Bicke Buyers Dashboard – Project Summary

The **Bicke Buyers Dashboard** provides an analytical overview of customer demographics, purchasing behavior, and income characteristics related to bike purchases. It uses interactive visualizations to highlight key patterns and insights.

1. Purchases by Education

- Bachelors degree holders form the largest buyer group with 306 purchases, followed by those with Partial College education (265).
- Customers with only **High School (179)** or **Graduate Degrees (174)** show moderate purchase levels.
- The lowest purchases come from Partial High School (76).
 Insight: Middle-tier education levels (Bachelors & Partial College) are more likely to purchase bikes compared to those with the lowest or highest education levels.

2. Purchases by Number of Children

- The highest purchases are made by customers with **no children (281)**, followed by those with **2 children (209)**.
- Purchases steadily decrease for customers with 3 (134), 4 (126), and 5 (81) children.
 - **Insight**: Customers without children or with fewer children are more likely to purchase bikes, possibly due to fewer financial constraints.

3. Average Income per Purchase (Gender-Based)

- Male buyers generally have higher average incomes compared to females.
- Males who purchased have an average income close to \$60,000+, whereas non-purchasing males earn slightly less (~\$57,000).
- Female buyers average about \$57,000, while non-buyers earn closer to \$54,000.
 Insight: Higher-income individuals, especially males, are more inclined to purchase bikes.

4. Purchases by Age Brackets

- Middle-aged customers dominate the buyer group, with significantly higher purchases compared to adolescents and older customers.
- Adolescents and older adults show lower purchase numbers.
 Insight: The target demographic for bike purchases is middle-aged individuals.

5. Purchases by Commute Distance

- Customers with shorter commutes (**0–1 miles**) are the most frequent buyers, with purchases decreasing as commute distance increases.
- Very few purchases are made by those commuting more than 10 miles.
 Insight: Biking is more appealing for customers living closer to work or daily destinations.

6. Overall Bike Purchases

- The pie chart shows a fairly balanced split:
 - 519 did not purchase a bike.
 - 481 purchased a bike.
 Insight: Nearly half the surveyed customers purchased a bike, indicating a strong market penetration potential.

7. Filter Options

The dashboard includes interactive filters for:

- Marital Status (Married, Single)
- **Gender** (Male, Female)
- Region (Europe, North America, Pacific)
 Value: These filters allow deeper segmentation and analysis across different customer groups.

Key Takeaways

- 1. **Education & Age** are strong predictors of bike purchases (Bachelors & Middleaged groups dominate).
- 2. **Income** positively correlates with likelihood of purchasing, especially for **males**.
- 3. Customers with **fewer children** and **shorter commutes** are more likely to purchase bikes.
- 4. Almost **50% market conversion** indicates a healthy demand for bikes.
- 5. Dashboard interactivity through filters provides flexibility for targeted marketing insights.

✓ Final Remark:

This dashboard provides actionable insights for marketing and sales strategies. Targeting middle-aged, bachelor-educated, higher-income customers with fewer children and shorter commutes could significantly boost bike sales.