

Presentation on Uber Ride Analytics Dashboard

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INTRODUCTION

The Uber Ride Analytics Dashboard helps analyze ride trends, peak hours, and key metrics using data visualization. It provides insights into passenger behavior and trip patterns, aiding better decision-making for businesses and analysts.





DATA SOURCE AND METHODOLOGY



Data Source

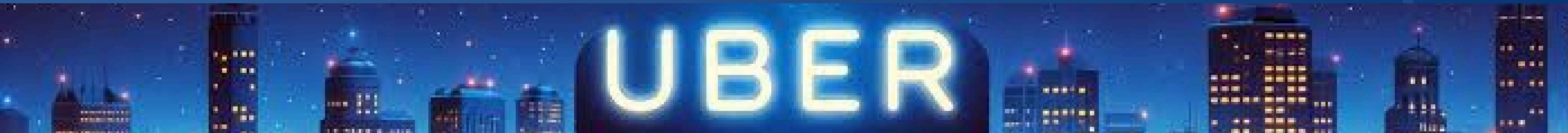
- Uber ride data from public datasets, company records, or simulations.
- Includes: Trip details like time, distance, fare, and passenger count.

Methodology

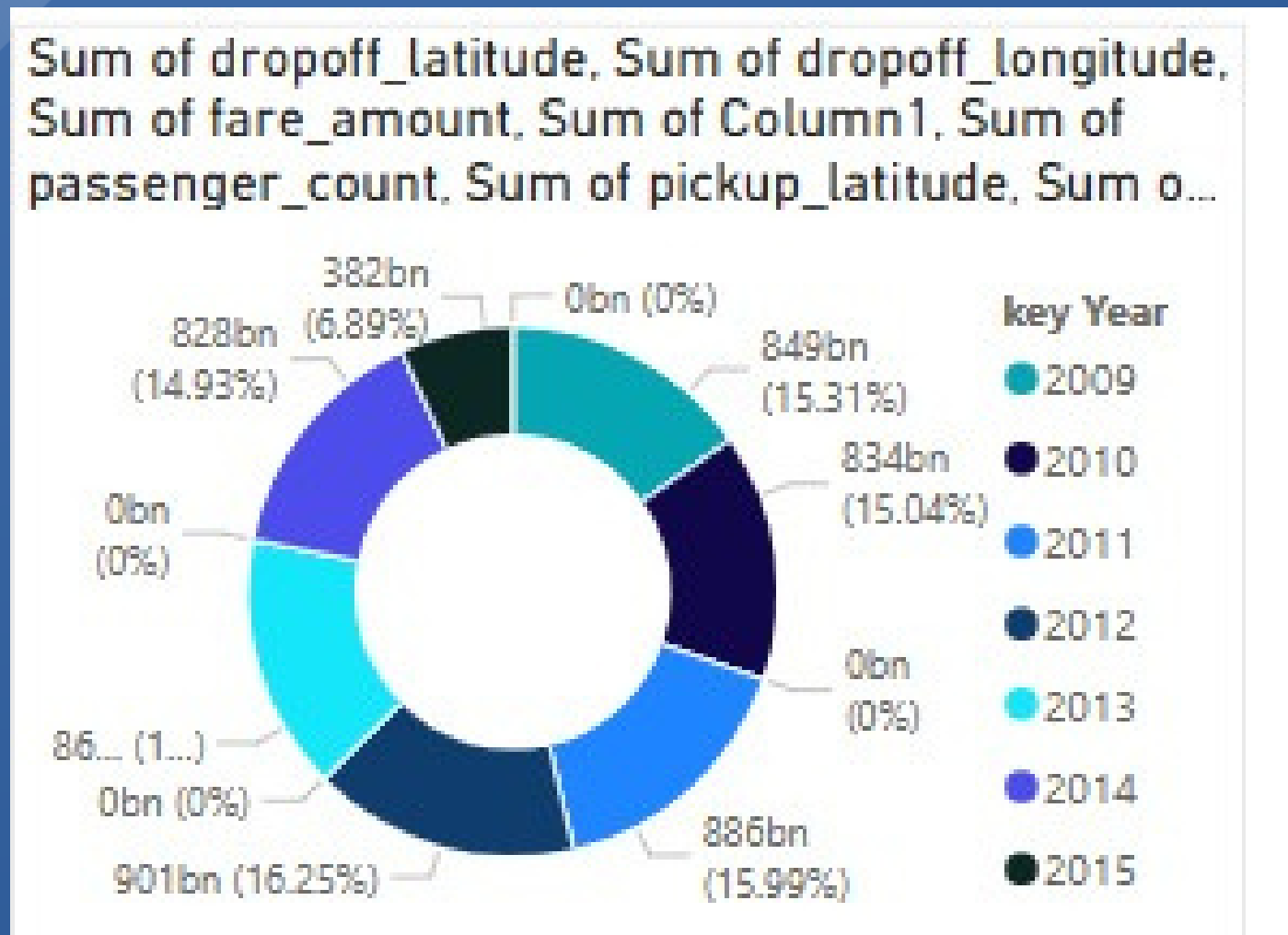
- Data Collection: Gather data from CSV files, APIs, etc.
- Data Cleaning: Remove errors, duplicates, and missing values.
- Data Analysis: Use tools like Power BI to process data.
- Visualization: Create charts, graphs, and heatmaps.

