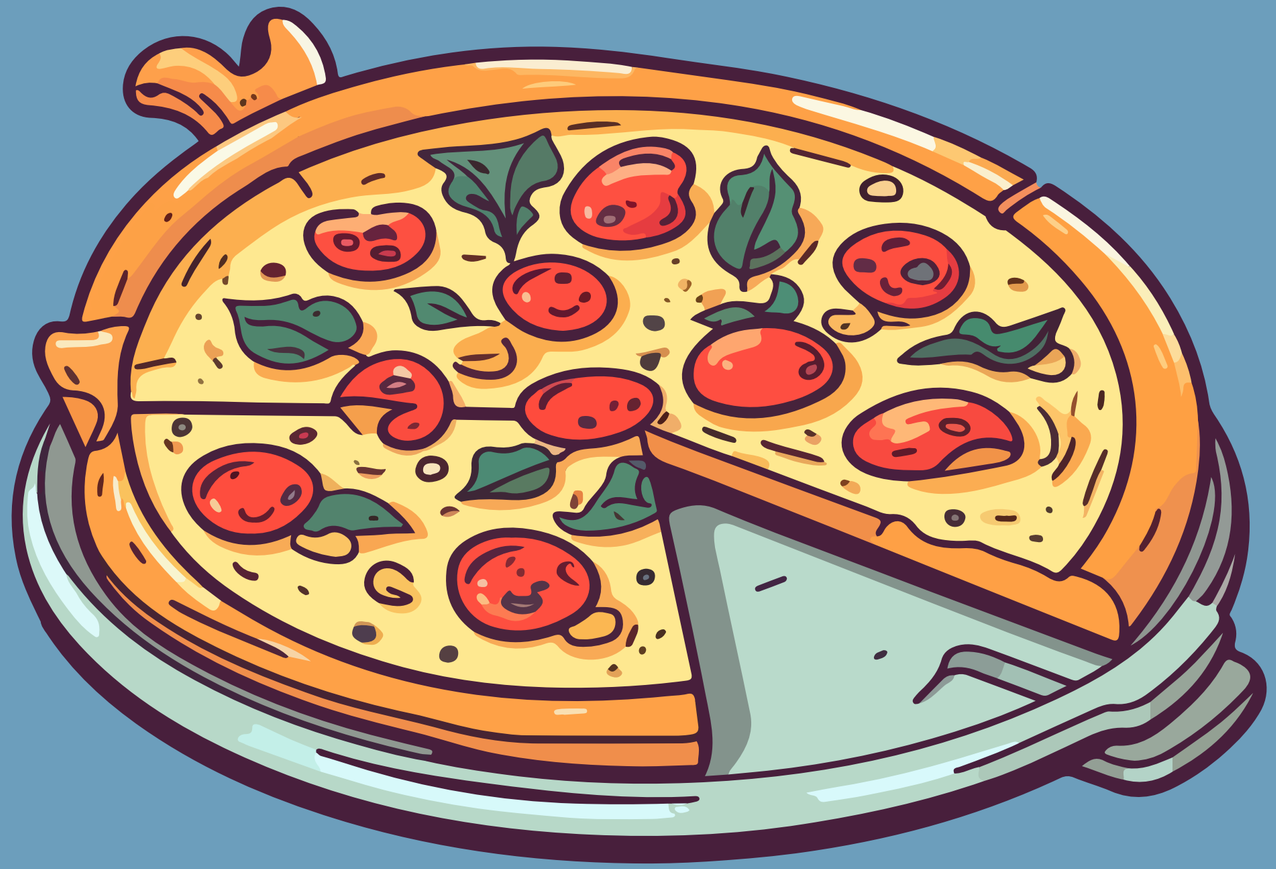
PIZZA SALES

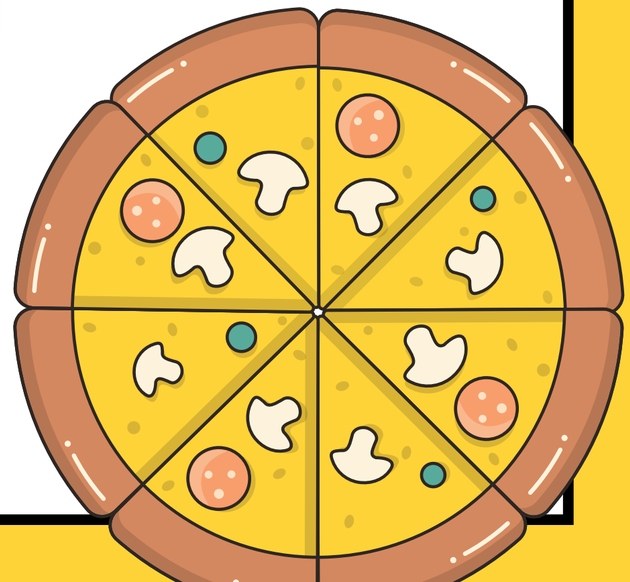


INTRODUCTION TO PIZZA SALES