CAR SALES ANALYSIS

PROJECT DESCRIPTION

Car Point, *a company that deals with the sales of cars,* embarked on a marketing campaign that lasted the entire 4th quarter of 2022. The company is interested in knowing the sort of effect the marketing campaign had in their sales, most especially in the year 2023.

DATA CLEANING

The dataset comprises of 18 columns and 25,307 rows at its raw state. At the data cleaning stage, the dataset was checked for cleaning but was realized to be clean as there were no duplicate, no unnecessary white spaces, inconsistent text casing or ignored values. Although, two (2) extra columns were added to make up for months' name and month quarter making a sum of 20 columns in the new dataset.
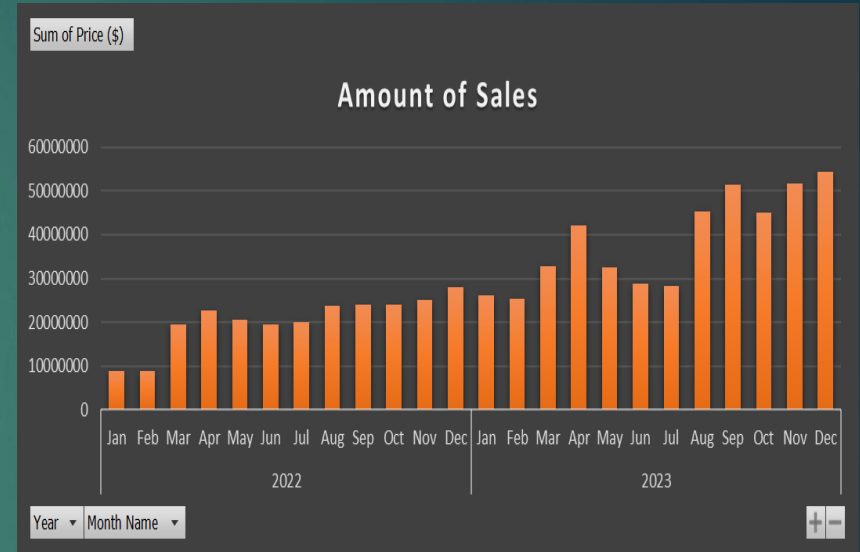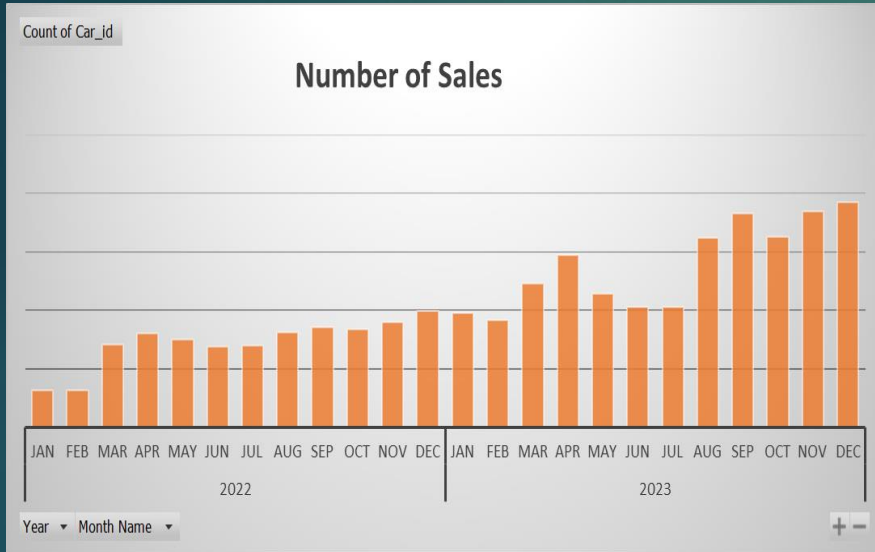
DATA CLEANING

To analyze the effects of the marketing campaign, the following parameters was determined:

