FoodHub Data Analysis

Post Graduate Program in AI and Machine Learning

June 16, 2025

Executive Summary

Key Findings

American, Japanese, Italian, Chinese cuisines dominate (80% of orders)

Customer Behavior

65.33% one-time customers; weekend orders 71% of volume

Operational Insights

Food prep consistently 20-35 mins; longer delivery times on weekdays

Business Problem & Approach Approach

Problem

Analyze order data to understand restaurant demand and improve customer experience and retention.
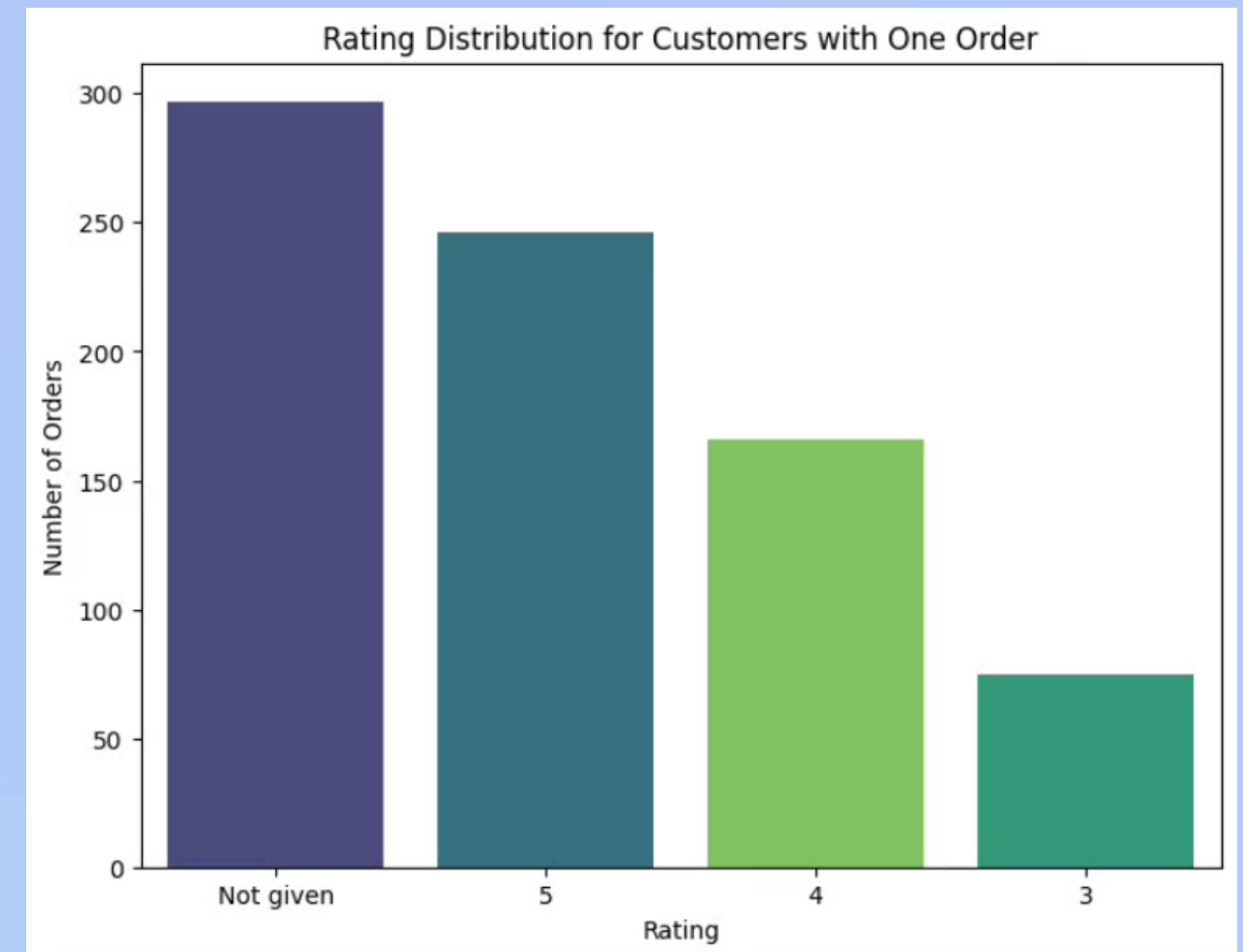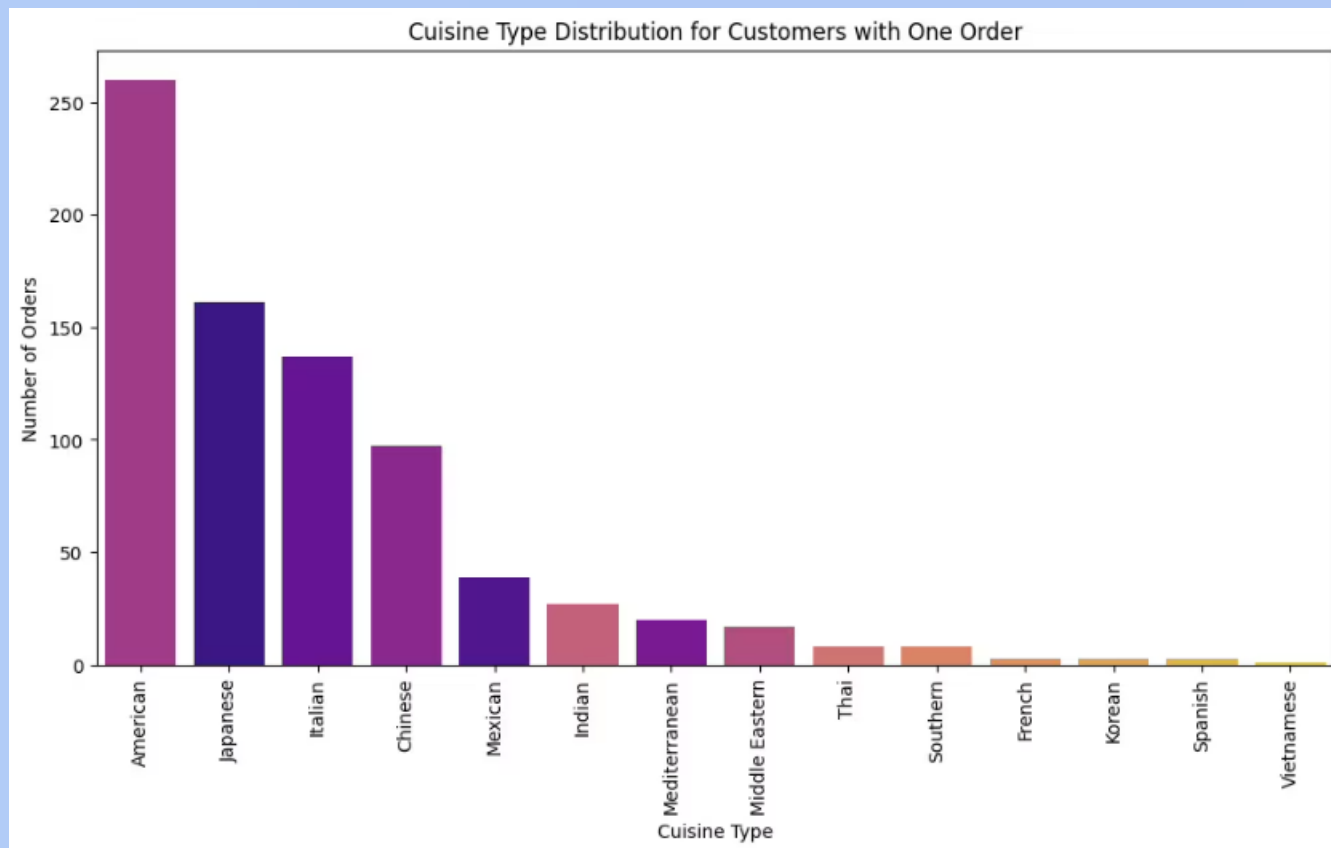
Methodology