QUERIES USING PL/SQL

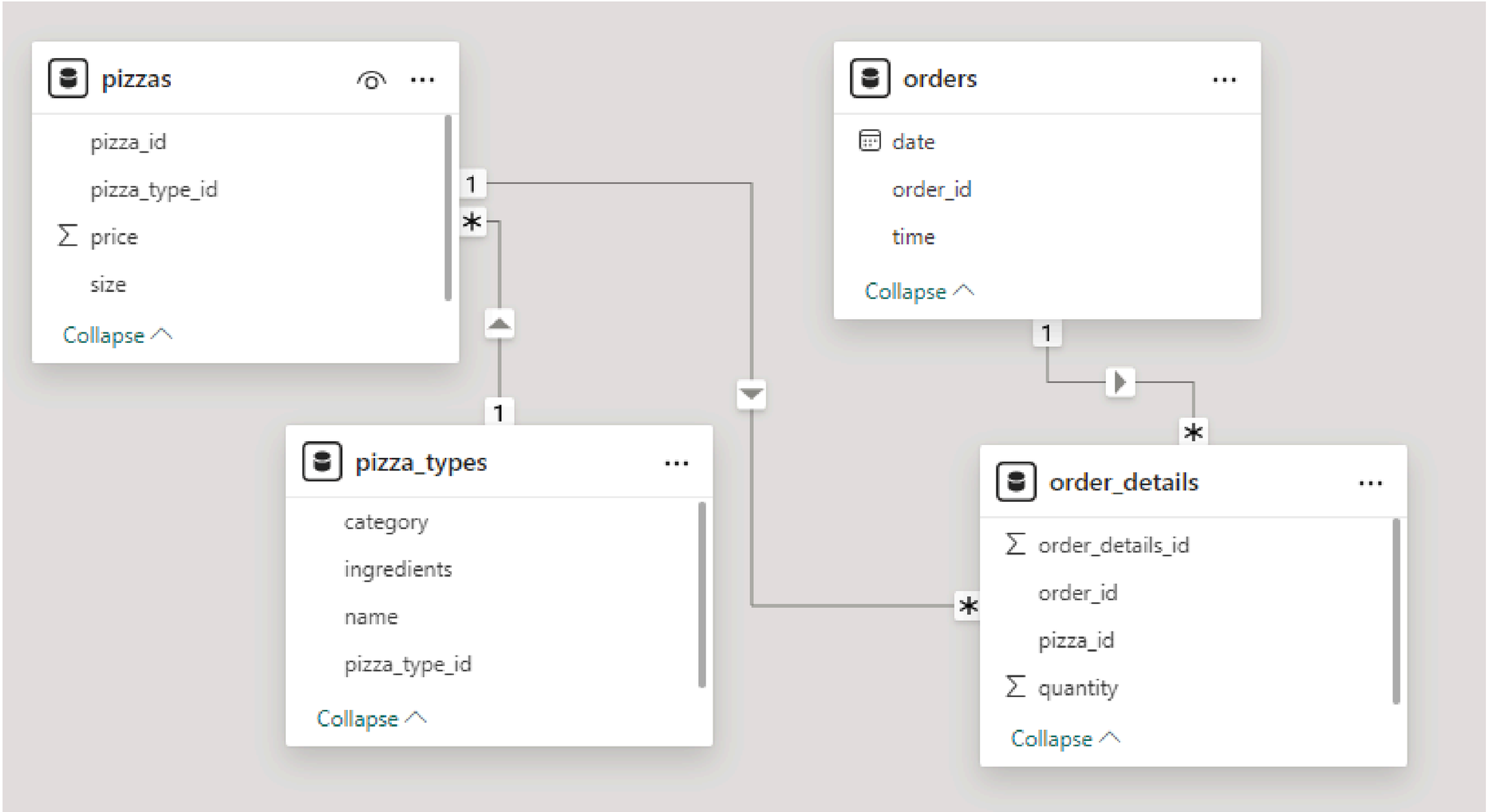
Leveraging PL/SQL for Efficient Data Management and Analysis