1. Monthly Sales Trend;

2. Yearly Growth Percentage;

3. Quarter Sales Trend;

4. Sales by Region;

5. Sales by Sex;

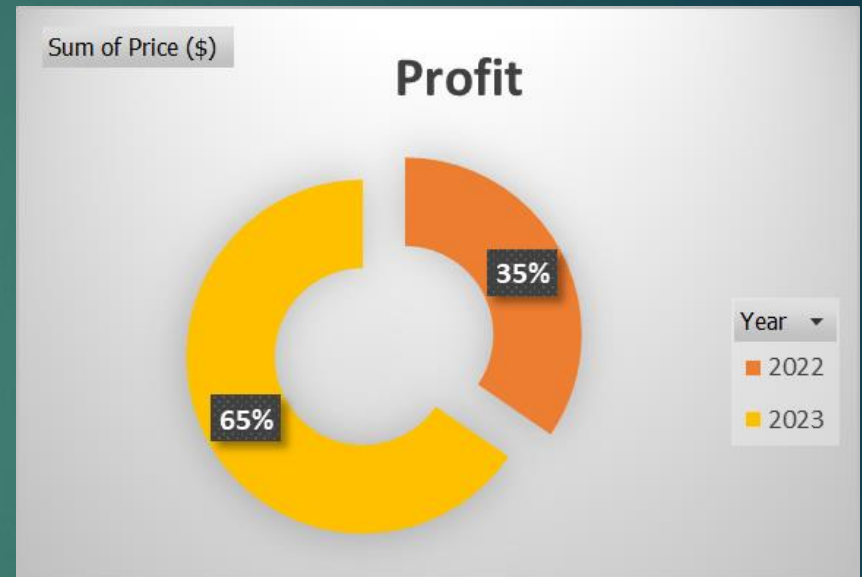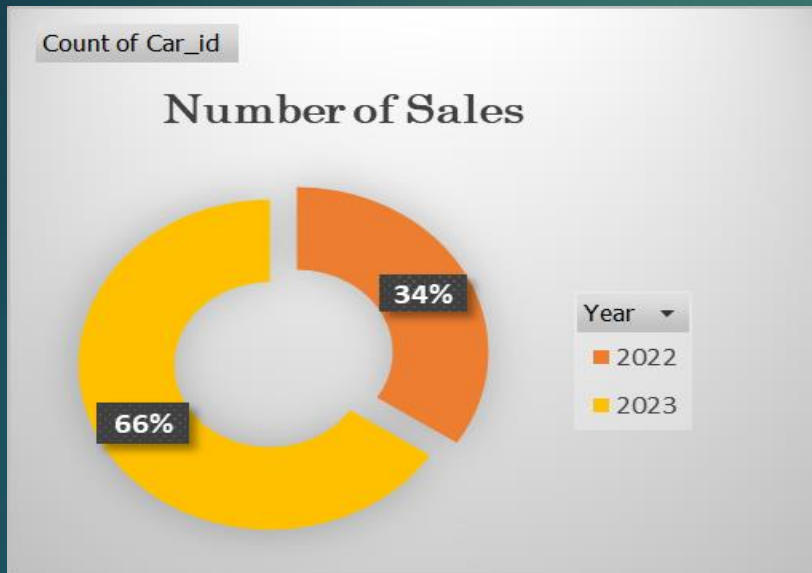6. Sales by Color and Body Style;

7. Sales by Transmission.

MONTHLY TREND

➢ The profit made is proportional to the number of sales made as the highest number of sales was in December, 2023 and the highest amount of profit made was also in same year and month.

