**Walmart Customer Analysis (2024)**

A detailed analysis of Walmart's customer transactions with a focus on understanding Customer Lifetime Value (CLV), identifying product preferences, and examining regional spending patterns and demographic impacts. This analysis aims to address stakeholder inquiries on optimizing targeted marketing strategies based on customer value insights. Interactive Tableau dashboard can be found [here](https://public.tableau.com/views/WalmartCustomerAnalysisDashboard/Dashboard1?:language=en-GB&:sid=&:redirect=auth&:display_count=n&:origin=viz_share_link)

**Northstar Metrics and Dimensions**

* **Customer Lifetime Value (CLV):** Estimated average purchase per customer.
* **Regional Distribution:** Total purchase amount by city category.
* **Product Preferences:** Average purchase amount by product category.
* **Spending Patterns:** Distribution of purchase amounts by defined ranges and occupation.

**Summary of Insights**

Customer Lifetime Value (CLV)

**Estimated Customer Lifetime Value:** The average purchase amount serves as an estimate for CLV, indicating that Walmart's typical customer provides a steady revenue stream, with specific demographics and regions contributing significantly to overall CLV.

Regional Distribution

**Total Purchase by City Category:** City Category B leads with the highest total purchases, followed by Categories C and A, suggesting a stronger market presence in Category B areas. Urban regions (Categories A and B) demonstrate substantial purchasing power, with Category B showing the highest overall engagement, making it a key area for targeted marketing and inventory management.

Product Preferences

**Average Purchase Amount by Product Category:** Product Categories 8, 10, and 7 exhibit the highest average purchases, highlighting these categories as top-performing in Walmart's product range. Specific product categories significantly drive sales, indicating areas where Walmart could enhance its marketing efforts or focus inventory investments.

Spending Patterns

**Distribution of Purchase Amounts by Range:** The majority of purchases fall within the $50-$100 range, indicating a mid-level spending behavior among Walmart’s customers. There is also notable activity in the $100-$200 range. This data emphasizes the importance of mid-tier priced items and suggests a potential to push higher-value purchases through strategic pricing and promotions.

**Purchase Amount by Occupation:** Occupation 4, 0, 7 and 17 exhibit the highest total and average purchase amounts, suggesting these groups hold the most spending power among all occupations. Identifying key occupational groups allows Walmart to refine its marketing strategies and tailor promotions to the highest value customers.

**Recommendations/Next Steps**

**Enhance Targeting of High-Value Customer Segments:** Prioritize marketing initiatives toward urban areas (City Category B) and occupations with the highest average purchases (e.g., Occupation 4, 0, 7 and 17).

**Optimize Product Category Promotions:** Leverage insights from top-performing product categories to tailor promotional strategies, particularly for Categories 8, 10 and 7.

**Expand Offerings in High-Spending Ranges:** Introduce promotional campaigns and upsell strategies within the $50-$100 and $100-$200 purchase ranges.  
  
**Develop Loyalty Programs in Key Regions:** Establish loyalty initiatives specifically aimed at customers in City Category B and those with a long duration of stay in urban areas.

**Data Collection:** Integrate additional demographic and time series data to refine CLV calculations further.