

PIZZAHUB

S A L E S A N A L Y S I S

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ABOUT ME

I'm Kamil Tirkey,

Empowering clients with financial security and growth through insurance, investments, and strategic planning.

Tableau, SQL, and Alteryx Certified professional specializing in creating insightful Business Intelligence dashboards and reports. Passionate about continuous learning and adopting new technologies to enhance performance and deliver organizational value.

SQL PROJECT OVERVIEW: PIZZAHUB SALES ANALYSIS

OBJECTIVE:

ANALYZE SALES DATA FOR PIZZAHUB TO UNDERSTAND PIZZA SALES PERFORMANCE, TOP-SELLING PIZZAS, REVENUE, CATEGORIES, AND AVERAGE ORDER METRICS.

TABLES:

ORDERS: CONTAINS ORDER DETAILS (ID, CUSTOMER INFO, DATE/TIME).

ORDER_DETAILS: INCLUDES DETAILED ITEM INFO (QUANTITY, PIZZA ID) FOR EACH ORDER.

PIZZAS: HOLDS DATA ON AVAILABLE PIZZAS (ID, NAME, PRICE, CATEGORY ID, TYPE ID).

PIZZA_TYPES: PROVIDES PIZZA STYLE INFO, LINKING TO PIZZAS VIA TYPE ID.

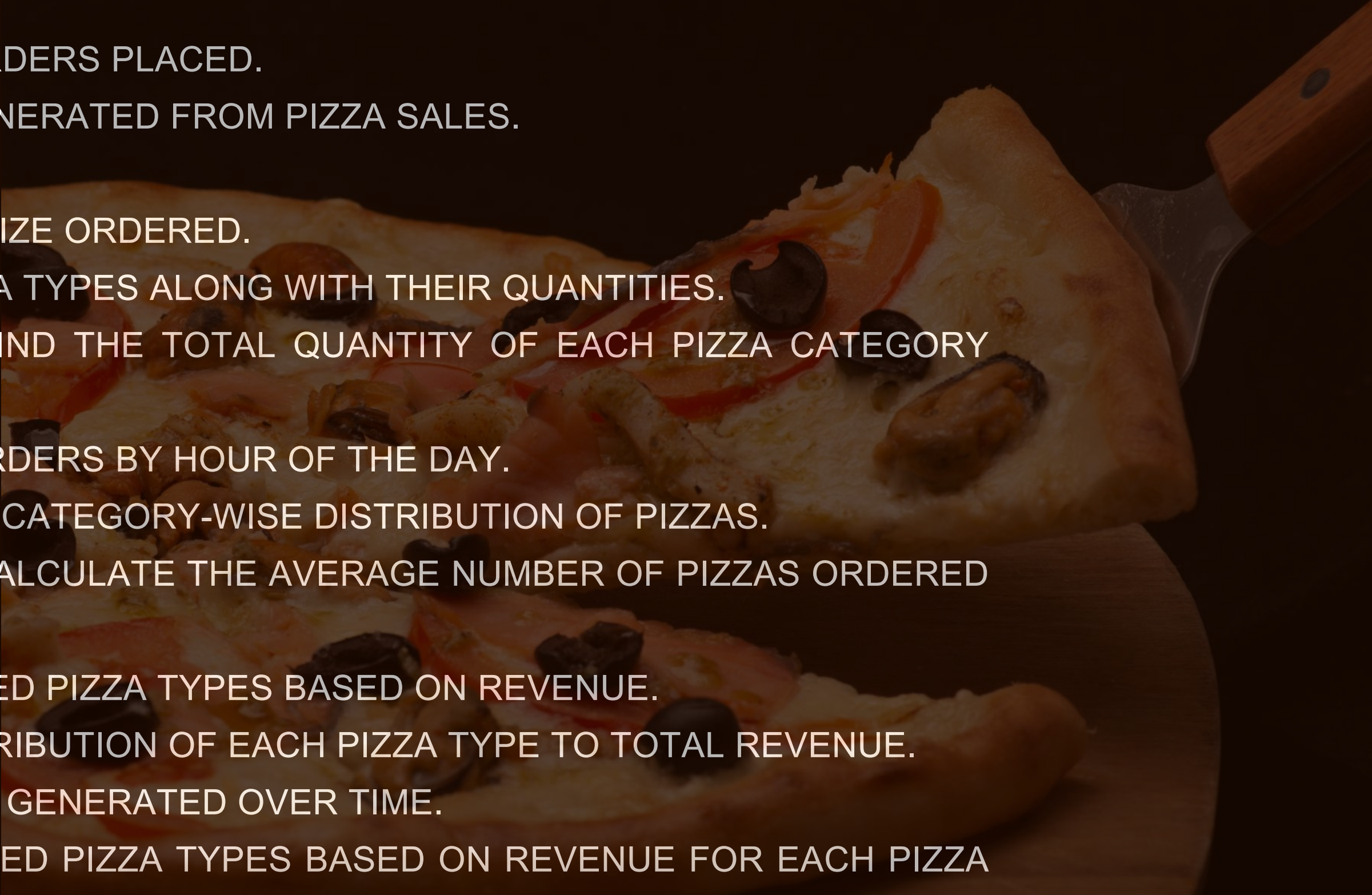
KEY ANALYSIS POINTS:

PIZZA SALES AND REVENUE: IDENTIFY TOP-SELLING PIZZAS AND CALCULATE TOTAL REVENUE.

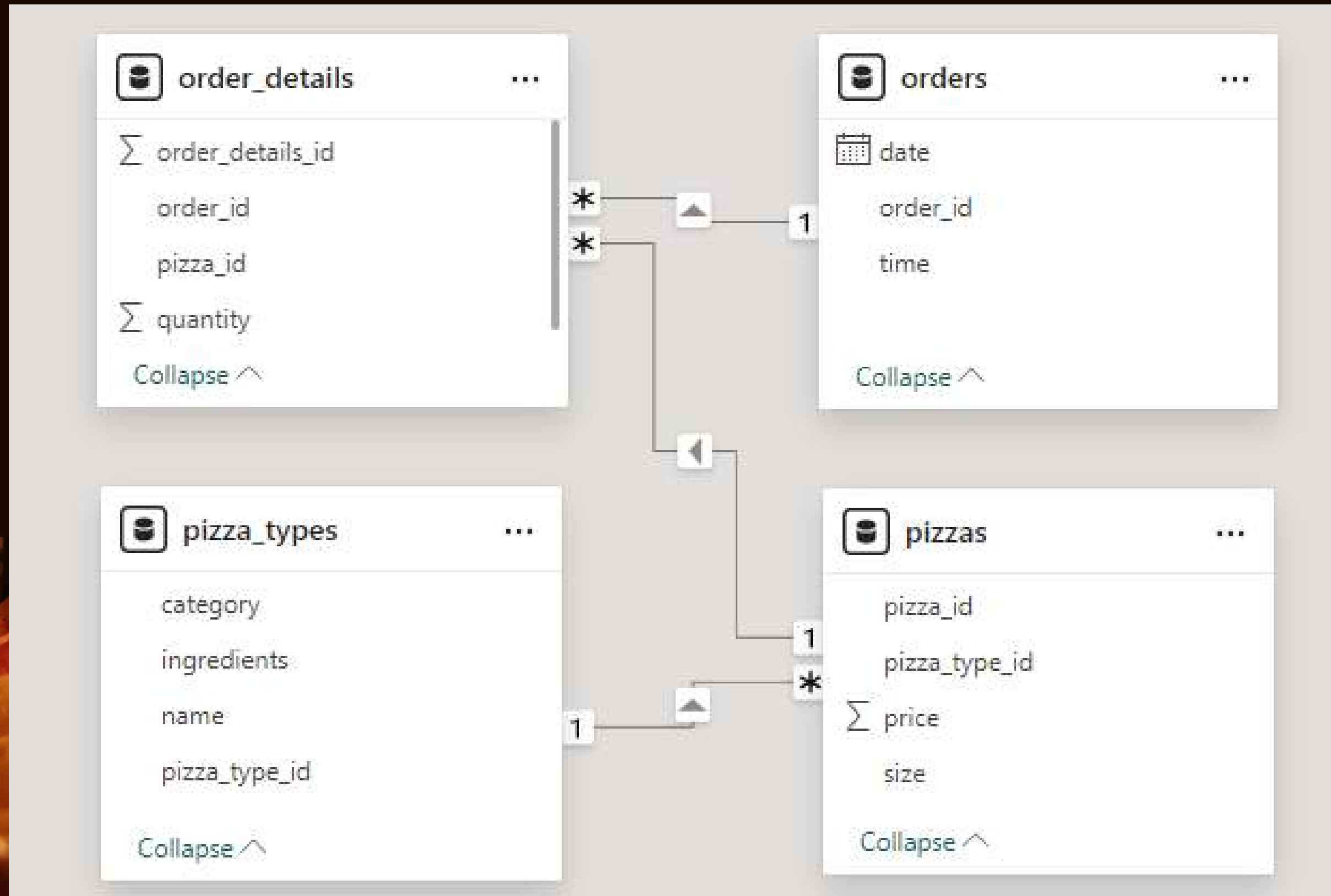
PIZZA CATEGORIES: ANALYZE SALES PERFORMANCE BY CATEGORY (E.G., VEGETARIAN, MEAT LOVERS).

