**Project Summary: Comprehensive Pizza Sales Analysis Using SQL**

This project undertakes an in-depth analysis of pizza sales data using SQL to uncover actionable insights that drive improved business performance. The dataset encompasses details on orders, customers, pizzas, and transactions, offering a robust foundation for analysis. By leveraging advanced SQL techniques, the study identifies trends and provides recommendations to optimize operations, inventory, and marketing strategies.

**Objectives**

The primary objectives of this analysis are to:

* Identify the most popular pizza types and sizes.
* Analyze peak sales times and daily order trends.
* Examine revenue trends and category contributions.
* Understand customer preferences to guide inventory and marketing strategies.

**Methodology**

The analysis employed various SQL techniques, including:

* **Data Cleaning**: Ensuring data accuracy and completeness.
* **Aggregations and Joins**: Combining data from multiple tables for a unified view.
* **Window Functions**: Tracking trends, such as cumulative revenue over time.

Queries ranged from basic to advanced, providing granular insights:

* **Basic Analysis**: Summary metrics such as total orders (21,350), revenue (₹8,17,860), most-ordered pizza size (Large), and highest-priced pizza (The Greek Pizza).
* **Intermediate Analysis**: Time-based trends, revealing peak order times (12 PM–1 PM) and an average of 138 pizzas ordered daily.
* **Advanced Analysis**: Revenue distribution by category, showing contributions from Classic (26.91%), Supreme (25.46%), Chicken (23.96%), and Veggie (23.68%) pizzas.

**Key Insights**

**Popular Items**

* **Large pizzas** are the most ordered size, reflecting preferences for value and sharing.
* The **Classic category** leads in sales, followed closely by Supreme, Chicken, and Veggie categories.

**Peak Sales Hours**

* The **lunch hour (12 PM–1 PM)** sees the highest order volume, underscoring its significance.

**Revenue Distribution**

* A balanced revenue contribution across categories highlights diverse customer tastes, with Classic pizzas driving the most revenue.

**High-Performing Pizzas**

* The **top 3 pizzas** in each category generate significant revenue, emphasizing customer favorites.

**Impact**

The insights gained from this project enable Pizzatown to:

* **Optimize inventory** by aligning stock with high-demand items and peak sales hours.
* **Target marketing campaigns** to promote popular pizzas and capitalize on peak times.
* **Enhance operational efficiency** through strategic staffing and resource allocation.

**Conclusion**

This SQL-driven analysis provides a clear roadmap for boosting Pizzatown revenue and customer satisfaction. By offering actionable insights into sales patterns and customer preferences, the findings empower the business to make informed decisions on inventory, marketing, and service improvements, fostering sustainable growth.