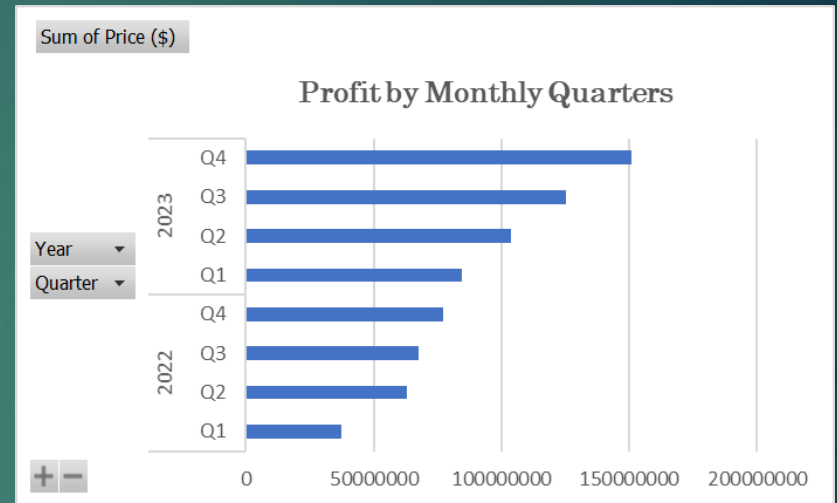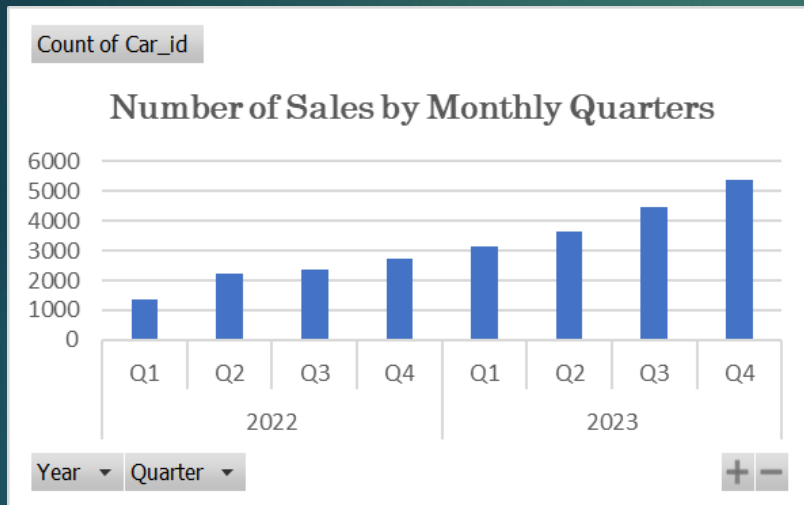➢ The market campaign in 2022, influenced the amount of sales in 2023.

YEARLY GROWTH PERCENTAGE

Count of Car_id

Number of Sales

34%

66%

Year
- 2022
- 2023

Sum of Price ($)

Profit

35%

65%

Year
- 2022
- 2023

➢ The percentage of the number of sales is proportional to the profit made.

➢ Highest number of sales and profit were made in 2023 with almost twice the sales in 2022..
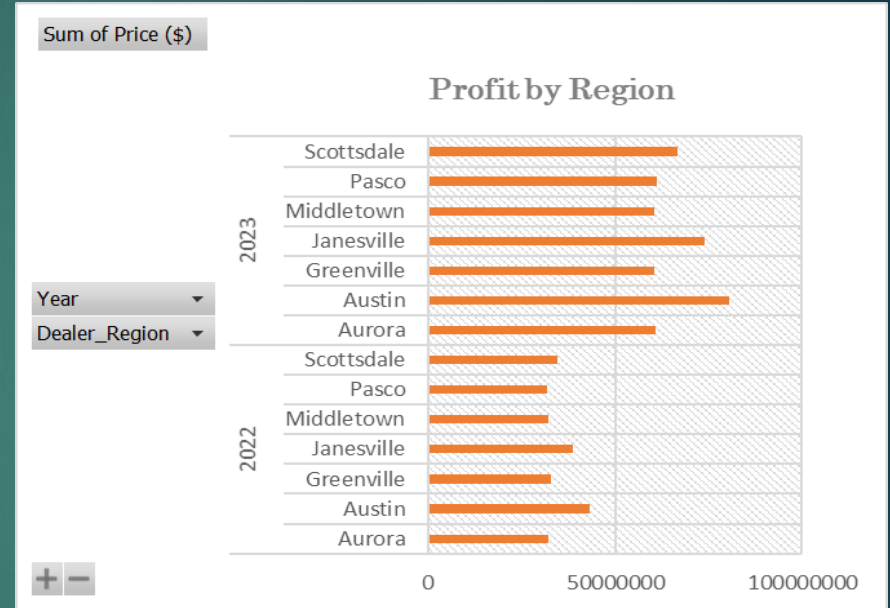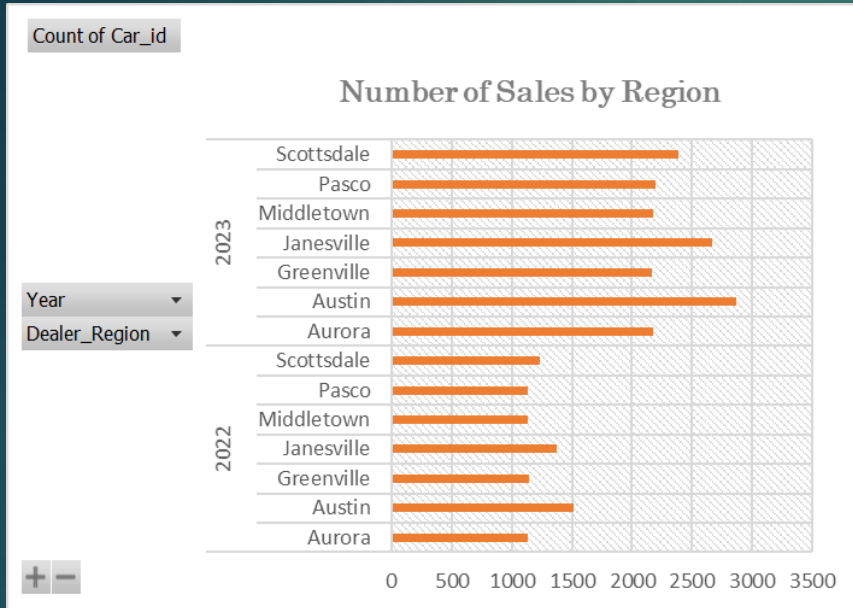
QUARTERLY TREND

