

PedalWise – Bike Sales Analytics Dashboard

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PedalWise – Bike Sales Analytics Dashboard

31

Buyers

48.1%

Conversion Rate

₹56.14K

Average Income

08

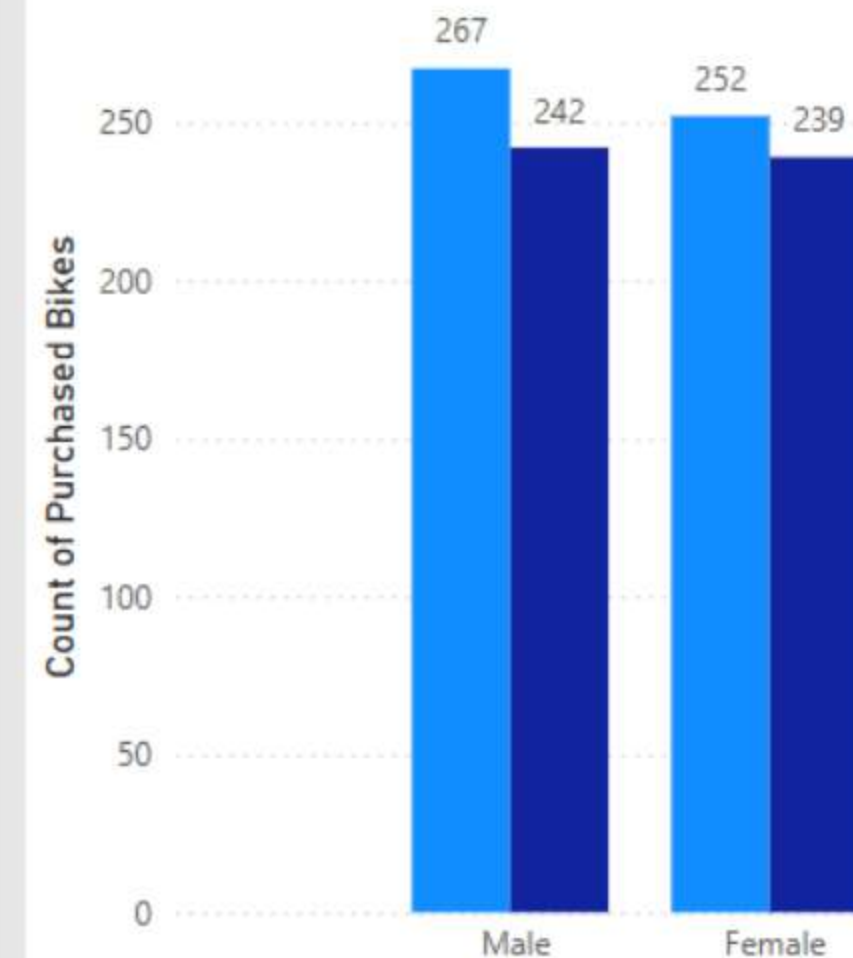
Items

150

5

Purchased Bike by Gender and Purchased Bike

Purchased Bike ● No ● Yes



Total Bikes

(48.23%)

Objective

- **Analyze customer purchase behavior from a retail bike dataset.**

This involves examining various data points to understand how customers make purchasing decisions.

- **Identify patterns, buyer profiles, and regional differences.**

The analysis aims to uncover trends and characteristics that define different customer segments and geographical influences.

- **Utilize Power BI for data visualization and insights.**

Power BI will be used to create interactive dashboards that display the findings effectively.

- **Optimize marketing strategies based on data insights.**

The ultimate goal is to refine marketing approaches to increase customer engagement and sales conversion rates.

Problem Statement

Who is more likely to purchase a bike?

What factors (income, age, region) drive conversion?

Which regions are underperforming despite high traffic?

How to align products with target customer profiles?



Methodology

Data Cleaning & Formatting using Power Query.

Dashboard Design in Power BI with DAX-based measures.

