Axon Sales Data Analysis

Odin School Data Science Boot Camp
Capstone Project on Data Visualization
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INTRODUCTION:

In the world of classic cars, Axon struggled to understand their sales performance due to scattered insights. To help them navigate this challenge, we harnessed the capabilities of Microsoft Power BI and SQL. Our goal was to shed light on their sales data and enhance decision-making, simplifying their path to success.

By converting raw sales data into actionable insights, the project provided a clear understanding of key performance indicators such as total customers, orders, average prices, and overall sales amount. Through interactive charts, it highlighted sales trends, popular products, and regional performance. This data-driven approach facilitated informed decision-making, addressing Axon's challenges effectively.

PROBLEM STATEMENT:

A small company Axon, which is a retailer selling classic cars, is facing issues in managing and analyzing their sales data. The sales team is struggling to make sense of the data and they do not have a centralized system to manage and analyze the data. The management is unable to get accurate and up-to-date sales reports, which is affecting the decision-making process.

To address this issue, the company has decided to implement a Business Intelligence (BI) tool that can help them manage and analyze their sales data effectively. They have shortlisted Microsoft PowerBI and SQL as the BI tools for this project.

The goal of the capstone project is to design and implement a BI solution using PowerBI and SQL that can help the company manage and analyze their sales data effectively.

TOOLS AND TECHNOLOGIES:

1)MySQL

2) Microsoft Power BI

KEY PERFORMANCE INDICATORS (KPI'S):

The following KPIs, serve as the heartbeat of sales performance:
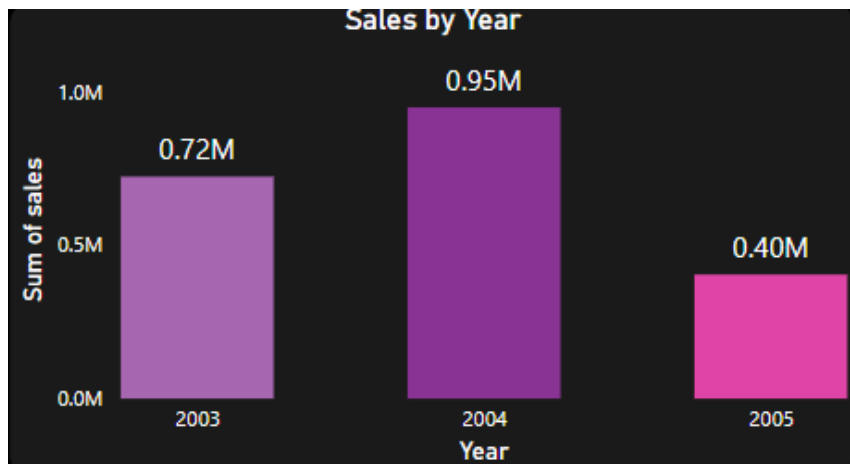
Total Customers: 09

Total Sales Amount : 9.60M

Total Profit : 3.83M

Total Product : 110

CHARTS AND INSIGHTS:

Our voyage into data visualization yielded insights through the following visuals:

- Sales Trend Over Time (Clustered Column Chart):Unveiling the ebb and of sales, this chart highlighted 2004 as the peak year with $0.95M and 2005 as the lowest with $0.40M.


