Project Report

Dataset Overview

This dataset contain detailed information about pizza orders, including specifics about the pizza variants, quantities, pricing, dates, times, and categorization details.

pizza_id: A unique identifier assigned to each distinct pizza variant available for ordering.

order_id: A unique identifier for each order made, which links to multiple pizzas.

pizza_name_id: An identifier linking to a specific name of the pizza.

quantity: The number of units of a specific pizza variant ordered within an order.

order_date: The date when the order was placed.

order_time: The time when the order was placed.

unit_price: The cost of a single unit of the specific pizza variant.

total_price: The aggregated cost of all units of a specific pizza variant in an order.

pizza_size: Represents the size of the pizza (e.g., small, medium, large).

pizza_category: Indicates the category of the pizza, such as vegetarian, non-vegetarian, etc.

pizza_ingredients: Provides a list or description of the ingredients used in the pizza.

pizza_name: Specifies the name of the specific pizza variant ordered.

Problem Statement

KPI'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:

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.

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 QUERIE

A. KPI's

1. Total Revenue:

```
SELECT SUM(total_price) AS Total_Revenue FROM pizza_sales ;
```

Total_Revenue
817860.049999993

2. Average Order Value

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

Avg_Order_Value
38.307262295081635

3. Total Pizzas Sold

```
SELECT SUM(quantity) AS Total_Pizza_Sold FROM pizza_sales;
```

Total_Pizza_Sold
49574

4. Total Orders

```
SELECT COUNT(DISTINCT order_id) AS Total_Orders FROM pizza_sales;
```

Total_Orders
21350

5. Average Pizzas Per Order

```
SELECT CAST(SUM(quantity)/ COUNT(DISTINCT order_id) AS DECIMAL (10,2)) AS
Avg_Pizza_Per_Order
FROM pizza_sales;
```

Avg_Pizza_Per_Order
2.32

B. Daily Trend for Total Orders

```
SELECT dayname(order_date) as order_day, COUNT(DISTINCT order_id) AS
Total_orders FROM pizza_sales
 GROUP BY dayname(order_date);
```

Output:

order_day	Total_orders
Friday	3538
Monday	2794
Saturday	3158
Sunday	2624
Thursday	3239
Tuesday	2973
Wednesday	3024

C. Monthly Trend for Orders

```
SELECT MONTHNAME(order_date) AS MONTH_NAME , COUNT(DISTINCT order_id) AS
Total_Orders FROM pizza_sales
 GROUP BY MONTHNAME(order_date)
 ORDER BY Total_Orders DESC ;
```

Output

	MONTH_NAME	Total_Orders
▶	July	1935
	May	1853
	January	1845
	August	1841
	March	1840
	April	1799
	November	1792
	June	1773
	February	1685
	December	1680
	September	1661
	October	1646

D. % of Sales by Pizza Category

```
SELECT pizza_category , sum(total_price)*100/ ( SELECT SUM(total_price)
from pizza_sales) AS PCT FROM pizza_sales
 GROUP BY pizza_category ;
```

Output

	pizza_category	PCT
▶	Classic	26.9059602556699
	Veggie	23.682590927384783
	Supreme	25.45631126009884
	Chicken	23.955137556847493

E. % of Sales by Pizza Size

```
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
 GROUP BY pizza_size
 ORDER BY PCT DESC ;
```

Output

	pizza_size	Total_Sales	PCT
▶	L	375318.70	45.89
	M	249382.25	30.49
	S	178076.50	21.77
	XL	14076.00	1.72
	XXL	1006.60	0.12

F. Total Pizzas Sold by Pizza Category

```
SELECT pizza_size, COUNT(pizza_id) AS total_pizza
FROM pizza_sales
GROUP BY pizza_size;
```

Output

	pizza_size	total_pizza
▶	M	15385
	L	18526
	S	14137
	XL	544
	XXL	28

G. Top 5 Pizzas by Revenue

```
SELECT pizza_name, SUM(total_price) AS total_revenue FROM pizza_sales
GROUP BY pizza_name
ORDER BY total_revenue DESC
LIMIT 5;
```

	pizza_name	total_revenue
▶	The Thai Chicken Pizza	43434.25
	The Barbecue Chicken Pizza	42768
	The California Chicken Pizza	41409.5
	The Classic Deluxe Pizza	38180.5
	The Spicy Italian Pizza	34831.25

H. Bottom 5 Pizzas by Revenue

```
SELECT pizza_name, SUM(total_price) AS total_revenue FROM pizza_sales
GROUP BY pizza_name
ORDER BY total_revenue ASC
LIMIT 5;
```

pizza_name	total_revenue
The Brie Carre Pizza	11588.4999999999
The Green Garden Pizza	13955.75
The Spinach Supreme Pizza	15277.75
The Mediterranean Pizza	15360.5
The Spinach Pesto Pizza	15596

