

# UBER METRICS

Power BI & Microsoft Fabric

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## Introduction

This project leverages Microsoft Fabric and Power BI to analyse Uber's key performance metrics. The goal is to offer insights into Uber's operational performance, including ride statistics, revenue trends, and driver engagement. By integrating data from various sources into a Lakehouse architecture, the data is cleaned, transformed, and visualized in Power BI dashboards for strategic decision-making.

## Data Architecture in Microsoft Fabric

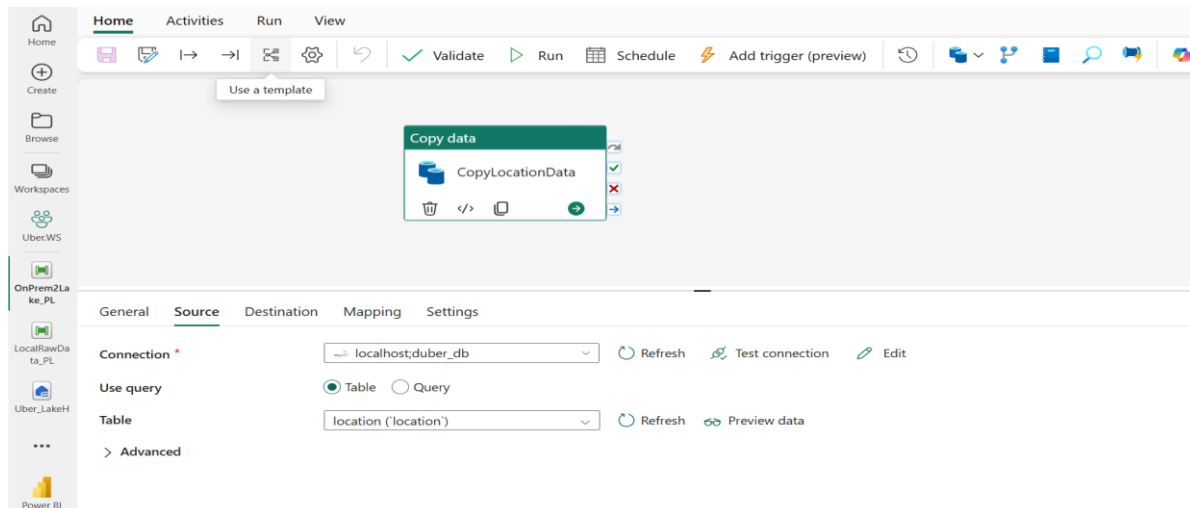
In Microsoft Fabric, a Lakehouse architecture was set up to manage large datasets. A data warehouse was also created for optimized data storage and reporting. The data was ingested from various sources and processed for reporting purposes.

| Name              | Type         | Task | Owner        | Refreshed      | Next refresh | Endorsement | Sensitivity | Included in app |
|-------------------|--------------|------|--------------|----------------|--------------|-------------|-------------|-----------------|
| Rides_DF          | Dataflow ... | —    | Shanti KS... | 12/11/2024...  | N/A          | —           | —           |                 |
| Transformation_PL | Data pipe... | —    | Shanti KS... | —              | —            | —           | —           |                 |
| Uber_LakeH        | Lakehouse    | —    | Shanti KS... | —              | —            | —           | —           |                 |
| Uber_LakeH        | Semantic ... | —    | Uber.WS      | 12/6/2024, ... | N/A          | —           | —           |                 |
| Uber_LakeH        | SQL analy... | —    | Uber.WS      | —              | N/A          | —           | —           |                 |
| Uber_PL           | Data pipe... | —    | Shanti KS... | —              | —            | —           | —           |                 |
| Uber_WH           | Warehouse    | —    | Shanti KS... | —              | N/A          | —           | —           |                 |
| Uber_WH           | Semantic ... | —    | Uber.WS      | 12/6/2024, ... | N/A          | —           | —           |                 |
| User_DF           | Dataflow ... | —    | Shanti KS... | 12/11/2024...  | N/A          | —           | —           |                 |

