**PROBLEM STATEMENT**

**A. KPI’s REQUIREMENT**

**We need to analyze key indicators for our pizza sales data to gain insights into our business performance.Specially,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.**

**A. CHARTS REQUIREMENT**

**We would like to visualize various aspects of our feature cells data to gain insight 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 worders over a specific time period. This chart will help us identify any patterns or fluctuations in worder volumes on a daily basis.**

**2. Hourly Trend for Total orders :**

**Create a line chart that illustrates the hourly trend of total worders throughout the day. This chart will allow us to identify peak hours or periods of high worder activity.**

**3. Percentage of Sales by Feature Category :**

**Create a pie chart that shows the distribution of sales across different feature categories. This chart will provide insights into the popularity of various feature 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 size 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-Seller by Total Pizzas Sold :**

**Create a bar chart highlighting the top 5 best-selling pizzas based on the total number of pizzas sold. This chart will help us identify the most popular pizza options.**

**7. Bottom 5 Worst-Sellers by Total Pizzas Sold:**

**Create a bar chart showcasing the bottom 5 worst-selling pizzas based on the total number of pizzas sold. This chart will enable us to identify underperforming or less popular pizza options.**

**PIZZA SALES SQL QUERIES**

**A. KPI’s REQUIREMENT**

**We need to analyze key indicators for our pizza sales data to gain insights into our bussiness**

**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. Hourly Trend for Orders**

SELECT DATEPART(HOUR, order\_time) as order\_hours, COUNT(DISTINCT order\_id) as total\_orders

from pizza\_sales

group by DATEPART(HOUR, order\_time)

order by DATEPART(HOUR, order\_time)

***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 Best Sellers by Total Pizzas Sold**

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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**H. Bottom 5 Best Sellers by Total Pizzas Sold**

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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***NOTE***

If you want to apply the Month, Quarter, Week filters to the above queries you can use WHERE clause. Follow some of below examples

SELECT DATENAME(DW, order\_date) AS order\_day, COUNT(DISTINCT order\_id) AS total\_orders

FROM pizza\_sales

WHERE MONTH(order\_date) = 1

GROUP BY DATENAME(DW, order\_date)

*\*Here MONTH(order\_date) = 1 indicates that the output is for the month of January. MONTH(order\_date) = 4 indicates output for Month of April.*

SELECT DATENAME(DW, order\_date) AS order\_day, COUNT(DISTINCT order\_id) AS total\_orders

FROM pizza\_sales

WHERE DATEPART(QUARTER, order\_date) = 1

GROUP BY DATENAME(DW, order\_date)

*\*Here DATEPART(QUARTER, order\_date) = 1 indicates that the output is for the Quarter 1. MONTH(order\_date) = 3 indicates output for Quarter 3.*