**BIKEDEKHO SALES INSIGHTS REPORT**

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**Objective:**

The aim of this project is to design a dynamic Excel dashboard to analyze BikeDekho customer and sales data. The dashboard helps visualize customer demographics, purchasing behaviour, and sales performance, providing actionable insights for marketing and sales teams to make informed decisions.

GitHub Link: <https://github.com/Niketanr/DataAnalytics-Project>

**Dataset Summary:**

* ID: Unique identifier for each customer.
* Marital Status: Indicates if the customer is Single or Married.
* Gender: Specifies whether the customer is Male or Female.
* Income: Annual income of the customer in Dollars $.
* Children: Number of children in the customer’s household.
* Education: Highest education level attained by the customer.
* Occupation: The customer's profession or employment type.
* Homeowner: Indicates whether the customer owns a home (Yes/No).
* Cars Owned: Number of cars currently owned by the customer.
* Commute Distance: Typical commuting distance (in miles).
* Region: Geographical region of the customer.
* Age: Age of the customer in years.
* Age Bracket: Categorized age group (e.g., 18-25, 26-35, etc.).
* Purchased Bike: Whether the customer purchased a bike (Yes/No).

**Visual Analytics Summary:**

The Bike Dekho Insights Dashboard presents multiple visualizations to help understand customer behaviour and bike purchase patterns. Below is the summary of each visual component:

**1. Bike Purchase by Gender:**

* Male customers purchased more bikes (273 purchases) compared to female customers (52 purchases), showing a clear male dominance in bike purchases.

**2. Bike Purchase by Age Bracket:**

* Adult (272) and Middle Aged (152) customers are the top segments for bike purchases.
* Young Adults (41) and Senior Citizens (30) show comparatively lower purchase rates.

**3. Region-wise Purchase:**

* North America has the highest number of bike purchases (288).
* Europe and the Pacific region have fewer bike buyers, indicating a regional disparity in sales.

**4. Education vs Bike Purchase:**

* Bachelor’s degree holders have the highest bike purchase count (169), followed by Partial College (127) and Graduate Degree (95) holders.
* Customers with Partial High School and High School education purchased fewer bikes.

**5. Commute Distance vs Bike Purchase:**

* Customers with 0-1 Miles commute purchased the most bikes (207), suggesting proximity commuting needs.
* 5-10 Miles and 10+ Miles commuters showed the least bike purchases.

**6. House Ownership vs Bike Purchase:**

* Non-homeowners (365) purchased significantly more bikes than homeowners (166), suggesting rental populations might prefer bikes for cost-effective mobility.

**7. Marital Status Distribution:**

* The dataset has more Married customers (549) than Single customers (477), but purchasing trends by marital status are not directly displayed.

**8. Income Distribution:**

* Most customers fall in the $20,000–$60,000 income range.
* Very few customers have incomes exceeding $100,000, indicating a mid-income dominant customer base.

**9. Average Income per Occupation:**

* Management professionals have the highest average income ($86,609).
* Manual workers have the lowest average income ($17,460).
* Professional and Skilled Manual workers have mid-range incomes, suggesting a diverse occupational mix in the dataset.

**Business Usefulness**

The BikeDekho Excel Dashboard provides actionable insights that are valuable for various business functions:

**1. Customer Targeting and Segmentation:**

* Identifies **high-conversion demographics** (e.g., male, single, working professionals with short commutes).
* Helps **segment the market** by age, income, region, and lifestyle for focused marketing.

**2. Marketing Strategy Optimization:**

* Allows the business to **design customized marketing campaigns** for specific regions, occupations, or income groups.
* Supports **personalized promotions** for potential buyers based on data-driven customer profiles.

**3. Sales Improvement:**

* Highlights the most **profitable customer categories**, helping the sales team prioritize efforts.
* Assists in predicting customer buying behavior, increasing **conversion rates**.

**4. Regional Expansion Planning:**

* Shows which regions (e.g., North America) are more responsive to bike sales, guiding **geographic expansion or focus.**

**5. Product & Pricing Strategy:**

* Informs decisions on **pricing models** by analyzing the income distribution of buyers.
* Helps tailor **product features or add-ons** (e.g., budget bikes for short-distance commuters).

**6. Inventory and Supply Chain Management:**

* Predicts demand patterns based on customer characteristics, aiding **inventory planning**.

**Conclusion:**

The BikeDekho Excel Dashboard effectively highlights key customer insights, revealing that male, mid-income, and working professionals are the primary bike buyers, with short-distance commuters showing the highest purchase rates. Regional analysis shows North America as the leading market for bike sales. These insights enable the company to focus on targeted marketing, optimize sales strategies, and make data-driven decisions to enhance customer engagement and drive business growth.

