Bike Sales Dashboard

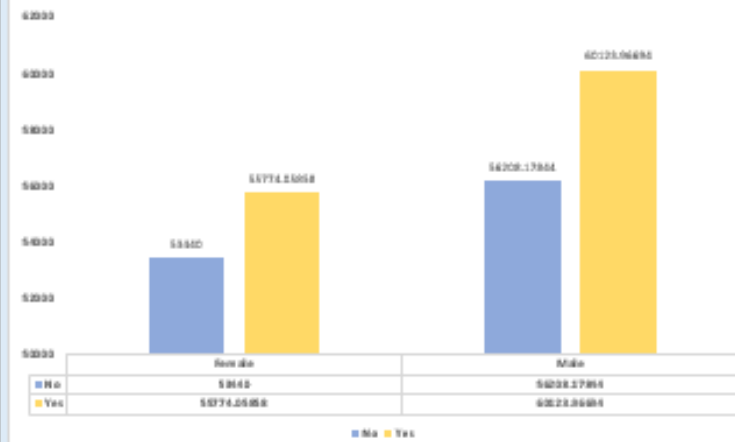# Objective

◆ The main objective of this project is to analyze bike sales data to derive insights and make data-driven business decisions. By examining various metrics such as average income per purchase, commute distance, age bracket, regional sales, gender distribution, and marital status, we aim to understand the key factors influencing bike sales and identify potential areas for growth and improvement.

◆ Technology Used:

◆ Excel: For data cleaning, analysis, and visualization.

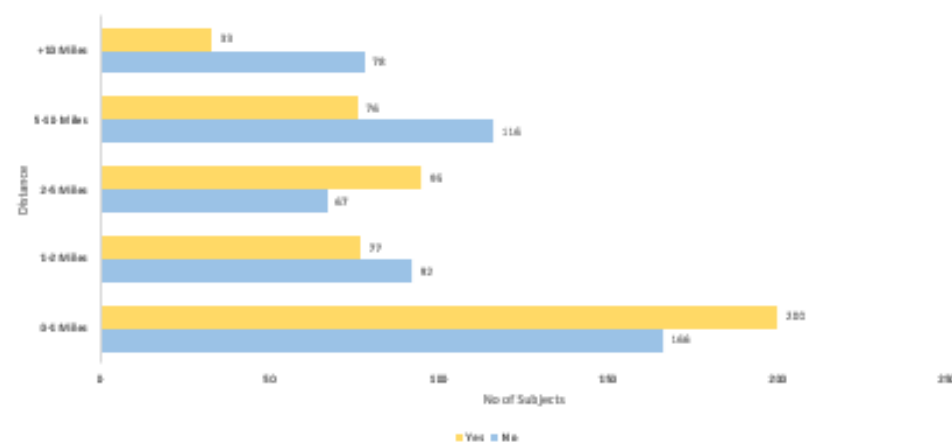◆ Pivot Charts: To dynamically summarize and analyze the data to create the dashboard visuals.

