Uber

Objective

The goal of this project is to analyse Uber ride data to identify patterns, trends, and key insights that can help optimise ride categories, understand user behaviour, and improve decision-making for business and personal rides.

Problem Statement

Uber requires a comprehensive analysis of its ride data to:

1. **Understand usage patterns across business and personal categories.**
2. **Evaluate ride trends based on purpose, day, and time.**
3. **Identify peak usage months and time periods for better resource allocation.**
4. **Measure total mileage, duration, and speed to assess efficiency.**

The findings from this analysis will support strategic planning, operational optimization, and tailored marketing efforts.

Tools Used

1. **Excel:**
    - **Data cleaning and preprocessing.**
    - **Initial exploratory analysis and organisation of datasets.**
2. **Power BI:**
    - **Data visualisation and interactive reporting.**
    - **Dashboards for insights on ride categories, purpose, timing, and mileage trends.**

This project combines Excel's robust data manipulation capabilities with Power BI's advanced visualisation tools to deliver an insightful and actionable report.

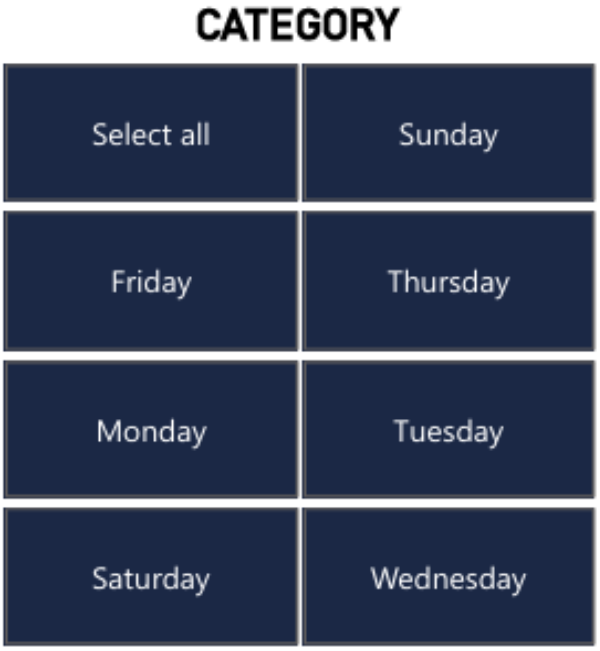
Report Summary

Page 1: Ride Overview

1. Slicers:

- **Category**: Filters data between `Business` and `Personal` rides.

- **Day of the Week**: Allows filtering rides by specific days (Monday to Sunday).

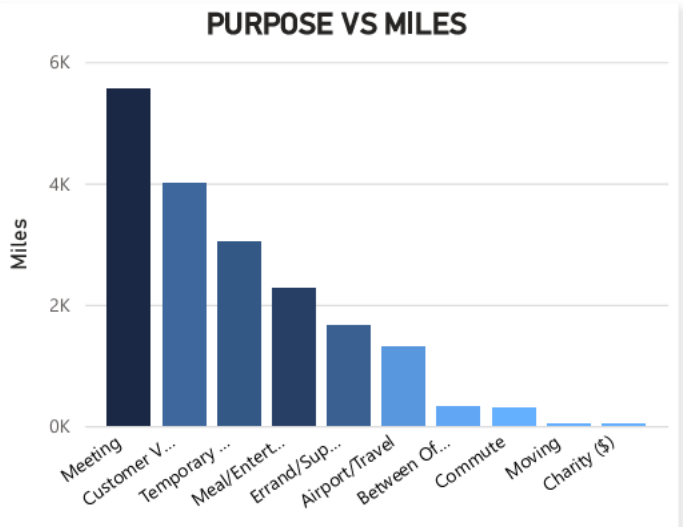


2. Card Visuals:

- **Total Miles: 18.47K**
- **Total Duration (minutes): 26K**
- **Average Speed: 42.96 MPH**

