Zomato Customer Segmentation Analysis

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This analysis will focus on insights derived from the users and orders sheets in the Zomato dataset.

Preparatory Steps for Dashboard Creation:

1. Specify how outliers, duplicate data, or categorical inconsistencies *(e.g., occupation names)* will be handled.
2. Include transformations like creating income brackets or grouping similar professions for analysis.
3. Begin by examining the datasets to identify and address any potential issues with data quality
4. (e.g., missing values or inconsistencies).
5. Load the cleaned data into Tableau and establish a relationship between the sheets by linking their *"user_id"* columns.
6. Develop relevant visualizations while applying appropriate filters to enhance interpretability.

Key Questions to Address:

1. What are the differences in spending behavior between single and married customers?
2. Are there specific age groups or occupations with higher order frequencies?
1. Which age group contributes the most to total order amounts?
2. Is there a predominant gender among customers responsible for the highest total order amounts?
3. What are the professions of customers generating the largest total order amounts?
4. How does monthly income vary across different occupations?
5. Does monthly income show a noticeable relationship with order amounts?
6. What level of education do the top-spending customers possess?
7. Who can we identify as Zomato's primary customer?

Hypotheses:
- *Null Hypothesis:* There is no difference in spending behavior across age or income groups.

- o *Nuanced Hypotheses:* Spending behavior varies significantly between different income brackets and age segments.
- o Higher monthly income is likely linked to greater sales contributions.
- o Customers with advanced educational qualifications tend to spend more.

Proposed Visualizations:

- o Add interactive filters or drill-down options to dynamically explore customer segments.
- o Use stacked bar charts for Total sales amounts by age group.
- o Side-by-Side bars for Total sales amounts by gender.
- o Include scatter plots for Total sales amounts categorized by monthly income and occupation.
- o Include scatter plots for Total sales amounts in relation to educational qualifications.

This framework ensures that the final dashboard will effectively address the outlined questions and hypotheses, providing actionable insights for Zomato.

These insights will help inform Zomato's business strategies, such as personalized marketing or pricing adjustments.

Insights Will Inform Zomato's Business Strategies

1. *Personalized Marketing Campaigns:*
   - o Insights into spending behavior by **age group, gender, marital status, and educational qualifications** can help design personalized marketing strategies that resonate with specific customer segments.
   - o For example, targeting high-frequency users with promotions tailored to their preferences or offering discounts to younger customers who show potential for increased spending.
2. *Dynamic Pricing Adjustments:*
   - o Analysis of **income brackets and spending behavior** can help optimize pricing models.
   - o For instance, offering premium pricing options for high-income segments or value deals for cost-sensitive groups.
3. *Customer Retention Strategies:*
   - o Identifying **high-value customer segments** can help Zomato create loyalty programs to retain these customers.
   - o Special promotions for frequent customers, personalized recommendations, and rewards for consistent orders.
4. *Optimized Service Offerings:*
   - o Insights on ***order frequency by occupation or marital status*** can guide the creation of tailored services
5. *Geographic Expansion Plans:*

- Understanding spending patterns by demographic groups can help identify regions or neighborhoods with high growth potential for new services or marketing efforts.

Summarized Key Expected Insights

1. *High-Value Customer Segments:*
   - Identifying groups (e.g., by **income, education level, or occupation**) that contribute significantly to total sales.
2. *Spending Trends by Demographics:*
   - Recognizing differences in spending behavior among **single vs. married customers, age groups, and gender**.
3. *Income and Spending Correlations:*
   - Determining how **monthly income** influences order amounts and spending habits.
4. *Order Frequency Patterns:*
   - Identifying which **occupations or age groups** order most frequently.
5. *Educational Impact on Spending:*
   - Analyzing how **educational qualifications** affect purchasing behavior and identifying potential for premium services.
6. *Market Segmentation Opportunities:*
   - Creating targeted customer segments for marketing based on **age, gender, income, and marital status**.

Dashboard Visualization Mockup

Overview of Sales Analysis Metrics

Sales by Monthly Income and Occupation

Measure: Sales Amount

Dimensions: Income, Occupation

Sales Distribution by Gender

Measure: Total Sales

Dimension: Gender

Sales Contribution by Age Group

Measure: Sales Amount

Dimension: Age

Sales vs Educational Qualifications

Measure: Total Sales

Dimension: Education Level