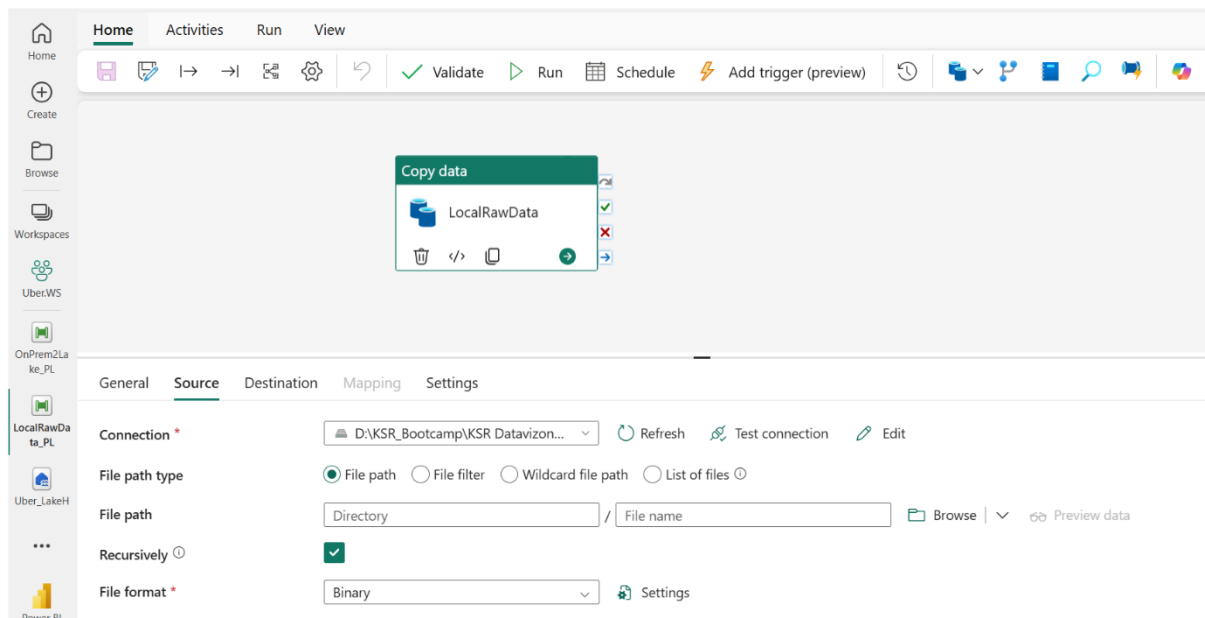
## Data Pipelines

Multiple data pipelines were created to ensure seamless data flow from various sources into Microsoft Fabric. These pipelines included the connection to SQL Server and local folders for data ingestion.

### “SQL Server Connection”



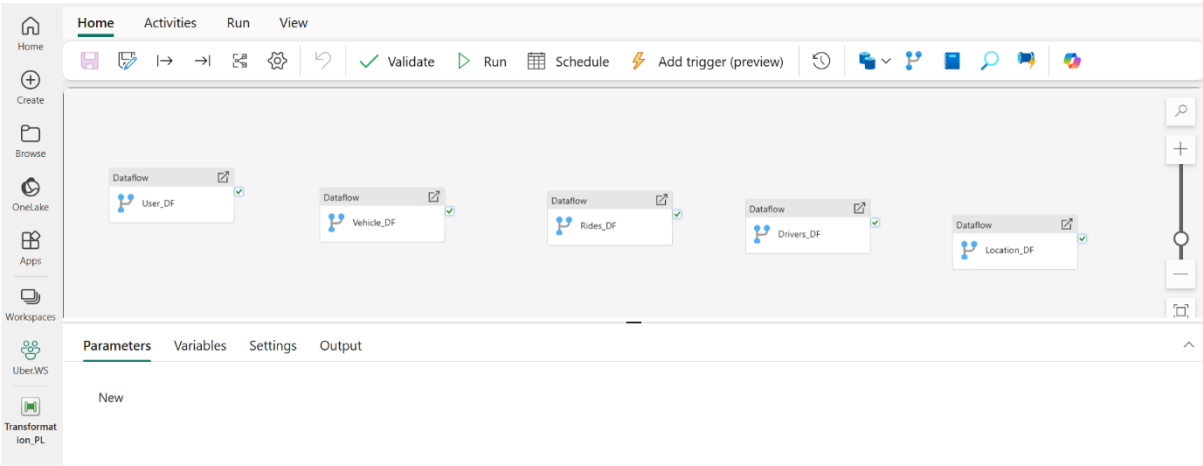
### “Local Folder Connection”



