

# Uber Metrics

## Power BI & Microsoft Fabric

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*Date: 08-02-2025*

### Introduction

This project leverages Microsoft Fabric and Power BI to analyze 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.

OneLake catalog

ExploreGovern (preview)

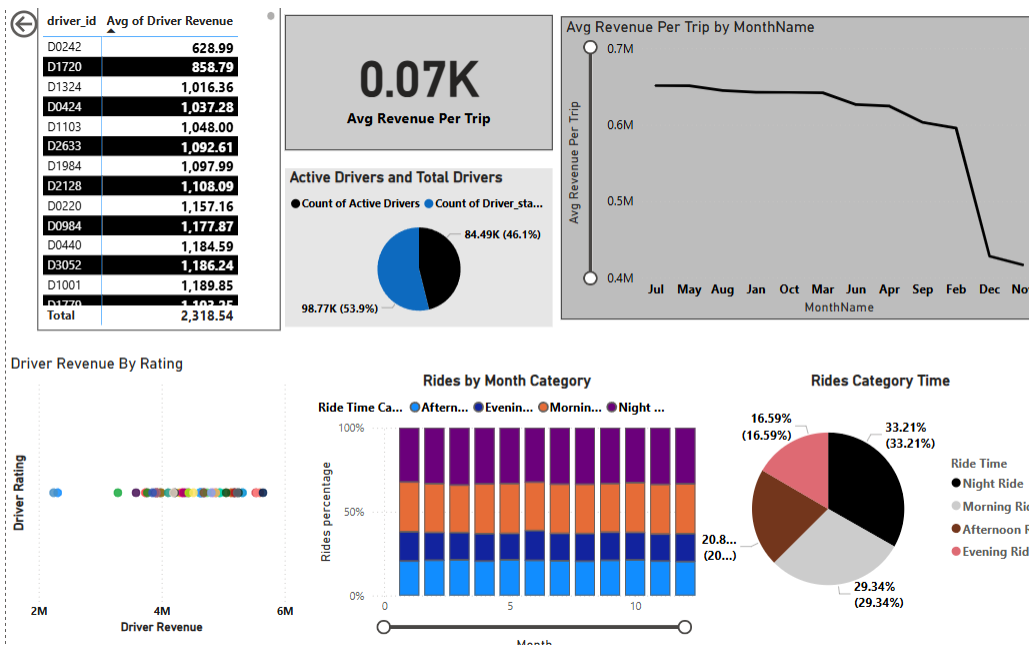
All items byData types: (All)Filter by keyword

All itemsMy itemsEndorsed itemsFavoritesWorkspacesAll workspacesUber\_Project-ws

Name	Type	Owner	Refreshed	Location
Uber_WH	Warehouse	Sai Kumar Embadi	—	Uber_Project-ws
Uber_WH	Semantic model (def...	Sai Kumar Embadi	12/25/24, 12:31:...	Uber_Project-ws
Uber_Lake_house	Lakehouse	Sai Kumar Embadi	—	Uber_Project-ws
DataflowsStagingWarehouse	Warehouse	Sai Kumar Embadi	—	Uber_Project-ws
DataflowsStagingWarehouse	Semantic model (def...	Sai Kumar Embadi	12/27/24, 6:30:0...	Uber_Project-ws
DataflowsStagingLakehouse	Semantic model (def...	Sai Kumar Embadi	12/27/24, 6:30:0...	Uber_Project-ws
DataflowsStagingLakehouse	SQL analytics endpo...	Sai Kumar Embadi	—	Uber_Project-ws
Uber_Lake_house	SQL analytics endpo...	Sai Kumar Embadi	—	Uber_Project-ws
Uber_Lake_house	Semantic model (def...	Sai Kumar Embadi	12/25/24, 12:30:...	Uber_Project-ws

