Technical Report: Quick Review of Sales Dataset

Introduction:

This report presents a comprehensive review of this sales dataset gotten from Kaggle, containing 2824 Rows and 26 Columns, including Order information, Product details, and Customer information. The purpose of this review is to identify initial insights, trends, and anomalies in the data, providing a foundation for further analysis that can aid Stakeholders decision-making process.

Data Overview:

The dataset consists of sales record gotten from 2003-2005, with missing values in some columns like: State, Address line 2 and Postal Code. The fields included are:

- Order information (Order number, Quantity ordered, Price, Order line number, Sales, Order date, Status)
- Product details (Product line, MSRP, product code)
- Customer information (Customer name, Phone, Address line 1, Address line 2, City, State, Postal code, Country, Territory, contact first name, Contact last name, Deal, Size)
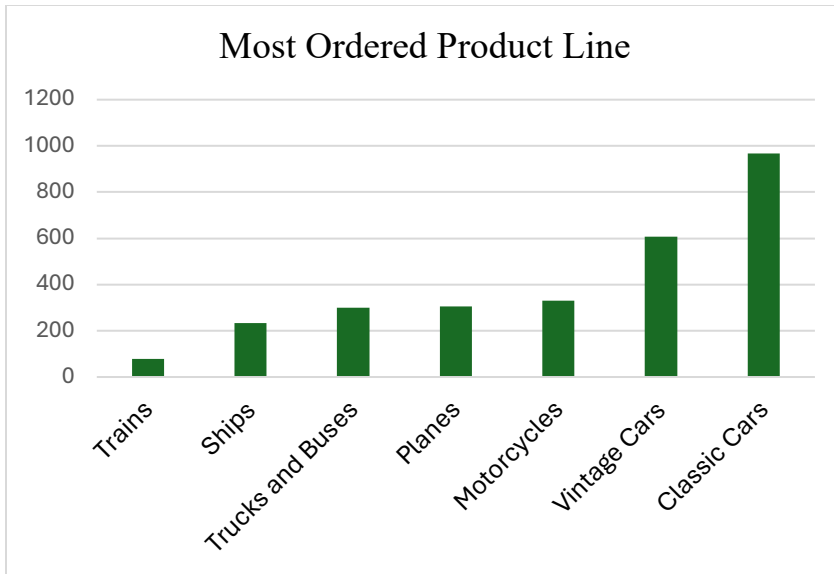
Quick Observations & Anomalies:

- The Order date column was in a datetime format.
- Address line 2 is a continuation of Address line 1.
- Contact last name is a continuation of contact first name.
- The 'Phone' column contains phone number in different formats.
- Postal code column is not standardized (Letters are attached to some numeric codes).

The columns that have the continuation of their data in another column e.g Address line 2 and 1 etc, should be merged into a single column (Address) to simplify the data structure and facilitate data analysis.
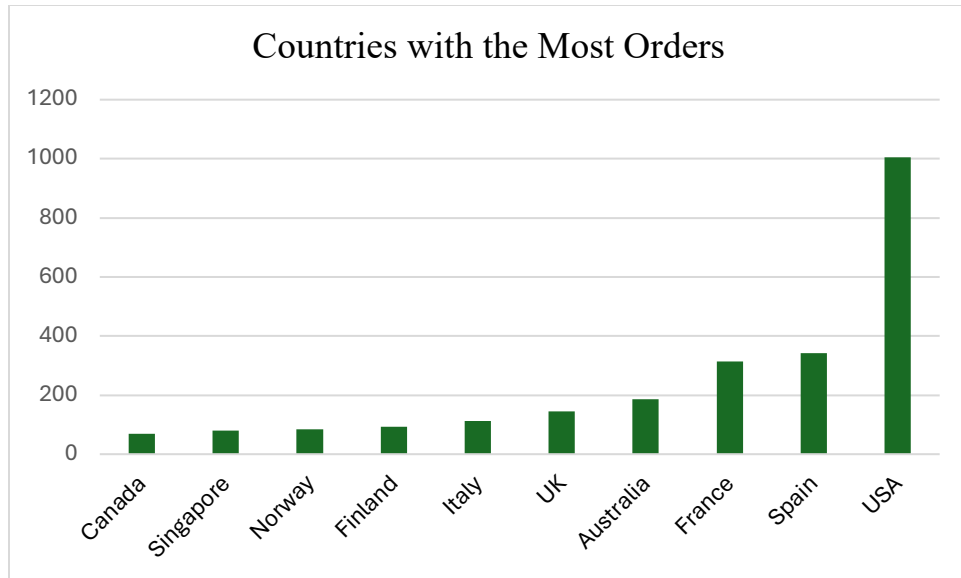
Insights:

- Sales Performance: The total sales value is $10,032,629, with an average sale price of $84.
- Product Popularity: The most ordered product line is Classic Cars with 967 total orders, with a total sales value of $3,919,616.

Most Ordered Product Line

Product Line	Orders
Trains	~80
Ships	~230
Trucks and Buses	~300
Planes	~310
Motorcycles	~330
Vintage Cars	~600
Classic Cars	~960

- Customer insights: The top customer is Euro Shopping Channel with a total order of 259.

Top Customer by Orders

Customer	Orders
Anna's Decorations, Ltd	~45
Souveniers And Things Co.	~45
Rovelli Gifts	~47
Muscle Machine Inc	~47
Land of Toys Inc.	~48
AV Stores, Co.	~50
La Rochelle Gifts	~52
Australian Collectors, Co.	~54
Mini Gifts Distributors Ltd.	~180
Euro Shopping Channel	~259

- Geographical: Total of 19 countries were represented, and four territories(APAC: Asia pacific, EMEA: Europe Middle east and Africa, Japan and NA: North America). With USA having the most orders of 1,004.

Countries with the Most Orders

A bar chart titled "Countries with the Most Orders" with the y-axis ranging from 0 to 1200. The bars from left to right are: Canada (~60), Singapore (~75), Norway (~80), Finland (~90), Italy (~110), UK (~140), Australia (~185), France (~315), Spain (~345), USA (~1000).

Conclusion:

This initial analysis reveals insights into product popularity, geographical trends, sales performance, and customer behavior. Further analysis could explore sales trends by quarter, months, product line and territory, as well as customer segmentation, sales performance metrics, and market analysis.

Recommendation for Further Analysis:

- Sales trend analysis by quarter and product line.
- Customer segmentation.
- Geographical analysis by country and territory.
- Sales performance metrics (e.g. Conversion rates, average order value)
- Market analysis to identify potential market opportunities, trends, and patterns.

By exploring these areas, businesses can gain a deeper understanding of their sales data, making informed decisions to drive growth and improvement.
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