Bike Sales Analysis

1. Business Task:

Analyze bike sales dataset to find what type of customers tends to buy more bikes than other depending on different attributes.

2. A description of data sources:

Dataset which consists of bike customers that is publicly available used in this analysis.

3. Cleaning or manipulation of data:

•Column name “marital status” have two entities M/S. I replaced them with Married and Single.

•Same with the Gender column M/F is replaced with Male and Female.

•Column name “Income” had two decimal points that are reduced to no decimals.

•Commute distance had an entity called “10+ miles” which is then replaced by “more than 10 miles”.

•I have created a new column name “age bracket” in which ages are defined into 3 categories adolescent, middle age, and old using the “age” column.

4. Analysis Summary:

Analysis shows that customers which are more likely to buy bikes have certain similarities. It depends upon the income they make and few other attributes like commute distance, age bracket.

5. Supporting visualizations and key findings:

Visualization shows that customers have less commute distance tends to buy more bikes than the customers having more commute distance.

Data shows that customer at the middle age (31-42) seems to take more interests in buying bikes than the other age groups.

Analysis shows that people that have long commute distance likes to own more cars. This might be the reason of less interest of buying bikes.

6. Recommendations based on analysis:

* As the data shows that people with less commute distance are more interested in bikes, so we should target audience that has less distance to travel to their work.
* People in the middle age bracket are also interested in bikes, so we can also focus on the audience that lies in this attribute as well.
* We should also market to the adolescent age group to target high sales in the future.