**Axon Classic Vehicles Sales Dashboard**

1. **Cover page** 
   1. **Insights**
      1. Axon company has sold 106k vehicles for a total of $8.85 million which that the average order value is $2.96 thousand.
      2. There are a total of 2996 customers who purchased those vehicles who placed total of 2996 orders.
2. **Sales Overview**
   1. **Charts and Insights**
      1. Sales by country map visualization
         * The United States is the top country for sales, followed by France, UK, Australia and the Japan.
      2. Sales trend timeline
         * Sales appear to be increasing over time from 2003 to 2004 with the highest sales however the sales drastically decreased in the year 2005.
         * The drastic fall of car sales in year 2005 can be because **of surge in gasoline prices** in the year 2005.
      3. Sales vs Profit chart
         * Sales and Profit were directly proportional to each other.
         * Sales increased by **32.71%** from 2003 to 2004 however the sales drastically decreased **-70.09%** in the year 2005.
      4. Top 3 Sales Representative
         * Gerard Hernandez, Leslie Jennings, and Leslie Thompson are the top 3 sales representatives in terms of total sales.
      5. Orders Counts by Season and Country
         * There is a seasonal trend where with higher order counts was placed in the fall and spring months.
         * Summer month was recorded as the season with lowest order counts.
3. **Customer Analysis**
   1. **Charts and Insights**
      1. Top spending customers
         * The top three spenders are Freyre Diego, followed by Nelson Susan and Ferguson Peter all of them belonging to high credit limit segment.
      2. Amount Spent vs Transactions by Credit Limit Segment
         * I have mentioned below how the credit limit segment was created.
         * We can observe in this chart that customers with medium credit limit did most of the transactions and spent on an average approximately 100k. While the transaction done by customers with high credit limit was less but they spent more with each transaction.
      3. Amount Spend by Credit Limit Groups
         * Customers classified in medium credit limit spent more overall closely followed by customers with high credit limit.
      4. Average Purchase vs Credit Limit by Credit Limit Segment
         * Average purchase amount is directly proportional to the credit limit.
         * Customers in the high credit limit segment tend to have higher average purchase amounts compared to the other segments. However, the number of transactions is lower.
4. **Product Analysis** 
   1. **Charts and Insights**
      1. Top Selling Products
         * The three top-selling products are the 1992 Ferrari 360 Spider red with 1808 orders and the 1937 Lincoln Berline with 1111 orders and American Airlines: MD-115. With 1085 orders
      2. Order Fulfilment Status
         * Less than 5 % of orders of classic cars, trucks, buses and trains were delayed based on the required date and the shipped date.
         * Vintage cars, Motorcycles,Planes and ship had 100% order fulfilment status as On time.
      3. Inventory Analysis
         * The company has ave more vehicles in stock than have been ordered.
         * Classic Cars are is the most popular product category, with a high number of units ordered and a large inventory surplus.
         * But the company can consider adjusting storage for Classic Cars to reduce inventory and free up capital.
         * Same goes with other categories Vintage Cars, Motorcycles, Planesm Trucks and Buses, and Ships also have a significant inventory surplus which could be adjusted.
5. Sales Forecasting using Forecast in the Analytics panel
   1. **Insights**
      1. Sales are forecasted is said to be decreasing after 2005 and keep on decreasing till 2007.
      2. Since there was **surge in gasoline prices** in the year 2005 we can’t really say if sales will keep on decreasing and if the prices of gas goes down in the next few years sales may increase.
      3. Gas prices climbed up in 2005 from 2004 so there was sudden decrease if the prices stay as it is or customers even with the high prices of gas will still buy the cars.

**Steps taken for Creating the Dashboard**

1. **Transforming dataset**
   1. Table 1 customers

* Converting Column customerName to companyName
* Phone column – messy phone numbers, replace any non-numeric characters such as dot, parenthesis, hyphen, spaces and plus sign with an empty string, and converting data type from text to whole number
* Converting creditLimit datatype from text to fixed decimal number ($)
* Merged contactFirstName and contactLastName to contactFullName
  1. Table 2 employees
     + Converting officeCode datatype from text to whole number
     + Findings –
       1. Employee no 1076 and 1188 are using same email
  2. Table 3 offices
     + Converting officeCode datatype from text to whole number
  3. Table 4 orderdetails
     + Converting priceEach datatype from decimal to fixed decimal number ($)
     + Converting orderLineNumber datatype from text to whole number
  4. Table 6 payments
     + Converting amount datatype from decimal to fixed decimal number ($)
  5. Table 7 productlines
     + Removed Column htmlDescription and image since it only had null values
  6. Table 8 products
* Converting qualityInStock from decimal to whole number
* Converting buyPrice datatype from decimal to fixed decimal number ($)
* Converting MSRP datatype from decimal to fixed decimal number ($)

1. **Measures**
2. Total Customers =COUNT('classicmodels customers'[customerNumber])
3. Total Cost = SUM('classicmodels products'[buyPrice])
4. Total Orders = COUNT('classicmodels orderdetails'[orderNumber])
5. Total Quantity = SUM('classicmodels orderdetails'[quantityOrdered])
6. Total customerTransactions = COUNT('classicmodels payments'[customerNumber])
7. Profit = [Total Sales] - [Total Cost]
8. **Calculated Columns**
9. Average Purchase Value = [Total Sales] / [Total customerTransactions]
10. creditLimitSegment = SWITCH( TRUE(), 'classicmodels customers'[creditlimit] < 50000, "Low", 'classicmodels customers'[creditlimit] >= 50000 && 'classicmodels customers'[creditlimit] < 100000, "Medium", 'classicmodels customers'[creditlimit] >= 100000, "High" )
11. PaymentYear = YEAR('classicmodels payments'[paymentDate])
12. Order Fulfillment Status = IF('classicmodels orders'[shippedDate] <= 'classicmodels orders'[requiredDate], "On Time", "Delayed")
13. Order Processing Time = DATEDIFF('classicmodels orders'[orderDate],'classicmodels orders'[shippedDate], DAY)
14. orderMonth = MONTH('classicmodels orders'[orderDate])
15. orderSeason =
16. Revenue per Order = [Total Sales]/[Total Orders]