Final Dashboard

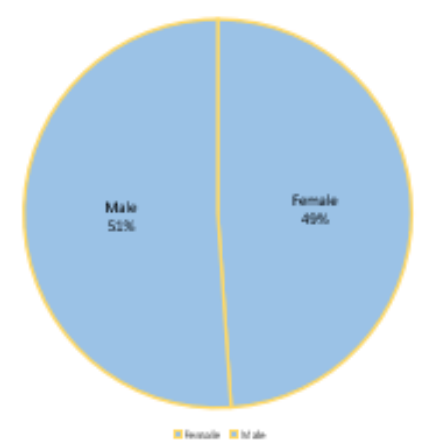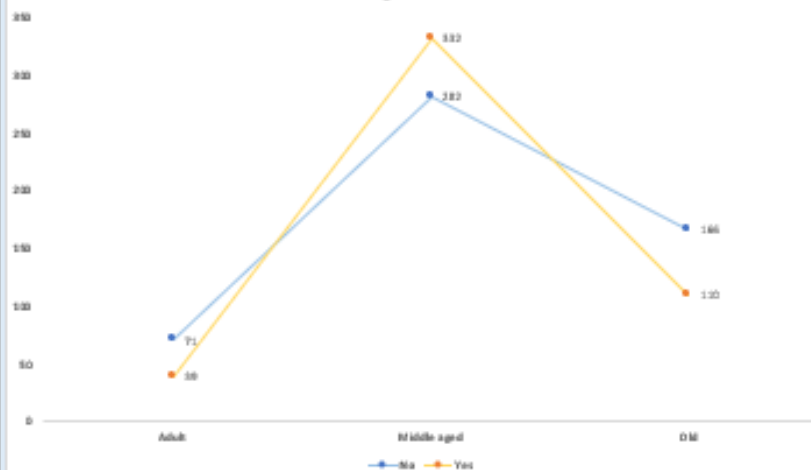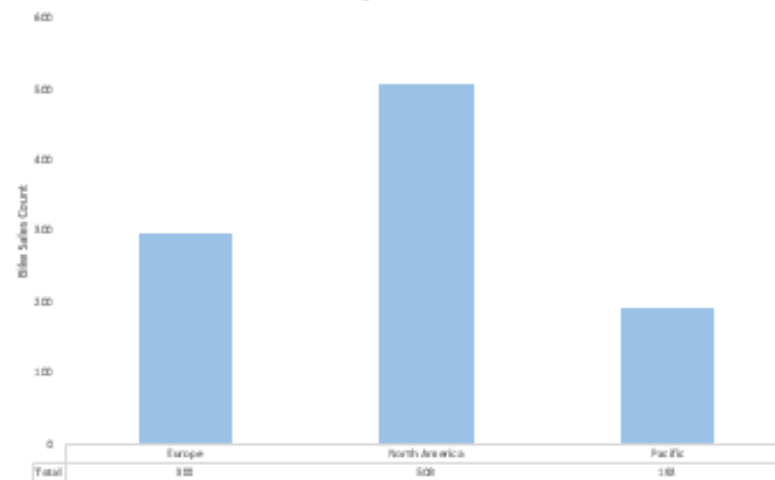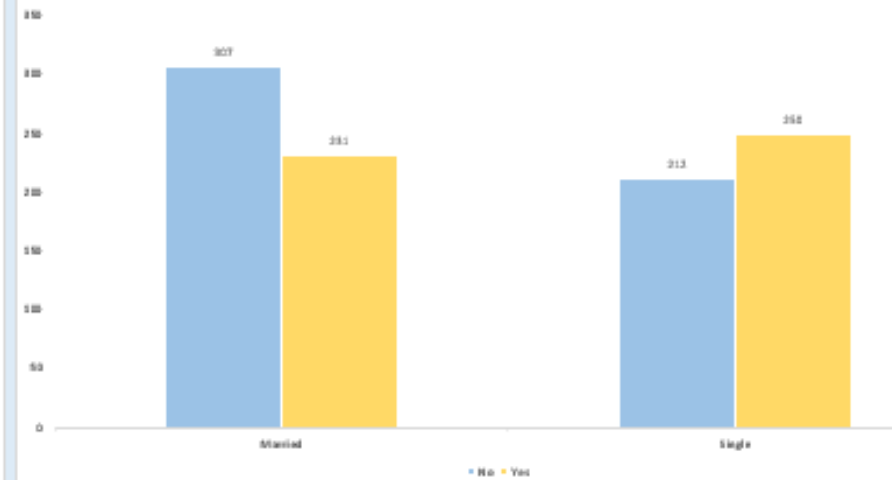# Chart Analysis and Questions Answered

◈ The following charts provide answers to specific questions:

◈ Average Income Per Purchase: What is the income distribution for bike purchases based on gender?

◈ Commute Distance Per Subject: How does the distance traveled for commuting correlate with bike sales?

◈ Gender Distribution: What is the gender split among bike buyers?

◈ Age Bracket: Which age group is the largest segment of bike buyers?

◈ Regional Sales: Which regions have the highest and lowest bike sales?

◈ Marital Status: How does marital status influence bike purchasing behavior?

Average Income Per Purchase

Data Represented:
This bar chart shows the average income per purchase for male and female customers.

Numbers Shown:
- The average income for females who bought bikes was $55,774.
- The average income for males who bought bikes was $60,123.

Conclusion:
The chart shows that male customers have a higher average income per purchase compared to female customers. This indicates that males might be purchasing more expensive bikes or accessories.

Business Decision:
Target marketing campaigns towards female customers with affordable bike options and promotions to boost sales among this demographic.

