

PIZZA SALES ANALYSIS

Problem Statement:

We would like to visualize various aspects of our pizza sales data to gain insights and understand key trends. We also need to analyze key indicators for our pizza sales data to gain insights into our business performance. Specifically, we want to calculate the following metrics:

1. **Total Revenue:** The sum of the total price of all pizza orders.
2. **Average Order Value:** The average amount spent per order, calculated by dividing the total revenue by the total number of orders.
3. **Total Pizzas Sold:** The sum of the quantities of all pizzas sold.
4. **Total Orders:** The total number of orders placed.
5. **Average Pizzas Per Order:** The average number of pizzas sold per order, calculated by dividing the total number of pizzas sold by the total number of orders.

Objective:

The objective of this data analysis is to analyze key indicators of pizza sales and to gain insights and understand key trends.

Research questions:

1. **Daily trend for total orders:** Is there any patterns or fluctuations in order volumes on a daily basis?
2. **Hourly trend for total orders:** When is the peak hours or periods of high order activity?
3. **Percentage of sales by pizza category:** What is the percentage of pizza sales by various pizza categories and their contribution to overall sales?
4. **Percentage of sales by pizza size:** What are the customer preferences for pizza sizes and their impact on sales?
5. **Total pizzas sold pizza category:** Compare the sales performance of different pizza categories.
6. **Top 5 best sellers by total pizzas sold:** What are the top 5 best sellers by total pizzas sold?
7. **Bottom 5 worst sellers by total pizzas sold:** What are the bottom 5 worst sellers by total pizzas sold?

Insights:

1. Pizza orders are lowest on Sunday and more orders are placed on Friday.
2. Peak hours are between 12pm to 1pm and 5pm to 6pm, orders are less placed between 9am to 10:30am and 10pm to 11 pm.
3. Large size pizzas are highest in sales and x-large and xx-large have less sales.
4. In pizzas category, classic pizza is sold the most and all other pizza category are almost same.
5. Most sold pizza is "The Classic Deluxe Pizza" and "The Brie Carre Pizza" is least sold.

Suggestions:

1. On Sunday less workers can be used, as orders are less placed on Sunday.
2. In peak hours more pizza ingredients and workers can be used to handle orders.
3. Except classic pizzas, discount or offers can be provided for other category pizzas to increase sales.