KEY FEATURES OF DASHBOARD

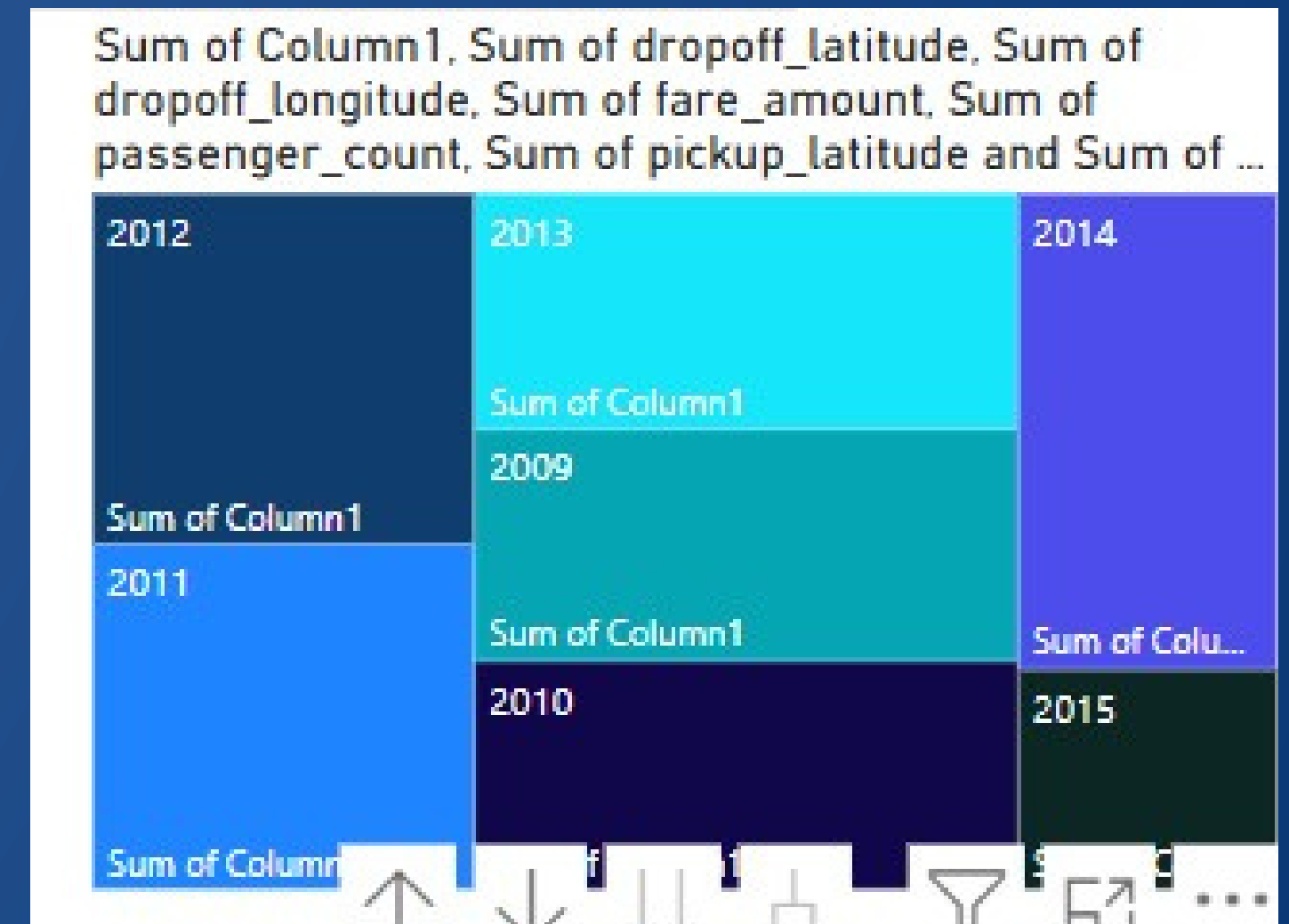
- Ride Trends Analysis – Shows daily, weekly, and monthly ride patterns.
- Peak Hour Identification – Highlights the busiest times for Uber rides.
- Revenue Insights – Analyzes earnings from trips over time.
- Trip Distribution – Displays rides by location, distance, and time.
- Passenger Behavior – Tracks ride frequency and user preferences.
- Interactive Visuals – Includes charts, graphs, and heatmaps for easy understanding.
- Filter & Search Options – Allows users to explore specific timeframes or locations.



