PROJECT OF PIZZA SALES REPORT

REPRESENTED BY
DIP DAS

OBJECTIVE :

THIS REPORT AIMS TO PROVIDE A COMPREHENSIVE ANALYSIS OF PIZZA SALES, FOCUSING ON KEY PERFORMANCE INDICATORS, ORDER PATTERNS, AND REVENUE GENERATION. THE GOAL IS TO ANSWER FUNDAMENTAL QUESTIONS ABOUT PIZZA ORDERS AND SALES DISTRIBUTION, PROVIDE INSIGHTS INTO THE BEST-SELLING PIZZAS AND CATEGORIES, AND ASSESS REVENUE PERFORMANCE OVER TIME.

RETRIEVE THE TOTAL NUMBER OF ORDERS PLACED

```sql
SELECT
    COUNT(order_id) as Total_order
FROM
    orders;
```

Result Grid | Filter

	Total_order
▸	21350

CALCULATE THE TOTAL REVENUE GENERATED FROM PIZZA SALES.

```
SELECT  ROUND(SUM(qntity * price)) AS Total_Revenue
FROM
    pizzahut.order_details
        JOIN
    pizzahut.pizzas ON order_details.pizza_id = pizzas.pizza_id;
```

Result Grid | Filter Rows:

Total_Revenue
175141

IDENTIFY THE HIGHEST-PRICED PIZZA NAME

```sql
SELECT
    pizza_types.p_name, pizzas.price
FROM
    pizzas
        JOIN
    pizza_types ON pizza_types.pizza_type_id = pizzas.pizza_type_id
ORDER BY price DESC
LIMIT 1;
```

Result Grid | Filter Rows: | Export: | Wra

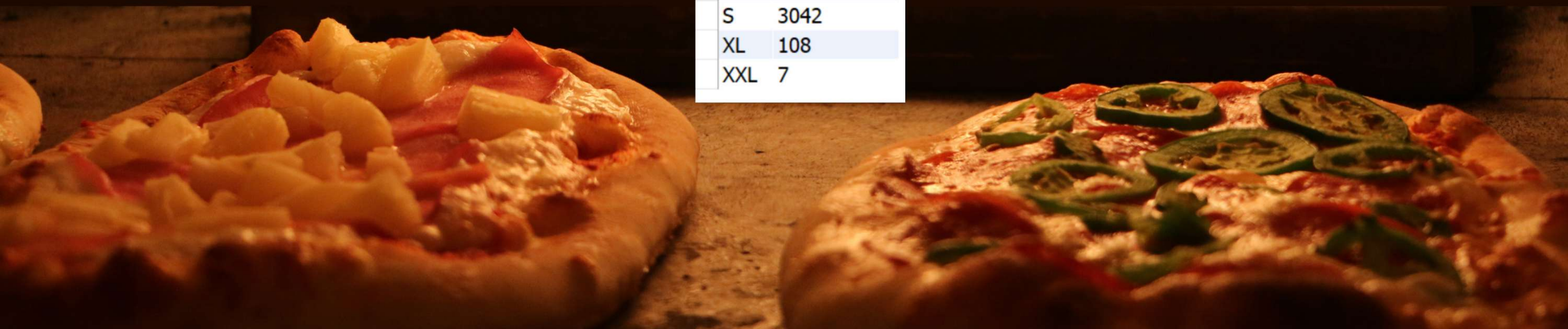
p_name	price
The Greek Pizza	36

IDENTIFY THE MOST COMMON PIZZA SIZE ORDERED

```sql
SELECT
    pizzas.size, COUNT(order_details.order_details_id) as Total_order
FROM
    pizzas
        JOIN
    order_details ON pizzas.pizza_id = order_details.pizza_id
GROUP BY pizzas.size
order by COUNT(order_details.order_details_id) desc ;
```

