



# Pizza Sales Analysis

## Business Problem Statement – *The Grand Crust Hotel*

### Background

The Grand Crust Hotel is a mid-sized urban hotel that operates a full-service in-house restaurant specializing in premium pizzas. The restaurant serves both hotel guests and walk-in customers and contributes significantly to the hotel's overall revenue.

Over time, the restaurant has generated a large amount of transactional sales data, including order details, pizza types, categories, sizes, quantities, pricing, and timestamps. However, the management team lacks structured insights into sales performance, customer preferences, and revenue trends. The data exists in the database but is not being effectively utilized for business decision-making.

### Core Business Problem

The management of The Grand Crust Hotel wants to transform raw pizza sales data into meaningful insights that can help improve revenue, optimize operations, and support strategic planning.

Currently, the hotel faces several challenges:

- No clear visibility of total sales and revenue performance
- Limited understanding of customer ordering patterns
- Difficulty identifying top-performing and low-performing pizza types
- Inefficient inventory and demand planning
- Lack of clarity on peak business hours
- No structured analysis of category-wise and size-wise demand
- Limited understanding of revenue contribution by each pizza type

Without data-driven insights, pricing decisions, staffing schedules, promotional strategies, and inventory management are based on assumptions rather than facts.

## Project Objective

The objective of this project is to analyze historical pizza sales data using MySQL to answer key business questions and generate actionable insights.

The analysis focuses on:

- Calculating total number of orders
- Measuring total revenue generated
- Identifying the highest-priced pizza
- Determining the most commonly ordered pizza size
- Listing the top 5 most ordered pizza types
- Analyzing total quantity ordered by category
- Understanding hourly distribution of orders
- Examining category-wise pizza distribution
- Calculating average daily order volume
- Identifying top 3 revenue-generating pizza types
- Measuring percentage contribution of each pizza type to total revenue
- Analyzing cumulative revenue growth over time.

## Expected Business Impact

By implementing this analysis, The Grand Crust Hotel can:

- Improve revenue optimization through better pricing strategies
- Focus marketing efforts on high-performing pizzas
- Optimize inventory and reduce waste
- Plan staffing efficiently during peak hours
- Monitor revenue growth trends
- Make informed, data-driven business decisions