I. Top 5 Pizzas by Quantity

```
SELECT pizza_name , SUM(quantity) AS total_quantity FROM pizza_sales
 GROUP BY pizza_name
 ORDER BY total_quantity DESC LIMIT 5;
```

Output:

pizza_name	total_quantity
The Classic Deluxe Pizza	2453
The Barbecue Chicken Pizza	2432
The Hawaiian Pizza	2422
The Pepperoni Pizza	2418
The Thai Chicken Pizza	2371

J. Bottom 5 Pizzas by Quantity

```
SELECT pizza_name , SUM(quantity) AS total_quantity FROM pizza_sales
 GROUP BY pizza_name
 ORDER BY total_quantity ASC LIMIT 5;
```

Output

pizza_name	total_quantity
The Brie Carre Pizza	490
The Mediterranean Pizza	934
The Calabrese Pizza	937
The Spinach Supreme Pizza	950
The Soppressata Pizza	961

K. Top 5 Pizzas by Total Orders

```
SELECT pizza_name , COUNT(DISTINCT order_id) AS total_orders FROM
pizza_sales
 GROUP BY pizza_name
ORDER BY total_orders DESC LIMIT 5;
```

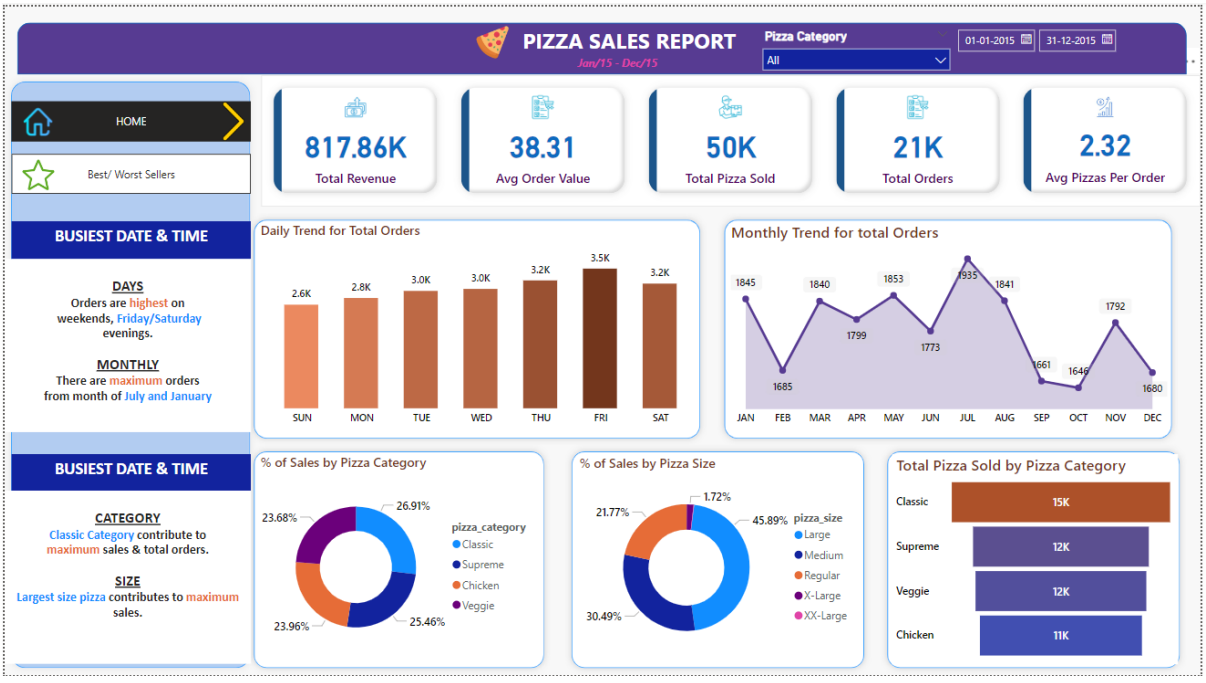
pizza_name	total_orders
The Classic Deluxe Pizza	2329
The Hawaiian Pizza	2280
The Pepperoni Pizza	2278
The Barbecue Chicken Pizza	2273
The Thai Chicken Pizza	2225

