AXON RETAIL SALES ANALYSIS

INTRODUCTION

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 Bl tools for this project.

APPROACH

DATA COLLECTION : Used MySQL database to extract detailed information from the Axon's database, that is, Sales, Customers, Products, Employees and order data.

DATA ANALYSIS AND TRANSFORMATION : Now we extracted the data and cleaned it to make it ready for analysis. We then analyzed the data and identified the essential insights that were required to proceed further.

DATA MODELLING AND DESIGNING DASHBOARD : Data Modelling was used to establish relationships among the data points. Using DAX(Data Analysis Expressions) and Power BI's visualizations we created interactive dashboards indicating the sales analysis.

DASHBOARD

Here is a short description of the data tables included that contains typical business data such as customers, products, sales orders, sales order line items, etc.

MySQL Sample Database Schema
The MySQL sample database schema consists of the following 8 tables:

- **Customers:** stores customer's data.
- **Products:** stores a list of scale model cars.

. **ProductLines:** stores a list of product line categories.

- **Orders:** stores sales orders placed by customers.
- **OrderDetails:** stores sales order line items for each sales order.
- **Payments:** stores payments made by customers based on their accounts.
- **Employees:** stores all employee information as well as the organization structure such as who reports to whom.
- **Offices:** stores sales office data

KEY INSIGHTS

Total Sales : Total sales achieved is **$9.6M** which consistently increased with time, indicating growing demand for the products and effective customer retention strategies.

Total Profit : Total Profit is **$3.83M** which also proportionately increased with sales and Profit ratio is **39.84%** , highlighting a well-managed, efficient, and scalable operation.

Trend Analysis : November month has the highest sales in both 2003 and 2004 leading to highest profits, can be because of holiday season sales.

Top Countries : **USA, Spain, France**

These are the three countries which ordered most products and thus, contributed to the sales success of the company.

Among all the countries, the company had the highest sales in the USA.

Top Product Lines : **1. Classic Cars 2. Vintage Cars**

Classic cars had the highest sum of sales and accounted for around 40% of Total sales.

Top Products : **1. 1992 Ferrari 360 Spider Red**

2. 1952 Alpine Renault 130

3. 2001 Ferrari Enzo

These are the top 3 products which had contributed most to the sales and profit of the company.

Total Products : 110

Top Customers: **1. Euro Shopping Channel**

2. Mini Gifts Distributors Ltd.

3. Australian Collectors , Co.

These are the top three customers who contributed most to the increased sales and profit of the company.

Total Customers : Total customers are 122 who contributed to the success of the company.

Top Employees : **1. Gerard Hernandez**
2. Leslie Jennings
3. Pamela Castillo

These are the top three employees who had contributed significantly to the sales success.

Total Employees : 23

Customer Sales by Country :

Understanding the customer distribution by country is crucial for targeted marketing efforts. Here are the top 4 countries based on most customers:

1. **USA - 36 customers**
2. **Germany - 13 customers**
3. **France - 12 customers**
4. **Spain - 7 customers**

CONCLUSION

This sales analysis report provides a comprehensive view of the business performance, the key metrics involved in the increased sales and profit of the company, top performing employees, products and customer distribution.
The dashboard provides real time data helping the sales team and management with the up to minute information and enables better decision making by revealing sales trends, customer behavior, products and employees performance. Thus, enabling the Axon Company to thrive in a data driven landscape.