Exploratory data analysis using Pandas and NumPy, with data visualisation via Seaborn and Matplotlib.
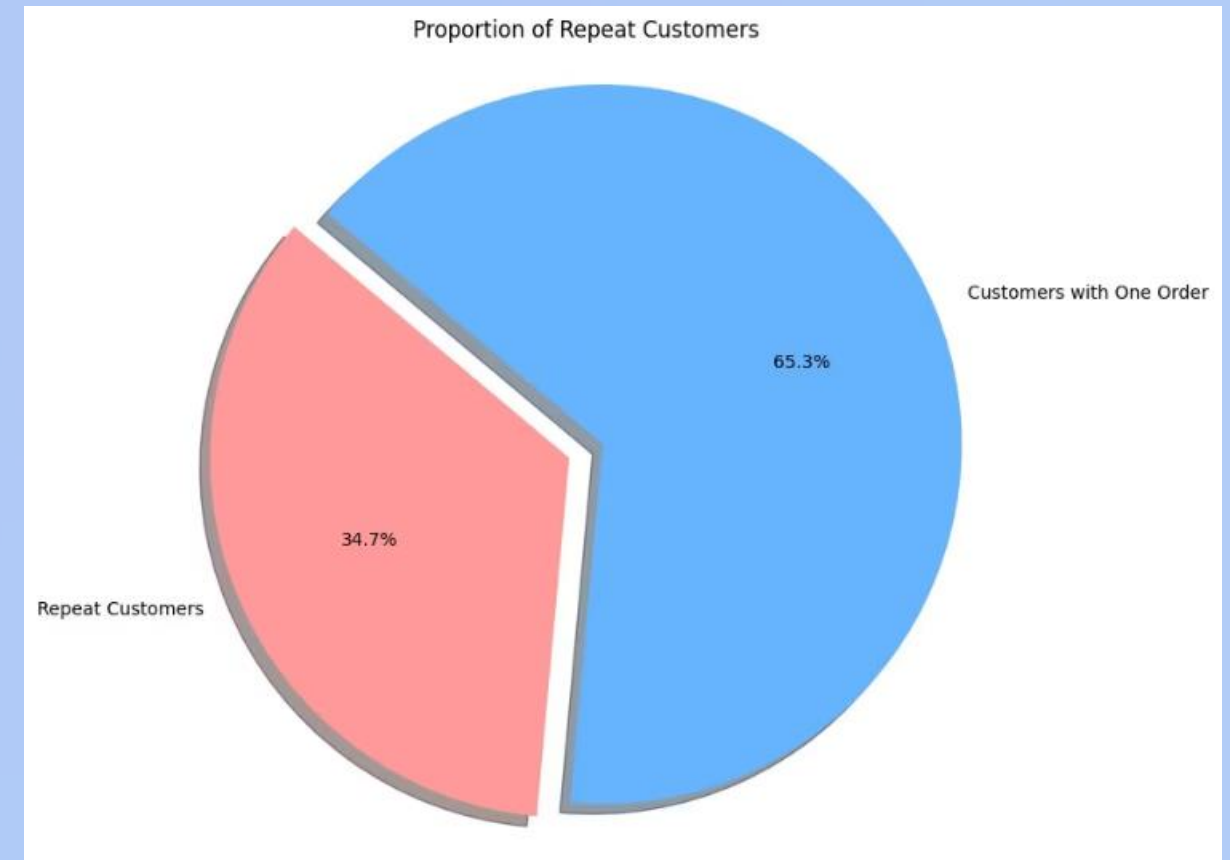
Dataset Overview

