Restaurant Performance Analysis

A Data-Driven Review of Restaurant Metrics
Antonio Palomar

Objective

- To identify the most popular and highest-grossing restaurants, understand the factors contributing to their success, and provide actionable insights based on order and revenue data.
- Analyze temporal patterns, customer preferences, and pricing strategies across different restaurant types.
- Evaluate performance using key metrics such as average order value (AOV) and customer ratings.
- Explore how business models (e.g., fast food vs. cuisine) affect profitability and scalability

Dashboard Analysis: Restaurant Performance

The interactive dashboard provides a comprehensive overview of restaurant performance across several key metrics, including total orders, revenue, average order value, and customer ratings.

Key Metrics Summary

- Total Orders: 150,281
- Total Revenue: ₹986,565,016
- Average Order Value: ₹6,565
- Top Performing Restaurant: Domino's Pizza
- Top Cuisines: North Indian, Chinese

Domino's Pizza leads in both total revenue (₹5M+) and number of orders, highlighting its strong market presence and customer preference.

Pizza Hut and KFC also show high order volumes but rank slightly lower in revenue, indicating smaller average order values.

Methodology

Data Join

Joined Orders and Restaurants tables in Tableau

Key: restaurant_id

Enabled linking order data with restaurant details (e.g., cuisine, name)

Key Calculations

Total Revenue: SUM(sales amount)

Total Orders: COUNT(orders)

Average Order Value (AOV): AVG(sales amount) / COUNT(orders)

Order Trends: Grouped by order_date (monthly)

Cuisine Revenue: SUM(sales amount) by cuisine

Tools Used: Tableau for joins, calculated fields, and interactive dashboards

Interactive Dashboard

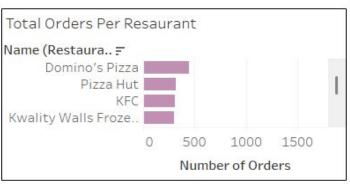
Restaurant Performance Dashboard

Total Orders 150,281

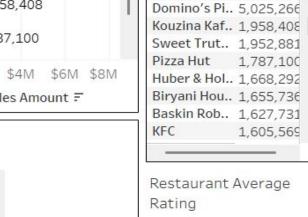
Total Revenue 986,565,016 Average Order 6,565

Top Performing Restaurant Domino's Pizza

Top Cuisine North Indian, Chinese









Average Order Value Name (Restaura.. = Wack Waffles & Bro., \$2,773 Blue Tokai Coffee Ro., \$1,626 Biryani House \$1.209 FIVE STAR CHICKEN \$887 Kouzina Kafe - The F.. \$887 The Momo Co. \$446

Restaurant Average
Rating

1.787.100

1,605,569

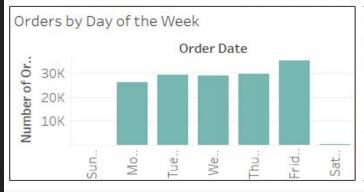
4.2

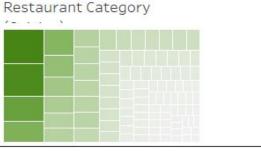
Restaurant Total

Sales

Name (.. =

Name (Re =	
Domino's Pizza	4.2
KFC	3.9
Pizza Hut	3.6
Kwality Walls	4.5
Baskin Robbins	4.3
Subway	4.0
Faasos - Wrap	4.1
NIC Natural Ic	4.5