VISUALIZATION EXPLAINED

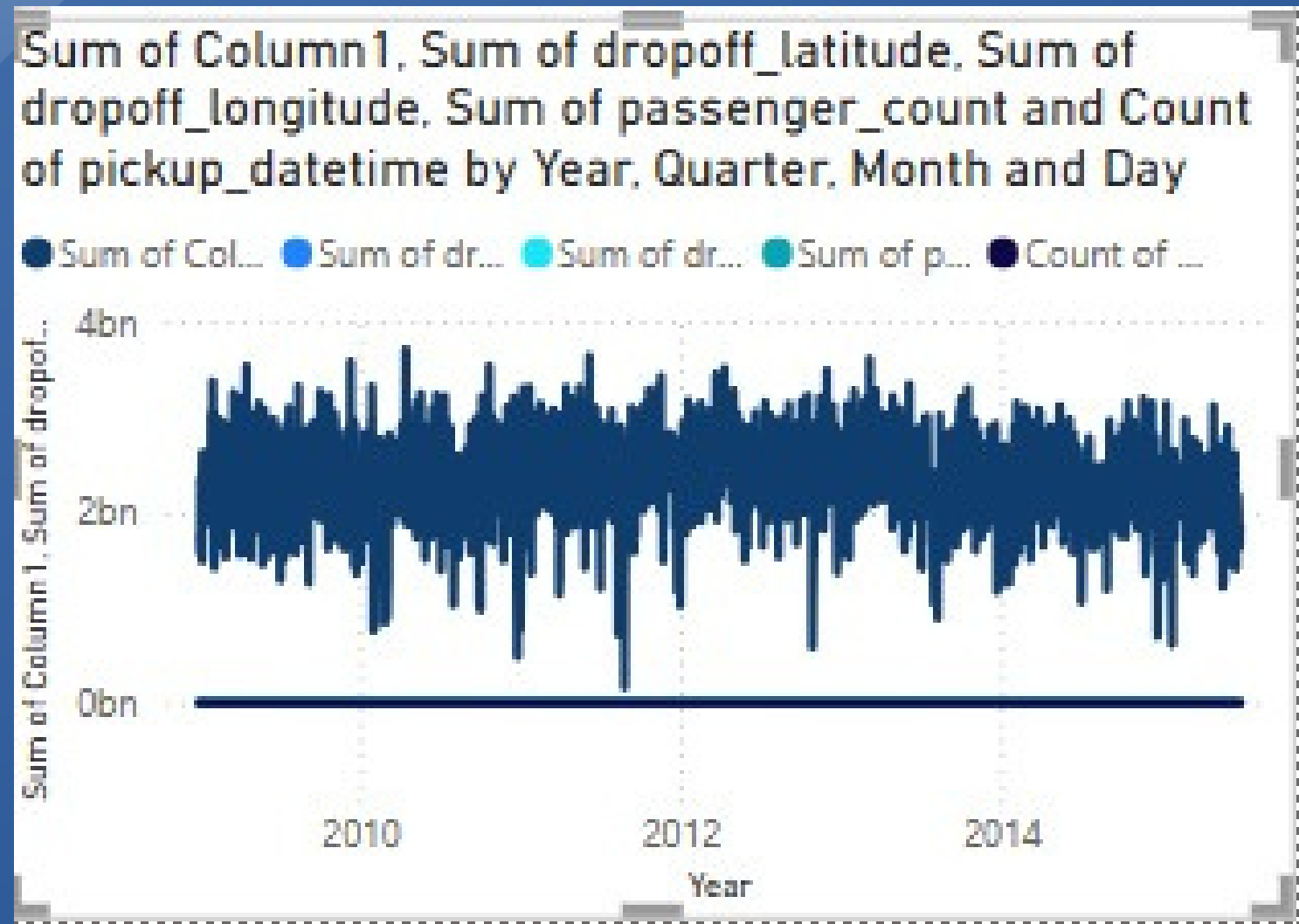


Donut chart

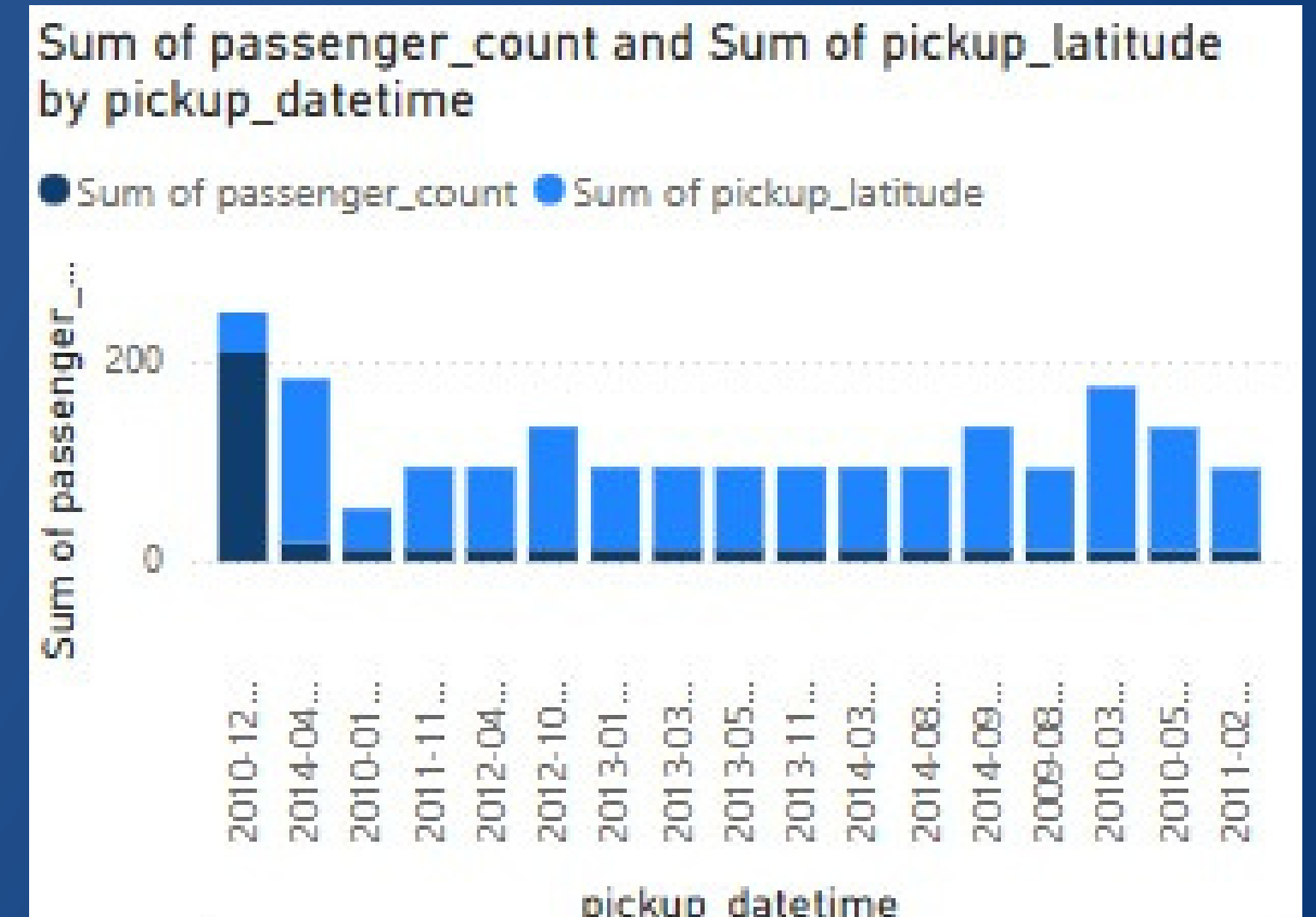


Treemap chart

VISUALIZATION EXPLAINED



Line chart



Bar chart(Horizontal
BarChart)

SOME QUERRIES ADDED IN PROJECT

The screenshot displays the Microsoft Power BI Desktop application. The top ribbon includes the 