**Axon Classic Cars**

**Problem Statement:**

Implement a comprehensive Business Intelligence solution using Microsoft PowerBI and SQL to streamline Axon's classic car sales data management. This project aims to establish a centralized system, providing accurate and up-to-date sales reports. Enhancing data analysis capabilities will empower the sales team and enable informed decision-making for improved business performance. The project aimed to create sales reports that provided essential insights for sales management and business operations.

**Overview:**

* Have extracted sales data from various sources, such as Customers, Products, and Orders.
* Created data storage named **Classic Models** using the MYSQL database.
* Conducted Data cleansing and preprocessing that included handling missing values and removing duplicates for an accurate estimation.
* Created Interactive and unique Visualization dashboards and Reports using Power BI.
* Designed and developed a variety of Reports, like Tables, Charts, Filters, and Slicers, while implementing strategic Business Logic for enhanced Data Visualization.
* Applied DAX functions to analyse data and extract insights.
* Performed **SQL** queries, generated valuable insights accurately.
* Tools used in project, PowerBI, MYSQL and MSWORD.

**Insights From Project:**

* **Total Sales:**  The company achieved an outstanding total sales figure of $9 million.
* **Average Sales:** ﻿﻿2004 had the highest average Total Sales at $3,59k, followed by 2003 at $2,70k and 2005 at $2,15k.﻿﻿
* **Sales Peak:**  In November 2004, the retail store recorded the highest number of orders.
* **Profitable Year:**  The year 2004 stood out as the most profitable year, then both 2003 and 2005.
* **Leading Market:** The “USA” leads in both sales and profit, followed by “France” and “Spain.”
* **Profitable Year:** 2004 is the highest total Sum of Profit by $ 1.81 million, followed by 2003 at $1.32 million and 2005 at $0.69 million.
* **Popular Product Lines:** “Classic Cars” is the most frequently ordered product line, followed by “Vintage Cars” and “Motorcycles.” Classic cars had the highest sum of sales by $35.5k.
* **Orders Shipped:** Total 303 orders were shipped successfully.
* **Customers:** Top performing customer “Euro Shipping Channel” has the highest number of orders, followed by “Mini Gifts Distributors Ltd” and “Australian Collections Co.”
* **QoQ% by year and quarter: ﻿**Total Sales QoQ% trended down, resulting in a 449.20% decrease between April 2003 and July 2005.﻿﻿ ﻿﻿Total Sales QoQ% dropped from 100.62% to -100.00% during its steepest decline between July 2004 and July 2005.﻿ And dropped from 100.62% to -100.00% during its steepest decline between July 2004 and July 2005.

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* **Best-Selling Product:** “1992 Ferrari 360 Spider Red” is the top seller, followed by “  “2001 Ferrari Enzo” .
* **Customers by Credit Limit:** At 227600, Euro+ Shopping Channel had the highest Sum of credit Limit and was 180.64% higher than Reims Collectables, which had the lowest Sum of credit Limit at 81100.﻿﻿
* ﻿﻿Euro+ Shopping Channel accounted for 24.96% of Sum of credit Limit.﻿﻿
* ﻿﻿Across all 7 customer Name, Sum of credit Limit ranged from 81100 to 227600.﻿﻿

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**Suggestions for Enhancing Sales:**

* As in Product Line Growth Invest in the growth of “Classic Cars” and “Vintage Cars” product lines by introducing new models, variations, and accessories.
* Emphasize top-selling products like “1992 Ferrari 360 Spider Red” and by ““2001 Ferrari Enzo”.
* Prioritize the USA market, which accounts for a significant 34% of total sales.
* Enhance customer engagement, especially in the USA and European markets, to build loyalty and increase sales.
* Introduce new products aligned with customer preferences and market demands.

**Conclusion:**

The implementation of the BI solution empowered Axon to efficiently manage and analyse their sales data, revealing invaluable insights. These insights have enhanced their decision-making process, enabling them to optimize inventory, focus on top-performing products, and identify growth opportunities. The journey of Axon serves as a compelling illustration of how BI solutions can provide a competitive edge, regardless of the business’s scale.