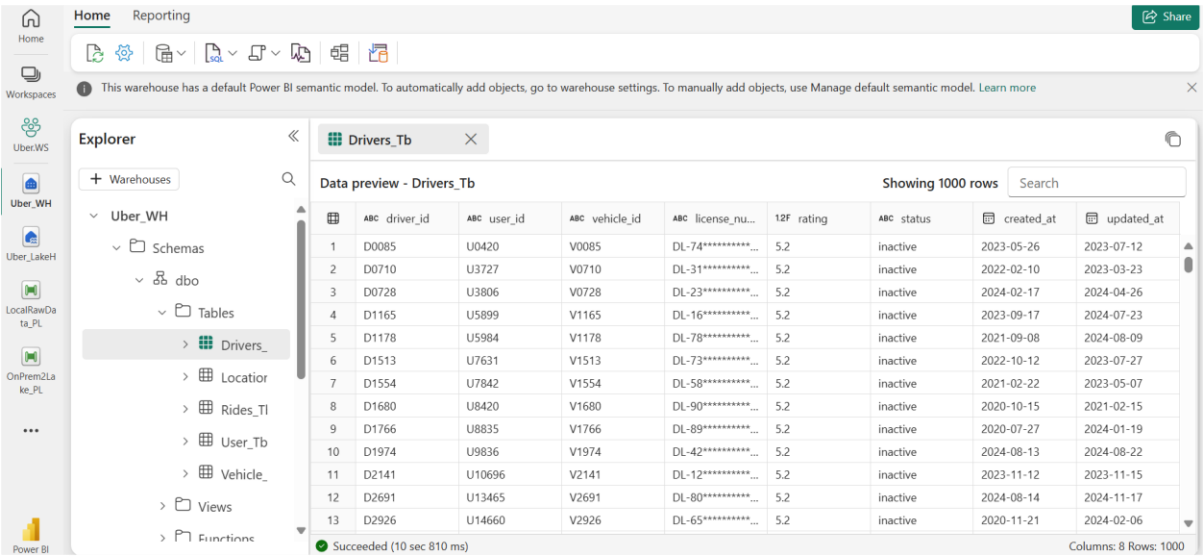
# Data Transformation and Cleaning

Data flows were designed to clean and transform raw data into structured formats suitable for analysis. The transformed data was loaded into the warehouse for reporting.

