Automobile Sales & Analytics Dashboard

Data Analytics Project
Your Name
Date

1. Introduction

The purpose of this project is to analyze automobile sales data to identify business insights, including sales performance by region, category, and car brand. The goal is to provide recommendations that will help improve decision-making and optimize performance.

2. Data Preparation

The dataset contains 500 rows and 22 columns with details about orders, customers, regions, categories, and car specifications.

Steps taken include:
- Data cleaning (ensured no missing values)
- Created a Date Table in Power BI for time-based analysis
- Added calculated measures using DAX (Total Sales, Total Orders, AOV, etc.)

3. Key Performance Indicators (KPIs)

The following KPIs were created in Power BI using DAX:
- Total Sales = SUM(SalesAmount)
- Total Orders = DISTINCTCOUNT(OrderID)
- AOV (Average Order Value) = Total Sales / Total Orders
- Total Quantity = SUM(Quantity)
- Average Discount % = AVERAGE(Discount)

These KPIs provide quick insights into overall sales performance.

4. Analysis & Insights

The dashboard provided the following insights:
- Region X generated the highest revenue.
- Category Y performed best in terms of sales volume.
- Sales peaked during November and December, indicating seasonality.
- Top 10 products accounted for nearly 40% of total sales.
- Technical factors such as Horsepower and FuelType influenced customer preferences.

5. Recommendations

- Increase stock before November–December to meet peak demand.
- Focus marketing efforts on high-performing regions.
- Launch promotional campaigns for underperforming categories.
- Encourage top customers with loyalty programs.
- Use car specification insights to adjust future product offerings.

6. Conclusion

This analysis highlights the importance of data-driven decision making in the automobile industry. By tracking KPIs and leveraging Power BI dashboards, the company can improve forecasting, optimize marketing, and ensure better resource allocation.