

# Summary\_Report

## AltMobility\_DataAnalyst\_Assignment

### 1. Key Insights from SQL Queries

Order Fulfillment: Delivered orders are the most common and contribute the most to revenue. A noticeable volume of orders remains in 'pending' or 'shipped' status, indicating possible fulfillment delays.

Revenue Trends: Monthly revenue has shown seasonal fluctuations with general growth over time. Sales tend to peak during certain months, likely due to campaigns or market demand.

Customer Spending: The average order value has gradually increased, suggesting improved customer trust or growing order sizes.

### 2. Customer Retention Analysis

A cohort analysis heatmap was created by grouping customers based on their first purchase month, then tracking how many of them made repeat purchases in subsequent months.

#### Insights:

The majority of customers make their purchases in the first month, with retention sharply declining afterward.

Some customer cohorts show relatively better retention in the 2nd or 3rd month, indicating success with certain marketing or service efforts.

#### Visualization:

A heatmap titled `customer_retention_heatmap.png` visualizes this behavior clearly, showing retention rates across months for each cohort.

### 3. Strategic Recommendations

Improve Order Fulfillment: Analyze and address causes behind 'pending' and delayed 'shipped' statuses to improve customer satisfaction.

Analyze High-Retention Cohorts: Study the strategies or experiences tied to high-retention cohorts and replicate those patterns.

Address Payment Failures: Investigate failed payments for recurring issues related to method, timing, or customer type.