools Used:** Power BI, Excel **Goal:** Provide actionable insights from Uber data to drive decisions in ride-hailing businesses.