Exploratory Data Analysis

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19 14.4, 16.2, 19.0, 19.3, 22.1, 22.7, 24.2, 26.0, 26.4, 26.7, 26.9, 27.7, 28.9, 31.0, 31.3, 35.6, 40.0, 42.0, 78.0

Data Modeling

One-way ANOVA: Combined MPG versus Retail (\$1000)

Alternative hypothesis At least one mean is different

Equal variances were assumed for the analysis.

Null hypothesis

Significance level

Factor Information

Analysis of Variance

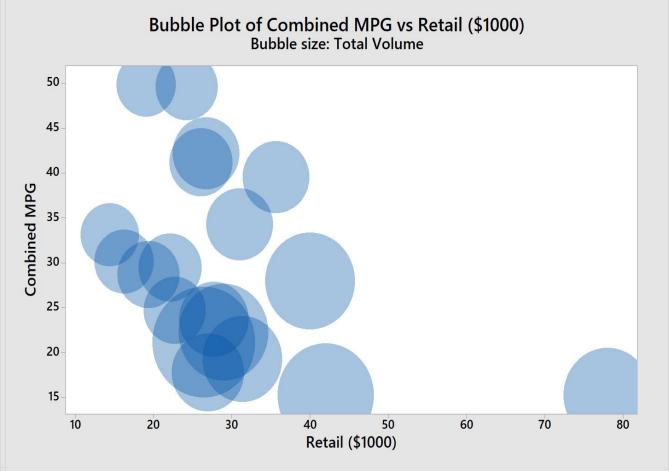
Retail (\$1000) 18 2085 115.8

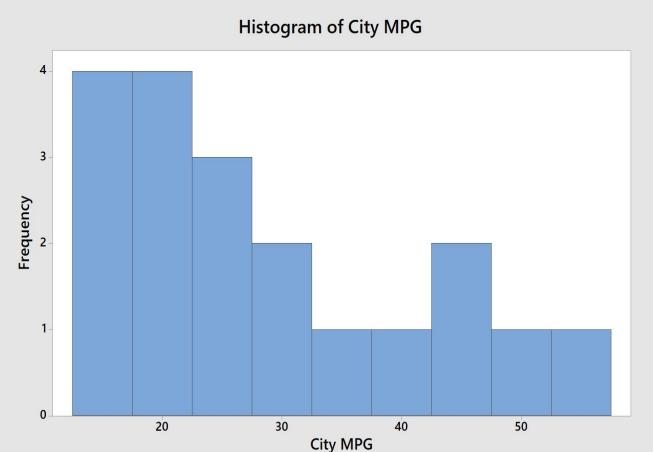
18

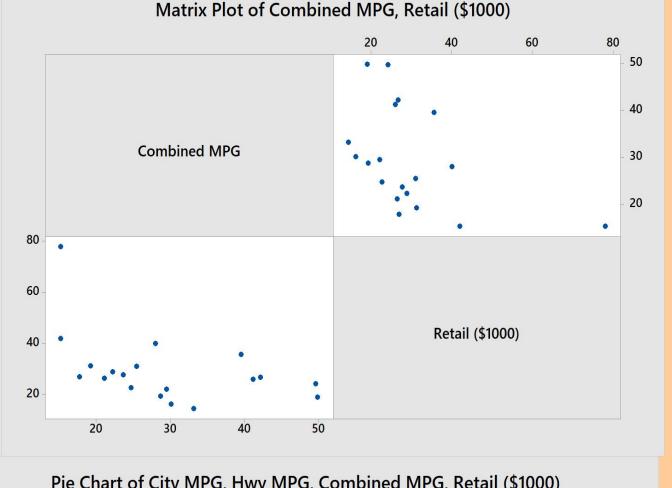
All means are equal

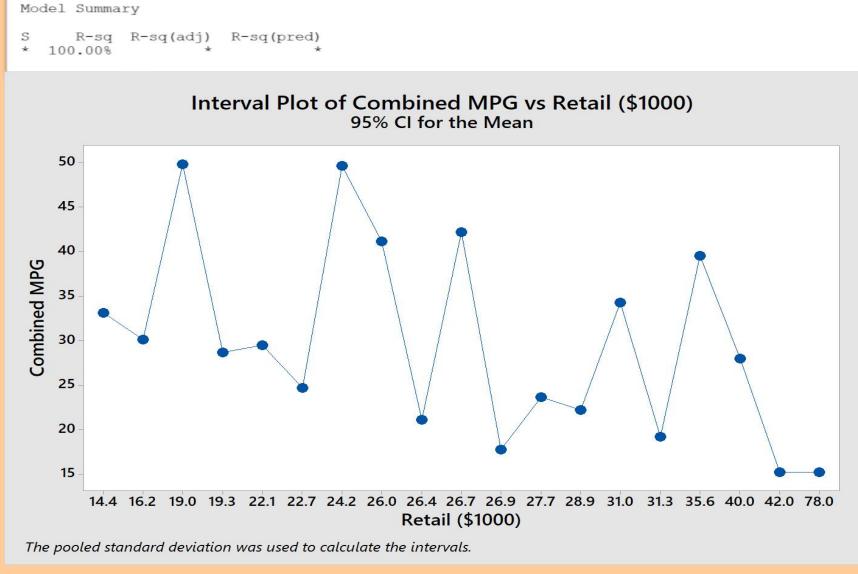
DF Adj SS Adj MS F-Value P-Value

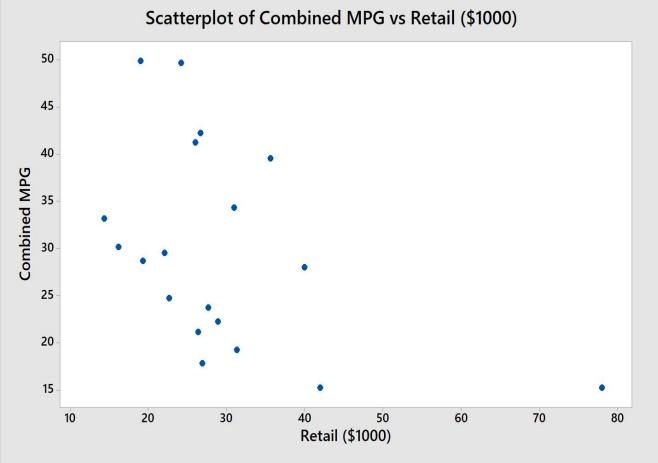