- *Sales by product line (Clustered bar chart): In this bar chart* display, the "Classic cars" stood tall with sales of $3.93M, while the "Trains" humbly reported $.0.2M
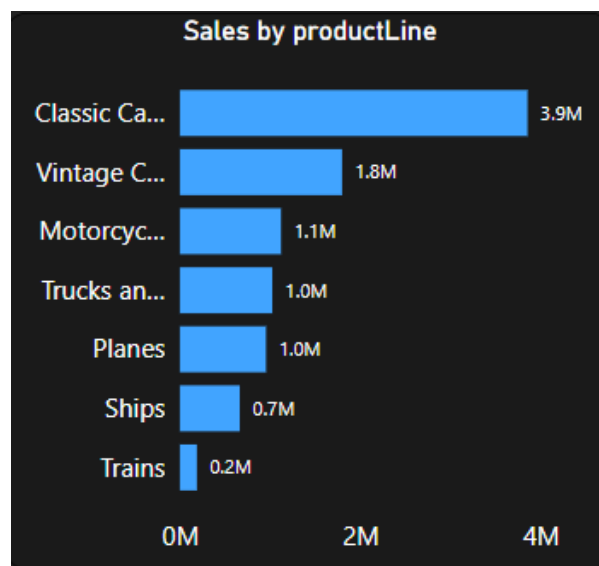
- *Top 5 product vendors (Clustered Chart): Championed by the "Classic* Metal Creations " at $0.93M, this chart unveiled the top 5 vendor and their contributions to the sales landscape.
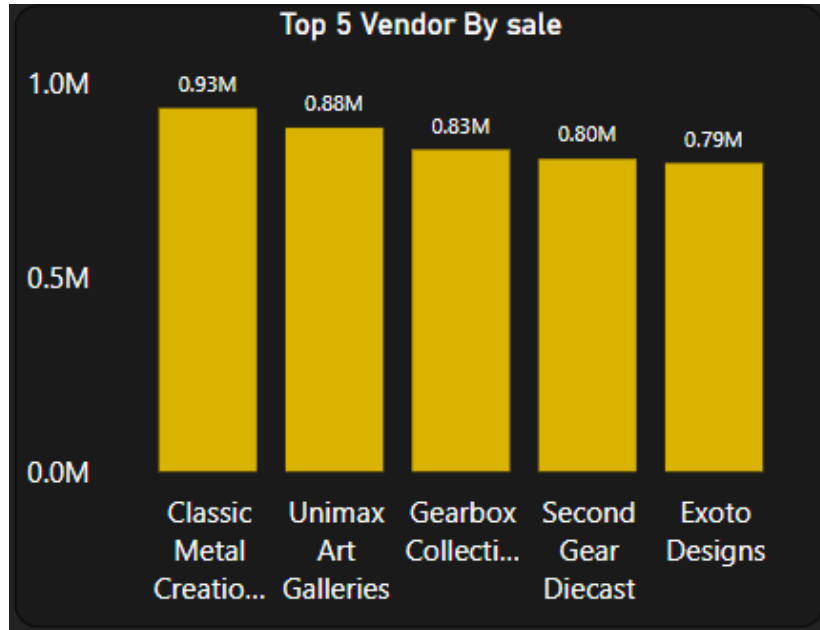
- *Orders vs Status (Tree Map):* This tree map mapped the distribution of orders based on their status, uncovering trends in order processing.
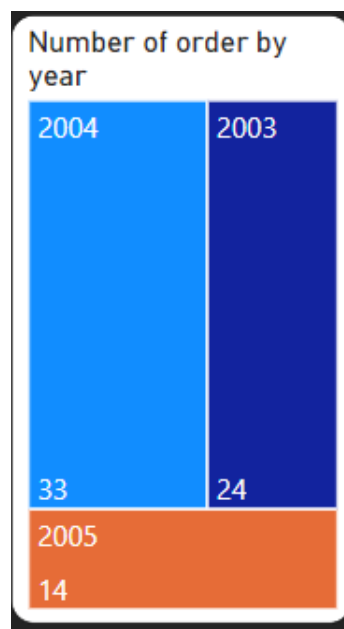
- **_Top 3 Countries by Sales (Bar Chart):_** _Dominated by the Australia at_ $119K, this chart spotlighted the top 3 countries by sales.
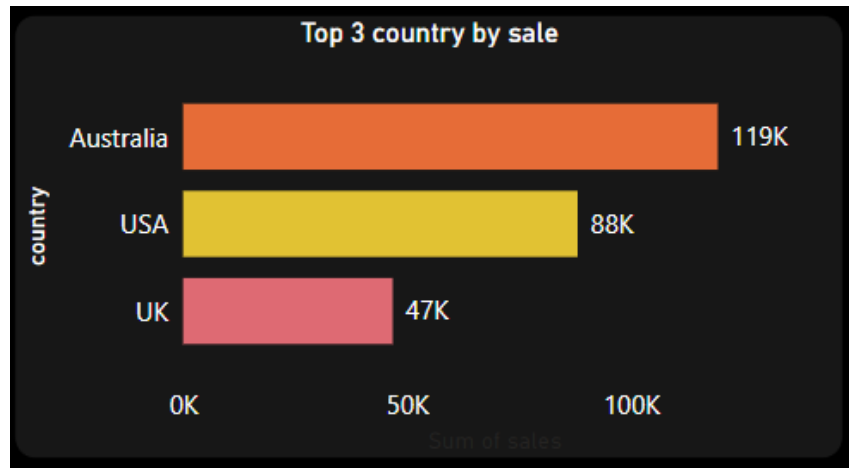
SLICERS FOR TIME ANALYSIS:

The inclusion of slicers allowed for time-specific analysis, offering the ability to dissect data by year, continent and state.

CONCLUSION:

Our journey reached its destination with the successful implementation of the Power BI solution. Axon's sales data gained clarity, empowering decision-making through interactive dashboards and insights.