'Home' tab with various editing and formatting tools. A notification bar at the top states: 'DAX queries will be saved to your model. They won't be visible when published in the Power BI service. [Learn more](#).' Below this, the 'Query Editor' pane shows a DAX query:

```
1 EVALUATE
2 TOPN(100, 'uber', [Column1], DESC)
```

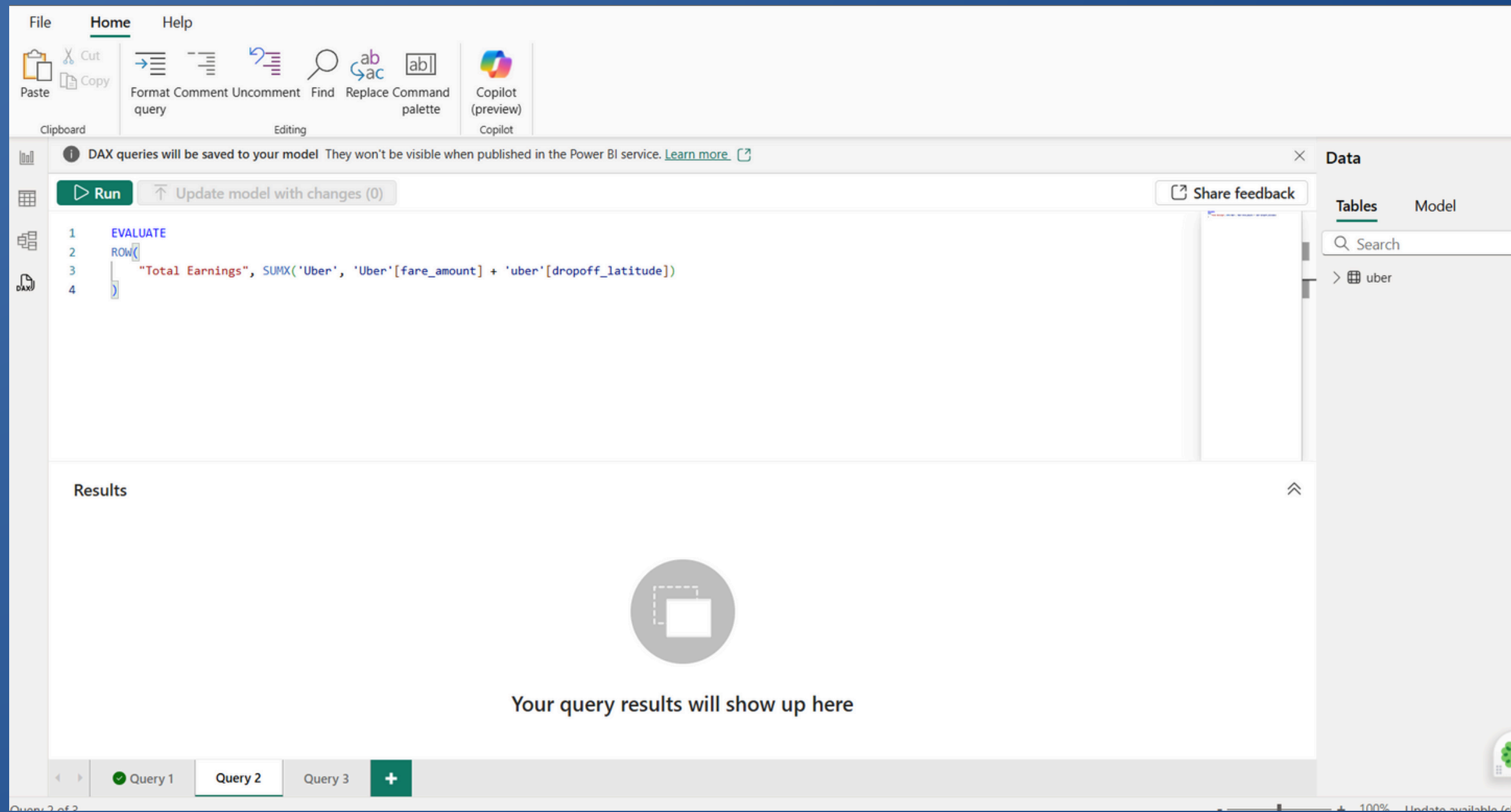
The 'Results' pane at the bottom shows the output of the query as a table with 8 rows and 9 columns. The columns are: uber[Column1], uber[key], uber[fare_amount], uber[pickup_datetime], uber[pickup_longitude], uber[pickup_latitude], uber[dropoff_longitude], and uber[dropof]. The data represents Uber ride records.