Welcome to the presentation on using **PL/SQL** for **pizza sales data analysis**.

Today, we'll explore how **PL/SQL** can help us manage and analyze pizza sales efficiently.



Relationship between tables



Retrive the total number of orders placed.

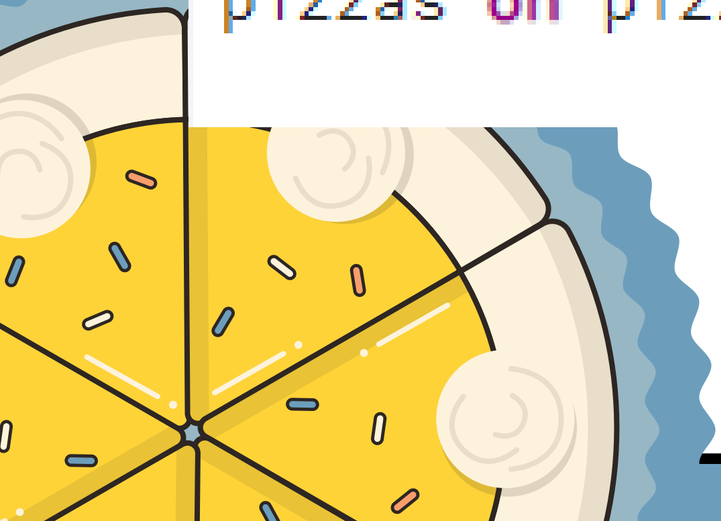
```sql
Select count(order_id) as total_orders from orders;
```

	total_orders bigint
1	21350

1

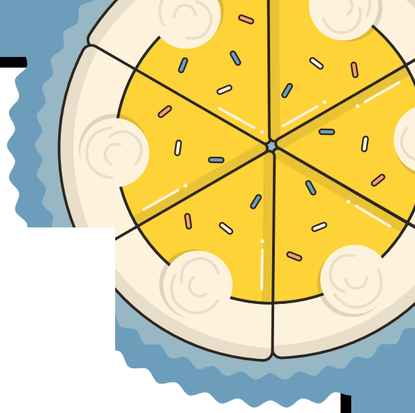
Calculate the total revenue generated from pizza sales.

```sql
select
round(sum(order_details.quantity * pizzas.price),2)
as total_sales
from
order_details
join
pizzas on pizzas.pizza_id = order_details.pizza_id;
```



	total_sales numeric
1	817860.05

Identify the highest price pizza.



```
select pizza_types.name, pizzas.price
from pizza_types join pizzas
on pizza_types.pizza_type_id = pizzas.pizza_type_id
order by pizzas.price desc limit 5;
```

	name text	price numeric
1	The Greek Pizza	35.95
2	The Greek Pizza	25.50
3	The Brie Carre Pizza	23.65
4	The Italian Vegetables Pizza	21.00
5	The Chicken Pesto Pizza	20.75

Identify the most common pizza size ordered.

```sql
select pizzas.size, count(order_details.order_details_id) as order_count
from pizzas join order_details
on pizzas.pizza_id = order_details.pizza_id
group by pizzas.size order by order_count desc;
```

	size text	order_count bigint
1	L	18526
2	M	15385
3	S	14137
4	XL	544
5	XXL	28

List the top 5 most ordered pizza types along with their quantites.

```
select pizza_types.name,
sum(order_details.quantity) as quantity
from pizza_types join pizzas
on pizza_types.pizza_type_id = pizzas.pizza_type_id
join order_details
on order_details.pizza_id = pizzas.pizza_id
group by pizza_types.name order by quantity desc limit 5
```

	name text	quantity bigint
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

Join the necessary tables to find the total quantity of each pizza ordered.

	category text	quantity bigint
1	Classic	14888
2	Supreme	11987
3	Veggie	11649
4	Chicken	11050

```
select pizza_types.category,
sum(order_details.quantity) as quantity
from pizza_types join pizzas
on pizza_types.pizza_type_id = pizzas.pizza_type_id
    join order_details
on order_details.pizza_id = pizzas.pizza_id
group by pizza_types.category order by quantity desc;
```

Determine the distribution of orders by hour of the day.