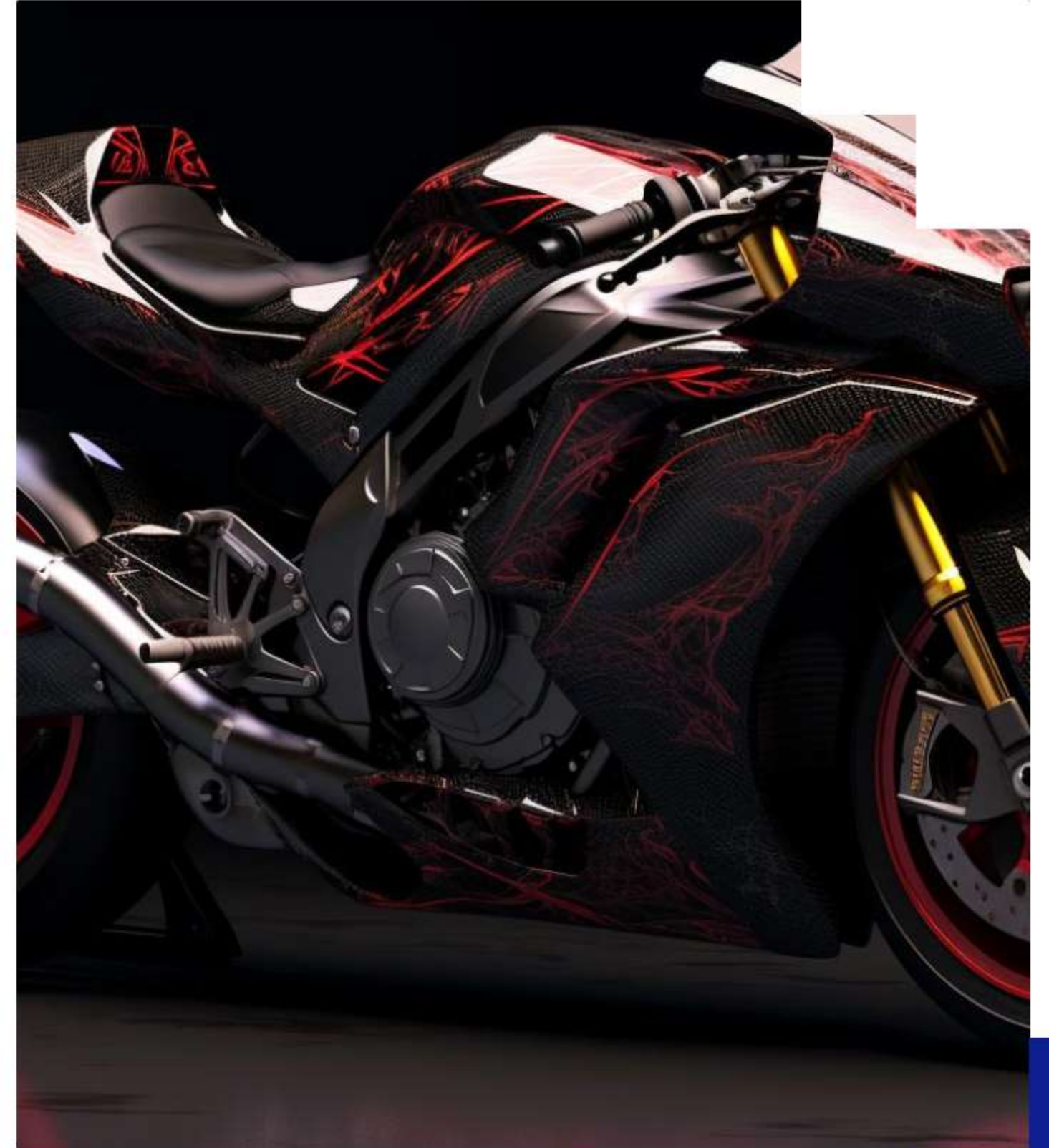
Visualization of purchase patterns & KPIs.

Segmentation of customer profiles (age, income, commute).



Key Insights

- 01 Customers aged 36–45 with 0–1 cars are the most likely to buy bikes.
- 02 Pacific region has the highest conversion rate (58.9%) and highest income.
- 03 Short commutes (0–1 miles) show the strongest correlation with purchases.
- 04 Professionals and skilled manual workers form the top buyer segments.