## “Data Flows”



## “Data transformation”



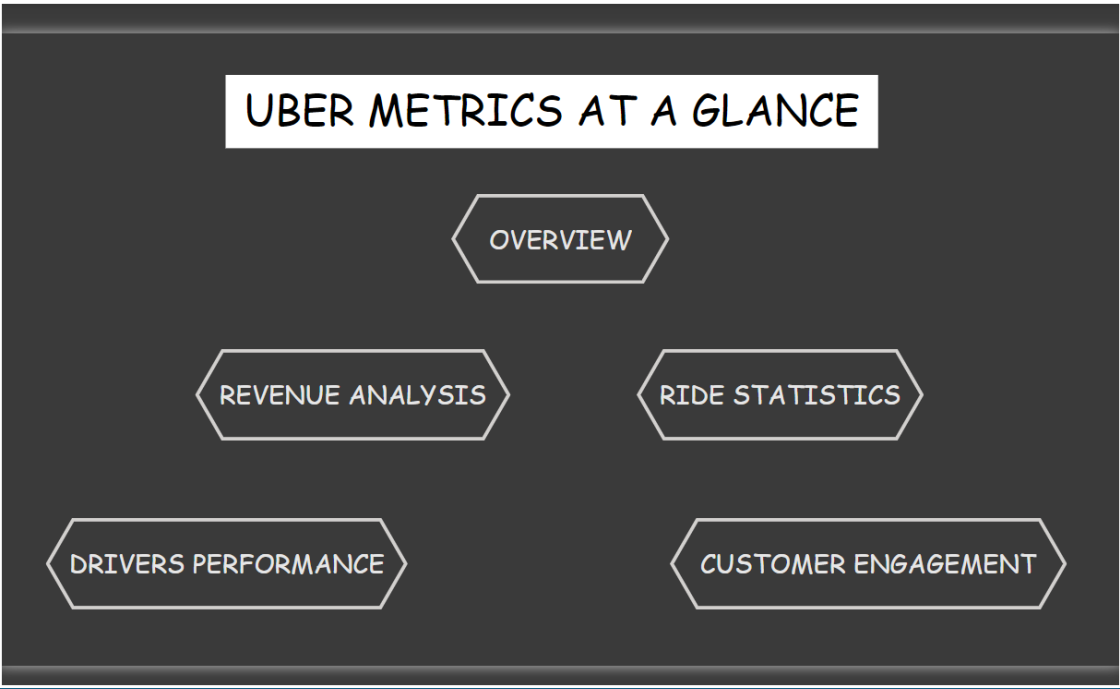
## Power BI Reporting

Power BI was used to create multiple interactive dashboards, including an overview dashboard, ride statistics, revenue analysis, and driver performance metrics. The transformed data from Microsoft Fabric was integrated into Power BI for visualization.

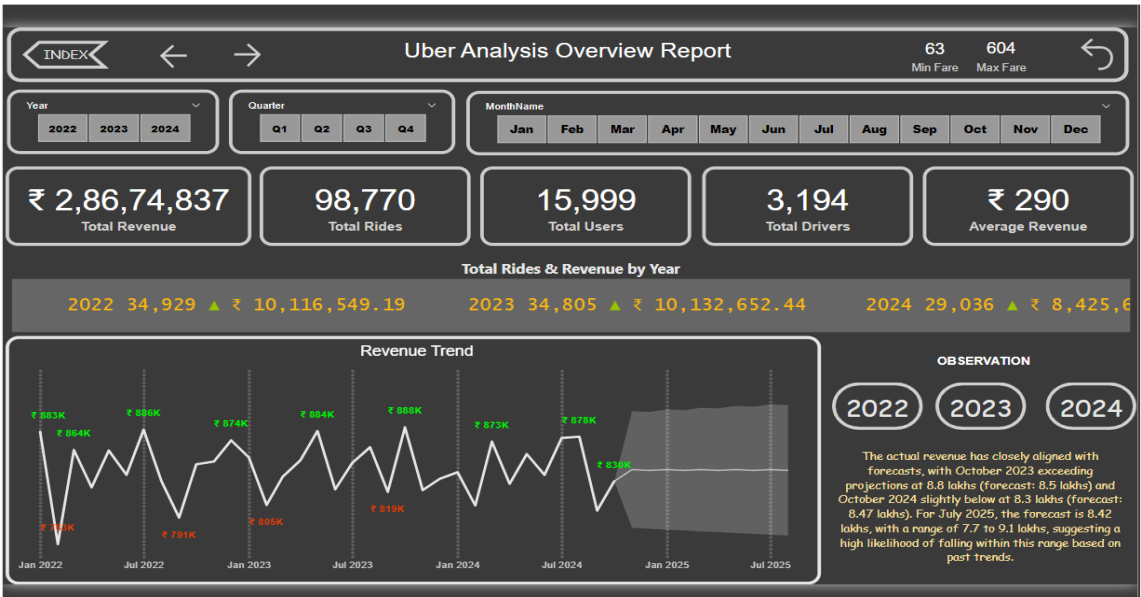
### Advanced Power BI Features:

DAX formulas were used to calculate key performance metrics and KPIs. Interactive visuals, including dynamic charts and conditional formatting, were incorporated to enhance user interaction. Bookmarks and buttons were used for easy navigation across different sections of the reports.

### “Index”



### “Overview Dashboard”



## Rides Statistics

INDEX

Year

202220232024

Quarter

Q1Q2Q3Q4

MonthName

JanFebMarApr

Day Type

WeekEndWorkDay

98,770

Total Rides

24794

Morning Rides

32,923

Night Rides

14,727

Mornng Ofc Rides

17,455

Evng Ofc Rides

1,02,822

Total Ride Duration(Hr)

Rides by Time Duration

Rides by Rider Type

Rides by Distance(km)

Rides Trend

Top 10 Location Rides by Revenue

| Pickup_Location_Name | Total Rides |
|----------------------|-------------|
| Kadugodi             | 2,407       |
| Vidyananyapura       | 2,394       |
| Whitefield           | 2,384       |
| Peenya               | 2,381       |
| Bannerghatta Road    | 2,370       |
| Nagarbhavi           | 2,350       |
| Yelahanka            | 2,294       |
| Sarapur Road         | 2,287       |
| Electronic City      | 2,286       |
| Kengeri              | 2,286       |
| Total                | 23,439      |

OBSERVATION

Workday

Weekend

i

i

Most rides from KADUGODI, both on workdays and weekends, are booked for faraway destinations, indicating that KADUGODI is likely a residential area far from key commercial or recreational hubs. This suggests residents need to travel long distances for work or leisure, making ride-hailing services essential in this location.