Avg Income Per Purchase

	Female	Male
No	53440	56208.17844
Yes	55774.05858	60123.96694
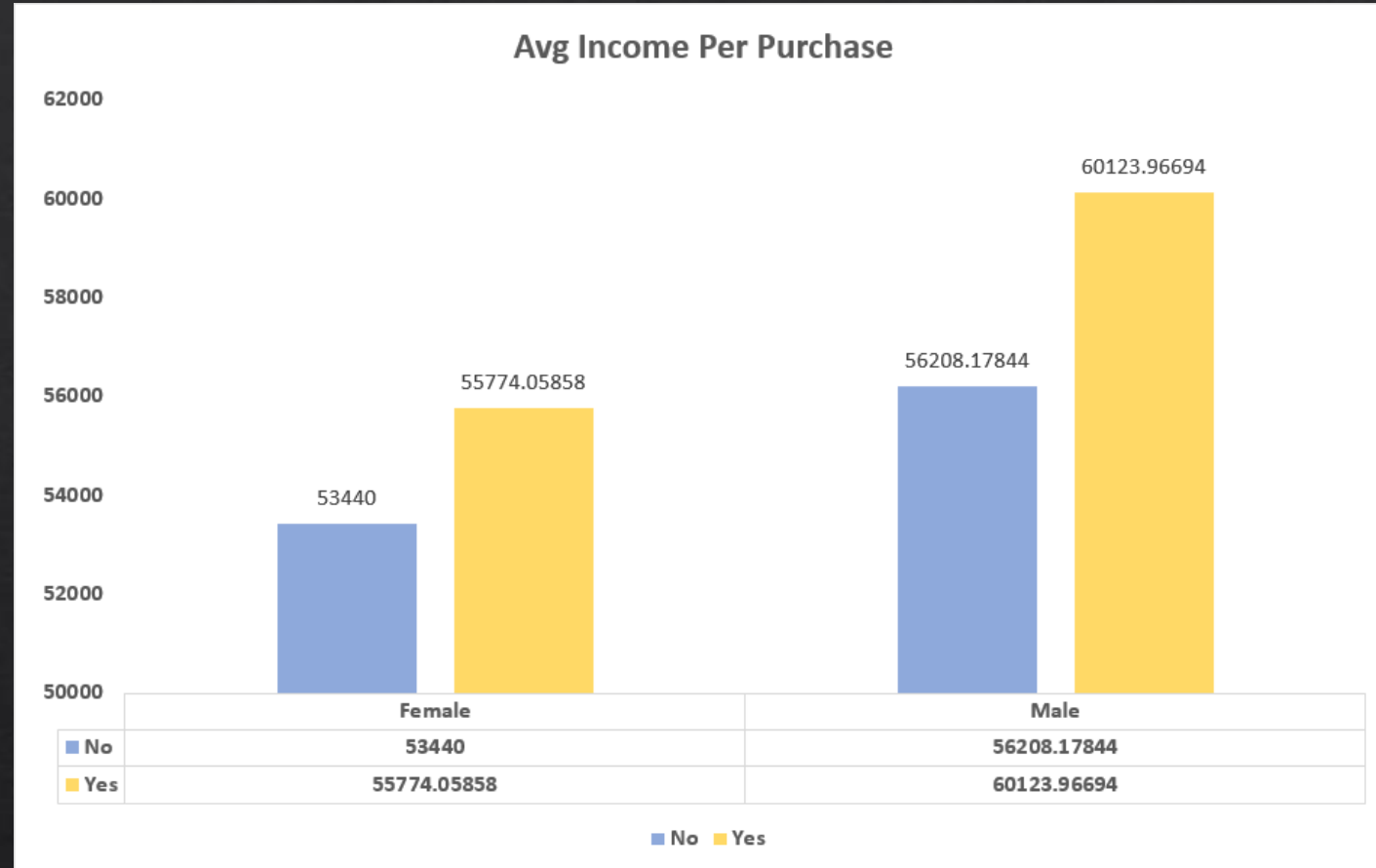
Commute Distance Per Subject

