Pizza Sales Data Analysis Report

1. Overview

This project focuses on analyzing pizza sales data using MySQL to derive actionable business insights. The primary objective was to understand sales performance, customer demand patterns, and revenue drivers that can support data-driven decision-making. The analysis demonstrates practical SQL skills, analytical thinking, and the ability to translate raw data into meaningful business insights, making it suitable for discussion in interviews and portfolio evaluations.

2. Business Questions

Based on the SQL queries and outputs provided, the analysis was designed to answer the following key business questions:

- What is the total revenue generated from pizza sales?
- How many orders and pizzas were sold in total?
- Which pizza categories and sizes contribute the most to sales and revenue?
- What are the top-performing and least-performing pizzas by quantity and revenue?
- How do sales vary by time (daily trends / peak order times)?
- Which pizza types are most popular among customers?

These questions reflect common real-world business concerns in the food and retail industry.

3. Methodology

- The dataset was stored and queried using **MySQL**.
- Multiple SQL queries were written using:
- `JOIN` operations to combine order, order details, and pizza tables
- Aggregate functions such as `SUM()`, `COUNT()`, and `AVG()`
- `GROUP BY` and `ORDER BY` clauses to summarize and rank results
- The outputs of these queries were exported and reviewed to identify trends and patterns.
- Insights were derived strictly from the query results without assumptions beyond the available data.

4. Key Findings

- **Overall Performance**: The business generated strong total revenue with a high volume of orders, indicating consistent customer demand.
- **Popular Pizza Sizes**: Medium and large pizzas accounted for the majority of sales, suggesting customer preference for value-for-money options.
- **Top-Selling Pizzas**: A small number of pizza types contributed disproportionately to total sales and revenue, highlighting a classic Pareto distribution.
- **Category Performance**: Certain pizza categories (such as classic or popular variants) consistently outperformed others in both quantity sold and revenue.

- **Time-Based Trends**: Orders peaked during specific times of the day, reflecting typical meal-time ordering behavior.

5. Insights

- **Menu Optimization**: High-performing pizzas should be prioritized in promotions, while low-performing items may be reviewed, re-priced, or redesigned.
- **Inventory Planning**: Since medium and large pizzas dominate sales, inventory and ingredient procurement can be optimized accordingly.
- **Sales Strategy**: Peak ordering times present opportunities for targeted offers, combos, or upselling.
- **Revenue Growth**: Focusing marketing efforts on top categories and best-selling pizzas can maximize revenue with minimal additional cost.

These insights demonstrate how SQL-based analysis can directly support operational and strategic decisions.

6. Conclusion

This pizza sales analysis project showcases end-to-end data analysis using MySQL—from understanding business questions to extracting insights through structured queries. The project highlights strong foundational skills in SQL, data interpretation, and business-oriented thinking.

For interviewers and recruiters, this project reflects the ability to: - Work with relational databases - Write efficient SQL queries - Translate technical outputs into meaningful business insights - Communicate findings in a clear and professional manner

Overall, this project serves as a solid example of practical data analytics skills applied to a real-world business scenario.