	uber[Column1]	uber[key]	uber[fare_amount]	uber[pickup_datetime]	uber[pickup_longitude]	uber[pickup_latitude]	uber[dropoff_longitude]	uber[dropof
1	55394656	9/18/2013 12:16:00 AM	23	2013-09-18 00:16:00 UTC	-73.99	40.73	-74.01	
2	55394781	8/24/2014 8:51:07 PM	4.5	2014-08-24 20:51:07 UTC	-74.01	40.71	-74.02	
3	55395143	1/7/2014 8:00:32 PM	6	2014-01-07 20:00:32 UTC	-73.96	40.78	-73.97	
4	55394904	7/31/2012 11:57:39 PM	14.5	2012-07-31 23:57:39 UTC	-74.02	40.71	-73.97	
5	55395011	5/13/2014 10:43:00 PM	13	2014-05-13 22:43:00 UTC	-74.01	40.72	-73.99	
6	55398178	7/21/2013 10:34:00 PM	9	2013-07-21 22:34:00 UTC	-74	40.74	-74	
7	55401223	10/22/2011 3:18:00 PM	12.9	2011-10-22 15:18:00 UTC	-73.98	40.76	-73.98	
8	55401567	12/1/2012 7:54:00 PM	19	2012-12-01 19:54:00 UTC	-73.96	40.77	-73.99	

The bottom of the interface shows a tab bar with 'Query 1' selected, followed by 'Query 2', 'Query 3', and a '+' button to add more queries.