INDEX

←

→

Uber Revenue Analysis Report

↻

Year

2022

2023

2024

Quarter

Q1

Q2

Q3

Q4

MonthName

Jan

Feb

Mar

Apr

May

Distance Category

Far

Long

Medium

Short

₹ 71,68,709

Revenue

₹ 50,99,134

Workdays Revenue

₹ 20,69,576

Weekend Revenue

₹ 23,93,499

NightRide Revenue

₹ 73

Avg. Revenue Per Ride

Top 10 Locations by Revenue

|            |               |               |           |
|------------|---------------|---------------|-----------|
| Kadugodi   | Electronic... | Peenya        | Ken...    |
| ₹ 216.55K  | ₹ 199.58K     |               |           |
| Whitefield | Vidyarany...  | ₹ 188.91K     | ₹ 186.54K |
| ₹ 205.88K  | ₹ 197.50K     | Sarjapur Road |           |
| Yelahanka  | Bannergh...   | ₹ 186.29K     |           |
| ₹ 202.40K  | ₹ 190.67K     | Nagarbhavi    |           |
|            |               | ₹ 178.91K     |           |

Uber Revenue by Year and Quarter

● Q1 ● Q2 ● Q3 ● Q4

|           |           |           |
|-----------|-----------|-----------|
| ₹ 643.59K | ₹ 635.54K |           |
| ₹ 626.90K | ₹ 634.00K | ₹ 207.58K |
| ₹ 631.11K | ₹ 639.65K | ₹ 638.47K |
| ₹ 627.54K | ₹ 623.97K | ₹ 631.06K |
|           |           | ₹ 629.29K |

Revenue by Rider Type

₹ 5.27M

₹ 1.90M

₹ 5M

₹ 0M

Frequent Rider

Casual Rider

Revenue by Vehicle type & Model

98,770

Total Rides

11,39,763.51

Distance(Km)

