**Problem Statement For Data Analysis Project :**  
**CLIENT’S REQUIREMENT :**

We 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:

from 12-01pm & after 5pm.

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

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.

**CHARTS REQUIREMENT**

We would like to visualize various aspects of our pizza sales data to gain insights and understand key trends. We have identified the following requirements for creating charts:

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 us 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 chart 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 will provide 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 chart will help us 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 chart will allow us to compare the sales performance of different pizza 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 the Revenue, Total Quantity, Total Orders. This chart will help us 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 the Revenue, Total Quantity, Total Orders. This chart will enable us to identify underperforming or less popular pizza options.

**PIZZA SALES SQL QUERIES**

**A. KPI’s**

**1. Total Revenue:**

SELECT SUM(total\_price) AS Total\_Revenue FROM pizza\_sales;



**2. Average Order Value**

SELECT (SUM(total\_price) / COUNT(DISTINCT order\_id)) AS Avg\_order\_Value FROM pizza\_sales



**3. Total Pizzas Sold**

SELECT SUM(quantity) AS Total\_pizza\_sold FROM pizza\_sales



**4. Total Orders**

SELECT COUNT(DISTINCT order\_id) AS Total\_Orders FROM pizza\_sales



**5. Average Pizzas Per Order**

SELECT CAST(CAST(SUM(quantity) AS DECIMAL(10,2)) /

CAST(COUNT(DISTINCT order\_id) AS DECIMAL(10,2)) AS DECIMAL(10,2))

AS Avg\_Pizzas\_per\_order

FROM pizza\_sales



**B. Daily Trend for Total Orders**SELECT DATENAME(DW, order\_date) AS order\_day, COUNT(DISTINCT order\_id) AS total\_orders

FROM pizza\_sales

GROUP BY DATENAME(DW, order\_date)

***Output:***

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**C. Monthly Trend for Orders**

select DATENAME(MONTH, order\_date) as Month\_Name, COUNT(DISTINCT order\_id) as Total\_Orders

from pizza\_sales

GROUP BY DATENAME(MONTH, order\_date)***Output***

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**D. % of Sales by Pizza Category**

SELECT pizza\_category, CAST(SUM(total\_price) AS DECIMAL(10,2)) as total\_revenue,

CAST(SUM(total\_price) \* 100 / (SELECT SUM(total\_price) from pizza\_sales) AS DECIMAL(10,2)) AS PCT

FROM pizza\_sales

GROUP BY pizza\_category

***Output***

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**E. % of Sales by Pizza Size**

SELECT pizza\_size, CAST(SUM(total\_price) AS DECIMAL(10,2)) as total\_revenue,

CAST(SUM(total\_price) \* 100 / (SELECT SUM(total\_price) from pizza\_sales) AS DECIMAL(10,2)) AS PCT

FROM pizza\_sales

GROUP BY pizza\_size

ORDER BY pizza\_size

***Output***

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**F. Total Pizzas Sold by Pizza Category**

SELECT pizza\_category, SUM(quantity) as Total\_Quantity\_Sold

FROM pizza\_sales

WHERE MONTH(order\_date) = 2

GROUP BY pizza\_category

ORDER BY Total\_Quantity\_Sold DESC

***Output***

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**G. Top 5 Pizzas by Revenue**

SELECT Top 5 pizza\_name, SUM(total\_price) AS Total\_Revenue

FROM pizza\_sales

GROUP BY pizza\_name

ORDER BY Total\_Revenue DESC

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**H. Bottom 5 Pizzas by Revenue**

SELECT Top 5 pizza\_name, SUM(total\_price) AS Total\_Revenue

FROM pizza\_sales

GROUP BY pizza\_name

ORDER BY Total\_Revenue ASC

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**I. Top 5 Pizzas by Quantity**

SELECT Top 5 pizza\_name, SUM(quantity) AS Total\_Pizza\_Sold

FROM pizza\_sales

GROUP BY pizza\_name

ORDER BY Total\_Pizza\_Sold DESC

***Output***

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**J. Bottom 5 Pizzas by Quantity**

SELECT TOP 5 pizza\_name, SUM(quantity) AS Total\_Pizza\_Sold

FROM pizza\_sales

GROUP BY pizza\_name

ORDER BY Total\_Pizza\_Sold ASC

***Output***

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**K. Top 5 Pizzas by Total Orders**

SELECT Top 5 pizza\_name, COUNT(DISTINCT order\_id) AS Total\_Orders

FROM pizza\_sales

GROUP BY pizza\_name

ORDER BY Total\_Orders DESC

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**L. Borrom 5 Pizzas by Total Orders**

SELECT Top 5 pizza\_name, COUNT(DISTINCT order\_id) AS Total\_Orders

FROM pizza\_sales

GROUP BY pizza\_name

ORDER BY Total\_Orders ASC

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Final Output Using Power Bi :

A screenshot of a computer

Description automatically generated



Thank You !!