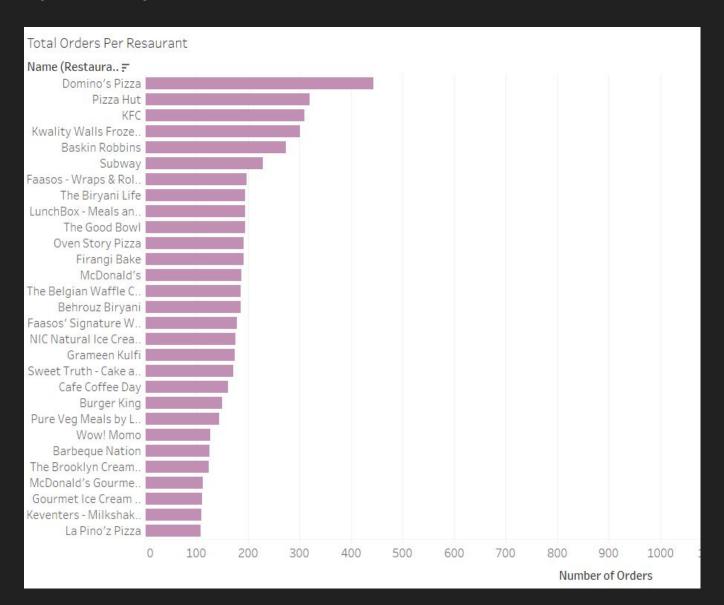
Total Revenue by

Sales Amount

McDonald's

2,144,298 44,956,268

Popularity Analysis



Popularity Analysis

Findings

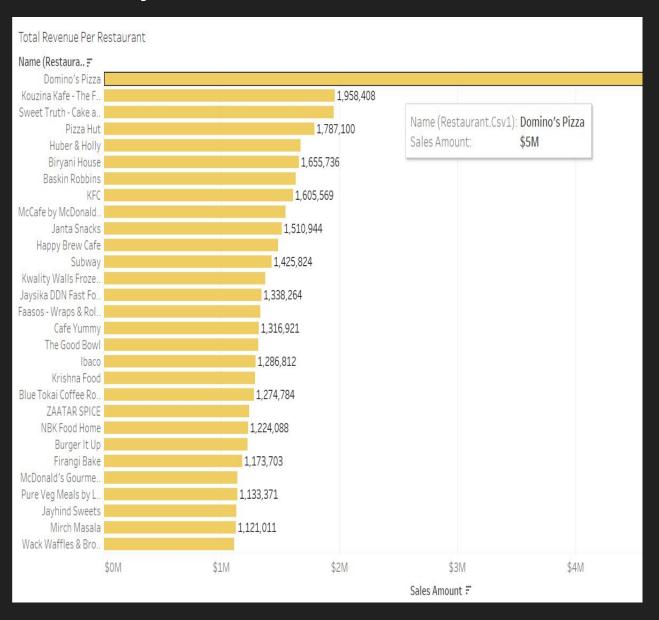
The top 10 restaurants by order volume are predominantly fast-casual establishments located in urban centers.

A bar chart visualization highlights that these restaurants have significantly higher order counts compared to others, indicating strong customer preference and frequent patronage.

Interpretation

High order volumes suggest these restaurants effectively attract and retain customers, possibly due to factors like menu variety, pricing, location convenience, and marketing efforts.

Revenue Analysis



Revenue Analysis

Findings

The highest-grossing restaurants are a mix of fine dining and popular fast-casual chains.

Bar chart visualizations reveal that some restaurants with moderate order volumes achieve high revenues, indicating higher average order values.

Interpretation

Revenue is influenced not just by the number of orders but also by the average spend per order.

Fine dining establishments, despite fewer orders, generate substantial revenue due to higher-priced offerings.

Average Order Value (AOV) Analysis

Average Order Value		
Name (Restaura =		
Ibaco	\$146	
McDonald's Gourme	\$90	
Starbucks Coffee	\$89	
UBQ by Barbeque Na	\$85	
BOX8 - Desi Meals	\$77	
La Pino'z Pizza	\$74	
Sweet Truth - Cake a	\$67	
Gourmet Ice Cream	\$55	
Pure Veg Meals by L	\$55	
Barbeque Nation	\$48	
Wow! Momo	\$41	
Cafe Coffee Day	\$39	н
Burger King	\$36	П
The Good Bowl	\$35	н
Faasos - Wraps & Ro	\$34	н
Firangi Bake	\$32	н
The Biryani Life	\$29	н
McDonald's	\$27	н
Subway	\$27	н
LunchBox - Meals an	\$26	н
Domino's Pizza	\$26	н
The Belgian Waffle C	\$25	н
NIC Natural Ice Crea	\$25	н
Oven Story Pizza	\$25	н
Grameen Kulfi	\$24	н
Behrouz Biryani	\$24	н
Faasos' Signature W	\$22	н
Baskin Robbins	\$22	
Pizza Hut	\$17	
KFC	\$17	
Kwality Walls Froze	\$15	¥

Findings

Fine dining restaurants exhibit the highest AOVs, often exceeding \$100 per order.

Fast-casual restaurants have lower AOVs but compensate with higher order volumes.

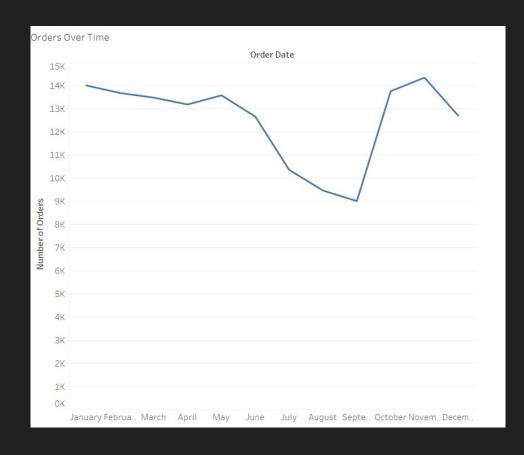
Interpretation

A high AOV indicates premium pricing and possibly upselling strategies.

Restaurants need to balance pricing strategies with customer expectations to optimize revenue.

