

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: 122

Total Orders: 312

Average Product Price: \$54.40

Average Order Value: \$33,970

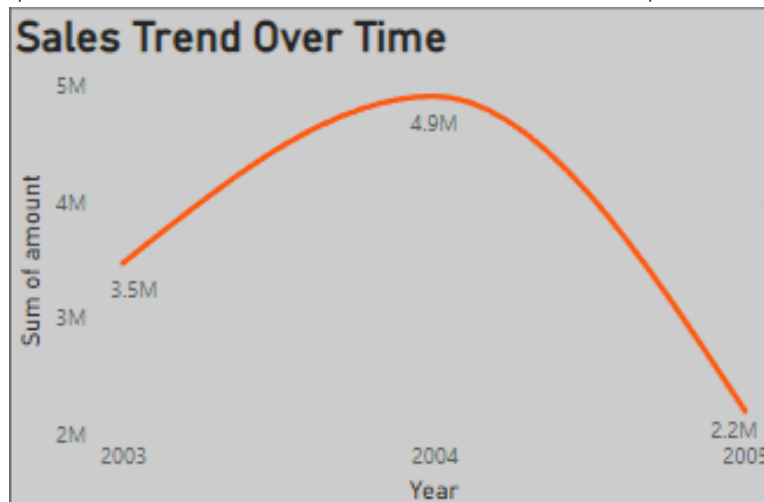
Average Order Processing Time: 3.77 days

Total Sales Amount: \$10.60M

CHARTS AND INSIGHTS

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

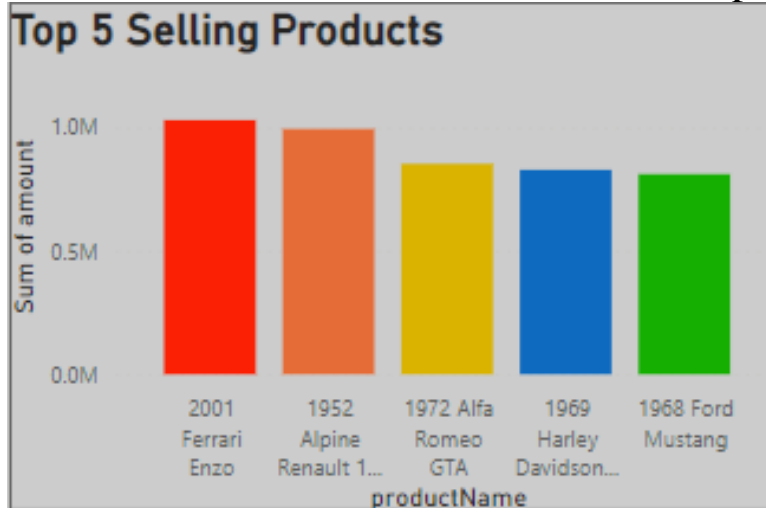
- *Sales Trend Over Time (Line Chart)*: Unveiling the ebb and flow of sales, this chart highlighted 2004 as the peak year with \$4.91M and 2005 as the lowest with \$2.21M.



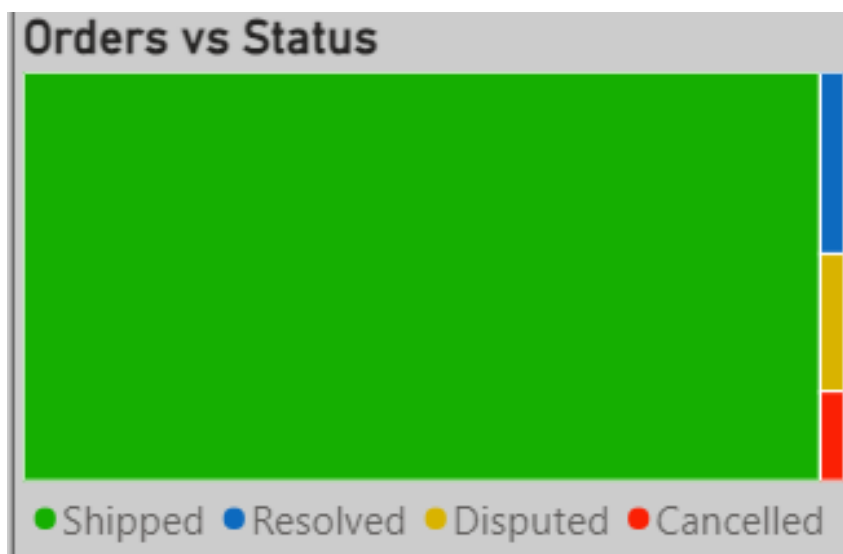
- *Product Line vs Order Count vs Sales (Table)*: In this tabular display, the "2001 Ferrari Enzo" stood tall with sales of \$1.03M, while the "1968 Ford Mustang" humbly reported \$811K.

Product Line vs Order Count vs Sales		
productLine	Count of orderNumber	Sum of amount
Classic Cars	162	61,54,006.62
Vintage Cars	56	17,70,522.98
Motorcycles	49	12,67,606.30
Planes	24	7,10,162.80
Trucks and Buses	14	5,40,779.72
Ships	5	1,07,390.08
Total	312	1,05,98,555.73

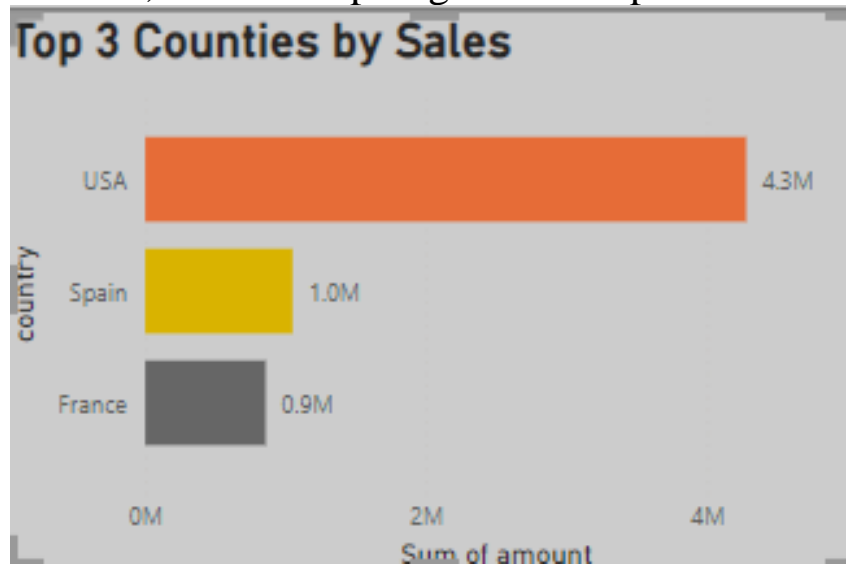
- Top 5 Selling Products (Bar Chart): Championed by the "2001 Ferrari Enzo" at \$1.03M, this chart unveiled the top 5 products and their contributions to the sales landscape.



- 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 USA at \$4.28M, 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 and quarter.

Filter by Year	
Select all	2004
2003	2005

Filter by Quarter				
Select all	Q1	Q2	Q3	Q4

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.