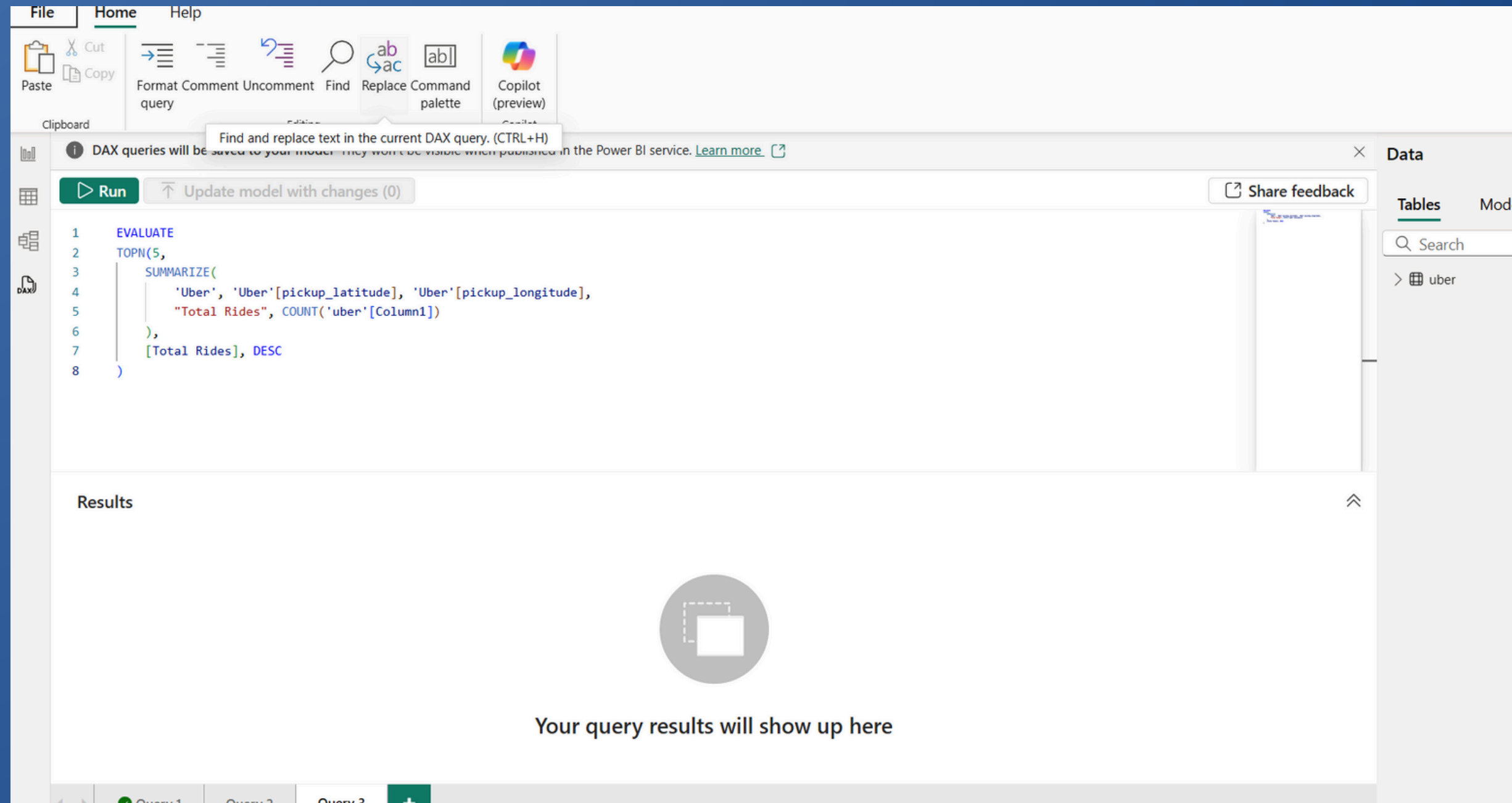
Query 1

SOME QUERRIES ADDED IN PROJECT



Query 2

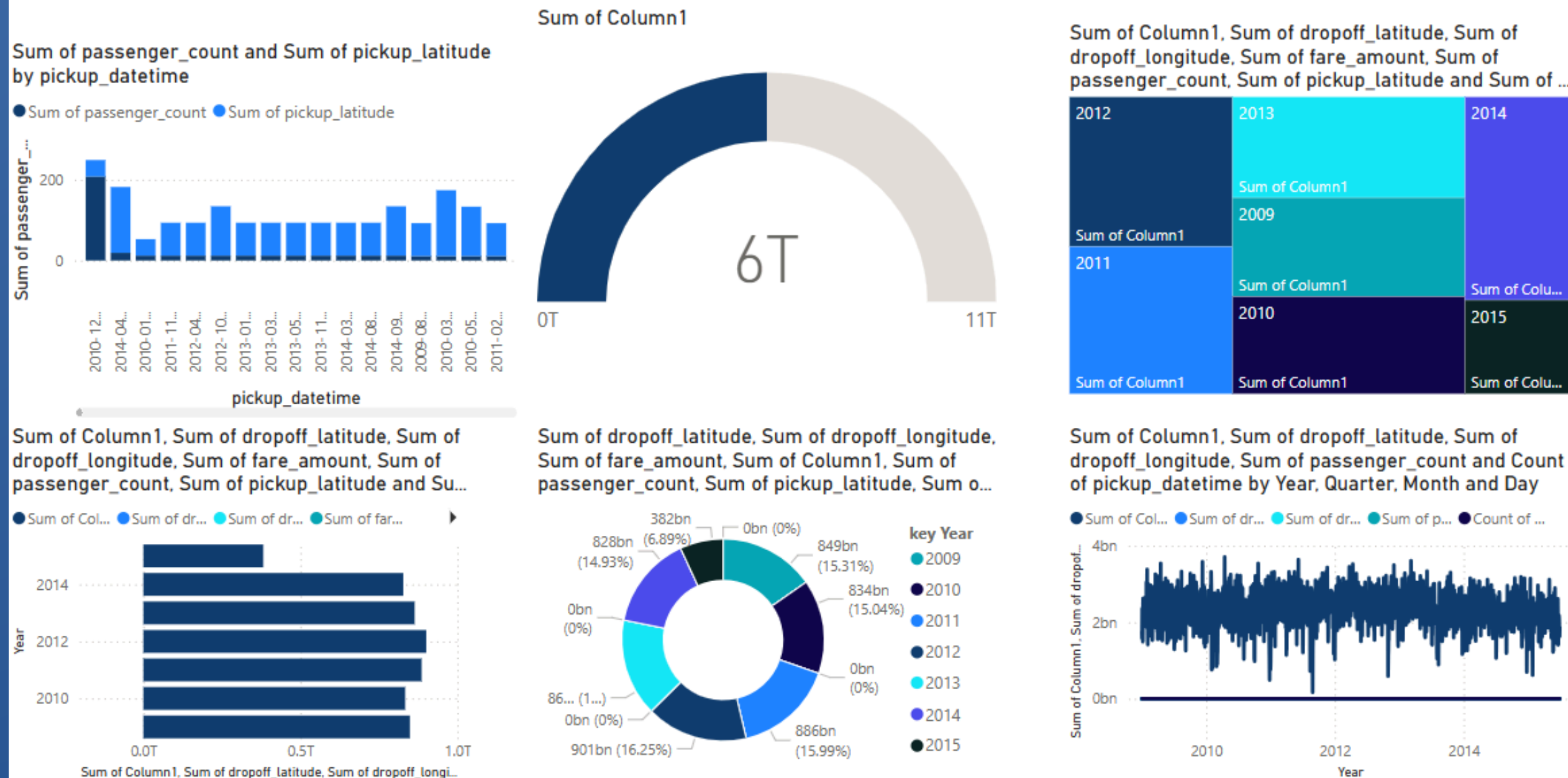
SOME QUERRIES ADDED IN PROJECT



Query 3

FINAL PROJECT OVERVIEW

"Uber Ride Analytics Dashboard"



KEY PROBLEM SOLVED BY THIS DASHBOARD

01

Identifying Peak Hours and High-Demand Areas

Helps Uber allocate drivers efficiently.

Reduces passenger wait times.

Maximizes driver earnings by identifying high-demand periods.

02

Tracking Ride Demand and Trends

Analyzing trip data over different time periods.

Predicting future ride demand.

Improving fleet management and driver supply balance.

03

Revenue and Performance Insights

Detailed revenue analysis, including fare trends and trip earnings.

Understanding surge pricing impacts.



CONCLUSION AND FUTURE IMPROVEMENT



Conclusion

- The Uber Ride Analytics Dashboard helps analyze ride trends, peak hours, and revenue, making ride-hailing more efficient. It improves decision-making for better service and driver management.



Future Improvement

- Live Data Updates – Real-time tracking for better accuracy.
- Predictive Analytics – Forecasting demand and fare trends.
- Driver & Customer Insights – Analyzing performance and feedback.
- 4. Smarter Route Suggestions – AI-based route optimization.



THANK YOU

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