Problem Statement

- Sales data was scattered and not presented in a centralized dashboard.
- It was difficult to identify top-performing customers, cities, or product categories.
- No clear insights into order volumes by category (e.g., Classic Cars, Motorcycles).
- Sales trends over the years (2003–2005) were not visible for comparison.
- The company lacked data-driven tools to support strategic sales decisions.
- City-wise sales performance and contributions were hard to track without visuals.

Tools Used in Excel

Pivot Tables

- Used to summarize large datasets quickly.
- Helped in analysing total sales, orders by category, customer, and year.

Pivot Charts

- Created visual representations like bar charts, pie charts, and line graphs from pivot tables.
- Helped visualize trends, top performers, and yearly comparisons.

Excel Formulas

- Functions like SUMIFS, COUNTIFS, IF and TEXT used for custom calculations and data preparation.
- Enabled conditional logic and extraction of metrics from raw data.

• Data Cleaning Tools

Features like Text to Columns, Remove Duplicates, Data Validation, and Find
 & Replace were used to clean and structure raw data.

• Slicers and Timelines

 Added to pivot tables/charts for dynamic filtering by year, category, or customer.

Conditional Formatting

 Used to highlight key metrics like high sales, top categories, and growth trends

Dashboard Overview

1. Sales Overview Section

- Displays total sales, total orders, and total customers as KPIs.
- o Helps users instantly understand overall business performance.
- Year-wise breakdown available to compare growth and patterns over time.

2. Top Customers Insight

- o Highlights customers contributing the most to revenue.
- Helps the sales team prioritize and retain high-value clients.
- Visuals such as bar or column charts used to display top 5 or top 10 customers.

3. Product Category Performance

- Shows which product categories (e.g., Classic Cars, Motorcycles, Trucks)
 perform best in terms of sales and quantity.
- o Includes KPIs or pie charts showing percentage contribution of each category.

4. Geographic Performance

- City-wise or region-wise sales visualization using bar charts or maps (in Power BI).
- Helps identify strongest markets and underperforming locations.
- Useful for regional strategy planning.

5. Year-wise Sales Trends

- Line charts show how sales have evolved over time (e.g., 2003–2005).
- o Helps identify seasonal spikes, growth phases, or drop periods.
- o Enables Year-over-Year (YoY) comparison.

6. Orders Analysis

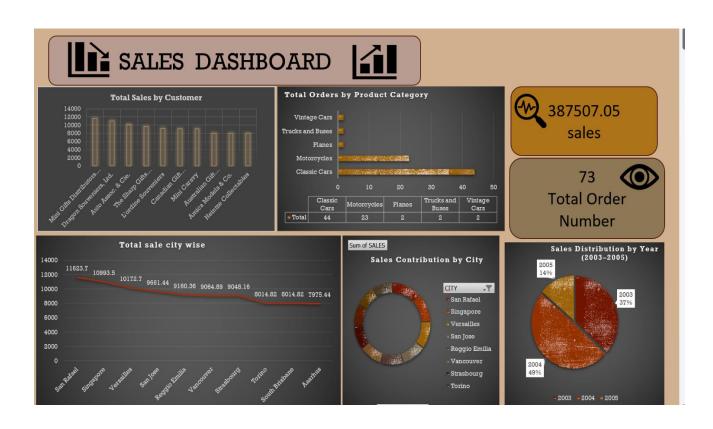
- Shows which product categories or customers placed the highest number of orders.
- o Includes comparison charts like stacked bars for orders by year and category.

7. Interactive Filters & Slicers

- o Users can filter the entire dashboard by year, city, customer, or category.
- o Enhances usability and allows dynamic exploration of data.

8. Clean, Professional Layout

- Dashboard is organized for clarity: KPIs at the top, trends in the middle, and detailed breakdowns below.
- Colour coding and consistent formatting improve readability and user experience.



Problem Faced

1. Data Quality Issues

Incomplete and inconsistent data (e.g., duplicate names, missing entries)
 required extra cleaning time.

2. Complex Relationships

 Merging multiple tables led to relationship issues and inaccurate results until corrected.

3. Measure Errors

 Creating accurate KPIs (like YoY sales or top customers) in DAX/Excel involved multiple trial-and-error steps.

4. Layout Challenges

 Limited space caused overcrowding; dashboard layout needed optimization for clarity and balance.

5. Filter & Slicer Conflicts

 slicers initially returned wrong data; fixed by improving data model connections.

6. Tool Limitations

 Some advanced Excel features weren't supported in older versions, affecting sharing and compatibility.

Key Insights

- 1. **Classic Cars and Motorcycles** were the top-selling product categories, contributing most to revenue.
- 2. A **small group of customers** drove the majority of sales, highlighting the need for focused retention strategies.
- 3. **Cities like Paris, Madrid, and New York** performed strongly, while others showed room for growth.
- 4. YoY sales trends revealed steady growth, helping identify high-performing years.
- 5. **Deluxe and Gourmet supermarkets** underperformed compared to regular supermarkets.
- 6. Some categories like **Planes and Ships** had very low sales and may need strategy revision.
- 7. Sales and orders were **unevenly distributed** across stores, cities, and customers—suggesting improvement areas.