

# Bike Buyers Across 3 Different World Regions

## Project Overview

This project analyzes the purchase of bikes in different regions (Pacific, North America, and Europe) based on various factors including marital status, number of children, commuting distance, income, home ownership, and age. The data has been cleaned to remove null and replicated values, and pivot tables have been created to interpret the information. The data is divided by whether a bike was purchased.

## Tools and Technologies Used

- Microsoft Excel: Pivot tables and Charts

## Project Structure

- **Bike Buyers:** Contains the raw data.
- **Working Sheet:** Where the data cleaning was done.
- **Pivot Tables:** Used for data exploration and chart creation.
- **Dashboard:** Set up for gathering all the charts and filters for easier use.

## Getting Started

To run the analysis, open the Excel file in the Dashboard folder.

## Usage

The charts in the Dashboard sheet provide insights into bike purchases based on different factors such as income per gender, commute distance, the sum of cars per age bracket, region and home ownership, and children's age bracket. There are three filters available for the charts of the pivot tables where users can filter by 'Marital Status', Region (when it's not included), and Education.

## Data of the Interviewed People

- ID
- Marital Status
- Gender
- Income
- Children
- Education
- Occupation
- Home Owner
- Cars
- Commute Distance
- Region
- Age
- Age Brackets
- Purchased Bike

## Cleaning Methods

- Removed duplicates and null values.
- Assigned ranges to the 'Age' column for clearer visualization.
- Change the 'Income' column to 'Currency'.
- Update the 'Marital Status' to 'Married' and 'Single', and the 'Gender' to 'Female' and 'Male'.

# Bike Buyers Dashboard

## Marital Status

Married

Single

## Region

Europe

North America

Pacific

## Education

Bachelors

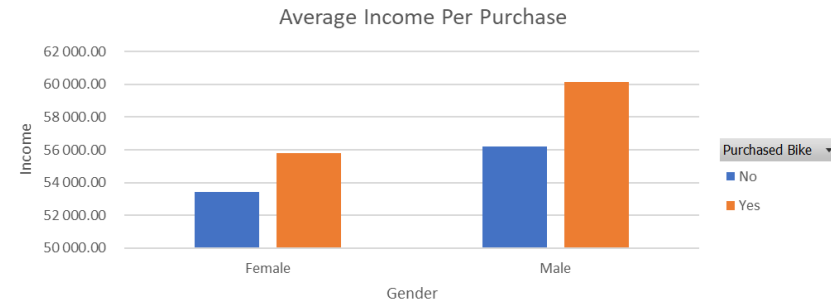
Graduate Degree

High School

Partial College

Partial High School

### Average of Income



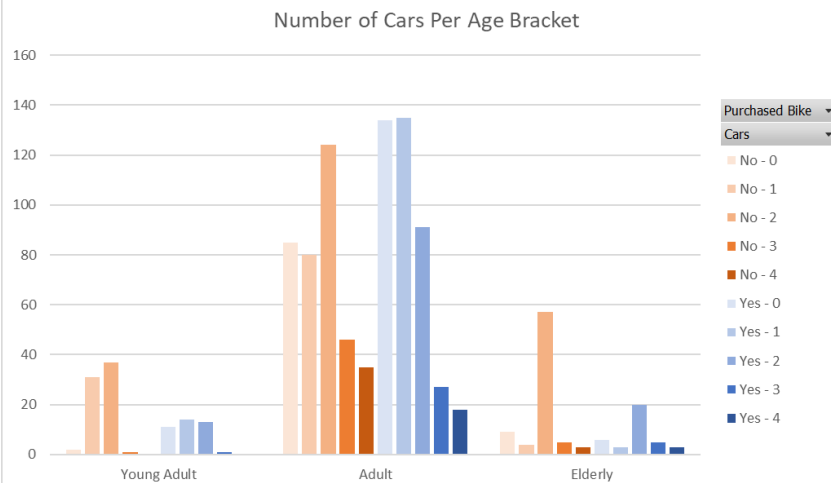
Gender

### Count of Purchased Bike



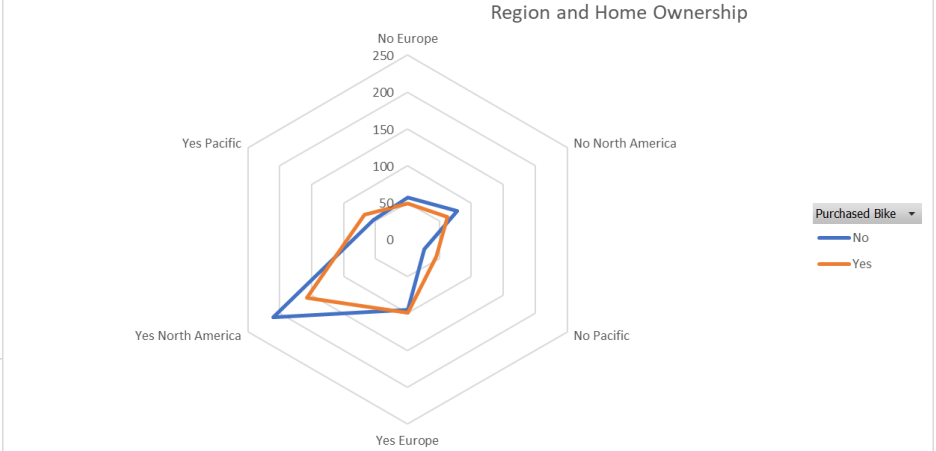
Commute Distance

### Count of Purchased Bike



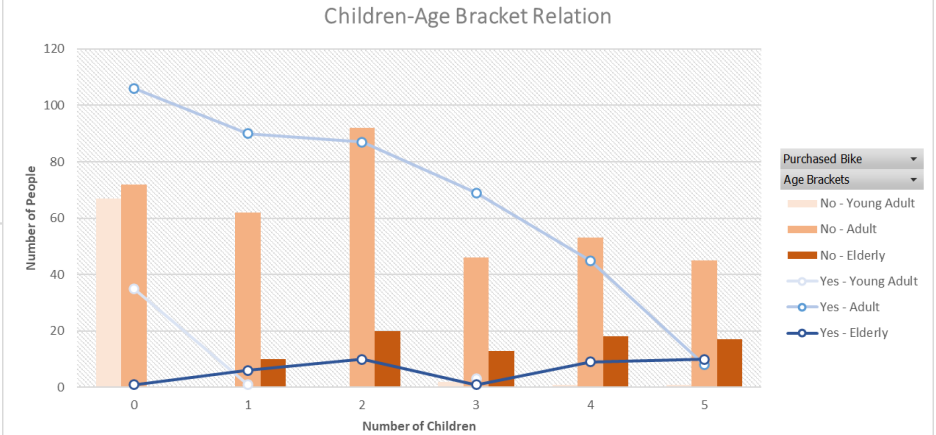
Age Brackets

### Count of Purchased Bike



Home Owner

### Count of Purchased Bike



Children

## Conclusions

- Individuals with higher education levels are more inclined to purchase bikes.
- Most bike buyers fall within the age range of 31 to 59 years old.
- Those with 0 to 2 children are more likely to purchase bikes.
- Bike purchases are more common among individuals living less than 1 mile away from their workplace.
- People with either no car or only one car are more likely to buy bikes.
- The majority of people who own a home in North America, don't buy bike.