Bike Sales Performance Excel Dashboard

Objective:

The objective of this interactive Excel dashboard is to analyze and track bike sales performance to understand different factors that are considered by customers before making a purchase decision..

Key Insights:

Businesses and analysts understand the factors influencing bike purchases and tailor marketing strategies accordingly. It can also identify potential target demographics and geographical areas for more effective bike sales and promotions.

Data Description:

The dataset comprises bike sales data with columns including:

ID: Unique identifier for each record or individual.
Marital Status: Marital status of the individual (e.g., Single, Married).
Gender: Gender of the individual (e.g., Male, Female).
Income: Annual income of the individual (continuous variable, currency).
Children: Number of children the individual has (discrete numerical value).
Education: Educational level of the individual (e.g., High School, Bachelor's etc).
Occupation: Job title or occupation of the individual.
Home Owner: Indicates whether the individual owns a home (binary: Yes/No).
Cars: Number of cars owned by the individual (discrete numerical value).
Commute Distance: Average distance traveled for daily commute
Region: Geographic region where the individual resides
Age: Age of the individual (continuous numerical value).
Age Brackets: Grouping individuals into predefined age ranges (e.g., 25-31, 32-54, 55-89).
Purchased Bike: Binary indicator of whether the individual purchased a bike (Yes/No).

Data Preprocessing:

Create the 'Age Brackets' column with the following ranges:

- '25-31': For individuals aged 25 to 31 (inclusive).
- '32-54': For individuals aged 32 to 54 (inclusive).

- '55-89': For individuals aged 55 to 89 (inclusive).

Perform the necessary data processing steps to create the 'Age Brackets' column and ensure that each individual is correctly categorized into one of the defined age ranges.

Key Metrics and Visualizations:

Bike Purchase by Age Brackets:
Visualize the relationship between age bracket and bike purchase

Purchase Decision Based On Commute Distance:
Do the number of people who make a purchase increase or decrease as commute distance increases? Analyze and visually represent this information using an appropriate chart

Purchase Decision Based On Average Income:
Analyze and visually represent the relationship between average income and gender based on their purchase decision.

Bike Sales By Region:
Illustrate the distribution of percentage bicycle sales by region.

Subjective Questions for Analysis:

1. How does the sales performance vary across different regions or locations?
2. What is the average age of customers who purchased bikes or did not purchased bikes?
3. Are there any correlations between customer demographics (such as age or gender) and the type of bike purchased?
4. How does commute distance vary between different regions?
5. IS there any correlation between Age and Income of individuals.

(Note: The dashboard would be interactive, allowing bike sales managers to explore sales data in detail and make informed decisions to enhance bike sales performance.)

Submit the Excel Dashboard which includes the Key Insights and subjective questions