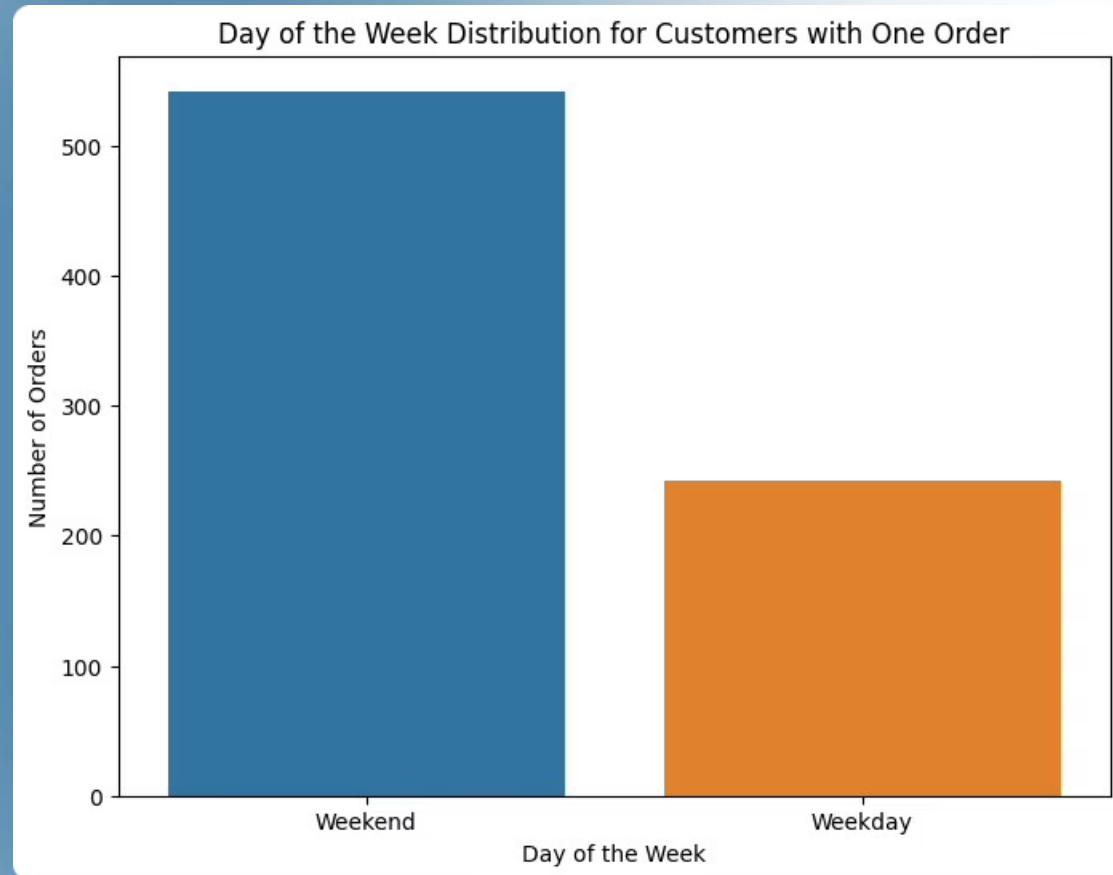1,898 order records with 9 attributes per order ; No missing values, ensuring data quality