AVERAGE ORDER METRICS: DETERMINE AVERAGE PIZZAS ORDERED PER DAY FOR CUSTOMER BEHAVIOR INSIGHTS.

QUESTIONS/ QUERIES

- RETRIEVE THE TOTAL NUMBER OF ORDERS PLACED.
 - CALCULATE THE TOTAL REVENUE GENERATED FROM PIZZA SALES.
 - IDENTIFY THE HIGHEST-PRICED PIZZA.
 - IDENTIFY THE MOST COMMON PIZZA SIZE ORDERED.
 - LIST THE TOP 5 MOST ORDERED PIZZA TYPES ALONG WITH THEIR QUANTITIES.
 - JOIN THE NECESSARY TABLES TO FIND THE TOTAL QUANTITY OF EACH PIZZA CATEGORY ORDERED.
 - DETERMINE THE DISTRIBUTION OF ORDERS BY HOUR OF THE DAY.
 - JOIN RELEVANT TABLES TO FIND THE CATEGORY-WISE DISTRIBUTION OF PIZZAS.
 - GROUP THE ORDERS BY DATE AND CALCULATE THE AVERAGE NUMBER OF PIZZAS ORDERED PER DAY.
 - DETERMINE THE TOP 3 MOST ORDERED PIZZA TYPES BASED ON REVENUE.
 - CALCULATE THE PERCENTAGE CONTRIBUTION OF EACH PIZZA TYPE TO TOTAL REVENUE.
 - ANALYZE THE CUMULATIVE REVENUE GENERATED OVER TIME.
 - DETERMINE THE TOP 3 MOST ORDERED PIZZA TYPES BASED ON REVENUE FOR EACH PIZZA CATEGORY.
- 

TABLES AND SCHEMAS



RETRIEVE THE TOTAL NUMBER OF ORDERS
PLACED.

```
SELECT  
    COUNT(order_id) AS total_orders  
FROM  
    orders;
```

| Result Grid | |
|-------------|--------------|
| | total_orders |
| ▶ | 21350 |

CALCULATE THE TOTAL REVENUE GENERATED FROM PIZZA SALES.

SELECT

ROUND(SUM(p.price * od.quantity), 2) **AS** total_revenue

FROM

pizzas p

INNER JOIN

orders_details od **ON** p.pizza_id = od.pizza_id;

Result Grid



total_revenue



817860.05

IDENTIFY THE HIGHEST-PRICED PIZZA.

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

Result Grid



Filter Rows:

| | name | price |
|---|-----------------|-------|
| ▶ | The Greek Pizza | 35.95 |

IDENTIFY THE MOST COMMON PIZZA SIZE ORDERED.

```
SELECT
    pizzas.size,
    COUNT(orders_details.order_details_id) AS order_count
FROM
    pizzas
    INNER JOIN
    orders_details ON pizzas.pizza_id = orders_details.pizza_id
GROUP BY pizzas.size
ORDER BY order_count DESC;
```

| Result Grid | | | Filter |
|-------------|------|-------------|--------|
| | size | order_count | |
| ▶ | L | 18526 | |
| | M | 15385 | |
| | S | 14137 | |
| | XL | 544 | |
| | XXL | 28 | |

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

```
SELECT
    pizza_types.name, SUM(orders_details.quantity) AS quantity
FROM
    pizza_types
    INNER JOIN
    pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
    INNER JOIN
    orders_details ON pizzas.pizza_id = orders_details.pizza_id
GROUP BY pizza_types.name
ORDER BY quantity DESC
LIMIT 5;
```

| Result Grid | | | Filter Rows: |
|-------------|----------------------------|----------|--------------|
| | name | quantity | |
| ▶ | The Classic Deluxe Pizza | 2453 | |
| | The Barbecue Chicken Pizza | 2432 | |
| | The Hawaiian Pizza | 2422 | |
| | The Pepperoni Pizza | 2418 | |
| | The Thai Chicken Pizza | 2371 | |

- JOIN THE NECESSARY TABLES TO FIND THE TOTAL QUANTITY OF EACH PIZZA CATEGORY ORDERED.

```
SELECT
    pizza_types.category,
    SUM(orders_details.quantity) AS quantity
FROM
    pizza_types
    INNER JOIN
    pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
    INNER JOIN
    orders_details ON pizzas.pizza_id = orders_details.pizza_id
GROUP BY pizza_types.category
ORDER BY quantity DESC;
```

| Result Grid | | | Filter Rows |
|-------------|----------|----------|-------------|
| | category | quantity | |
| ▶ | Classic | 14888 | |
| | Supreme | 11987 | |
| | Veggie | 11649 | |
| | Chicken | 11050 | |