### 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.



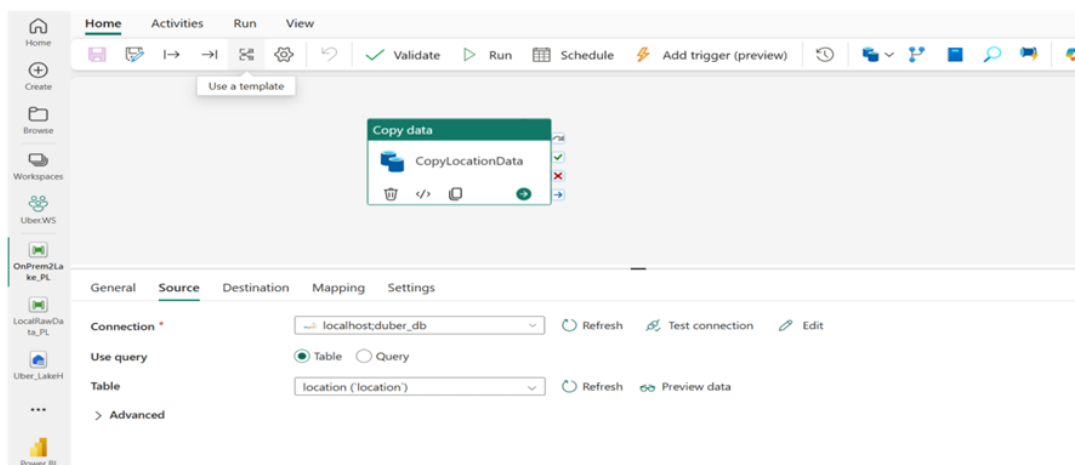
## Data Pipelines

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.

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### “SQL Server 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.

User\_Data\_DF

Power Query | Dataflow saved

Home | Transform | Add column | View | Help

Get data | Recent | Enter data | Manage connections | Options | Manage parameters | Query | Manage columns | Reduce rows | Sort | Transform | Combine | Map to entity | Copilot | Export template

Queries [1] | User.xlsx

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	user_id	name	email	phone_number	password_hash	profile_picture	user_type
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2	U0002	User2	User2@gmail.com	+91 75*****93	;% *****_3	https://example.com/user2.jpg	rider
3	U0003	User3	User3@gmail.com	+91 90*****15	"aj *****^w\$	https://example.com/user3.jpg	rider
4	U0004	User4	User4@gmail.com	+91 91*****17	Ti *****{w{	https://example.com/user4.jpg	driver
5	U0005	User5	User5@gmail.com	+91 92*****54	s!A *****aEV	https://example.com/user5.jpg	rider
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10	U0010	User10	User10@gmail.com	+91 92*****15	h? *****bQ+	https://example.com/user10.jpg	driver
11	U0011	User11	User11@gmail.com	+91 84*****45	J@y *****KJH	https://example.com/user11.jpg	rider
12	U0012	User12	User12@gmail.com	+91 97*****14	rjH *****Nac	https://example.com/user12.jpg	rider
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Query setting: >

