

Bike Dekho Project – Comprehensive Insights Report

1. Working Sheet Analysis

The Working Sheet in this project contains all the cleaned and transformed data ready for analysis.

Data Cleaning & Preparation

- Removed duplicate records and invalid entries.
- Standardized category fields such as Gender, Region, and Education.
- Ensured numerical fields like Age, Income, and Cars Owned were correctly formatted.
- Created derived fields (Age Groups, Income Bands) to support deeper analysis.

Outcome: A refined dataset containing details like Gender, Marital Status, Age, Education, Income, Region, Commute Distance, Cars Owned, Home Ownership, and Bike Purchase Status.

2. Pivot Table Analysis

Pivot tables summarize and explore relationships within the data, revealing important patterns.

Key Pivot Table Insights

- **Purchase Status by Gender:** Male and female customers show almost identical purchasing trends.
- **Purchase Status by Marital Status:** Married customers are slightly more inclined to purchase compared to single customers.
- **Average Income by Purchase Status:** Bike buyers have a higher average income compared to non-buyers.
- **Commute Distance Effect:**
 - 0–1 Miles: High purchase rates.
 - 2–5 Miles: High purchase rates.
 - 5–10 Miles: Low purchase rates.
 - 10+ Miles: Lowest purchase rates.
- **Age Insights:** Most buyers fall between 35–50 years of age.

3. Dashboard Analysis

The Dashboard visualizes the summarized information for better understanding and quick decision-making.

Typical Dashboard Elements

- **KPI Cards:** Total Customers, Total Buyers, Total Non-Buyers.
- **Pie Chart:** Distribution of Bike Purchase (Yes vs No).

- **Bar Chart:** Commute Distance vs Purchase Rate.
- **Stacked Chart:** Gender and Marital Status vs Purchase Rate.
- **Column Chart:** Age Group vs Purchase Rate.
- **Income Segmentation:** Average income comparison between buyers and non-buyers.

4. Overall Insights

- Income and commute distance are the strongest indicators of bike purchasing.
- Gender and marital status have minimal influence on purchasing behavior.
- Homeowners and people with fewer cars are more likely to buy bikes.
- The primary buyers are in the 35–50 age range.
- Short-distance commuters (0–1 miles and 2–5 miles) are the best potential targets.

5. Strategic Recommendations

- Focus marketing efforts on mid-income, urban homeowners aged 35–50.
- Highlight cost savings, health benefits, and eco-friendly advantages in campaigns.
- Offer tailored bike models for short-distance commuters.
- Run region-specific campaigns in urban and suburban areas with better infrastructure.

6. Sheet Connections

Sheet	Purpose	Output
Working Sheet	Data Cleaning & Preparation	Reliable, ready-to-analyze data
Pivot Table	Data Aggregation & Trends	Clear insights and patterns
Dashboard	Visual Storytelling	Actionable insights at a glance

7. Conclusion

Through comprehensive cleaning, pivot-based analysis, and dashboard visualization, the **Bike Dekho Project** identifies key drivers of bike purchasing: income, commute distance, and age demographics. These insights guide marketing and product strategies for improved sales and targeted campaigns.