



Correlation Heatmap

Filter
Purchased Bike Yes

Row Labels	Avg of Age	Count of Region	Sum of Income	Sum of Cars
Europe	41.51	148	60,80,000	117
North America	43.90	220	1,43,20,000	293
Pacific	42.94	113	72,60,000	175

1. Bar Chart (Marital Status):

How does the count of bike purchases vary among different marital statuses? Are married individuals more likely to purchase bikes?

Single individuals are more likely to purchase bikes. *(By 17 Bikes)*

2. Bar Chart (Gender):

Does gender influence bike purchases, and if so, to what extent?

The total difference in bike purchases between males and females is 3. While there is a slight difference in purchase rates between genders, it is minimal and suggests that gender has a negligible influence on bike purchases.

3. Histogram (Income):

What is the distribution of income among bike buyers? Are there specific income brackets that show a higher likelihood of bike purchases?

Income bracket 10000-49999 shows higher likelihood of bike purchases. *(By 205 Bikes)*

4. Histogram (Age):

Are certain age groups more inclined to purchase bikes?

Middle-aged adults are more inclined to purchase bikes across all age groups so they are an important segment of the market..

5. Box Plot (Income):

Identify outliers in the income distribution of bike buyers. Are there any extreme income values, and how might they impact purchasing behavior?

There are extreme income values so there might be purchasing behavior.

6. Pie Chart (Region):

Are there regions where bike purchases are notably higher?

Yes, bike purchases are notably higher in North America with a purchase percentage of 46%.

7. Scatter Plot (Income vs. Age):

Do individuals with higher incomes tend to be in specific age groups?

Middle age adult tends to have higher incomes in the range 50000-89999.

8. Stacked Bar Chart (Marital Status & Gender):

How does the distribution of bike purchases differ when considering both marital status and gender simultaneously? Are there notable patterns?

Single females and married males have higher purchase rate. *(By 130 and 123 respectively)*

9. Correlation Heatmap (Numeric Variables):

What variables show a strong correlation, and how might this influence purchasing behavior?

Strong correlation is shown in the region North America as average age for purchasing bike, income and other variables are notably higher.