Properties

Name: User.xlsx

Entity type: Custom

Applied steps: ABC 123

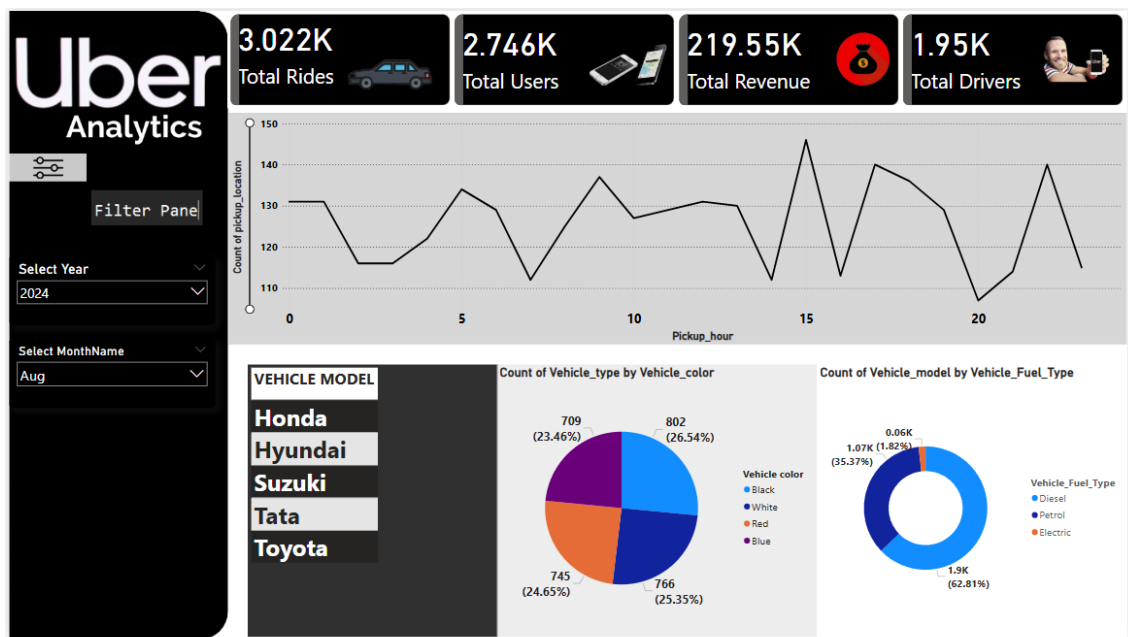
Data destination: No data destination

## 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.

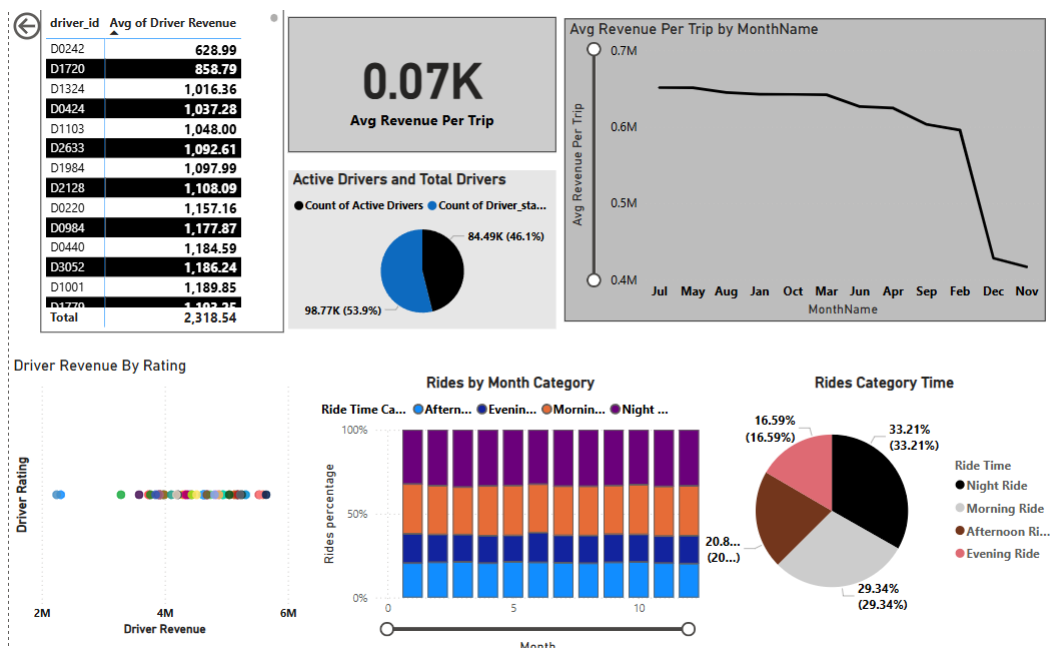
Advanced Power BI Features:

- 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.



## Power BI Visualization

Below is a visualization of key Power BI reports showcasing Uber's operational data.



## 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.
- Enhanced decision-making capabilities through data-driven insights.
- Efficient data processing and storage using the Lakehouse and warehouse architectures.