3. Bar Chart: Purpose vs. Miles
This bar chart highlights the mileage distribution across different ride purposes:

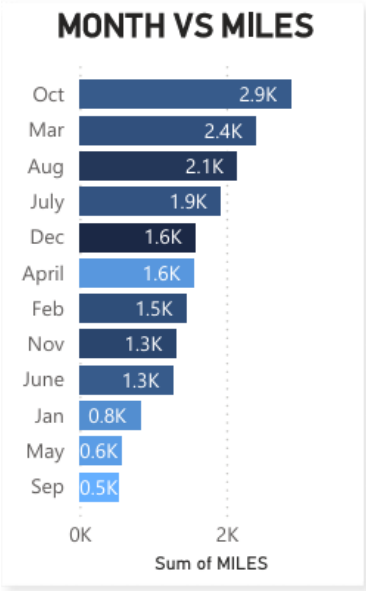
- **Meeting: 5.5K+ miles**
- **Customer Visit: 4K+ miles**
- **Temporary Visit: 3K+ miles**
- **Meal/Entertainment: 2K+ miles**



Insight: Meetings and customer visits account for the majority of Uber's ride miles, indicating high business usage.

4. Bar Chart: Month vs. Miles
The mileage trends across months reveal the highest miles in the following months:

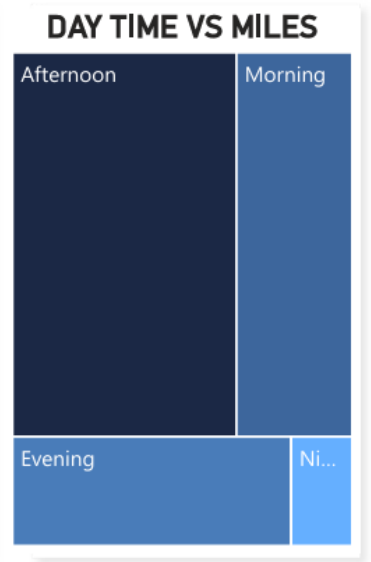
- **October: 2.9K miles**
- **March: 2.4K miles**
- **August: 2.1K miles**
- **July: 1.9K miles**
- **December: 1.6K miles**



Insight: October sees the highest mileage, likely due to increased business activities or holiday travel.

5. Treemap: Day Time vs. Miles
The treemap shows mileage distribution based on the time of day:

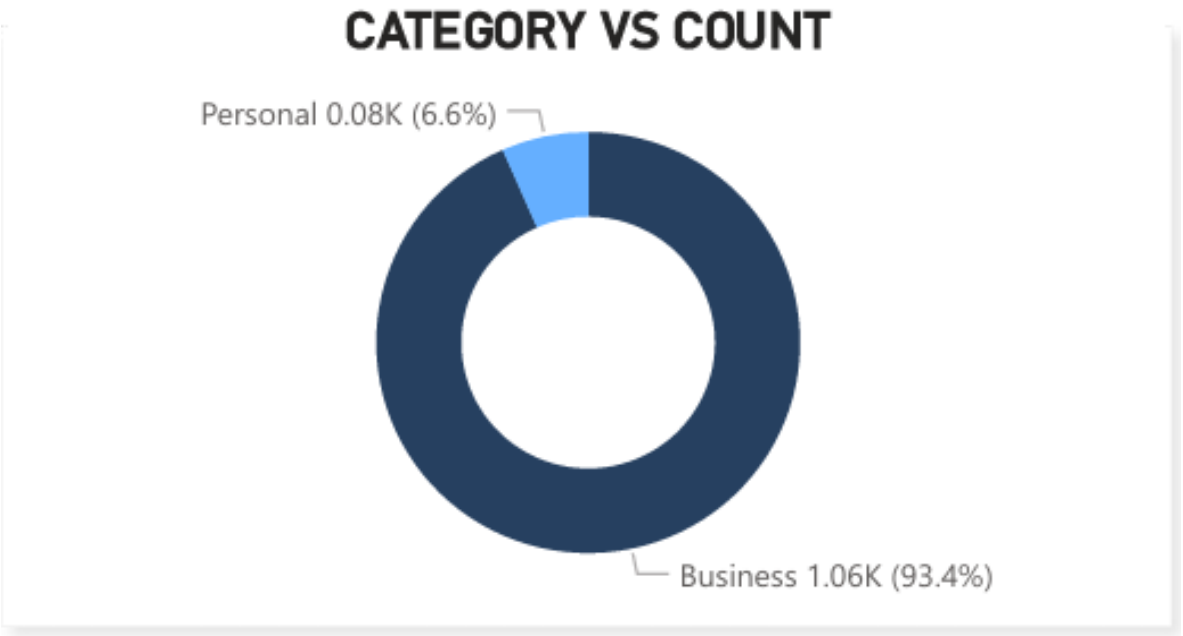
- **Afternoon** (largest)
- **Morning**
- **Evening**
- **Night**



Insight: Most rides occur in the afternoon, suggesting peak business activity or personal errands during this time.