DETERMINE THE DISTRIBUTION OF ORDERS BY HOUR OF THE DAY.

```
SELECT
    HOUR(order_time) AS hour, COUNT(order_id) order_count
FROM
    orders
GROUP BY HOUR(order_time)
ORDER BY HOUR(order_time) DESC;
```

| Result Grid | | | Filter Row |
|-------------|------|-------------|------------|
| | hour | order_count | |
| ▶ | 23 | 28 | |
| | 22 | 663 | |
| | 21 | 1198 | |
| | 20 | 1642 | |
| | 19 | 2009 | |
| | 18 | 2399 | |
| | 17 | 2336 | |
| | 16 | 1920 | |
| | 15 | 1468 | |

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

```
Select category, count(name) as count  
FROM pizza_types  
group by category;
```

| Result Grid | | | Filter |
|-------------|----------|-------|--------|
| | 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.

```
with order_quantity as
( select orders.order_date as date, sum(orders_details.quantity) as order_count
  FROM orders_details
 inner join orders
  on orders_details.order_id = orders.order_id
 group by date
)
Select round(avg(order_count),0)as avg_pizza_order_per_day
from order_quantity
```

Result Grid



Filter Rows:

| | avg_pizza_order_per_day |
|---|-------------------------|
| ▶ | 138 |

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

```
-- With sub-query

SELECT
    (pizza_types.name) AS name,
    ROUND(SUM(orders_details.quantity * pizzas.price),
          2) AS total_revenue
FROM
    pizza_types
    JOIN
    pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
    JOIN
    orders_details ON pizzas.pizza_id = orders_details.pizza_id
GROUP BY name
ORDER BY total_revenue DESC
LIMIT 3;
```

| Result Grid | | | Filter Rows: |
|-------------|------------------------------|---------------|--------------|
| | name | total_revenue | |
| ▶ | The Thai Chicken Pizza | 43434.25 | |
| | The Barbecue Chicken Pizza | 42768 | |
| | The California Chicken Pizza | 41409.5 | |

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

```
-- with Sub-Query
SELECT
    pizza_types.category AS category,
    ROUND(SUM(orders_details.quantity * pizzas.price) / (SELECT
        ROUND(SUM(pizzas.price * orders_details.quantity),
            2) AS total_revenue

        FROM
            pizzas
            INNER JOIN
                orders_details ON pizzas.pizza_id = orders_details.pizza_id) * 100,
        2) AS percentage

FROM
    pizza_types
    JOIN
        pizzas ON pizzas.pizza_type_id = pizza_types.pizza_type_id
    JOIN
        orders_details ON pizzas.pizza_id = orders_details.pizza_id
GROUP BY category;
```

| Result Grid | | | Filter Rows: |
|-------------|----------|------------|--------------|
| | category | percentage | |
| ▶ | Classic | 26.91 | |
| | Veggie | 23.68 | |
| | Supreme | 25.46 | |
| | Chicken | 23.96 | |

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

--- with CTE

```
WITH total_revenue_cte AS (  
    SELECT  
        ROUND(SUM(pizzas.price * orders_details.quantity), 2) AS total_revenue  
    FROM pizzas  
    JOIN orders_details ON pizzas.pizza_id = orders_details.pizza_id  
)  
SELECT  
    pizza_types.category AS category,  
    ROUND(SUM(orders_details.quantity * pizzas.price) / total_revenue_cte.total_revenue * 100, 2) AS percentage  
FROM  
    pizza_types  
    JOIN pizzas ON pizzas.pizza_type_id = pizza_types.pizza_type_id  
    JOIN orders_details ON pizzas.pizza_id = orders_details.pizza_id  
    CROSS JOIN total_revenue_cte  
GROUP BY category, total_revenue_cte.total_revenue ;
```

| Result Grid | | | Filter Rows: |
|-------------|----------|------------|--------------|
| | category | percentage | |
| ▶ | Classic | 26.91 | |
| | Veggie | 23.68 | |
| | Supreme | 25.46 | |
| | Chicken | 23.96 | |


