**Summary of Key Insights:**

1. **Customer Segmentation Insights: -**

**(i) Wealth Segment**:

* + Based on wealth segments, the analysis identified various customer groups, with a significant portion of customers falling into the **Mass Customers** and fewer in the **High-Net-Worth** category.
  + Customers in the High-Net-Worth sector had noticeably longer average tenure, which suggests commitment and the possibility of higher lifetime value.

**(ii) Gender Segmentation**:

* + A balanced distribution of clients with minor differences in their purchase habits was shown by the gender study.
  + Males had a higher average of past bike-related purchases compared to females, suggesting targeted marketing opportunities for female customers.

**(iii) Job Industry Analysis**:

* + The distribution of customers across various job industries indicated that the **Healthcare** and **Technology** sectors had the highest representation.
  + Wealth segments within these industries showed that High Net Worth customers were more prevalent in Technology, suggesting a correlation between industry and wealth.

1. **Transaction Analysis Insights**

**(i) Sales Trend Analysis**:

* + The sales trend chart indicated significant spikes in sales during holiday months (e.g., December), highlighting seasonal buying patterns.
  + Monthly sales data showed consistent growth over the year, with specific months exhibiting higher sales volumes.

**(ii) Product Performance**:

* + Total sales analysis by brand revealed that Brand A outperformed others significantly, while certain product lines had higher average list prices but lower total sales.
  + This indicates potential for optimizing product offerings based on performance metrics.

**(iii) Customer Purchase Behaviour**:

* + The top 10 customers based on total transaction value were identified, revealing that a small percentage of customers contributed to a large portion of total sales.
  + The average number of purchases per customer indicated opportunities for increasing engagement and repeat purchases.

1. **New Customer Insights:**

**(i) New Customer Demographics**:

* + New customer analysis showed a diverse demographic profile, with significant representation across various wealth segments and job industries.

**(ii) New Customer Location Analysis**:

* + Geographic distribution of new customers highlighted key states (e.g., New South Wales) where marketing efforts could be intensified.

**(iii) Potential Revenue from New Customers**:

* + Estimations based on past bike-related purchases suggested substantial potential revenue from new customers, especially those in high-value segments.

1. **Customer Lifetime Value (CLV) Analysis:**

**(i) CLV Calculation**:

* + Average CLV varied significantly across wealth segments, with High-Net-Worth customers showing the highest CLV.

**(ii) Demographic Relationships**:

* + Analysis indicated that gender and job industry had notable impacts on CLV, suggesting targeted strategies could enhance customer value over time

**Recommendations**

**A. Marketing Strategies for High-Value Customer Segments**

* Suggest targeted marketing efforts for the segments with high CLV or frequent purchases.
* Focus on marketing channels that reach high-value segments identified in the CLV analysis.

**B. Business Expansion Based on New Customer Locations**

* Identify regions with growth potential based on new customer distribution.
* Look at the new customer location map. If certain states or regions have more new customers, suggest expanding business activities, like opening new stores or increasing marketing spend in those regions.

**C. Product Offerings Based on Transaction Analysis**

* Suggest adjustments to the product lineup, such as promoting best-selling products or introducing new products.
* Review the transaction analysis of product performance. If certain products or brands sell well, recommend promoting them more.
* For products with low sales, suggest considering discounts, bundles, or replacements with products that better align with customer preferences.

VIDEO LINK : <https://drive.google.com/file/d/1ZrtNWrAzFSnLS4Rtn3_pnMEaA5MrIKXD/view?usp=sharing>

N. UMAMAHESWAR.

DATA SCIENCE LEARNER ,