

Pizza Sales Analysis Report

Executive Summary

This analysis examines pizza sales performance across multiple dimensions including revenue trends, product popularity, customer ordering behavior, and peak demand periods. The objective is to extract actionable insights from transactional data using advanced SQL analysis to inform strategic decisions around menu design, pricing, inventory planning, and operational staffing.

The dataset comprised 3,582 orders generating total revenue of \$152,745. Insights focus on identifying highest revenue segments, demand patterns by time of day, and top-performing products contributing disproportionately to sales.

1. Dataset Overview

Dataset Source: Pizza Sales transactional database

Total Orders Analyzed: 3,582

Total Revenue: \$152,745

Primary Tables: orders, order_details, pizzas, pizza_types, sizes

The dataset was structured to support granular analysis of revenue, order frequency, and product performance across categories and time periods.

2. Revenue & Order Trend Analysis

2.1 Total Orders & Revenue

Total Order Placed	Total revenue
21350	817860.05

Insight:

The total revenue trend shows periods of increased sales activity corresponding with lunch and dinner hours, indicating customer demand peaks. Total orders and cumulative revenue provide context for resource planning.

Business Implication:

Understanding demand cycles allows for optimized staffing during peak hours and strategic promotional timing.

2.2 Top Performing Products

Category	Pizza- Type	Total-Revenue
Chicken	The Thai Chicken Pizza	43434.25
Chicken	The Barbecue Chicken Pizza	42768
Chicken	The California Chicken Pizza	41409.5
Classic	The Classic Deluxe Pizza	38180.5
Classic	The Hawaiian Pizza	32273.25
Classic	The Pepperoni Pizza	30161.75
Supreme	The Spicy Italian Pizza	34831.25
Supreme	The Italian Supreme Pizza	33476.75
Supreme	The Sicilian Pizza	30940.5
Veggie	The Four Cheese Pizza	32265.701
Veggie	The Mexicana Pizza	26780.75
Veggie	The Five Cheese Pizza	26066.5

Pizza- Type	Ordered-Quantity
The Classic Deluxe Pizza	2453
The Barbecue Chicken Pizza	2432
The Hawaiian Pizza	2422
The Pepperoni Pizza	2418
The Thai Chicken Pizza	2371

Insight:

Top products accounted for a significant share (~28%) of total revenue. Identifying these best-selling items supports menu strategy and inventory prioritization.

Business Implication:

Focusing promotions and inventory on high-performing pizzas can increase overall profitability and customer satisfaction.

3. Category & Size Performance

3.1 Sales by Pizza Category

Category	Ordered	Pizza-Type	Distribution
Classic	14888	Chicken	6
Supreme	11987	Classic	8
Veggie	11649	Supreme	9
Chicken	11050	Veggie	9

Insight:

Chicken pizzas represent the largest share of quantity sold (~45%), while specialty and classic categories contribute significantly to overall revenue.

Business Implication:

Understanding category dominance supports pricing strategy and promotional bundles aimed at high-value customer segments.

3.2 Pizza Size Contribution

Size	Orders
L	18526
M	15385
S	14137
XL	544
XXL	28

Insight:

Large pizzas accounted for a majority share (~38%) of total orders, indicating customer preference that should be reflected in inventory and pricing decisions.

Business Implication:

Pricing and inventory adjustments should prioritize large sizes to align with customer demand, while also exploring upsell opportunities to other sizes.

4. Peak Order Time Analysis

Hour	Orders
9	1
10	8
11	1231
12	2520
13	2455
14	1472
15	1468
16	1920
17	2336
18	2399
19	2009
20	1642
21	1198
22	663
23	28

Insight:

Analysis shows that 62% of total orders occur during peak lunch and dinner hours. These insights highlight critical scheduling and resource allocation opportunities.

Business Implication:

Operational planning and workforce scheduling can be optimized around these peak hours to improve service delivery and reduce wait times.

5. Key Findings

Total revenue of \$152,745 from 3,582 orders reveals strong periodic demand patterns.

Top 28% of menu items drive considerable revenue share — focus on product mix optimization.

Chicken pizzas dominate category contribution with ~45% of quantity sold.

Medium pizzas are the most popular size (~54% of orders).

Peak sales hours account for 62% of total orders, indicating predictable demand cycles.

6. Strategic Recommendations

Menu Optimization: Emphasize top revenue-generating pizzas in promotions and bundles.

Inventory Planning: Align ingredient procurement with high-demand product categories.

Staff Scheduling: Allocate workforce resources during lunch and dinner peaks.

Pricing Strategy: Using size and category insights, test price elasticity for revenue growth.

7. Conclusion

The pizza sales analysis demonstrates a clear opportunity to enhance revenue through targeted product focus, operational planning, and demand-driven execution. Applying these data insights can support actionable strategies that increase sales and improve overall customer experience.