Result Grid | Filter Rows:

size	Total_order
L	3973
M	3183
S	3042
XL	108
XXL	7



LIST THE TOP 5 MOST ORDERED PIZZA TYPES ALONG WITH THEIR QUANTITIES.

```sql
SELECT
    pizza_types.p_name,
    SUM(order_details.qntity) AS total_quintity
FROM
    pizzas
        JOIN
    order_details ON order_details.pizza_id = pizzas.pizza_id
        JOIN
    pizza_types ON pizza_types.pizza_type_id = pizzas.pizza_type_id
GROUP BY pizza_types.p_name
ORDER BY total_quintity DESC
LIMIT 5;
```

p_name	total_quintity
The Pepperoni Pizza	535
The Barbecue Chicken Pizza	534
The California Chicken Pizza	509
The Hawaiian Pizza	505
The Thai Chicken Pizza	483

JOIN THE NECESSARY TABLES TO FIND THE TOTAL QUANTITY OF EACH PIZZA CATEGORY ORDERD

```sql
SELECT
    pizza_types.category,
    SUM(order_details.qntity) AS total_order
FROM
    pizza_types
        JOIN
    pizzas ON pizzas.pizza_type_id = pizza_types.pizza_type_id
        JOIN
    order_details ON order_details.pizza_id = pizzas.pizza_id
GROUP BY pizza_types.category
ORDER BY total_order DESC;
```

category	total_order
Classic	3122
Veggie	2541
Supreme	2524
Chicken	2320

DETERMINE THE DISTRIBUTION OF ORDERS BY HOUR OF THE DAY

```sql
SELECT
    HOUR(order_time) AS o_hour, COUNT(order_id) AS count_order
FROM
    orders
GROUP BY o_hour
ORDER BY count_order DESC;
```

o_hour	count_order
12	2520
13	2455
18	2399
17	2336
19	2009
16	1920
20	1642
14	1472
15	1468
11	1231
21	1198
22	663
23	28
10	8
9	1

JOIN RELEVANT TABLES TO FIND THE CATEGORY-WISE DISTRIBUTION OF PIZZAS

```sql
SELECT
    pizza_types.category AS pizza_category,
    COUNT(pizza_types.p_name) as COUNT
FROM
    pizza_types
GROUP BY pizza_category;
```

Result Grid | Filter Rows:

pizza_category	COUNT
Chicken	6
Classic	8
Supreme	9
Veggie	9

GROUP THE ORDERS BY DATE AND CALCULATE THE AVERAGE NUMBER OF PIZZAS ORDERED PER DAY

```sql
SELECT
    orders.order_date AS ord_date,
    SUM(order_details.qntity) AS total_order,
    AVG(order_details.qntity) AS avg_order
FROM
    orders
        JOIN
    order_details ON orders.order_id = order_details.order_id
GROUP BY ord_date
ORDER BY total_order DESC limit 10;
```

Result Grid | Filter Rows: | Export:

ord_date	total_order	avg_order
2015-02-01	191	1.0160
2015-03-13	176	1.0173
2015-02-20	175	1.0355
2015-01-08	173	1.0117
2015-02-27	173	1.0117
2015-01-02	165	1.0313
2015-02-18	163	1.0188
2015-02-13	163	1.0188
2015-01-01	162	1.0062
2015-02-03	159	1.0392

DETERMINE THE TOP 3 MOST ORDERED PIZZA TYPES BASED ON REVENUE.

```sql
SELECT
    pizza_types.p_name, SUM(qntity * price) AS Total_Revenue
FROM
    pizzas
        JOIN
    order_details ON order_details.pizza_id = pizzas.pizza_id
        JOIN
    pizza_types ON pizza_types.pizza_type_id = pizzas.pizza_type_id
GROUP BY pizza_types.p_name
ORDER BY SUM(qntity * price) DESC
LIMIT 3;
```

p_name	Total_Revenue
The Barbecue Chicken Pizza	9558
The California Chicken Pizza	8977
The Thai Chicken Pizza	8895