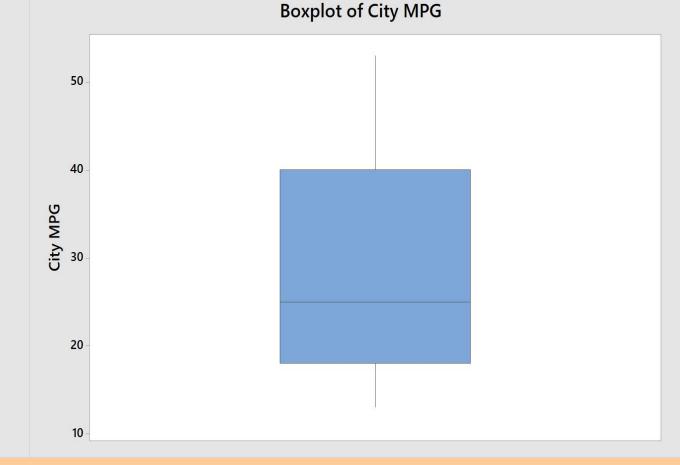


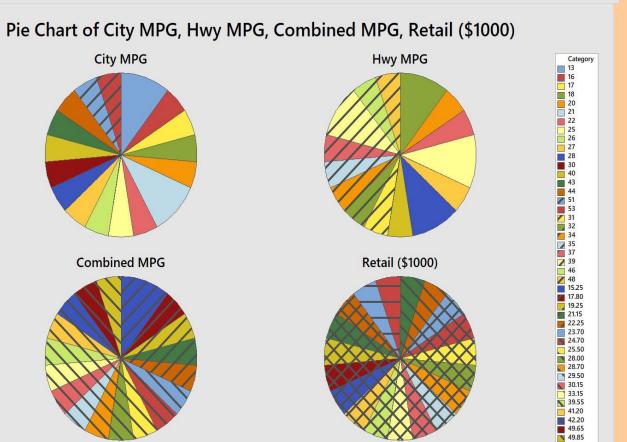












Dataset

	Type	City MPG	Hwy MPG	Combined MPG	Retail (\$1000)	Total Volume
1	SUV	17	22	19.25	31.3	187.0
2	Sedan	37	31	34.30	31.0	132.3
3	Sedan	40	39	39.55	35.6	132.3
4	Sedan	25	35	29.50	22.1	118.1
5	Sedan	43	39	41.20	26.0	118.1
6	Sedan	27	34	30.15	16.2	104.4
7	SUV	16	20	17.80	26.9	155.9
8	SUV	20	25	22.25	28.9	241.1
9	SUV	28	28	28.00	40.0	239.5
10	SUV	13	18	15.25	78.0	232.7

Summery

In this poster, 6 major graphs(bubble plot, histogram, matrix plot, scatterplot, boxplot and pie chart) are shown for a particular dataset. Data modeling is also shown for that dataset. These analysis are done by Minitab software and these helped us to visualize our dataset.