UBER TRIP ANALYSIS

Dashboard 1 – Overview Analysis

Analysis Uber Trip data using Power Bi and SQL to gain Insights into booking trends, revenue and trip efficiency, helping stakeholders make data – driven decision.

KPI's:

1. **Total Bookings:** How many trips were booked over a given period.
2. **Total Booking Value:** What is total revenue generated from all Bookings?
3. **Average Booking Value:** What is the average revenue per Booking?
4. **Total Trip distance:** What is the total distance covered by all trip?
5. **Average Trip distance:** How fare is customer travelling on average per trip?
6. **Average Trip Time:** What is the average duration of Trip?

Expected Outcomes:

- ✓ Identify Trends in ride bookings and average generation.
- ✓ Analyze trip efficiency in term of distance and duration.
- ✓ Compare booking values and trip pattern across different time period.
- ✓ Provide Insights to optimize pricing models and improve customer satisfaction.

CHARTS:

Create Measure Selector using a Disconnected table with the Following values:

- Total Bookings
- Total Booking Value
- Total Trip Distance

Then, use a measure to dynamically update the visualizations based on user selection.

By Payment Type (Card, Cash, Wallet, etc.)

By Trip Type (Day/Night)

Additional Enhancements:

- ➢ **Dynamic Title –** Update the Chart Title based on the selected measure.
- ➢ **Slicers –** Add Filters for Date, City, and other interactive filters for deeper analysis.
- ➢ **Tooltips –** Show Additional details like Average Booking value or Trip Distance.

Vehicle Type Analysis – Grid View in Power Bi

Create a grid table (matrix or table visual) to analyse key performance indicators like Total Booking, Total Booking Value, Avg booking value, Total trip distance across different Vehicle types in Uber Trip.

Power Bi Implementation:

- **Use a Table or Matrix Visual** to display vehicle type with the KPIs.
- **Apply Conditional Formatting** to highlight high and low values.
- **Enable Sorting & Filtering** for user interaction.

Total Bookings by Day:

- Detecting Trends and fluctuation to daily trip values.
- Identifying peak and off-peak booking days.
- Understanding the impact of external factors (Holiday, events, whether) on ride demand.
- Supporting strategic plaining for resource allocation and pricing adjustment.

Dashboard 2 – Location Analysis:

Understanding Trip Location is crucial for optimizing ride distribution, demand forecasting, and optional efficiency. This analysis focused on –

- **Most Frequent Pickup Point:**
  - Identify the most common starting locations for trips.
  - Helps in optimizing driver availability and dynamic pricing strategies.

- **Most Frequent Drop – off Point:**
  - Find the most common Drop – off location.
  - Requires Activating an interactive relationship in Power Bi between **Pickup Location and Drop – off Location** in the Data Model.

- **Farthest Trip:**
  - Determine the longest trip based on the distance travelled.
  - Useful for Analysis outlier trips, long distance demand, and fare optimization.

Total Booking by Location (Top 5):

- Identify the Top 5 Location with the Highest Trip bookings.
- Helps in demand forecasting and optimizing driver availability in high-traffic areas.

Most Preferred Vehicle for Location Pickup:

- Determine the most frequent booked Vehicle Type at each pickup location.
- Support strategic Vehicle distribution based on customer performances and location demand.

Other Implementation Enhancement for Uber Trip Analysis Dashboard

➢ **Bookmark for Data Details:**

- Add a **"Data Details"** bookmark to display a pop-up or side panel explaining.
  - Meaning of key Metrics (Total Bookings, Total Trip Distance, etc.)
  - Description of tables used in the analysis.
  - Data source and refresh frequency.

➢ **Clear Slicer Button:**

- Add a Clear Filter button using a blank button with a reset slicer action to reset all selection in one link.
- Improve User experience for quick dashboard resets.

➢ **Download Raw Data Button:**

- Add a Button to export raw data in CSV or Excel format.
- Use Power Automate or build-in Power Bi Export
- Enable user to analyze raw data outside Power Bi if needed.