Axon Sales Analysis Report

Aim

The aim of the Axon Sales Analysis project is to assist Axon company, a classic car retailer, in effectively managing and analyzing their sales data using Microsoft Power BI and SQL. This project will provide insights and recommendations to enhance their decision-making process.

Introduction

This report outlines the process and results of the Axon Sales Analysis project, focusing on the steps taken, visualizations created, and key insights into both top and bottom performance. Recommendations for the company's improvement are also provided.

Steps Involved

1. Data Extraction and Transformation

- Data sourced from MySQL database.
- Loaded into Power BI for analysis.

  Data transformation included:
- Removal of unwanted columns.
- Merging of columns for data consistency.
- Data type changes for accuracy.
- Removal of duplicate records.
- Reordering columns for better organization.
- Row filtering for relevance.

2. Data Modelling

- Established relationships between tables in Power BI to enable comprehensive analysis.

3. Calculated Measures and Columns

Created Calculated columns:
- Total Sales, Total Cost, Profit in classicmodels orderdetails table.
- OrderDateYear, OrderDateQuarter, OrderDateMonth in classicmodels orders table.
- Profit Margin, Total Profit in classicmodels products table.

Created calculated measures:
- Total Orders
- Total Quantity Ordered
- Total Sales
- Total Payment
- Current Stock Quantity

4. Data Visualization

Page 1: Overview Dashboard

1. **Key Metrics displayed:**
   1) Total Sales: **9.60M**
   2) Total Profit: **3.83M**
   3) Total Quantity Ordered: **106k**
   4) Current Stock Quantity: **555k**

2. **Total Sales by Product Line (Pie Chart)** enhances understanding of product line performance.

3. **Total Sales by Date Hierarchy (Area Chart)** tracks sales trends over time.

4. **Total Sales by Product Vendors (Matrix)** provides vendor insights.

5. **Slicers** for Product Line, Order Year, Order Quarter, and Product Name enable deeper exploration.

Page 2: Detailed Analysis Dashboard

1. **Slicers** for Customer Country, Product Line, Product Name, and Order Date enable deeper exploration.

2. **Top 10 Products in Terms of Sales (Pie Chart)** reveals top-selling products.

3. **Top and Bottom Customers in Terms of Sales (Bar Chart)** highlights top and bottom customers.

4. **Top Sales Persons in Terms of Sales (Column Chart)** identifies top salespersons.

5. **Total Sales by Country (Map)** provides geographical sales insights.

Key Insights

1. **Total Sales** : The total sales amount to **9.60 million**, reflecting the overall revenue generated by Axon Company.

2. **Total Profit** : Axon has achieved a total profit of **3.83 million**, indicating the financial success of the business.

3. **Total Quantity Ordered** : A total of **106,000 items** have been ordered, demonstrating customer demand.

4. **Current Stock Quantity** : The company maintains a current stock quantity of **555,000 items**, showing its inventory status.

5. **Total Sales by Product Line** : The **"Classic Car"** product line has delivered the highest sales, amounting to **3.85 million**, constituting **40.13% of the total sales**. In contrast, the **"Trains"** product line contributed the least with sales of **188,532.92**, representing **1.96%** of total sales.

6. **Total Sales by Date Hierarchy** : The sales data exhibits a consistent yearly month wise **increase from 2003 to 2005**, signifying a positive sales trend over time.

7. **Top Product Sold** : The top-selling product is the **"1992 Ferrari 360 Spider Red**," demonstrating its popularity and revenue contribution.

8. **Top and Bottom Customers** : The top customer is **"Euro+ Shopping Channel" with sales of 0.74 million**, indicating a strong customer relationship. On the other hand, **"Board & Toys Co." falls in the bottom category with sales of 7,918.60**.

9. **Top Salesperson** : **Leslie** emerges as the top salesperson with sales of **1,369,194.92**, showcasing exceptional sales performance.

Recommendations

The insights from this analysis should guide Axon in the following ways:

1. **Focus On Classic car sales** : Given that "Classic Car" is the leading product line, consider expanding offerings and marketing efforts in this category.

2. **Target Top Customers** : Strengthen relationships with top customers, such as "Euro+ Shopping Channel," to encourage repeat business.

3. **Salesperson Recognition** : Recognize and reward the efforts of top-performing salespersons like Leslie, which can motivate the sales team.

4. **Inventory Management** : Efficiently manage the current stock quantity and optimize it based on sales trends.

5. **Periodic Data Analysis** : Continue analyzing data periodically to make informed decisions and adapt strategies accordingly.

Conclusion

The Axon Sales Analysis project Report provides valuable insights that can assist the company in making informed decisions, optimizing sales strategies, and enhancing overall performance. Periodic analysis and a focus on top and bottom performers are essential for continued success.