## **📊 Problem Statement: Pizza Sales Data Analysis**

To gain insights into our pizza sales and customer behavior, we aim to visualize the data using charts and compute essential KPIs. The objectives are categorized as follows:

### **📈 Charts Requirement**

1. **Daily Trend for Total Orders** Create a bar chart that displays the daily trend of total orders over a specific time period. This chart will help identify any patterns or fluctuations in order volumes on a daily basis.
2. **Monthly Trend for Total Orders** Create a line chart that illustrates the hourly trend of total orders throughout the day. This will allow us to identify peak hours or periods of high order activity.
3. **Percentage of Sales by Pizza Category** Create a pie chart that shows the distribution of sales across different pizza categories. This chart provides insights into the popularity of various pizza categories and their contribution to overall sales.
4. **Percentage of Sales by Pizza Size** Generate a pie chart that represents the percentage of sales attributed to different pizza sizes. This will help understand customer preferences for pizza sizes and their impact on sales.
5. **Total Pizzas Sold by Pizza Category** Create a funnel chart that presents the total number of pizzas sold for each pizza category. This will allow comparison of sales performance across different categories.
6. **Top 5 Best Sellers by Revenue, Total Quantity, and Total Orders** Create a bar chart highlighting the top 5 best-selling pizzas based on revenue, total quantity sold, and total orders. This will help identify the most popular pizza options.
7. **Bottom 5 Best Sellers by Revenue, Total Quantity, and Total Orders** Create a bar chart showcasing the bottom 5 worst-selling pizzas based on revenue, total quantity, and total orders. This will help identify underperforming or less popular pizzas.

### **📌 KPI's Requirement**

We need to calculate key performance indicators (KPIs) to evaluate the business performance of our pizza sales:

1. **Total Revenue** The sum of the total price of all pizza orders.
2. **Average Order Value (AOV)** The average amount spent per order, calculated by dividing 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.