Data Represented:
This chart displays the number of subjects based on their commute distance.
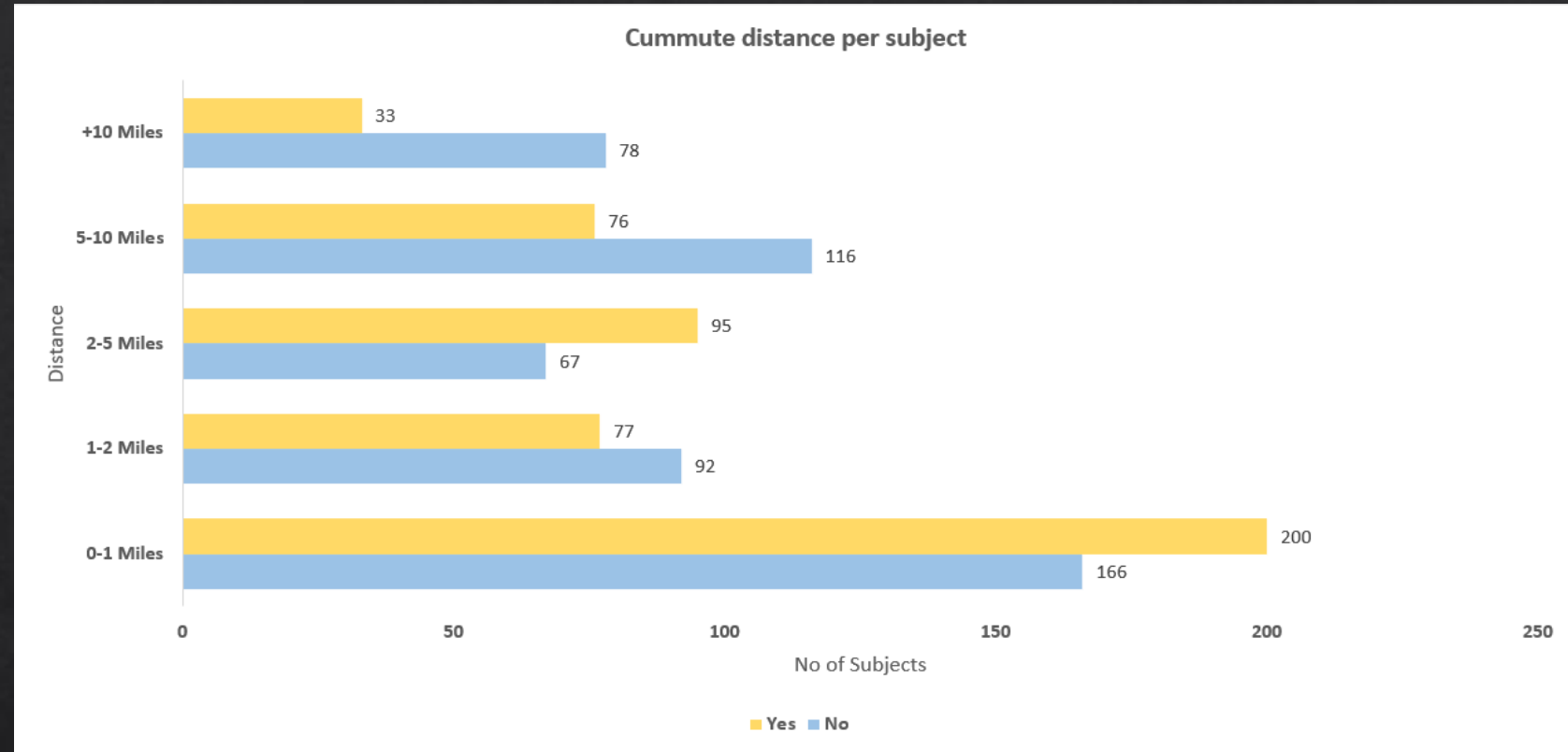
Numbers Shown:
- 200 Subjects who bought bikes travel 0-1 miles followed by 2-5 Miles.
- 166 Subjects who didn't buy the bikes travel 0-1 miles followed by 116 travelling 5-10 miles.

Cummute distance per subject

Conclusion:
The chart indicates that most bike buyers commute between 0-5 miles, followed by 2-5 miles. Fewer customers commute longer distances.

Business Decision:
Focus on promoting bikes that are suitable for short to medium commutes, highlighting features like comfort and efficiency for these distances.

Gender Distribution

Data Represented:
The pie chart shows the gender distribution of bike customers. It indicates the percentage of male and female customers.

