Bike Dekho - Bike Sales Analysis Excel Project

Objective:

To analyze customer demographics and behavior to understand the factors influencing bike purchases, using cleaned and structured Excel data.

Tools Used:

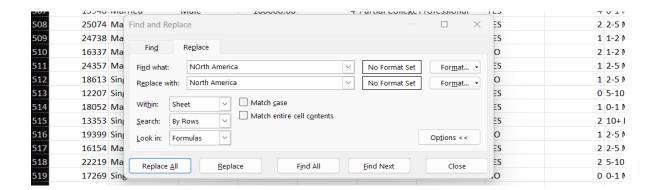
Microsoft Excel

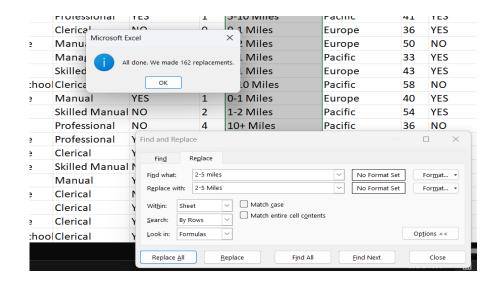
- PivotTables
- o Charts (Clustered Column, Line, Stacked Column, Pie)
- Conditional Formatting
- Data Cleaning Techniques

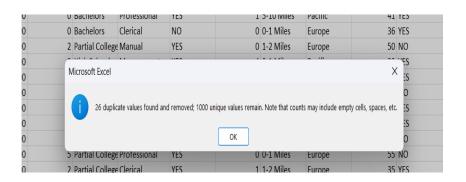
EXCEL CLEANED DATA

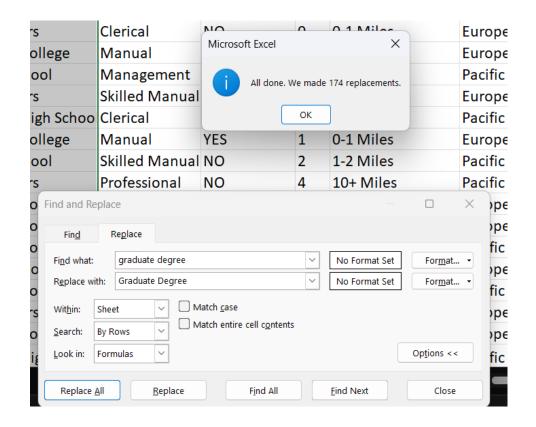
Data Cleaning Performed:

- Removed extra spaces and duplicate values.
- Standardized Purchased Bike values to YES/NO.
- Converted Income to numeric format for analysis.
- Title-cased inconsistent entries in respective columns.
- Formatted Commute Distance values consistently
- Applied conditional formatting to highlight key patterns.
- Some of the actions performed as shown in below figures.









EXCEL DASHBOARD

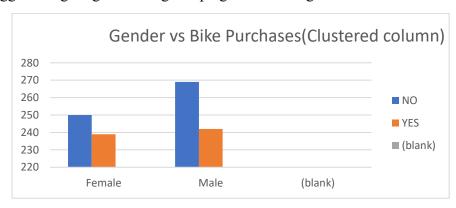
Purpose:

To visually analyze key factors influencing bike purchases using interactive PivotCharts and cleaned data.

1. Gender vs Bike Purchase

Chart Type Used: Clustered Column Chart Insight:

- Below figure shows actual **counts** of bike buyers vs non-buyers across **Male** and **Female** categories.
- **Insight**: Males may have a **higher count** of bike purchases than females (or vice versa depending on data), indicating **gender influence** in bike buying behavior.
- Suggests targeting marketing campaigns based on gender trends.



2. Commute Distance vs Bike Purchase

Chart Type Used: Line Chart Insight:

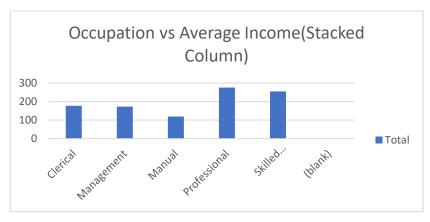
- Below figure illustrates how **commute length** affects bike buying patterns.
- **Trend Insight**: If bike purchase peaks at mid or long distances (like 2–5 miles or 5–10 miles), it shows users with **longer commutes prefer bikes**.
- Very short or very long distances may have **lower purchase rates**, indicating people either walk or use public transport/cars for extremes.



3. Occupation vs Average Income

Chart Type Used: Stacked Column Chart Insight:

- Below figure visualizes how **income differs** across occupations.
- Professionals, Managers, or Skilled Manual Workers may have higher average income → more likely to afford bikes.
- Clerical or Manual labor categories may show lower income, correlating with fewer purchases or more budget-conscious buyers.

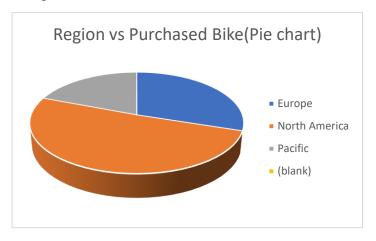


4. Region-wise Bike Purchase

Chart Type Used: Pie Chart Insight:

- Below figure shows **proportional distribution** of bike purchases across regions.
- Helps identify top-performing regions (e.g., North America might account for 40% of purchases).

• Good for **regional targeting** — focus sales or campaigns where adoption is already high or needs improvement.



Business Insights:

1. Target Demographics Identified

 Males may purchase more bikes than females → focus marketing efforts accordingly.

2. Commute-Based Purchase Trend

People with medium-to-long commute distances are more likely to buy bikes
→ segment ads based on travel needs.

3. Income Influence on Purchase

 High-income occupations (e.g., Professionals, Managers) show higher potential for conversion.

4. Region-Specific Opportunities

 ○ Certain regions show higher bike adoption → prioritize high-performing regions for campaigns or dealerships.

5. Education & Occupation Influence

 Educated customers in skilled jobs are more likely buyers → aligns with aspirational buying behavior.

Deliverables:

- Cleaned and standardized dataset.
- Interactive Excel dashboard with 4 key charts.
- PivotTable-based analysis.

• Summary of business insights.

Skills Demonstrated:

- Data cleaning and formatting in Excel.
- PivotTable creation and analysis.
- Data visualization using charts.
- Dashboard design and layout.
- Business insight generation.