Uber Analytics Dashboard

Project Statement

➢ Context:

Uber is a large-scale ride-hailing and mobility platform that connects customers with drivers across multiple locations and vehicle categories.
With thousands of daily bookings, cancellations, and completed rides, Uber generates a massive volume of operational and customer data.

To remain competitive and efficient, Uber requires a centralized analytics solution that can transform raw ride data into actionable insights related to customer behavior, route performance, cancellations, distance trends, and revenue efficiency.

➢ Challenge:

Managing and analyzing Uber ride data without a centralized dashboard presents several challenges:

- Difficulty in tracking ride demand and booking trends
- Limited visibility into cancellation patterns and reasons
- Lack of clarity on customer retention and repeat usage
- Inability to identify high-performing routes and locations
- Challenges in measuring distance efficiency and vehicle utilization

Without structured analytics, decision-making becomes reactive, leading to inefficiencies in operations, customer experience, and revenue optimization.

➢ Goals:

The primary objectives of this project are:

1. Develop a comprehensive Power BI dashboard to visualize Uber ride data across multiple dimensions
2. Track key performance indicators (KPIs) such as:
    - Total bookings
    - Cancellation rate and completion rate
    - Average and total ride distance
    - Customer retention and repeat riders
    - Route-level distance and revenue contribution
3. Enable interactive filtering by date, vehicle type, pickup/drop location, booking status, and payment method
4. Provide business-ready insights to support operational, strategic, and customer-focused decisions.

➢ Target Audience:

- Business Stakeholders – For high-level performance monitoring.
- Operations Teams – To identify cancellation issues, route inefficiencies, and demand patterns.
- Strategy & Growth Teams – To analyze customer retention and route dependency
- Data Analysts & BI Professionals – For analytical exploration and reporting

➢ Key Features of the Dashboard

1. Advanced DAX-based KPIs and calculations.
2. Interactive and user-friendly Power BI interface
3. Multi-page dashboard design with clear analytical separation
4. Dynamic slicers for real-time data exploration
5. Route-level and customer-level performance insights.

📊 Dashboard Components (Page-wise Explanation)

➢ Home Page

Description:

The Home page acts as the landing page for the dashboard. It introduces the Uber Analytics project and provides navigation buttons to access different analytical sections such as Overview, Revenue, Rider, Location, and Vehicle pages.

Business Implication:

- Improves usability and navigation.
- Provides clear project context for stakeholders.

➢ 📈 Overview Page

Key Components:

1. Overall KPIs
    - Total Bookings
    - Cancellation Rate %
    - Completion Rate %
    - Average Ride Distance

2. Time-Based Trends
    - Monthly and quarterly booking and distance trends

Business Implication:

- Enables stakeholders to quickly assess platform health.
- Highlights operational efficiency and ride success rates
- Helps identify seasonal or time-based demand patterns

➢ 💰 Revenue Page

Key Components:

1. Revenue Trends Over Times
    - Monthly and quarterly revenue analysis
2. Revenue Efficiency KPIs
    - Revenue per Booking
    - Average fare indicators
3. Revenue Breakdown
    - Revenue by vehicle type
    - Revenue by payment method

Business Implication:

- Identifies key revenue drivers.
- Helps understand monetization efficiency
- Supports pricing and payment strategy decisions

➢ 👤 Rider Page

Key Components:

1. Customer Segmentation
    - First Riders
    - Return Riders
    - Regular Riders
2. Customer Retention Metrics
    - Customer Retention Rate %
    - Repeat ride behavior

3. Rider Cancellation Analysis
    - Rider-side cancellation reasons and patterns

Business Implication:

- Evaluates customer loyalty and engagement.
- Helps improve customer experience and retention strategies
- Identifies rider behavior contributing to cancellations

➢ 📍 Location Page

Key Components:

1. Location-Based KPIs
    - Total bookings by location
    - Cancellation rate by location
    - Average distance per location
2. Route-Level Analysis
    - Top pickup–drop routes by total distance
    - Top route revenue contribution %
3. Distance Trends
    - Distance distribution by vehicle type
    - Monthly distance traveled

Business Implication:

- Identifies high-demand and high-impact locations.
- Supports route optimization and plannings.
- Highlights revenue dependency on specific routes.

➢ 📍 Location Page

Key Components:

1. Vehicle Utilization Metrics
    - Total bookings by vehicle type
    - Distance traveled by vehicle category
    - Average distance per location

2. Vehicle Performance Comparison
    - Contribution of each vehicle type to overall operations

Business Implication:

- Helps assess fleet efficiency.
- Supports decisions on vehicle supply allocation.
- Identifies underperforming or overutilized vehicle categories.

➢ ✅ Expected Outcome:

- A **centralized analytics solution** for Uber ride data
- Improved visibility into customer behavior and route performance
- Faster, data-driven decision-making
- A reusable BI framework for mobility analytics projects

➢ 🎯 Why This Project?

This Uber Analytics Dashboard project demonstrates:

- Advanced Power BI dashboard design
- Real-world business problem solving
- Strong understanding of KPIs, DAX, and analytics storytelling
- Practical application of data visualization best practices