GreenLeaf Market Capstone  
  
Report  
  
  
This report provides an in-depth analysis of the GreenLeaf Market Database, segmented into four key areas: Order-level Analysis, Completion Rate Analysis, Customer-level Analysis, and Delivery Analysis. Each section offers valuable insights and addresses specific questions related to different aspects of the data.

**Order-level Analysis:**

* Analyzed the distribution of orders across delivery slots and areas to uncover demand patterns.
* Identified regions with the highest growth in monthly orders from January to September, highlighting areas of significant increase.
* Assessed delivery charges and discounts as percentages of product amounts at the slot and monthly level to understand their impact on order values.
* Evaluated discounts as a percentage of product amounts, considering both drop areas and delivery slots.

**Key Insight**: HSR Layout records the highest number of orders during the afternoon time slot.

**Completion Rate Analysis:**

* Investigated completion rates in relation to delivery slots and days of the week to identify patterns, aiding in scheduling and resource allocation.
* Assessed completion rates at the drop area level to evaluate delivery efficiency across regions, informing logistics and optimization strategies.
* Examined completion rates based on the number of products ordered in each transaction, offering insights into customer behaviour and preferences.
* Provided detailed analysis of observed patterns in completion rate data to develop actionable strategies for enhancing order fulfilment and customer satisfaction.

**Key Insight**: Orders with 1-5 products have the highest completion rates.

**Customer-level Analysis:**

* Analysed completion rates by customer acquisition sources to evaluate the effectiveness of different marketing channels.
* Calculated Customer Lifetime Value (LTV) for individual customers, offering a deeper understanding of long-term customer profitability.
* Aggregated LTV data to assess the overall performance of acquisition sources and months, aiding in resource allocation and marketing strategy refinement.
* Determined average revenue per order across customer acquisition sources and months, crucial for pricing and promotional strategies.
* Explored patterns in order ratings based on factors like delivery slots, number of items ordered, delivery charges, and discounts, providing insights for service improvement.

**Key Insight**: The afternoon time slot has the highest number of 5-star ratings (4073).

**Delivery Analysis:**

* Calculated the average delivery time at the month and area levels, offering insights into delivery efficiency and customer expectations.
* Compared delivery times between weekdays and weekends to evaluate performance differences.
* Assessed delivery times by delivery slot, essential for optimizing logistics and meeting customer expectations.
* Analysed patterns in delivery charges across slots and areas, informing pricing strategies.
* Investigated variations in delivery times by area, identifying potential factors to optimize routes and reduce delivery times.

**Key Insight**: The late-night time slot has the shortest delivery times due to reduced traffic and other factors.

**Conclusion:**

The thorough analysis of the GreenLeaf Market Database has yielded valuable insights into order distribution, completion rates, customer behavior, and delivery efficiency. These insights are essential for making informed decisions and developing strategies to enhance overall performance. Based on the findings, I recommend implementing targeted actions to address the identified patterns, boost customer satisfaction, improve delivery efficiency, and increase order completion rates. Ongoing monitoring and analysis are crucial to effectively adapt to changing market conditions and customer preferences.