

# Pizza Sales Performance Analysis

## SQL Server & Excel Data Analytics Project

### Project Overview

This project provides a comprehensive analysis of a year's worth of pizza sales data to identify key performance indicators (KPIs), consumer behavior patterns, and inventory optimization opportunities. By utilizing **MS SQL Server** for data extraction and **Excel** for advanced visualization, I transformed raw transactional data into actionable business insights.

### Key Metrics (KPIs)

- **Total Revenue:** \$817,860
- **Total Orders:** 21,350
- **Total Pizzas Sold:** 49,574
- **Average Order Value (AOV):** \$38.31
- **Average Pizzas Per Order:** 2.23

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### Insights & Findings

#### 1. Sales Performance by Category & Size

- **Best Selling Size:** **Regular** is the preferred choice among customers, indicating a trend toward individual or snack-sized portions.
- **Top 5 Pizzas (Revenue):** 1. The Classic Deluxe 2. BBQ Chicken 3. Hawaiian 4. Pepperoni 5. Thai Chicken

#### 2. Temporal Trends (The "Weekend Peak")

- **Busiest Periods:** High concentration of sales during **Fridays and Weekends**.
- **Lull Periods:** Significant drop in activity during **Mondays through Thursdays**.
- **Bottom 5 Pizzas:** Specialty flavors like *Brie Carre* and *Soppressata* have the lowest turnover, suggesting they may be niche products or require better marketing.

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### Tech Stack & Skills

- **SQL Server:** Data cleaning, joining tables, and writing complex CTEs to calculate AOV and sales trends.
- **MS Excel:** Built a dynamic dashboard with a **custom brick-style UI**, utilizing Pivot Tables, Power Query, and Slicers for interactivity.
- **Data Modeling:** Established relationships between sales, pizza types, and time dimensions.

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## 💡 Final Verdict & Business Recommendations

**Current Status: Profitable & Scalable.** The business has high volume and a solid AOV, but it is over-reliant on weekend traffic.

### Strategic Recommendations:

1. **Weekday "Bundle" Promos:** Launch "Mid-week Family Deals" (Tuesday/Wednesday) to increase order volume during the worst-performing days.
  2. **Inventory Optimization:** Consider removing the bottom 2-3 lowest sellers (*Brie Carre, Mediterranean*) to reduce food waste and storage costs.
  3. **Upselling:** Since the average pizza per order is 2.23, create a "3-Pizza Combo" discount to push the average toward 3.0.
  4. **Size Marketing:** Since "Regular" sells best, introduce a "Limited Time Large" upgrade for a small fee to increase the Total Revenue.
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## 📁 How to Navigate this Repository

- `/sql_queries/`: Contains the `.sql` files used to calculate the KPIs.
- `/dashboard/`: The `.xlsx` file containing the final interactive dashboard.
- `/images/`: Screenshots of the dashboard and query results.