

PIZZA SALES ANALYSIS

Objective

The primary aim of this project is to conduct an in-depth analysis of sales data to gain valuable insights into Pizza sales performances, identify emerging trends, and develop data-driven business strategies for improved decision-making.

SQL Queries for Analysis

Various SQL queries are utilized to perform the sales analysis effectively. These queries involve aggregating sales data, calculating key performance metrics such as revenue, profit, and sales growth, and grouping data based on dimensions like time, region, or product category. The queries further facilitate the exploration of sales patterns, customer segmentation, and identifying top-performing pizzas and size.

Key Insights and Findings

The sales analysis yields valuable and actionable insights for decision-making. It uncovers sales performance trends over time, pinpoints best-selling pizzas or categories, and highlights underperforming regions. Analysing customer demographics aids in identifying target segments for personalized marketing strategies. With these insights, businesses can make informed decisions, optimize their operations, and drive growth and success.

KPI's REQUIREMENT

1. Total Revenue:

```
SELECT SUM(total_price) As Total_Revenue from pizza_sales
```

| Results | | Messages | |
|---------------|-----------------|----------|--|
| Total_Revenue | | | |
| 1 | 817860.05083847 | | |

2. Average Order Value:

```
SELECT SUM(total_price) / COUNT(DISTINCT order_id) As Avg_Order_Value  
from pizza_sales
```

| Results Messages | |
|------------------|------------------|
| | Avg_Order_Value |
| 1 | 38.3072623343546 |

3. Total Pizza Sold:

SELECT SUM(quantity) As Total_pizza_sold from pizza_sales

| Results Messages | |
|------------------|------------------|
| | Total_pizza_sold |
| 1 | 49574 |

4. Total Orders:

SELECT COUNT(DISTINCT order_id) As Total_orders from pizza_sales

| Results Messages | |
|------------------|--------------|
| | Total_orders |
| 1 | 21350 |

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_perorder from pizza_sales

| Results Messages | |
|------------------|---------------------|
| | Avg_pizzas_perorder |
| 1 | 2.32 |

CHARTS REQUIREMENT

1. 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)

| Results Messages | | |
|------------------|-----------|--------------|
| | order_day | Total_orders |
| 1 | Saturday | 3158 |
| 2 | Wednesday | 3024 |
| 3 | Monday | 2794 |
| 4 | Sunday | 2624 |
| 5 | Friday | 3538 |
| 6 | Thursday | 3239 |
| 7 | Tuesday | 2973 |

2. Monthly Trend for Total 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)  
Order By Total_orders DESC
```

| | Month_Name | Total_orders |
|----|------------|--------------|
| 1 | July | 1935 |
| 2 | May | 1853 |
| 3 | January | 1845 |
| 4 | August | 1841 |
| 5 | March | 1840 |
| 6 | April | 1799 |
| 7 | November | 1792 |
| 8 | June | 1773 |
| 9 | February | 1685 |
| 10 | December | 1680 |
| 11 | September | 1661 |
| 12 | October | 1646 |

3. Percentage of Sales by Pizza Category:

```
select pizza_category, sum(Total_price) as  
Total_sales, sum(Total_price) * 100/  
(select sum(Total_price) from pizza_sales where  
MONTH(order_date) = 1) As PCT  
from pizza_sales  
where MONTH(order_date) = 1  
Group By pizza_category
```

| | pizza_category | Total_sales | PCT |
|---|----------------|------------------|------------------|
| 1 | Classic | 18619.4000015259 | 26.6779189176038 |
| 2 | Chicken | 16188.75 | 23.1952780348435 |
| 3 | Veggie | 17055.4000778198 | 24.4370162489706 |
| 4 | Supreme | 17929.7499866486 | 25.6897867985821 |

4. Percentage of Sales by Pizza Size:

```
select pizza_size, sum(Total_price) as  
Total_sales, sum(Total_price) * 100/  
(select sum(Total_price) from pizza_sales) As PCT  
from pizza_sales  
Group By pizza_size
```

| Results | | Messages | |
|---------|------------|------------------|-------------------|
| | pizza_size | Total_sales | PCT |
| 1 | L | 375318.701004028 | 45.8903330244889 |
| 2 | XXL | 1006.6000213623 | 0.123077294254725 |
| 3 | M | 249382.25 | 30.492044420599 |
| 4 | XL | 14076 | 1.72107684995364 |
| 5 | S | 178076.49981308 | 21.7734684107037 |

select pizza_size, sum(Total_price) as
Total_sales, 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 PCT DESC

| Results | | Messages | |
|---------|------------|------------------|-------|
| | pizza_size | Total_sales | PCT |
| 1 | L | 375318.701004028 | 45.89 |
| 2 | M | 249382.25 | 30.49 |
| 3 | S | 178076.49981308 | 21.77 |
| 4 | XL | 14076 | 1.72 |
| 5 | XXL | 1006.6000213623 | 0.12 |

5. Total Pizzas Sold by Category:

```
select pizza_size, CAST(sum(Total_price) As
DECIMAL(10,2)) as Total_sales,
CAST(sum(Total_price) * 100/
(select sum(Total_price) from pizza_sales) As
Decimal(10,2)) As PCT
from pizza_sales
where DATEPART(QUARTER, order_date) =1
Group By pizza_size
Order By PCT DESC
```

| Results | | Messages | |
|---------|------------|-------------|-------|
| | pizza_size | Total_sales | PCT |
| 1 | L | 95229.65 | 11.64 |
| 2 | M | 61159.00 | 7.48 |
| 3 | S | 45384.25 | 5.55 |
| 4 | XL | 3289.50 | 0.40 |
| 5 | XXL | 287.60 | 0.04 |

6. 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

| | pizza_name | Total_revenue |
|---|------------------------------|---------------|
| 1 | The Thai Chicken Pizza | 43434.25 |
| 2 | The Barbecue Chicken Pizza | 42768 |
| 3 | The California Chicken Pizza | 41409.5 |
| 4 | The Classic Deluxe Pizza | 38180.5 |
| 5 | The Spicy Italian Pizza | 34831.25 |

7. Bottom 5 Pizzas by Revenue, Total Quantity

```
select Top 5 pizza_name, sum(Total_price) As  
Total_revenue from pizza_sales
```

Group By pizza_name

Order By Total_revenue ASC

| | pizza_name | Total_revenue |
|---|---------------------------|------------------|
| 1 | The Brie Carre Pizza | 11588.4998130798 |
| 2 | The Green Garden Pizza | 13955.75 |
| 3 | The Spinach Supreme Pizza | 15277.75 |
| 4 | The Mediterranean Pizza | 15360.5 |
| 5 | The Spinach Pesto Pizza | 15596 |

| | pizza_name | Total_Quantity |
|---|---------------------------|----------------|
| 1 | The Brie Carre Pizza | 490 |
| 2 | The Mediterranean Pizza | 934 |
| 3 | The Calabrese Pizza | 937 |
| 4 | The Spinach Supreme Pizza | 950 |
| 5 | The Soppressata Pizza | 961 |

```
Select Top 5 pizza_name, COUNT(DISTINCT order_id) As Total_orders  
from pizza_sales Group By pizza_name Order By Total_orders ASC
```

| Results | | | Messages | | |
|---------|---------------------------|--|--------------|--|--|
| | pizza_name | | Total_orders | | |
| 1 | The Brie Carre Pizza | | 480 | | |
| 2 | The Mediterranean Pizza | | 912 | | |
| 3 | The Spinach Supreme Pizza | | 918 | | |
| 4 | The Calabrese Pizza | | 918 | | |
| 5 | The Chicken Pesto Pizza | | 938 | | |