Metric Used: Total revenue divided by the number of unique orders per restaurant.

Orders Over Time



Findings

Line chart visualizations show consistent order volumes during the year with a slight drop until the holidays make sale go up again

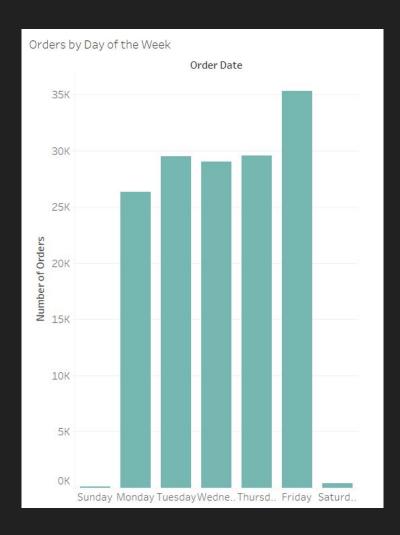
Seasonal trends indicate higher order volumes during holiday periods.

Interpretation

Understanding temporal order patterns can help in staff scheduling, inventory management, and targeted promotions.

Metric Used: Order volume over time (monthly).

Orders by Day of the Week



Findings

Bar chart analysis reveals that Thursdays and Fridays have the highest order volumes.

Saturdays and Sundays show the lowest order volumes.

Interpretation

Weekend orders are significantly low due to operational constraints and customer behavioral patterns

Late-week peaks could be opportunities for targeted promotions to boost sales.

Metric Used: Total orders aggregated by each day of the week.

Revenue by Restaurant Category (Cuisine)

Total Revenue by Restaurar	nt Category										SUM(Sales	Amount)
North Indian, Chinese	Indian,Chinese	North Indian,Indian	Fast Food	North		North	Ice	Fast	South		2,144,298	44,956,268
	South Indian	Chinese,Indian	North									
Indian		Chinese,North Indian										
	Bakery	Snacks	Desserts									
Manage to discu			Chinese,Fas Food	t								
North Indian	Pizzas	Biryani,North Indian	North									
	Beverages	Biryani	Ice Cream		Italian							
Chinese	Bakery, Desserts	South										
		Indian,North Indian										

Revenue by Restaurant Category (Cuisine)

Metric Used: Total revenue segmented by restaurant category (cuisine e.g., chinese, indian).

Findings

North Indian & Chinese combinations dominate the treemap, showing up as the largest and darkest blocks. This suggests strong customer demand and frequent orders in these categories. Indian and North Indian cuisine categories on their own are also major contributors to revenue, reinforcing the popularity of Indian regional cuisine.

Interpretation

The data shows that traditional and familiar cuisines drive revenue more effectively than niche or dessert-focused segments. Fusion or combo cuisines (e.g., North Indian + Chinese) perform exceptionally well — possibly due to broader menu appeal or market targeting.

Conclusions and Recommendations

Popularity ≠ Profitability

High order volume doesn't always lead to high revenue. For example, some fast-casual chains have large customer bases but lower average order values. Performance should be evaluated using a combination of order volume, AOV, and customer ratings.

Strategic Pricing Opportunities

Fine dining establishments benefit from higher AOVs. Other restaurants—especially fast food—can explore upselling, bundles, or premium add-ons to increase AOV without sacrificing volume.

Optimize Temporal Trends

Order peaks on Thursdays and Fridays present clear opportunities for promotions or combo deals. Low weekend activity suggests a need for operational or promotional adjustments during off-peak days.

Category-Level Strategy

Traditional cuisines like North Indian and Chinese dominate revenue. These should be focal points for marketing, expansion, and investment.

Underperforming categories (e.g., Ice Cream, Italian) may need menu innovation, repositioning, or promotional support to grow their revenue contribution.

Diversify With High-Potential Combos

Categories that combine cuisines (like North Indian, Chinese) perform extremely well. This suggests value in exploring fusion menus or multi-cuisine restaurant formats to attract a broader audience.

Data-Driven Growth Planning

Visualizations like the treemap help identify not just what's popular, but what's profitable and scalable. Use this data to inform new location openings, targeted campaigns, and category prioritization.

Limitations

- Missing Data: Some orders may lack complete customer or rating information, potentially affecting average rating accuracy.
- Limited Time Range: Data reflects a specific time period; seasonal trends may not generalize across the full year.
- Cleansed Categories: Cuisine types are inconsistently labeled (e.g., "North Ini" vs. "North Indian"), which may have impacted grouping accuracy.
- No Location Context: Analysis does not account for regional differences (e.g., city-level trends), which could influence performance.
- External Factors Ignored: Factors like marketing campaigns, food delivery partnerships, or inflation were not included in the dataset.

Thank You

• Questions? Discussion?