➢ The number of sales is proportional to the profit made.

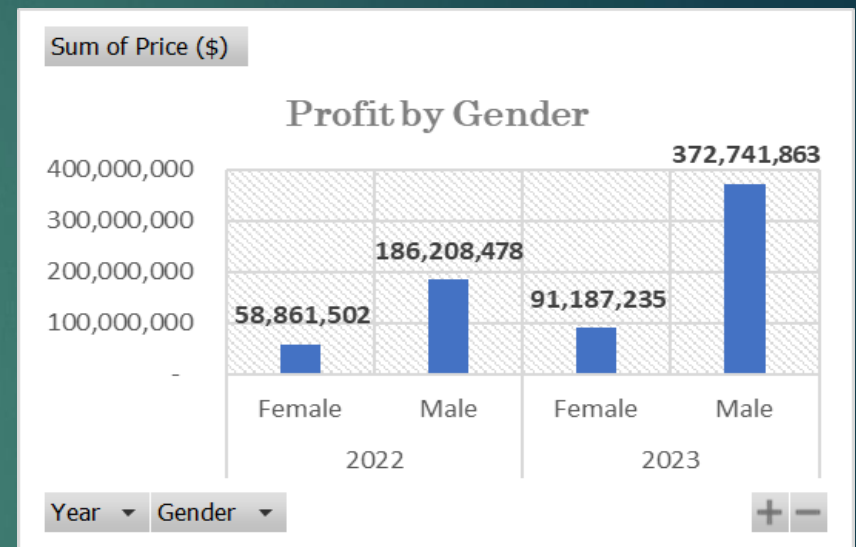➢ Number of sales and profit keeps increasing constantly.
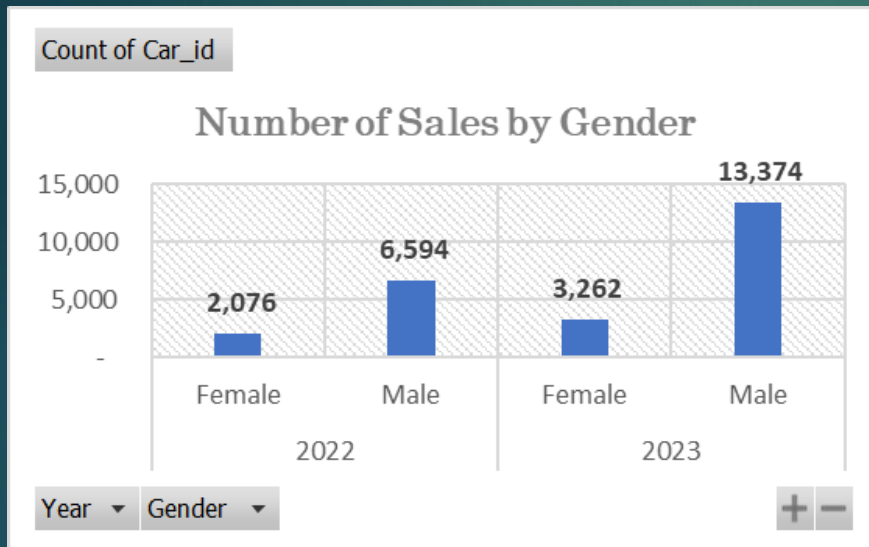
REGIONAL TREND

