Summary Report

Alt Mobility – Data Analyst Assignment
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1. Key Insights from SQL Queries

- **Order and Sales Analysis:**

    o The majority of orders were successfully delivered or shipped, contributing positively to total revenue.

    o A small percentage of orders were canceled or pending, indicating minor operational issues that can be improved.

    o Monthly sales revenue trends showed gradual growth with occasional slight dips.

- **Customer Analysis:**

    o A large portion of customers placed only one order, while a smaller but valuable segment became repeat customers.

    o Repeat customers mostly placed between 2 to 5 orders, indicating moderate customer loyalty.

    o Monthly order trends revealed seasonal fluctuations in customer activity.

- **Payment Status Analysis:**

    o The majority of payments were successfully completed, although some months showed a slight increase in failed payments.

- o Credit card and online wallet payment methods recorded the highest success rates.

  - o Identified payment failures suggest occasional technical or customer-related payment issues.

- **Order and Payment Join Analysis:**

  - o Very few discrepancies were found where delivered orders had missing or failed payments, highlighting the need for improved operational synchronization.

  - o Overall, most successful deliveries were associated with successful payments, confirming good system alignment.

2. Observations from Customer Retention Analysis

- **Retention Behavior:**

  - o Customers are most likely to reorder within the first one to two months after their initial order.

  - o A significant drop in customer retention is observed after the third month.

  - o Very few customers remain active six months after their first purchase.

- **New Customer Acquisition:**

  - o New customer acquisition showed fluctuations, with certain months achieving significantly higher acquisition rates.

  - o These peak acquisition months can be analyzed further to optimize future marketing efforts.

- **Retention Drop-off Trend:**

  - o A consistent drop-off pattern was observed across all cohorts after two months, indicating a critical early engagement window for customer retention efforts.

- **Cohort Size Distribution:**

  - o Some months produced larger customer cohorts, pointing to periods of successful marketing or seasonal factors.

3. Recommendations for Alt Mobility

1. **Strengthen Early Engagement:**

     o   Implement follow-up strategies within 30 days of a customer's first order to increase the likelihood of a second order.

     o   Use targeted offers, loyalty points, or personalized communications to encourage repeat purchases early.

2. **Introduce Loyalty Programs:**

     o   Launch structured loyalty programs to reward multiple purchases, aiming to retain customers beyond the first three months.

3. **Improve Payment Success Rates:**

     o   Analyze and address root causes of payment failures.

     o   Offer multiple reliable payment options to minimize transaction issues.

4. **Optimize Customer Acquisition Strategies:**

     o   Study successful marketing periods to replicate high acquisition tactics in weaker months.

5. **Ensure Better Order-Payment System Integration:**

     o   Further align operational and payment systems to eliminate any remaining inconsistencies between delivery and payment records.

Conclusion

Through SQL-based data analysis and cohort retention visualization using Power BI, key patterns in customer behavior, order trends, and payment processing were identified. Alt Mobility can leverage these insights to optimize customer engagement, improve operational efficiency, and maximize customer lifetime value.