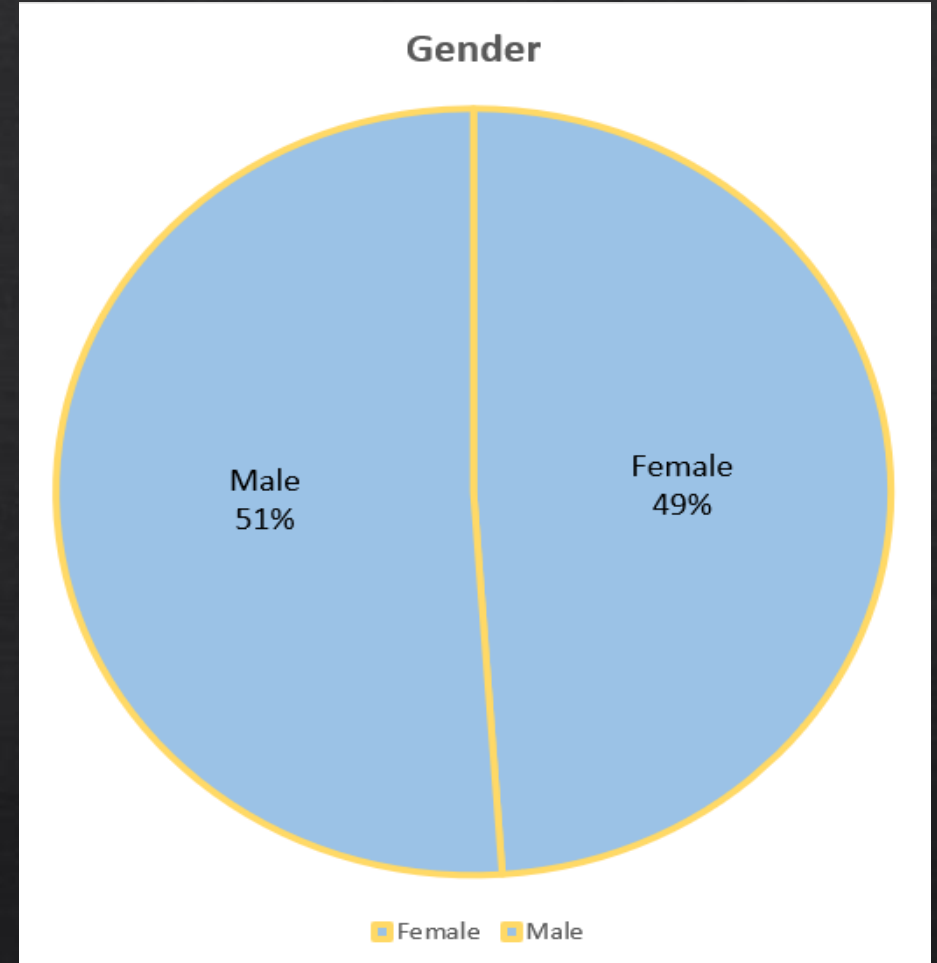Numbers Shown:
Males: 51%
Females: 49%

Conclusion:
The gender distribution of bike buyers is almost equal, with males making up 51% and females 49% of the total.

Business Decision:
Maintain a balanced marketing strategy that appeals to both genders, ensuring that bike designs and features cater to the preferences of both male and female customers.

Gender

Male
51%

Female
49%

Female Male

Age Bracket

Data Represented:

