**Car Sales Dashboard – Fully Dynamic Sales Insight**

📊 **Tool Used**: Power BI  
🧠 **Key Techniques**: Dynamic Visualizations | DAX Functions | Data Modeling | Interactive Filters

**💡 Project Overview:**

In this project, I developed a fully dynamic and interactive **Car Sales Dashboard** to visualize and analyze Year-To-Date (YTD) and Month-To-Date (MTD) performance metrics. The dashboard empowers stakeholders with real-time insights into sales trends, customer preferences, and dealership performance.

**🎯 Key Objectives:**

* Track YTD and MTD performance across multiple KPIs.
* Analyze sales trends by car body style, color, company, region, transmission, and engine.
* Enable dynamic filtering and drill-down capabilities for deeper insights.
* Deliver business-ready, actionable visualizations using DAX and Power BI best practices.

**📌 Dashboard Sections Breakdown:**

**1. Top KPIs:**

* **YTD Total Sales**: $371.2M – with a positive YoY growth of 23.59%.
* **YTD Average Price**: $28.0K – compared against MTD for quick comparison.
* **YTD Cars Sold**: 13.3K units – 19.73% higher than MTD baseline.

✅ These KPIs are created using **DAX measures** to dynamically adjust based on time filters.

**2. YTD Sales Weekly Trend:**

* A **line chart** tracks weekly sales flow across 52 weeks, highlighting peaks (e.g., Week 36: $14.9M).
* Helpful for identifying seasonal demand or weekly promotional effectiveness.

**3. Sales Breakdown by Body Style:**

* Donut chart categorizes YTD sales into **SUV, Sedan, Hatchback, Passenger, and Hardtop** styles.
* Useful for inventory planning based on popular vehicle types.

**4. Sales by Color:**

* Analyzes color trends – Pale White dominates, followed by Black and Red.
* Assists in customer preference analytics.

**5. Geographical Analysis:**

* **Map Visual**: Displays YTD car sales across U.S. cities like Austin, Scottsdale, Janesville, etc.
* Enhances **regional performance visibility** and dealership strategy.

**6. Company-Wise Sales Trend:**

* A comprehensive table showcasing:
  + Average Price per company (e.g., Cadillac $42.2K, Audi $22.2K).
  + YTD Cars Sold (e.g., Chevrolet: 1043 cars).
  + YTD Total Sales (e.g., Ford: $16.0M).
  + % Growth in Sales (%GT YTD).

🔧 All values are calculated using **custom DAX measures** for dynamic interaction with slicers.

**7. Dynamic Filters (Slicers):**

* **Body Style**, **Dealer Region**, **Transmission**, **Engine** – all filters dynamically update charts and metrics.
* These slicers enhance interactivity and support stakeholder-specific views.

**🧠 DAX Highlights:**

* CALCULATE(), FILTER(), DATESYTD(), TOTALYTD(), and DIVIDE() for metric accuracy.
* Applied **YTD/MTD comparisons** using DAX time intelligence functions.
* Created **dynamic tooltips and conditional formatting** for better UX.

**✅ Outcome:**

This dashboard transforms raw car sales data into a powerful decision-making tool, enabling users to **monitor performance**, **identify opportunities**, and **optimize dealership operations**.

💼 **Takeaway**: This project strengthened my expertise in **Power BI**, **data storytelling**, and **DAX-driven business intelligence** – vital skills for a professional Data Analyst.