- Number of sales is proportional to the profit made in the regions.
- Austin had the highest number of sales and profit in 2022 and 2023.
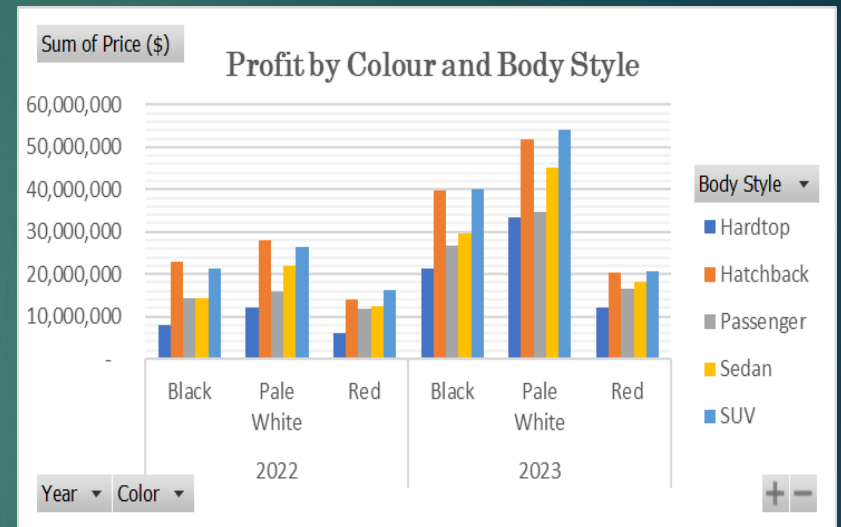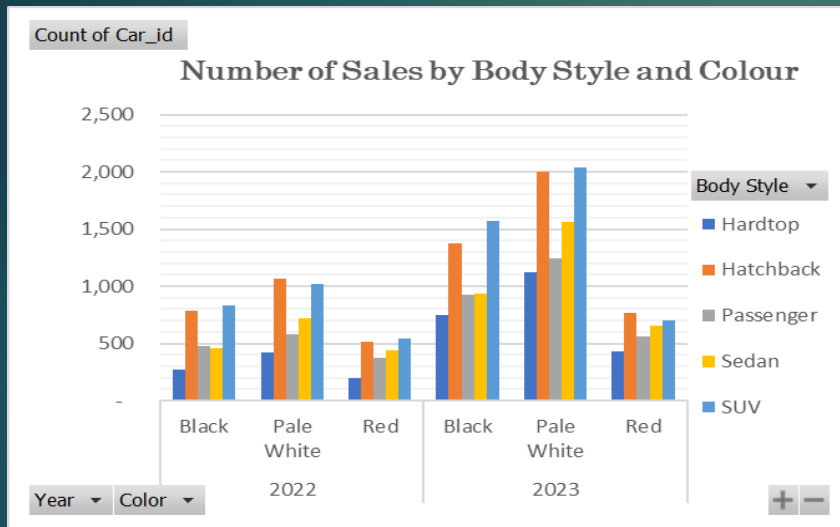
GENDER TREND

➢ The number of sales is proportional to the amount of sales.