This line chart compares the number of purchases made by different age groups over two years.
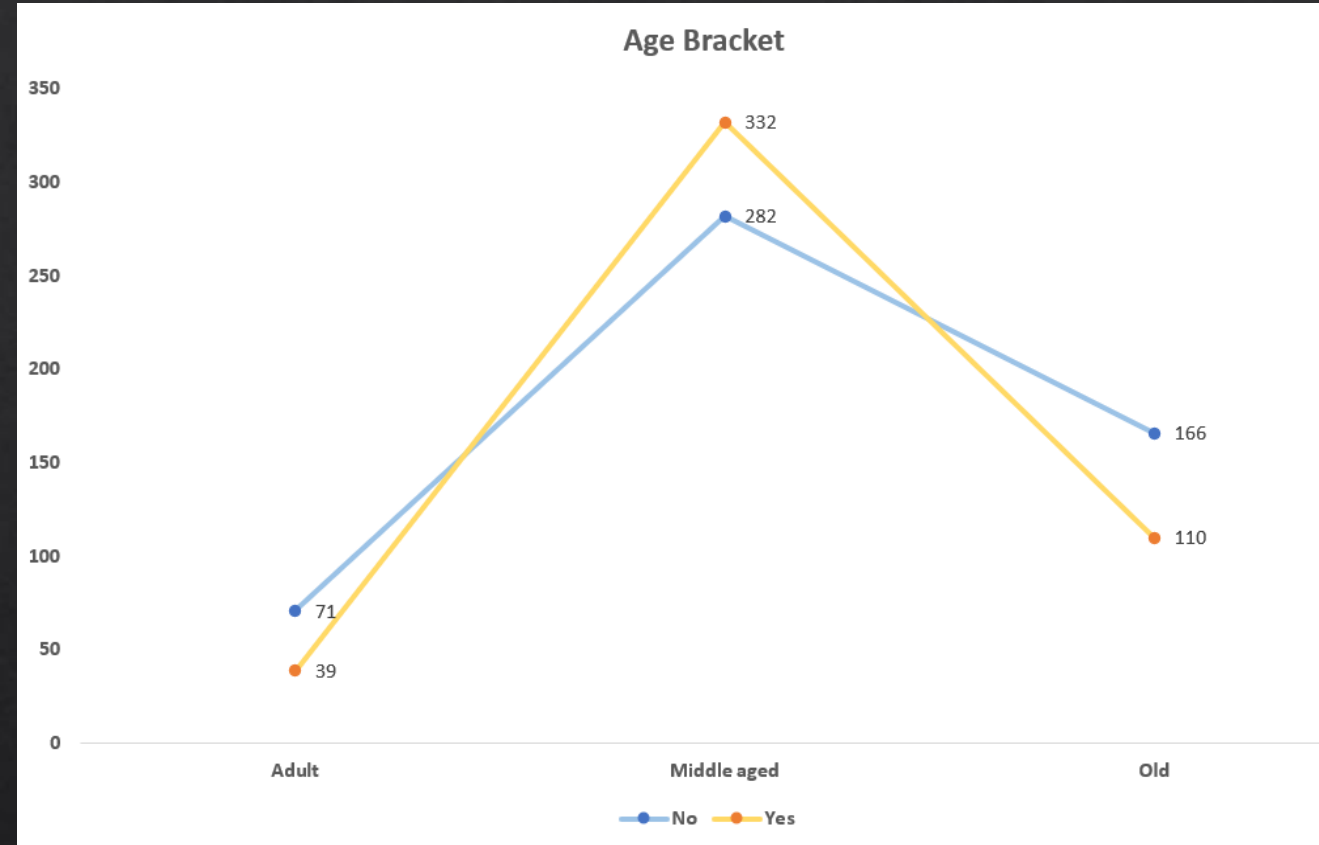
Numbers Shown:

◈ The Middle-Aged bracket (31-50) has bought the most number of bikes, i.e. 332, followed by the Old (51-100) age bracket with 110 purchases.

Conclusion:

The chart reveals that the middle-aged group (31-50 years) is the largest segment of bike buyers, followed by Old (51-100 years).

Business Decision:

Develop targeted marketing strategies and product offerings for the middle-aged group, such as bikes designed for fitness and leisure.

Regional Sales

Data Represented:

This bar chart shows the number of bike sales in different regions (Europe, North America, Pacific).

Numbers Shown:

North America had the highest sales with around 508.

Followed by Europe with 300 and Pacific region with192 sales

Conclusion:

North America has the highest bike sales, followed by Europe and the Pacific region.

Business Decision:

Invest more in marketing and distribution channels in North America and Europe to capitalize on high sales potential. Explore growth opportunities in the Pacific region.

