

# Bike Purchase Analysis Dashboard

Understanding Customer Behavior & Purchase Drivers

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# Introduction

Think about how people choose a bike today.

Some buy bikes for convenience, others for fitness, lifestyle, or cost-saving reasons. For businesses selling bikes, rentals, or mobility solutions, **understanding *who* buys a bike and *why*** is more important than just tracking sales numbers.

Just like companies such as **Uber, Lyft, and Decathlon** rely on customer data to shape product offerings and marketing strategies, this analysis uses customer demographic and behavioral data to uncover the **key factors influencing bike purchases**.

This analysis transforms raw customer data into **actionable insights**, helping businesses understand purchasing patterns and optimize decision-making.

# Problem Statement

Bike retailers and mobility companies often struggle to answer questions such as:

- Who is more likely to purchase a bike?
- Does owning a car reduce the likelihood of buying a bike?
- How do age, income, occupation, and marital status affect purchase decisions?
- Are bikes purchased more for short-distance commuting or long-distance travel?

Without proper analysis, marketing efforts become generic, inventory planning becomes inefficient, and customer targeting remains weak.

This analysis addresses these challenges by providing a **data-driven understanding of customer purchase behavior**.

# Objectives

The key objectives of this analysis are to:

- Identify demographic factors influencing bike purchases
- Understand the relationship between car ownership and bike purchases
- Analyze how age, income, and marital status affect buying decisions
- Examine distance traveled and its impact on bike usage
- Provide insights that support targeted marketing and product strategy

# Dashboard Overview

## **The dashboard presents:**

- Key customer metrics (total customers, rentals, purchases)
- Filters for gender, region, and occupation
- Comparative visualizations of bike vs car ownership
- Behavioral insights based on age, distance, and home ownership

## **Key Metrics Highlighted:**

- **Total Customers:** 32
- **Total Home Owners:** 18
- **Total Rentals:** 14
- **Total Bikes Purchased:** 14
- **Average Income:** \$79,375
- **Regions Covered:** 3

Gender

Female

Male

Region

Europe

North America

Pacific

Occupation

Clerical

Management

Manual

Professional

Skilled Manual



## Bike Purchase Dashboard

Total Customers

32

Total Home Owners

18

Total Rentals

14

Total Bike Purchased

14

Average Income

\$79,375.00

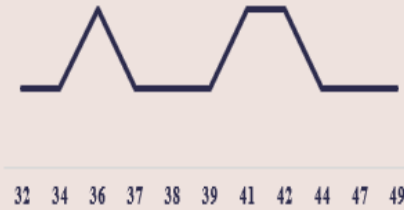
Region

3

### Cars Owned vs Bike Purchased



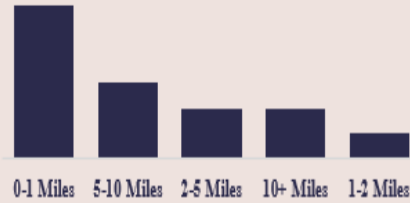
### Age vs Bike Purchased



### Marital Status vs Bike Purchased



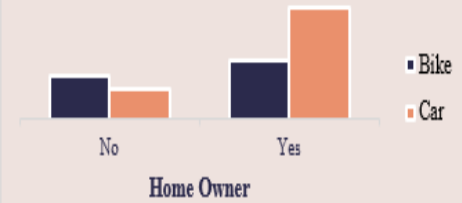
### Distance vs Bike Purchased



### Occupation vs Purchased Bike & Car



### Home Owner vs Purchased Bike & Car



# KPI Summary

**Business Question:** *What does the customer base look like overall?*

- Nearly half of customers purchased bikes
- Majority are home owners
- Average income suggests a middle-to-upper income segment

**Insight:**

Bike purchases are not limited to low-income customers; they appeal to financially stable individuals.

# Cars Owned vs Bike Purchased

**Business Question:** *Does owning a car reduce bike purchases?*

- Customers owning cars still purchase bikes
- Car ownership does not eliminate interest in bikes

## **Insight:**

Bikes are viewed as **complementary**, not substitutes, to cars — ideal for lifestyle, fitness, and short trips.



# Age vs Bike Purchased

**Business Question:** *Which age group purchases bikes the most?*

- Bike purchases peak between **mid-30s and early 40s**
- Lower purchases at younger and older extremes

## **Insight:**

Middle-aged customers are the most active buyers, likely due to health awareness and commuting needs.

# Marital Status vs Bike Purchased

**Business Question:** *Does marital status affect bike purchases?*

- Single customers purchase more bikes than married customers

## **Insight:**

Single customers may have greater flexibility and lifestyle motivation for bike ownership.

# Distance vs Bike Purchased

**Business Question:** *How does distance travel influence bike purchases?*

- Highest bike purchases occur in the **0–1 mile range**
- Purchases decline as distance increases

**Insight:**

Bikes are primarily used for **short-distance commuting and local errands.**

# Occupation vs Purchased Bike & Car

**Business Question:** *Does occupation influence purchasing behavior?*

- Professionals purchase more bikes and cars compared to other occupations

**Insight:**

Professionals represent a **high-value customer segment** with strong purchasing power.

# Home Owner vs Purchased Bike & Car

**Business Question:** *Does home ownership influence bike purchases?*

- Home owners are more likely to purchase both bikes and cars
- **Insight:**  
Stable living conditions increase the likelihood of owning multiple transportation options.

# Conclusion

This analysis reveals that bike purchases are strongly influenced by **lifestyle, income stability, and short-distance mobility needs** rather than the absence of cars.

Middle-aged professionals, homeowners, and single individuals represent the **most promising customer segments**. Bikes are commonly used as an additional mode of transportation rather than a replacement.

# Recommendations

- Target marketing campaigns toward **professionals aged 30–45**
- Promote bikes as lifestyle and fitness products, not just transportation
- Focus on urban areas with short commuting distances
- Bundle bike products with accessories for homeowners
- Introduce flexible financing options for mid-income earners

# Tools Used

- Microsoft Excel
- Pivot Tables
- Charts & Slicers
- Data Cleaning & Transformation



Thank You 😊