

Objective:

Analyze fleet performance data to identify cost optimization opportunities, assess vehicle utilization, and improve

Data cleaning:

Removed duplicates

Formatted the date column to yyyy/mm/dd

Reduced numerical columns to 2 decimal place

Confirmed if we have null cell

Check for outliers

Perform Analysis:

Added 3 columns:

$\text{Field_Efficiency} = \text{Distance_Travelled} / \text{Fuel_Consumed}$

$\text{Revenue_per_Trip} = \text{Revenue(USD)} / \text{Trip_Count}$

$\text{Maintenance_Cost_per_Km} = \text{Maintenance_Cost(USD)} / \text{Distance_Travelled(Km)}$

Pivot Table:

Sum of Revenue by Region

Rank vehivlr by total Revenue

Visualize Insights:

Revenue by Region using clustered bar chart

Maintenance cost over time using line chart

Revenue show by Region using Pie Chart

Fuel_Efficiency vs Distance using Scattered plot

Building Dashboard:

Add Slicers for Region, Date and Driver_Name

Create 4 KPIs:

Total Revenue(UDS)

Average Fuel Efficiency

Most/Least Profitable Vehicles

Insights:

West Region has the highest Revenue

Vehicle V9756 is the most profitable

Ethan is the drive with the highest revenue per trip

Revenue pick is in January

Recommendation:

Assign vehicles with better fuel efficiency to longer routes.

Increase operations in the West Region to capitalize on high revenue potential

Incentivize drivers like Ethan to share best practices with others.

Ensure maximum fleet availability during **Month January** to handle increased demand

Monitor and improve underperforming vehicle V6700

the overall efficiency in the transportation industry.