CALCULATE THE PERCENTAGE CONTRIBUTION OF EACH PIZZA TYPE TO TOTAL REVENUE.

```sql
SELECT
    pizza_types.category AS pizza_category,
    (SUM(order_details.qntity * pizzas.price) / (SELECT
            ROUND(SUM(order_details.qntity * pizzas.price))
        FROM
            order_details
                JOIN
            pizzas ON order_details.pizza_id = pizzas.pizza_id)) * 100
            AS percentage_of_revenue
FROM
    pizzas
        JOIN
    order_details ON order_details.pizza_id = pizzas.pizza_id
        JOIN
    pizza_types ON pizza_types.pizza_type_id = pizzas.pizza_type_id
GROUP BY pizza_types.category;
```

pizza_category	percentage_of_R
Classic	26.6208
Veggie	24.2981
Supreme	25.2945
Chicken	23.7865

DETERMINE THE TOP 3 MOST ORDERED PIZZA TYPES BASED ON REVENUE FOR EACH PIZZA CATEGORY

```sql
select p_name,Total_revenue,category,r_rank from

(select p_name, Total_revenue,category ,rank()
over (partition by category order by Total_revenue desc) as r_rank
from
(SELECT
    pizza_types.p_name,pizza_types.category, SUM(qntity * price) as Total_Revenue
FROM
    pizzas
        JOIN
    order_details ON order_details.pizza_id = pizzas.pizza_id
        JOIN
    pizza_types ON pizza_types.pizza_type_id = pizzas.pizza_type_id
GROUP BY pizza_types.p_name,pizza_types.category
ORDER BY SUM(qntity * price) DESC) as a) as b where r_rank <=3 ;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

p_name	Total_revenue	category	r_rank
The Barbecue Chicken Pizza	9558	Chicken	1
The California Chicken Pizza	8977	Chicken	2
The Thai Chicken Pizza	8895	Chicken	3
The Classic Deluxe Pizza	7356	Classic	1
The Hawaiian Pizza	6867	Classic	2
The Pepperoni Pizza	6806	Classic	3
The Spicy Italian Pizza	7121	Supreme	1
The Italian Supreme Pizza	7053	Supreme	2
The Sicilian Pizza	6748	Supreme	3
The Four Cheese Pizza	7158	Veggie	1
The Five Cheese Pizza	6042	Veggie	2
The Vegetables + Vegetabl...	5848	Veggie	3

ANALYZE THE CUMULATIVE REVENUE GENERATED OVER TIME

```sql
SELECT
    sales.order_date,
    SUM(total_revenue) OVER(ORDER BY order_date) AS cumulative_revenue
FROM (
    SELECT
        orders.order_date AS order_date,
        SUM(order_details.qntity * pizzas.price) AS total_revenue
    FROM pizzas
    JOIN order_details ON order_details.pizza_id = pizzas.pizza_id
    JOIN orders ON orders.order_id = order_details.order_id
    GROUP BY orders.order_date
) AS sales;
```

order_date	cumulative_revenue
2015-01-01	2746
2015-01-02	5512
2015-01-03	8203
2015-01-04	9983
2015-01-05	12075
2015-01-06	14532
2015-01-07	16761
2015-01-08	19628
2015-01-09	21777

CONCLUSION:

THE ANALYSIS PROVIDED IN THIS REPORT WILL HELP IDENTIFY KEY AREAS OF STRENGTH IN PIZZA SALES, SUCH AS WHICH TYPES OF PIZZAS AND CATEGORIES ARE MOST POPULAR, WHAT TIMES OF THE DAY ARE BUSIEST, AND HOW REVENUE IS DISTRIBUTED. THE DATA CAN BE USED TO IMPROVE INVENTORY MANAGEMENT, PRICING STRATEGY, STAFFING, AND PROMOTIONAL ACTIVITIES TO MAXIMIZE BOTH SALES VOLUME AND REVENUE.

FURTHERMORE, UNDERSTANDING THE PERCENTAGE CONTRIBUTIONS OF INDIVIDUAL PIZZAS AND CUMULATIVE REVENUE GROWTH CAN HELP THE BUSINESS MAKE INFORMED DECISIONS ABOUT PRODUCT OFFERINGS, PROMOTIONAL FOCUS, AND GROWTH STRATEGIES.

THANK YOU