6. Pie Chart: Category vs. Count
The pie chart represents ride counts by category:

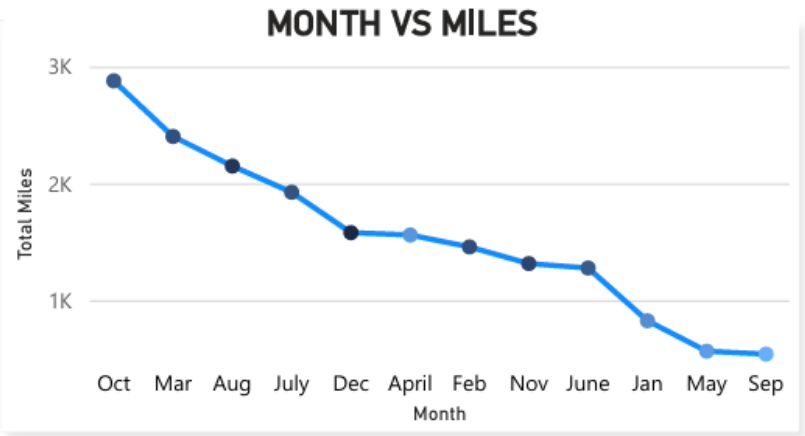
- **Business: 1.06K rides (93.4%)**
- **Personal: 0.08K rides (6.6%)**



Insight: Business rides dominate Uber's usage, with personal rides accounting for a small fraction.

7. Line Chart: Month vs. Miles
The line chart tracks mileage trends across months, reinforcing the bar chart's insights:

- **October, March, August, July, December** show the highest mileage, with peaks exceeding **2.5K**, **2.3K**, **2.1K**, **1.8K**, and **1.5K miles**, respectively.



Insights and Recommendations

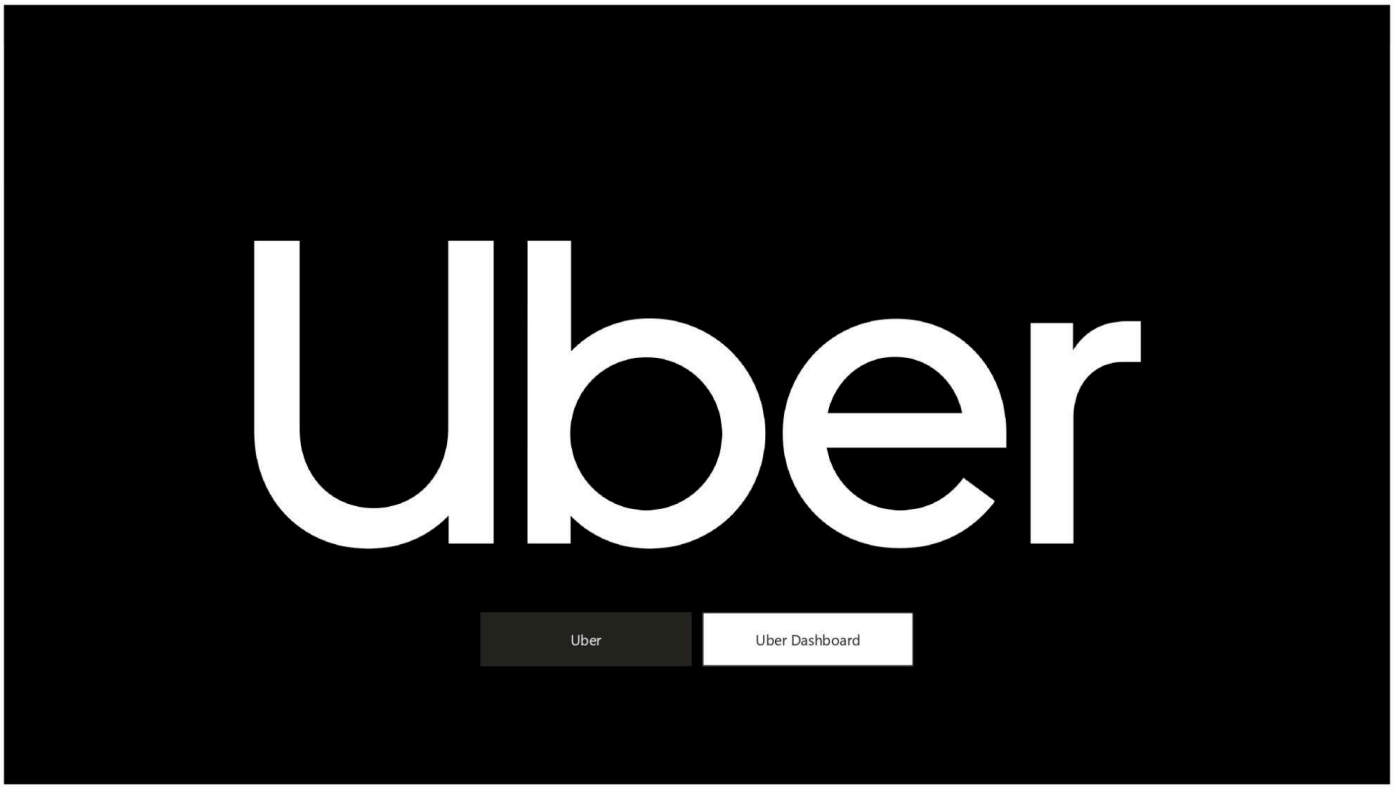
Key Observations:

1. **Business Usage Dominates**:
   Business rides account for over 93% of all trips, highlighting Uber's strong presence in corporate travel.
2. **Peak Mileage in October and Afternoons**:
   October shows the highest mileage, and most rides occur in the afternoon. Uber can focus marketing efforts or surge pricing during these periods.
3. **Primary Ride Purposes**:
   Meetings and customer visits drive the highest mileage, reflecting Uber's importance in professional settings.
4. **Consistent Seasonal Peaks**:
   High mileage months like October and March could align with industry trends or travel seasons.

Recommendations:

1. **Expand Business Partnerships**:
   Strengthen ties with corporate clients to maintain and grow business ride revenue.
2. **Targeted Promotions**:
   Encourage personal ride adoption through discounts or loyalty programs, as personal rides currently account for only 6.6%.
3. **Optimise Afternoon Operations**:
   Focus on driver availability and promotions during the afternoon, which sees the highest ride volume.
4. **Leverage High-Mileage Months**:
   Plan marketing campaigns or price adjustments around high-usage months like October and March.

This Power BI report delivers actionable insights to guide Uber's decision-making and enhance its operational efficiency in catering to both business and personal users.


uber
Uber
Uber Dashboard

Uber
CATEGORY
Select all
Business
Personal
CATEGORY
Select all
Sunday
Friday
Thursday
Monday
Tuesday
Saturday
Wednesday
Uber
Uber Dashboard
TOTAL MILES
18.47K
TOTAL DURATION (mintues)
26K
AVERAGE SPEED
42.96
PURPOSE VS MILES
6K
4K
2K
0K
Miles
Meeting
Customer V...
Temporary ...
Meal/Entert...
Errand/Sup...
Airport/Travel
Between Or...
Commute
Moving
Charity ($)
MONTH VS MILES
Oct 2.9K
Mar 2.4K
Aug 2.1K
July 1.9K
Dec 1.6K
April 1.6K
Feb 1.5K
Nov 1.3K
June 1.3K
Jan 0.8K
May 0.6K
Sep 0.5K
0K
2K
Sum of MILES
DAY TIME VS MILES
Afternoon
Morning
Evening
Ni...
CATEGORY VS COUNT
Personal 0.08K (6.6%)
Business 1.06K (93.4%)
MONTH VS MILES
3K
2K
1K
Total Miles
Oct Mar Aug July Dec April Feb Nov June Jan May Sep
Month