# **🚲 Bike Dekho – Bike Sales Analysis Excel Project**

**Project Overview:**

This report presents key findings and insights from the customer dataset of the fictional brand "Bike Dekho." The analysis is based on 1,000 customer records and focuses on demographics, income distribution, vehicle ownership, and bike purchasing behavior across different segments. The objective is to guide data-driven decisions in marketing, targeting, and operational planning.

**🎯 Project Objectives:**

* To clean and organize raw bike sales data for better usability.
* To perform exploratory data analysis (EDA) using Excel formulas and PivotTables.
* To uncover key patterns in customer demographics, bike preferences, and sales performance.
* To create an interactive and insightful **dashboard** for decision-makers.

**Executive Summary**

**1. Demographic Overview**

**Gender Distribution:**

* Males: 511 buyers
* Females: 489 buyers

**Marital Status:**

* Married: 538
* Single: 462

**Education Levels:**

* Bachelors (306) had the highest representation.
* Other groups include Graduate Degree (174), High School (179), Partial College (265), and Partial High School (76).

**Occupations Covered:**

* Professional (most common), followed by Skilled Manual, Management, Clerical, and Manual roles.

**Regions:**

* North America had the highest number of customers (508), followed by Europe (300), and Pacific (192).

**2. Bike Purchase Analysis**

**By Region:**

* North America had the highest bike purchases and total income (₹31.88M).

**By Marital Status:**

* Married individuals were slightly more likely to buy bikes (53.8%) than singles (46.2%).

**By Gender:**

* Males contributed more in terms of purchases and income (₹29.67M vs ₹26.69M).

**By Education:**

* Bachelors had the highest income (₹19.28M) and the most purchases.
* Graduate Degree holders followed with ₹11.5M income.

**By Commute Distance:**

* Most purchases were from those with a 0–1 mile commute (366 bikes), followed by 1–2 miles and 5–10 miles.

**3. Car Ownership Patterns**

**By Occupation and Purchase Status:**

* Professionals and Management roles owned the most cars (471 and 372 respectively).
* Bike buyers tended to own fewer cars within each occupation group.

**By Commute Distance:**

* Short-distance commuters (0–1 mile) owned more cars (361), suggesting urban convenience users.

**4. Key Insights**

* **Professionals and Bachelors degree holders** are key segments for high-income and bike purchase conversions.
* **Married males** contribute the most income and purchase activity.
* **Urban dwellers (0–1 mile commuters)** are more likely to own both cars and bikes, suggesting mixed transport usage.
* **Skilled Manual and Manual workers** have lower vehicle ownership and may need targeted affordability plans.

**5. Recommendations**

1. **Focus Marketing** on Married, Male Professionals with Bachelors degrees.
2. **Run Regional Campaigns** targeting North America and Europe with tailored offers.
3. **Create Combo Offers** for urban users who own both bikes and cars.
4. **Educate and Upsell** to Partial College and High School segments through awareness campaigns.
5. **Target Occupations** like Skilled Manual workers with EMI-based or budget-friendly bike options.

**6. Conclusion**

This project demonstrates the power of data segmentation in identifying profitable customer groups and guiding strategic decisions. The visual and pivot-based EDA reveals rich behavioral trends that Bike Dekho can leverage to boost sales, personalize offers, and improve targeting.

*Prepared by: Soham Jadhav* *Date: July 2025*

**📌 Tools & Features Used:**

* Microsoft Excel (Formulas, PivotTables, PivotCharts)
* Conditional Formatting
* Slicers and Timelines
* Named Ranges and Data Validation
* Interactive Dashboard Design

**🧠 Skills Demonstrated:**

* Data Cleaning & Preparation
* Data Analysis & Interpretation
* Business Intelligence Reporting
* Dashboard Design in Excel