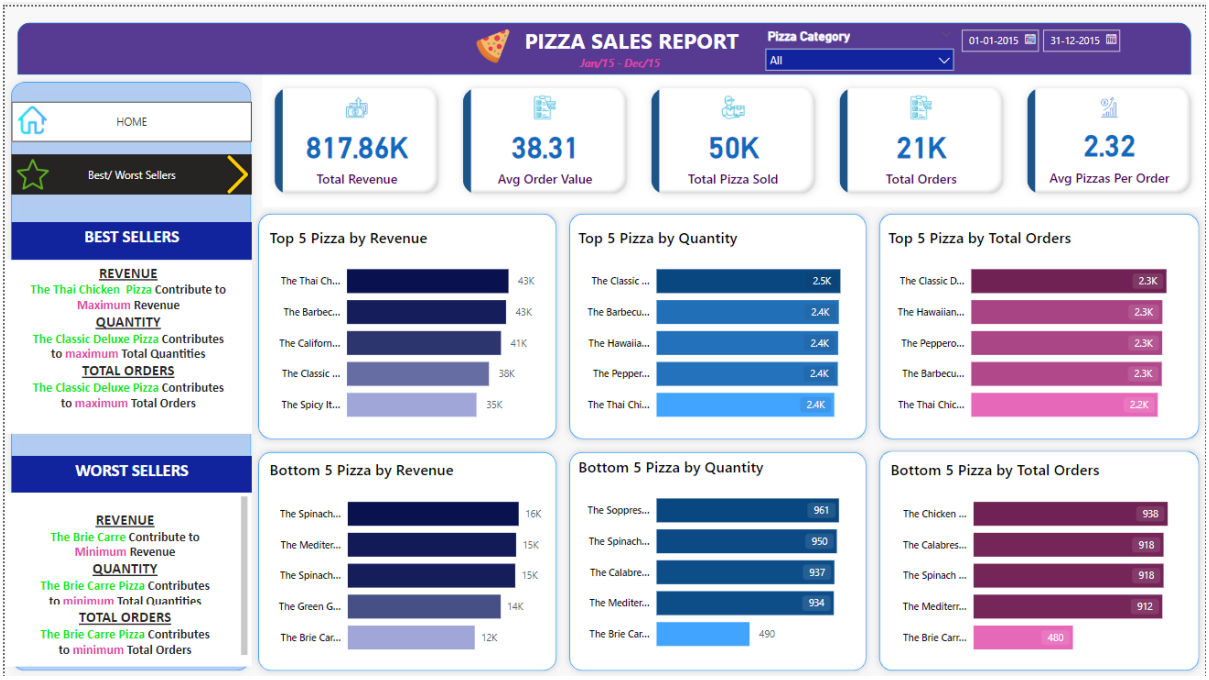
L. Bottom 5 Pizzas by Total Orders

```
SELECT pizza_name , COUNT(DISTINCT order_id) AS total_orders FROM
pizza_sales
 GROUP BY pizza_name
 ORDER BY total_orders ASC LIMIT 5;
```

pizza_name	total_orders
The Brie Carre Pizza	480
The Mediterranean Pizza	912
The Calabrese Pizza	918
The Spinach Supreme Pizza	918
The Chicken Pesto Pizza	938

Power BI Dashboards




PIZZA SALES REPORT
Jan'15 - Dec'15
Pizza Category
All
01-01-2015
31-12-2015
HOME
Best/ Worst Sellers
817.86K
Total Revenue
38.31
Avg Order Value
50K
Total Pizza Sold
21K
Total Orders
2.32
Avg Pizzas Per Order
BEST SELLERS
REVENUE
The Thai Chicken Pizza Contribute to Maximum Revenue
QUANTITY
The Classic Deluxe Pizza Contributes to maximum Total Quantities
TOTAL ORDERS
The Classic Deluxe Pizza Contributes to maximum Total Orders
WORST SELLERS
REVENUE
The Brie Carre Contribute to Minimum Revenue
QUANTITY
The Brie Carre Pizza Contributes to minimum Total Quantities
TOTAL ORDERS
The Brie Carre Pizza Contributes to minimum Total Orders
Top 5 Pizza by Revenue
The Thai Ch... 43K
The Barbec... 43K
The Californ... 41K
The Classic ... 38K
The Spicy It... 35K
Top 5 Pizza by Quantity
The Classic ... 2.5K
The Barbecu... 2.4K
The Hawaiia... 2.4K
The Pepper... 2.4K
The Thai Chi... 2.4K
Top 5 Pizza by Total Orders
The Classic D... 2.3K
The Hawaiian... 2.3K
The Peppero... 2.3K
The Barbecu... 2.3K
The Thai Chic... 2.2K
Bottom 5 Pizza by Revenue
The Spinach... 16K
The Mediter... 15K
The Spinach... 15K
The Green G... 14K
The Brie Car... 12K
Bottom 5 Pizza by Quantity
The Soppres... 961
The Spinach... 950
The Calabre... 937
The Mediter... 934
The Brie Car... 490
Bottom 5 Pizza by Total Orders
The Chicken ... 938
The Calabres... 918
The Spinach ... 918
The Mediterr... 912
The Brie Carr... 480