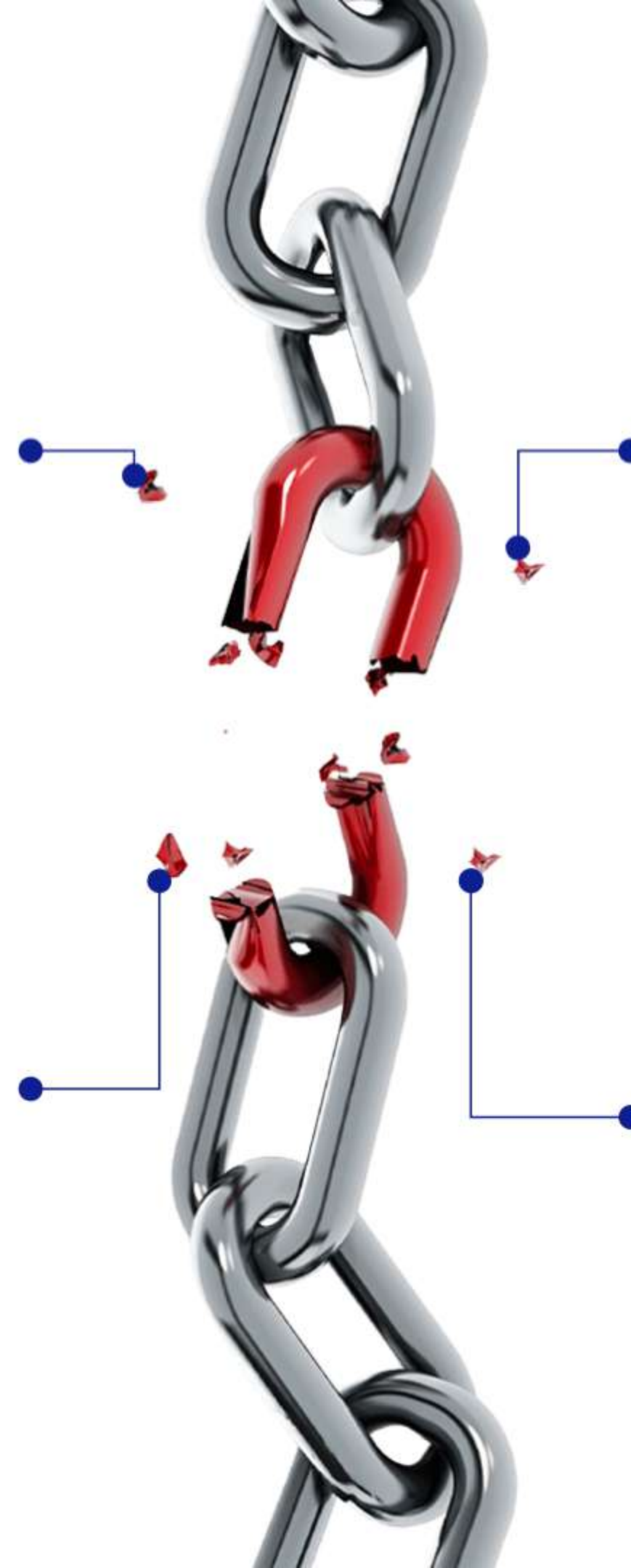
Problems Identified

High-income individuals are less likely to buy bikes.

Long commute customers have poor conversion.

North America has the most buyers but lowest conversion rate.

Younger (18-25) and older (60+) age groups underperform.



Actionable Recommendations



- 01 Target marketing towards 36–45 age, low-to-medium income, 0–1 cars.
- 02 Promote premium bikes in Pacific region due to higher income and conversion.
- 03 Introduce e-bikes for long-distance commuters.
- 04 Create engagement campaigns for youth and senior age groups.

Conclusion



- 01 The PedalWise dashboard enables decision-makers to understand customer profiles with high likelihood to purchase.
- 02 It pinpoints underperforming segments and regions.
- 03 It aids in making data-driven marketing, regional, and product decisions.

Future Scope



Add predictive modeling for purchase forecasting.

This will help anticipate customer demand and optimize inventory management.

Integrate bike model preferences and customer feedback.

This will enhance the understanding of customer needs and improve product offerings.

Enable real-time dashboard refresh and mobile optimization.

This ensures that users have immediate access to the latest data and insights on-the-go.

Explore the Dashboard

