PIZZA SALES ANALYSIS

KPIs :

- ### Data Used

```
select top 5 *
from pizza_sales
```

	pizza_id	order_id	pizza_name_id	quantity	order_date	order_time	unit_price	total_price	pizza_size	pizza_category	pizza_ingredients	pizza_name
1	1	1	hawaiian_m	1	2015-01-01	11:38:36.0000000	13.25	13.25	M	Classic	Sliced Ham, Pineapple, Mozzarella Cheese	The Hawaiian Pizza
2	2	2	classic_dlx_m	1	2015-01-01	11:57:40.0000000	16	16	M	Classic	Pepperoni, Mushrooms, Red Onions, Red Peppers, B...	The Classic Deluxe Pizza
3	3	2	five_cheese_l	1	2015-01-01	11:57:40.0000000	18.5	18.5	L	Veggie	Mozzarella Cheese, Provolone Cheese, Smoked Goud...	The Five Cheese Pizza
4	4	2	ital_supr_l	1	2015-01-01	11:57:40.0000000	20.75	20.75	L	Supreme	Calabrese Salami, Capocollo, Tomatoes, Red Onions, ...	The Italian Supreme Pizza
5	5	2	mexicana_m	1	2015-01-01	11:57:40.0000000	16	16	M	Veggie	Tomatoes, Red Peppers, Jalapeno Peppers, Red Onio...	The Mexicana Pizza

- ### Total Revenue Generated

```
select
round(sum(quantity * unit_price),2) as total_revenue
from pizza_sales

/*another way*/

select round(sum(total_price), 2) as total_revenue
from pizza_sales
```
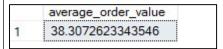
	total_revenue
1	817860.05

- ### Total Orders

```
select count( distinct order_id) AS total_orders
from pizza_sales
```

	total_orders
1	21350

- ### Average Order Value

```
select sum(total_price) / count(distinct order_id) as average_order_value
from pizza_sales
```

	average_order_value
1	38.3072623343546

- ### Total Pizzas Sold

```
select sum(quantity) as total_pizzas
from pizza_sales
```

	total_pizzas
1	49574

● 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 average_pizzas_per_order
from pizza_sales
```

	average_pizzas_per_order
1	2.32

● 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)
```

	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

➤ **DATENAME** : The DATENAME function in SQL is used to return a specific part of a date as a string, such as the day, month, year, weekday, hour, minute, or second.

➤ Here, DW is mentioned hence, it will retrieve Day of the week (Monday, Tuesday, Wednesday… etc) from the date column

● Monthly Trend for Total Orders

```
select DATENAME(MM, order_date) as month_name,
count(distinct order_id) as total_orders
from pizza_sales
group by DATENAME(MM, 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

● Percentage of Sales by PIZZA category

(USING CTE/WITH CLAUSE METHOD)

```
with pizza_prices as
(select pizza_category,
round(sum(total_price),2) as price from pizza_sales
group by pizza_category)
,

total_sales_price as
(select round(sum(total_price), 2) as total_price from pizza_sales)

select pizza_category,
round((price / total_price * 100.0), 3) as percentage
from pizza_prices, total_sales_price
```

	pizza_category	percentage
1	Classic	26.906
2	Chicken	23.955
3	Veggie	23.683
4	Supreme	25.456

```
/*another method*/
```

(USING SUBQUERY METHOD)

```
select
pizza_category, round(sum(total_price), 3)as total_sales,
round(sum(total_price) * 100.0 / (select sum(total_price) from pizza_sales), 3) as percentage
from pizza_sales
group by pizza_category
```

	pizza_category	total_sales	percentage
1	Classic	220053.1	26.906
2	Chicken	195919.5	23.955
3	Veggie	193690.451	23.683
4	Supreme	208197	25.456

● **NOTE : If we need to specifically see the sales for a particular month, hence, we use 'WHERE' clause**

```
select
pizza_category, round(sum(total_price), 3)as total_sales,
round(sum(total_price) * 100.0 / (select sum(total_price) from pizza_sales where
MONTH(order_date) = 1), 3) as percentage
```

```sql
from pizza_sales
where MONTH(order_date) = 1
group by pizza_category
```

	pizza_category	total_sales	percentage
1	Classic	18619.4	26.678
2	Chicken	16188.75	23.195
3	Veggie	17055.4	24.437
4	Supreme	17929.75	25.69

● Percentage of Sales by PIZZA size

```sql
select pizza_size,
sum(total_price) as total_sales,
cast (sum(total_price) * 100.0 / (select sum(total_price) from pizza_sales) as decimal (10,2))
as pct
from pizza_sales
group by pizza_size
order by pct
```

	pizza_size	total_sales	pct
1	XXL	1006.6000213623	0.12
2	XL	14076	1.72
3	S	178076.49981308	21.77
4	M	249382.25	30.49
5	L	375318.701004028	45.89

❖ **USING WHERE CLASUSE FOR SPECIFICATION IN ORDER TO SHOW THE DATA**

```sql
select pizza_size,
sum(total_price) as total_sales,
cast (sum(total_price) * 100.0 / (select sum(total_price) from pizza_sales where datepart
(quarter, order_date) = 1)as decimal (10, 2)
) as pct
from pizza_sales
where datepart (quarter, order_date) = 1
group by pizza_size
order by pct
```

	pizza_size	total_sales	pct
1	XXL	287.600006103516	0.14
2	XL	3289.5	1.60
3	S	45384.2499523163	22.10
4	M	61159	29.78
5	L	95229.6502571106	46.37

● Top 5 Best Sellers Pizza by Revenue

```sql
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

● **Bottom 5 Sellers Pizza 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
```

	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

● **Top 5 Best Sellers Pizza by Quantity**

```
select top 5
pizza_name,
sum(quantity) as total_sales
from pizza_sales
group by pizza_name
order by total_sales desc
```

	pizza_name	total_sales
1	The Classic Deluxe Pizza	2453
2	The Barbecue Chicken Pizza	2432
3	The Hawaiian Pizza	2422
4	The Pepperoni Pizza	2418
5	The Thai Chicken Pizza	2371

● **Bottom 5 Sellers Pizza by Quantity**

```
select top 5
pizza_name,
sum(quantity) as total_sales
from pizza_sales
group by pizza_name
order by total_sales asc
```

	pizza_name	total_sales
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

-
- ## Top 5 Best Sellers Pizza by 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
```

	pizza_name	total_orders
1	The Classic Deluxe Pizza	2329
2	The Hawaiian Pizza	2280
3	The Pepperoni Pizza	2278
4	The Barbecue Chicken Pizza	2273
5	The Thai Chicken Pizza	2225

- ## Bottom 5 Sellers Pizza by 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
```

	pizza_name	total_orders
1	The Classic Deluxe Pizza	2329
2	The Hawaiian Pizza	2280
3	The Pepperoni Pizza	2278
4	The Barbecue Chicken Pizza	2273
5	The Thai Chicken Pizza	2225