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

	hour numeric	order_count bigint
1	11	1231
2	23	28
3	18	2399
4	19	2009
5	15	1468
6	9	1
7	21	1198
8	17	2336
9	20	1642
10	13	2455
11	10	8
12	16	1920
13	22	663
14	12	2520
15	14	1472

Join the revelent tables to find the category wise distribution on pizzas.

```
select round(avg(quantity),0) from
(select orders.order_date, sum(order_details.quantity) as quantity
from orders join order_details
on orders.order_id = order_details.order_id
group by orders.order_date) as order_quantity;
```

	round numeric
1	138

Group the orders by date and calculate the average number of pizzas ordered per day.

```
select category, count(name) from pizza_types
group by category;
```

	category text	count bigint
1	Supreme	9
2	Chicken	6
3	Classic	8
4	Veggie	9

Determine the top 3 most ordered pizza types based on revenue.

```sql
select pizza_types.name,
sum(order_details.quantity * pizzas.price) as revenue
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.name order by revenue desc limit 3;
```

	name text	revenue numeric
1	The Thai Chicken Pizza	43434.25
2	The Barbecue Chicken Pizza	42768.00
3	The California Chicken Pizza	41409.50

Calculate the percentage contribution of each pizza type to total revenue.

```
select pizza_types.category,
round(sum(order_details.quantity * pizzas.price) / (select
round(sum(order_details.quantity * pizzas.price),2) as Totalsales
from
order_details
join
pizzas on pizzas.pizza_id = order_details.pizza_id)* 100,2) as revenue
from pizza_types join pizzas
on pizza_types.pizza_type_id = pizzas.pizza_type_id
join order_details
on order_details.pizza_id = pizzas.pizza_id
group by pizza_types.category order by revenue desc;
```

	category text	revenue numeric
1	Classic	26.91
2	Supreme	25.46
3	Chicken	23.96
4	Veggie	23.68

Analyze the cumulative revenue generated over time.

```
select order_date,
sum(revenue) over(order by order_date) as cum_revenue
from
(select orders.order_date,
sum(order_details.quantity * pizzas.price) as revenue
from order_details join pizzas
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 date	cum_revenue numeric
1	2015-01-01	2713.85
2	2015-01-02	5445.75
3	2015-01-03	8108.15
4	2015-01-04	9863.60
5	2015-01-05	11929.55
6	2015-01-06	14358.50
7	2015-01-07	16560.70
8	2015-01-08	19399.05
9	2015-01-09	21526.40
10	2015-01-10	23990.35
11	2015-01-11	25862.65
12	2015-01-12	27781.70

Determine the top 3 most ordered pizza types based on revenue for each pizza category.

```sql
select name, revenue from
(select category, name, revenue,
rank() over(partition by category order by revenue desc) as rn
from
(select pizza_types.category, pizza_types.name,
sum((order_details.quantity)* pizzas.price) as revenue
from pizza_types join pizzas
on pizza_types.pizza_type_id = pizzas.pizza_type_id
join order_details
on order_details.pizza_id = pizzas.pizza_id
group by pizza_types.category, pizza_types.name) as a) as b
where rn <= 3;
```

	name text	revenue numeric
1	The Thai Chicken Pizza	43434.25
2	The Barbecue Chicken Pizza	42768.00
3	The California Chicken Pizza	41409.50
4	The Classic Deluxe Pizza	38180.50
5	The Hawaiian Pizza	32273.25
6	The Pepperoni Pizza	30161.75
7	The Spicy Italian Pizza	34831.25
8	The Italian Supreme Pizza	33476.75
9	The Sicilian Pizza	30940.50
10	The Four Cheese Pizza	32265.70
11	The Mexicana Pizza	26780.75
12	The Five Cheese Pizza	26066.50

Thankyou...