Sedan

SUV

Hatchbacks

Toyota

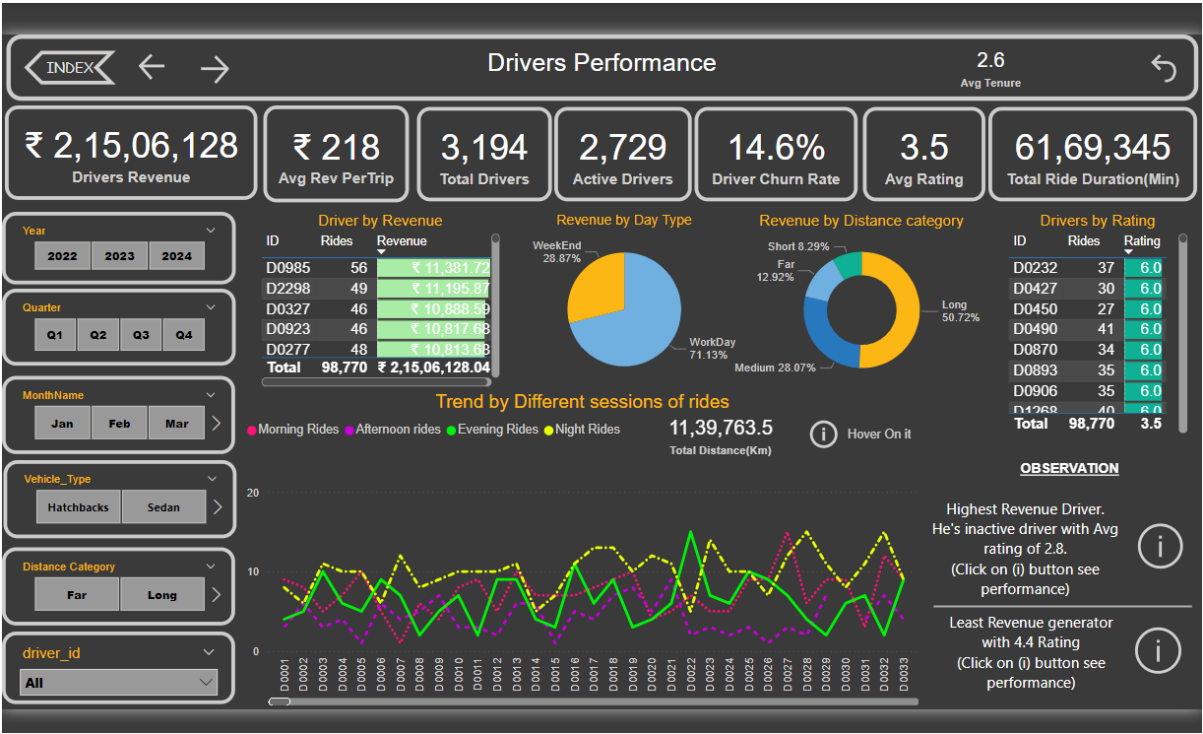
Honda

Suzuki

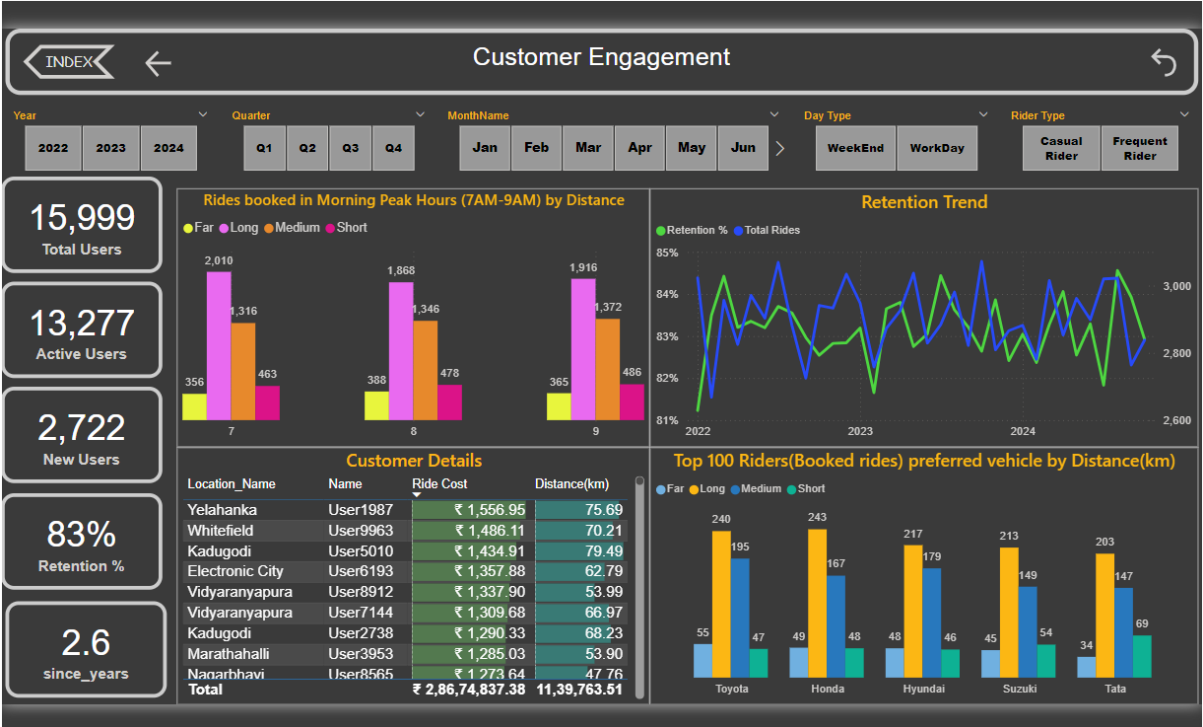
Tata

Hyundai

“Drivers Performance”



“Customer Engagement”



## **Outcome & Key Takeaways**

The project enabled effective tracking of Uber's metrics, providing valuable insights into ride performance, revenue trends, and driver engagement. The dashboards were interactive and allowed stakeholders to explore data dynamically.

Key Takeaways:

- Seamless integration of data using Microsoft Fabric.
- Development of comprehensive Power BI dashboards for Uber's performance.
- Use of advanced Power BI features like DAX, conditional formatting, and interactive visuals.