Cuisine Type Distribution for Customers with One Order

Rating Distribution for Customers with One Order

Customer Behavior Analysis

Repeat Customers

Only 34.67% place multiple orders

One-Time Customers

65.33% never return after first order

Growth Opportunity

Convert one-time users to loyal customers

Proportion of Repeat Customers

Customers with One Order — 65.3%

Repeat Customers — 34.7%

Order Patterns

Day of the Week Distribution for Customers with One Order

Weekend Dominance

71% of orders occur on weekends

Price Range

50% orders under $15; 75% under $23

Consistent Timing

Prep time 20-35 mins; slower delivery on weekdays

Made with GAMMA

Rating Distribution
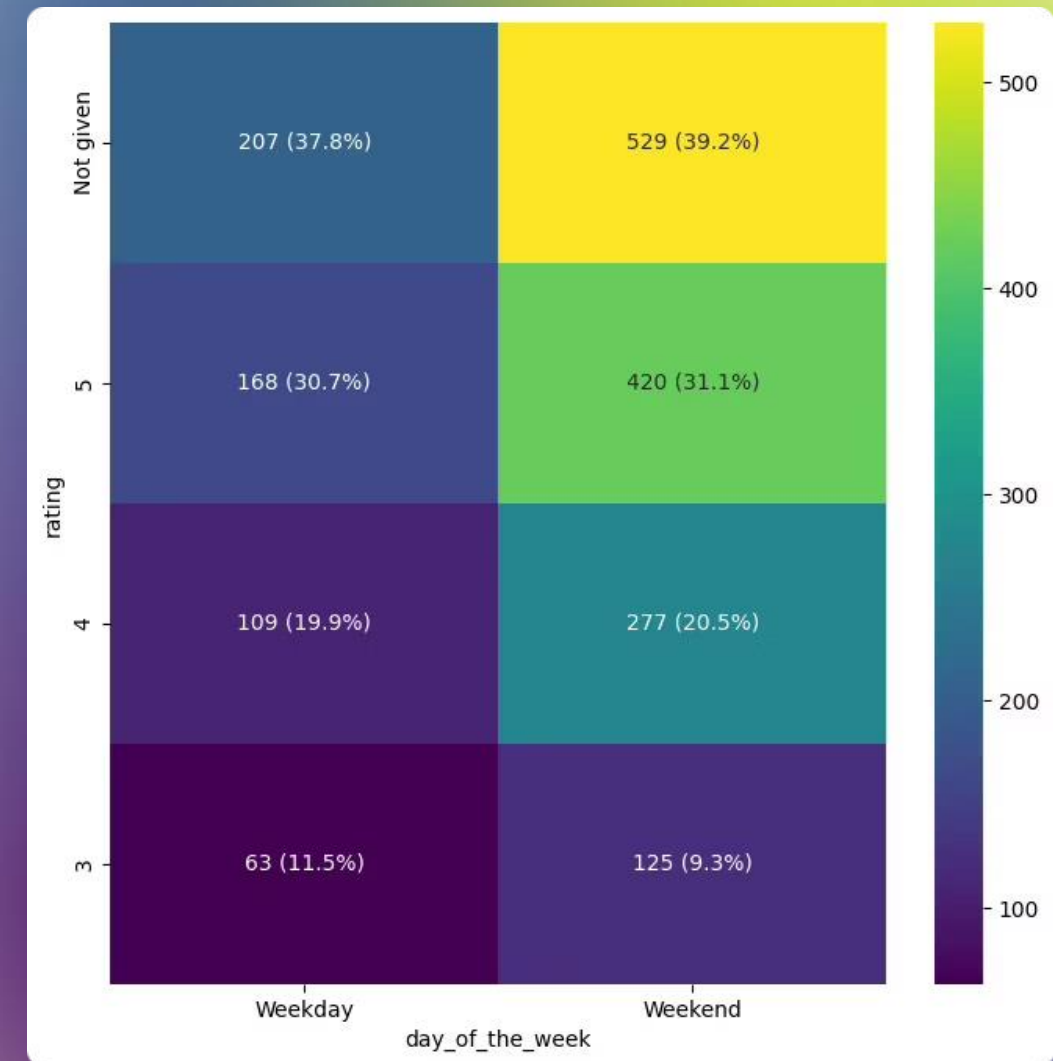
38.8%

Unrated Orders

736 out of 1,898 orders

4-5★

Positive Ratings

Majority of rated orders

65.33%

One-time Customers

Don't leave ratings

Restaurant Performance

Total Restaurants

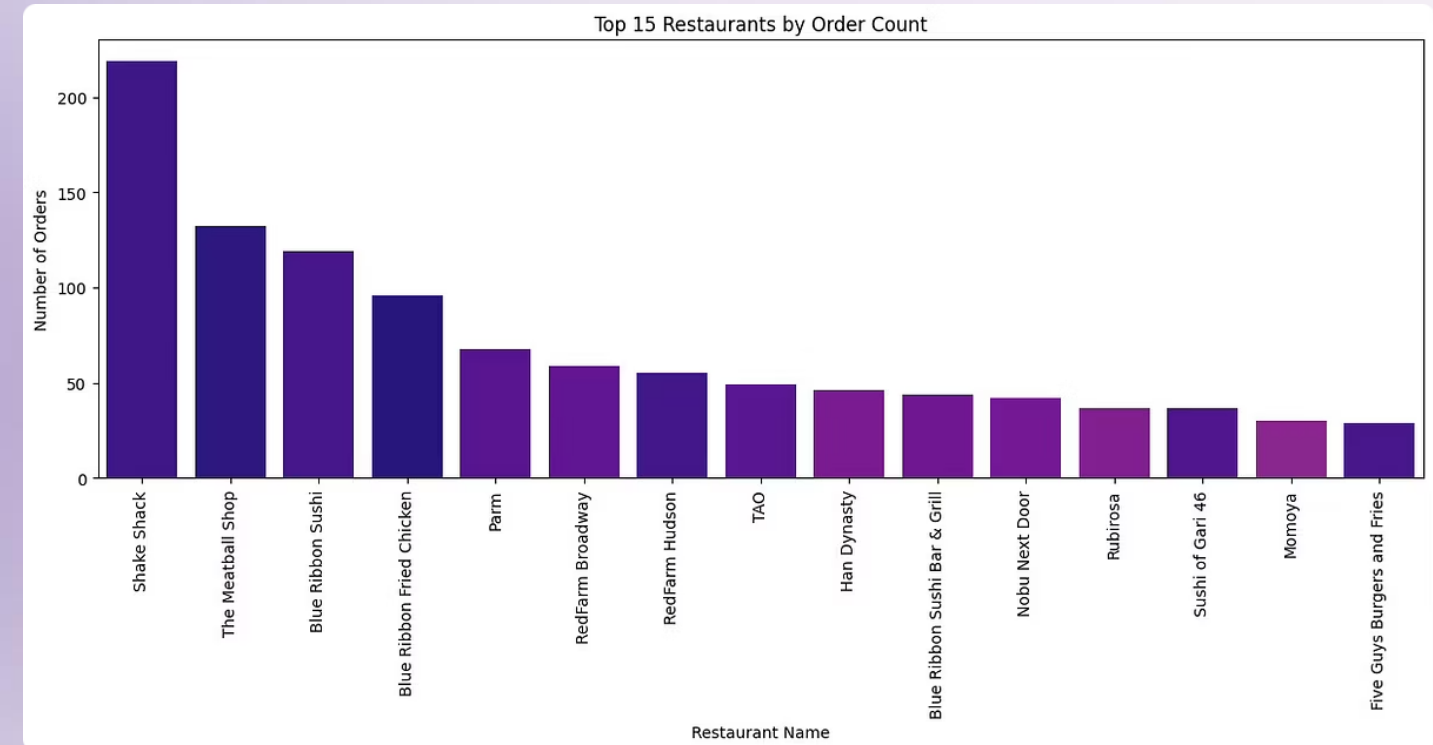178 unique restaurants on platform
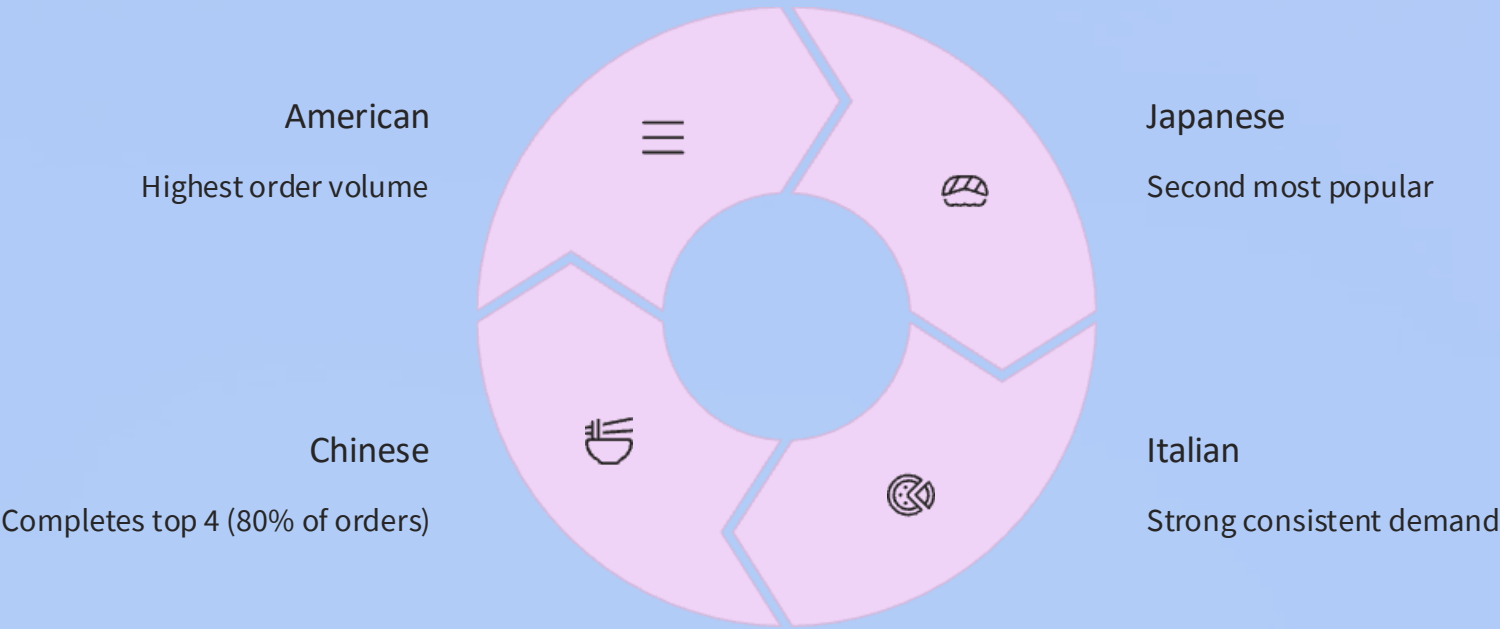
Repeat Business
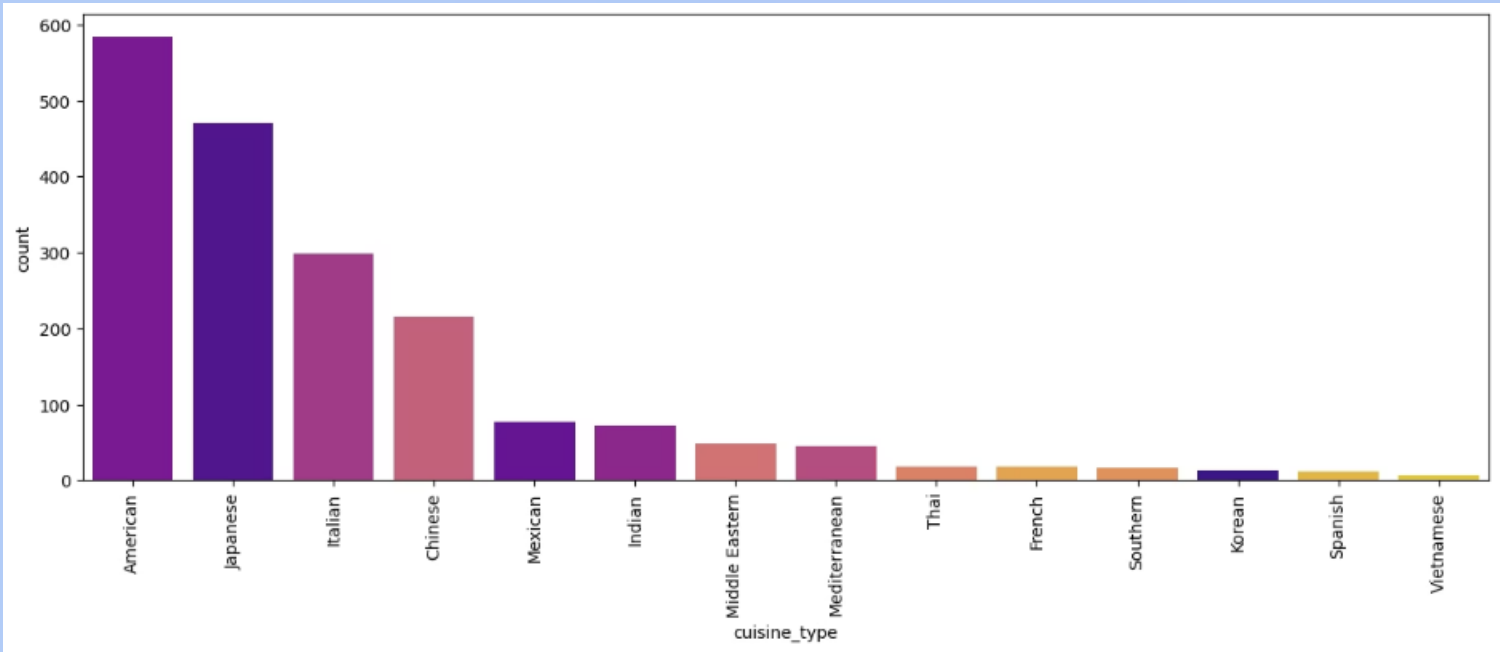
72% (128) receive multiple orders

Underperforming

28% (50) have only one order

Top 15 Restaurants by Order Count

Cuisine Popularity

American — Highest order volume

Japanese — Second most popular

Chinese — Completes top 4 (80% of orders)

Italian — Strong consistent demand

Key Recommendations

Convert One-time Customers

Implement loyalty programs; improve first experience

Increase Rating Submissions

Incentivize customer feedback; simplify rating process

Optimize Weekday Performance

Improve delivery times; weekday-specific promotions

Support Underperforming Restaurants

Targeted marketing for single-order restaurants