Regional Sales

	Europe	North America	Pacific
Total	300	508	192
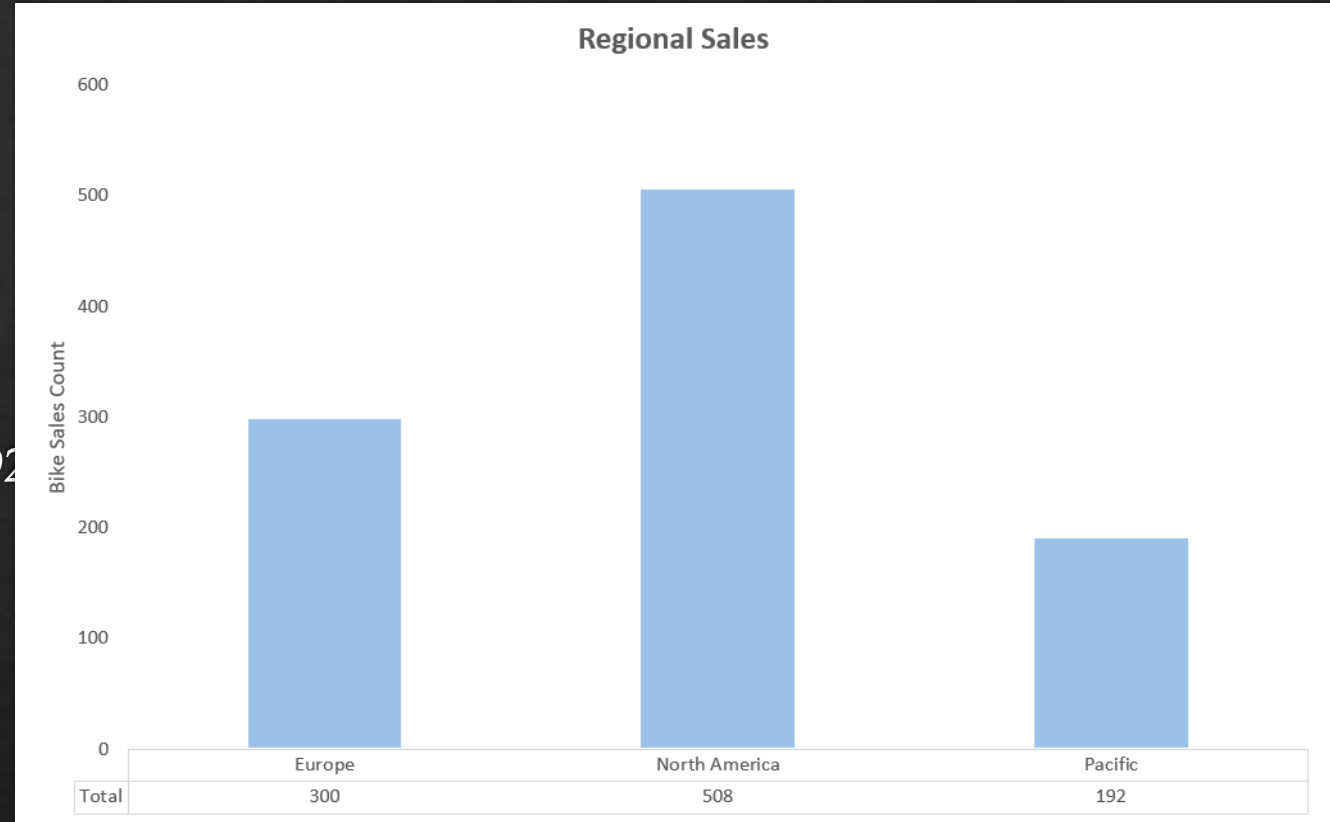
Marital Status

Data Represented:

The chart compares the number of purchases made by married and single individuals over two years.
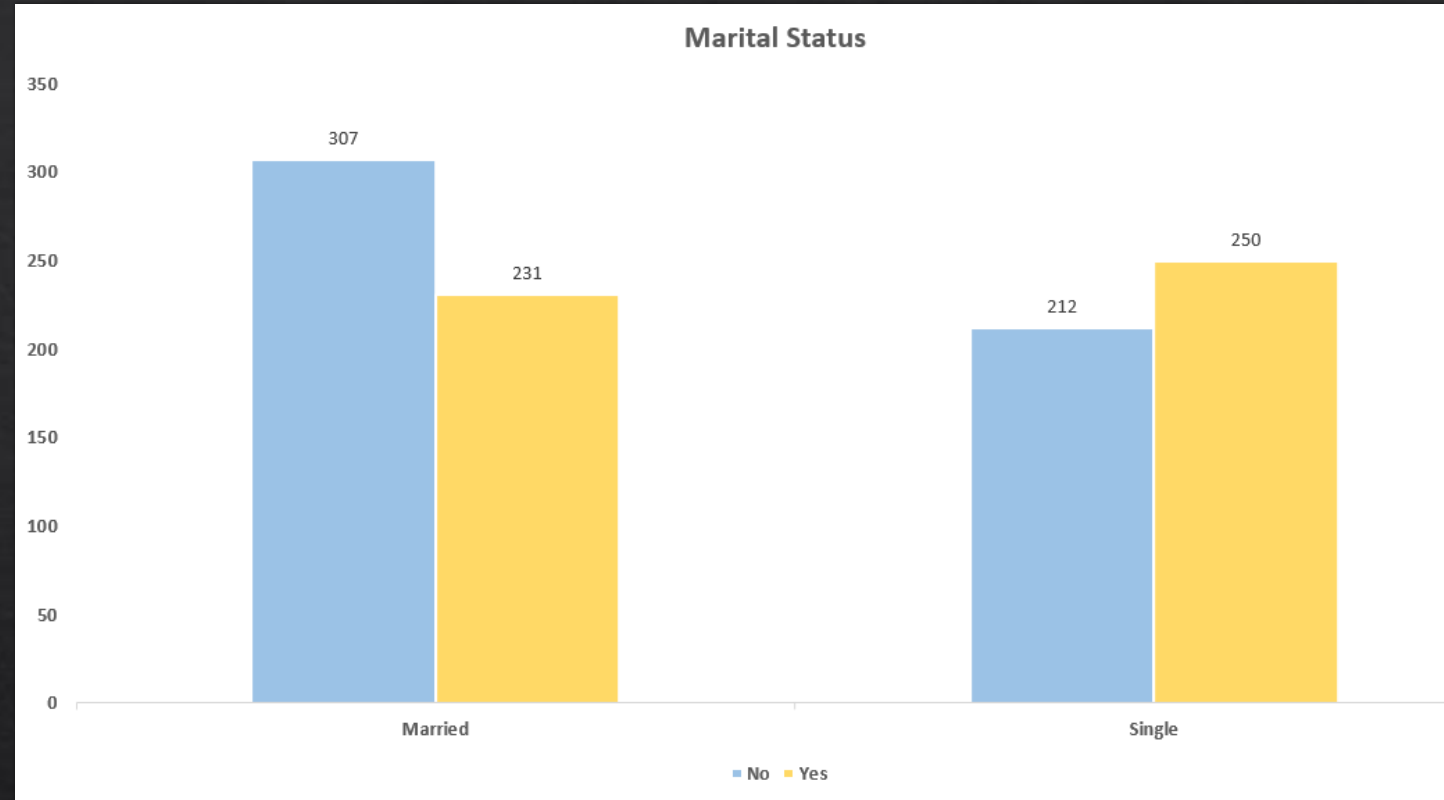
Numbers Shown:

Single individuals had higher purchases with around 250.

Conclusion:

Single customers constitute a larger proportion of bike buyers compared to married customers.

Business Decision:

Create marketing campaigns that highlight the benefits of biking for single individuals, such as health, fitness, and convenience.

Marital Status

Possible Business Decisions

- The dashboard provides insights into customer demographics, regional sales, and buying behaviors. It highlights the importance of targeted marketing, understanding customer preferences, and exploring new market opportunities.

- Business Decisions:

- Promote bikes for varied commute distances highlighting comfort and milage benefits for shorter range commute.

- Create balanced or gender blind marketing campaigns for both genders.

- Focus on middle-aged customers for sales maximization.

- Boost market presence and marketing efforts in North America and explore growth in other regions.

- Develop targeted promotions for single and married customers.

Final Conclusion & Overall Insights

◈ Analyzing the Bike Sales Dashboard reveals several key insights into customer demographics and sales patterns. Notably, male customers have a higher average income per purchase, with $60,123 compared to $55,774. for females. This suggests targeted marketing towards high-income males could be beneficial. Additionally, the majority of customers commute between 0-1 miles, suggesting to focus on promoting bikes that are suitable for short to medium commutes, highlighting features like comfort and efficiency for these distances. North America dominates regional sales, indicating a focus on maintaining market share there while exploring opportunities in Europe and the Pacific. Lastly, the data shows that single individuals purchase more bikes, suggesting tailored promotions for this demographic could enhance sales.