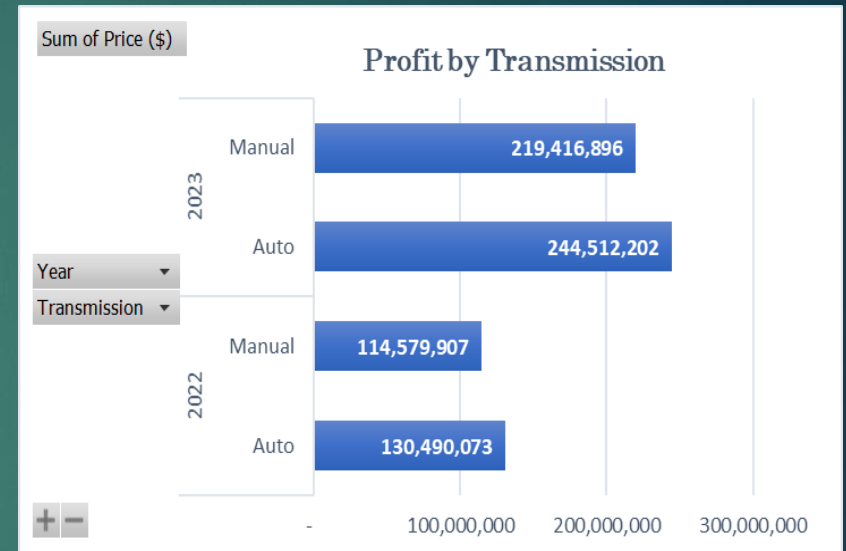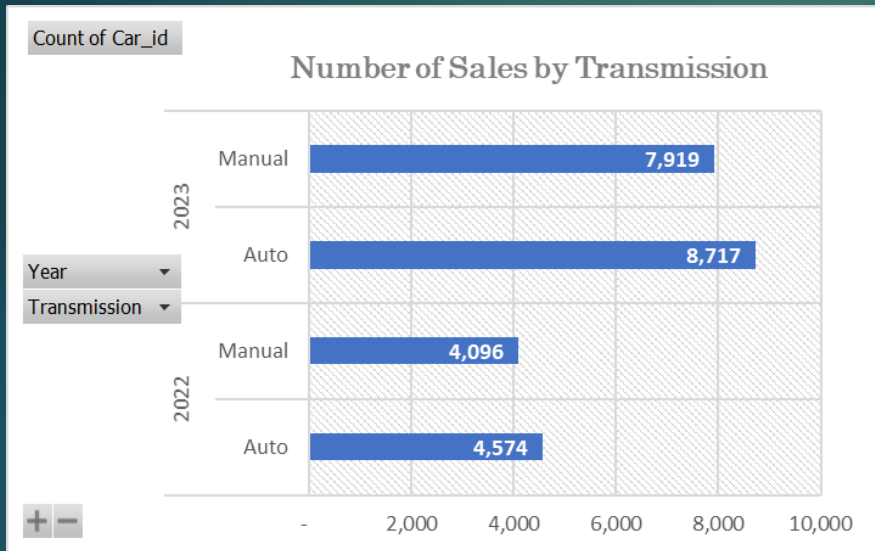➢ Male gender made the highest number of sales and profit in both years.

TREND BY COLOUR AND BODY STYLE

➤ The number of sales is proportional to the amount of sales.

➤ Pale white colured cars made the highest sales in both years.

TREND BY TRANSMISSION

➤ The number of sales is proportional to the amount of sales.

➤ Cars with Auto transmission made the highest sales in both years.

CONCLUSION

➢ 2023 sales surpassed 2022 by 32%, indicating significant yearly growth;

➢ Sales consistently increased quarter-over-quarter, correlating with marketing intensity;

➢ December 2023 saw the highest sales, driven by intense marketing efforts;

➢ Austin region and male customers drove the highest sales in both years;

➢ Car purchase increased by about 50% for the Male gender and less than 50% for the female;

➢ Sales of manual transmission cars increased by about 93% while that of the automatic transmission cars increased by about 83%.

RECOMMENDATIONS

➤ **Targeted Marketing:** Focus marketing efforts on non-Red cars, as the campaign had minimal impact on their sales. Explore new strategies to boost Red car sales.

➤ **Regional Focus:** Concentrate marketing efforts in the Austin region, where sales have been consistently high, to maximize returns.

➤ **Transmission Type:** Emphasize manual transmission cars in marketing campaigns, as their sales increased significantly (93%) compared to automatic transmission cars (83%).

➤ **Gender-Specific Approach:** Develop tailored marketing strategies for female customers, as their purchase increase was less than 50%, compared to a 50% increase for male customers.

THANKS FOR WATCHING