ANALYZE THE CUMULATIVE REVENUE GENERATED OVER TIME.

```
WITH sales AS (  
  select orders.order_date as date, round(sum(orders_details.quantity*pizzas.price),2) as revenue  
  from pizzas  
  join orders_details  
  On pizzas.pizza_id = orders_details.pizza_id  
  join orders  
  on orders_details.order_id = orders.order_id  
  group by date  
)  
select sales.date as date, revenue,  
sum(sales.revenue) over(order by date) as cumumative_revenue  
from sales;
```

| Result Grid | | | | Filter Rows: |
|-------------|------------|---------|--------------------|--------------|
| | date | revenue | cumulative_revenue | |
| ▶ | 2015-01-01 | 2713.85 | 2713.85 | |
| | 2015-01-02 | 2731.9 | 5445.75 | |
| | 2015-01-03 | 2662.4 | 8108.15 | |
| | 2015-01-04 | 1755.45 | 9863.6 | |
| | 2015-01-05 | 2065.95 | 11929.55 | |
| | 2015-01-06 | 2428.95 | 14358.5 | |
| | 2015-01-07 | 2202.2 | 16560.7 | |
| | 2015-01-08 | 2828.25 | 19389.05 | |

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

```
with revenue_cte as
(
  select pizza_types.category as category, pizza_types.name as name,
  Round(sum(orders_details.quantity*pizzas.price),2) as revenue
  from pizza_types
  join pizzas
  on pizza_types.pizza_type_id = pizzas.pizza_type_id
  join orders_details
  on pizzas.pizza_id = orders_details.pizza_id
  group by category, name
),
rank_pizzas AS
(
  select category, name, revenue,
  rank() over(partition by category order by revenue desc) as rank_num
  from revenue_cte
)
select category, name, revenue, rank_num
from rank_pizzas
where rank_num <=3;
```



| | category | name | revenue | rank_num |
|---|----------|------------------------------|----------|----------|
| ▶ | Chicken | The Thai Chicken Pizza | 43434.25 | 1 |
| | Chicken | The Barbecue Chicken Pizza | 42768 | 2 |
| | Chicken | The California Chicken Pizza | 41409.5 | 3 |
| | Classic | The Classic Deluxe Pizza | 38180.5 | 1 |
| | Classic | The Hawaiian Pizza | 32273.25 | 2 |
| | Classic | The Pepperoni Pizza | 30161.75 | 3 |
| | Supreme | The Spicy Italian Pizza | 34831.25 | 1 |

KEY INSIGHT & FINDINGS

- TOTAL NUMBER OF ORDERS PLACED: 21,350 ORDERS DURING THE ANALYZED PERIOD
- TOTAL REVENUE GENERATED FROM PIZZA SALES: \$817,860.05
- TOP 3 MOST ORDERED PIZZA TYPES BASED ON REVENUE:
THE THAI CHICKEN PIZZA: \$43,434.25, THE BARBECUE CHICKEN PIZZA: \$42,768.00, THE CALIFORNIA CHICKEN PIZZA: \$41,409.50
- PERCENTAGE CONTRIBUTION OF EACH PIZZA TYPE TO TOTAL REVENUE:
CLASSIC PIZZA: 26.91% , VEGGIE PIZZA: 23.68%, SUPREME PIZZA: 25.46% , CHICKEN PIZZA: 23.96%
- TOP 5 MOST ORDERED PIZZA TYPES ALONG WITH THEIR QUANTITIES:
THE CLASSIC DELUXE, BARBECUE CHICKEN, HAWAIIAN, PEPPERONI, AND THAI CHICKEN PIZZAS WERE THE MOST POPULAR CHOICES.
- ORDERS AVERAGE DAILY ORDER VOLUME WAS 138 PIZZAS/DAY

ANALYSIS SUMMARY

- **CUSTOMER PREFERENCES:** CHICKEN-BASED PIZZAS LIKE THAI CHICKEN, BARBECUE CHICKEN, AND CALIFORNIA CHICKEN ARE TOP SELLERS, REFLECTING A STRONG PREFERENCE FOR CHICKEN TOPPINGS AMONG CUSTOMERS.
- **REVENUE DISTRIBUTION:** REVENUE ACROSS PIZZA TYPES SHOWS BALANCED PERFORMANCE, WITH CLASSIC, VEGGIE, SUPREME, AND CHICKEN PIZZAS ALL CONTRIBUTING SIGNIFICANTLY TO SALES.
- **BUSINESS STRATEGY IMPLICATIONS:** PIZZAHUB CAN OPTIMIZE ITS MENU BY HIGHLIGHTING POPULAR PIZZA TYPES AND EXPLORING NEW VARIATIONS OR PROMOTIONS BASED ON THESE FINDINGS TO BOOST SALES.

PIZZAHUB

SALES ANALYSIS
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THANK YOU

