

Pizza Sales Dashboard Analysis & Recommendations

Executive Summary

This report summarizes insights derived from the pizza sales dataset through interactive Power BI dashboards. The analysis highlights key business metrics such as total revenue, order behavior, and ingredient popularity. It aims to assist business decision-making by identifying patterns in sales, time-based performance, and product preferences.

Overall Sales Performance

- **Total Revenue:** \$817.86K
- **Total Quantity Sold:** 50K

- **Total Orders:** 21K
- **Average Pizzas per Order:** 2.3
- **Average Order Value:** \$38.31

Key patterns

- Clear peaks in mid-July and late November; steady weekend surges on Friday–Saturday evenings (5–8 PM).
- Small dips following peaks suggest normal post-promotion slowdowns.

Likely causes

- Promotions or holidays (school breaks, Black Friday).
- Weekend behavior boosting evening orders.
- Weather or stock changes influencing short-term demand.
- Operational issues (reduced hours or outages) creating one-day drops.

Product Performance

The product-level analysis compares pizzas by both revenue and quantity sold.

- **Top Performers:** The Thai Chicken Pizza and Barbecue Chicken Pizza dominated revenue performance.
- **Quantity Leaders:** The Classic Deluxe and Hawaiian pizzas led in quantity sold, indicating strong consumer preference.
- **Low Performers:** The Brie Carre and Mediterranean variants generated the least revenue, suggesting limited appeal.

Size and Ingredient Analysis

Medium and Large pizzas generated the highest sales and revenue.

Ingredient-level analysis revealed that Bacon and Chicken are the most popular, while Kalamata Olives and Eggplant remain the least favored. This indicates strong demand for meat-based toppings compared to vegetarian options.

Correlation and Insights

The analysis revealed an inverse correlation between pizza price and quantity sold, meaning higher-priced pizzas sell less frequently. However, these contribute more to overall revenue per transaction.

Ingredient popularity aligns closely with its revenue contribution, confirming that top selling ingredients are also the most profitable. The scatter plots below demonstrate the correlation strength and balance between volume and profit margins.

Order Frequency and Timing

Order analysis shows that single-item orders account for approximately 62% of total sales, while multi-item orders make up 38%. The average time between orders was calculated at 11 minutes, indicating a consistent flow of transactions throughout the day.

Peak order times occurred during evenings, with noticeable surges on weekends. This suggests that marketing strategies and staffing schedules should focus on these high demand periods to maximize efficiency and sales.

Recommendations

Based on the analysis, the following actions are recommended:

- **Product Strategy:** Focus on promoting high-performing pizzas (Classic Deluxe, Thai Chicken) and consider discontinuing or redesigning low-performing ones (Brie Carre, Mediterranean).
- **Ingredient Optimization:** Increase procurement and inventory for top ingredients like Bacon and Chicken, while limiting low-demand ingredients.
- **Pricing Strategy:** Maintain current pricing for premium pizzas, but introduce bundle discounts to encourage higher order quantities.
- **Marketing:** Launch weekend campaigns and family meal bundles targeting Friday–Sunday peaks.
- **Operations:** Align staff shifts with high-volume periods (evenings and weekends) and consider midweek promotions to balance sales.

- **Customer Experience:** Gather feedback on vegetarian options to improve their appeal and diversify menu choices.