

”Pizza Sales Analysis”

*** Using Data Analytics**

Project Overview

The Pizza Sales Analysis project focuses on examining restaurant sales data to identify customer preferences, revenue trends, and peak ordering times. The analysis helps businesses make data-driven decisions to improve sales, optimize inventory, and design effective marketing strategies.

Objectives

- Analyze total sales and revenue.**
- Identify best-selling pizza types.**
- Determine peak order times and days.**
- Study customer preferences by size and category.**
- Provide insights to improve business performance**

Tools & Technologies

- Python**
- Pandas – data cleaning and manipulation**
- NumPy – numerical operations**
- Matplotlib / Seaborn – data visualization**
- Jupyter Notebook – development environment**
- CSV Dataset – pizza sales data**

Dataset Description

The dataset includes the following fields:

- **Order ID**
- **Pizza name**
- **Category (Veg, Non-Veg, Classic, etc.)**
- **Size (Small, Medium, Large, XL)**
- **Quantity**
- **Price**
- **Order date**
- **Order time**

Methodology

1. Data Collection

- **Imported the pizza sales dataset in CSV format.**

2. Data Cleaning

- **Removed duplicates.**
- **Handled missing values.**
- **Converted date and time columns into proper formats.**

3. Exploratory Data Analysis (EDA)

- **Calculated total revenue.**
- **Identified top-selling pizzas.**
- **Analyzed sales by category and size.**
- **Studied hourly and daily order trends.**

4. Data Visualization

- **Bar charts for top-selling pizzas.**
- **Line graphs for revenue trends.**
- **Pie charts for category distribution.**
- **Heatmaps for order time analysis.**

Business Insights

- **Promote top-selling pizzas in advertisements.**
- **Offer discounts during low-sales hours.**
- **Increase stock for high-demand pizza types.**
- **Create combo deals for popular sizes.**

Conclusion :

The Pizza Sales Analysis project provides valuable insights into customer behavior, revenue trends, and peak demand periods. These findings can help restaurant owners optimize pricing, inventory, and promotional strategies to increase profitability.