

Hot

PIZZA SALES ANALYSIS

Presentation by
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AGENDA

1. Introduction to the Dataset:

- Overview of the data collected.
- Key metrics and dimensions analyzed.

2. Sales Performance Analysis:

- Overall sales trends.
- Performance comparison across different pizza categories and types.

3. Customer Behavior Insights:

- Identifying peak sales periods.
- Understanding customer preferences.

4. Revenue and Profit Analysis:

- Breakdown of revenue by product line and time period.

5. Actionable Insights and Recommendations:

- Key findings from the analysis.
- Strategic recommendations for boosting sales and improving customer satisfaction.

GOALS

By the end of this presentation, I hope to provide you with a comprehensive understanding of our pizza sales dynamics and present actionable insights that can drive our business growth.

PIZZA SALES ANALYSIS

WELCOME !!!

Greetings everyone,

Thank you for joining me today for an insightful presentation on "Pizza Sales Analysis." I am **Nandha Kumar B (Data Analyst)**, and I am excited to take you through a detailed examination of our pizza sales data.



Number of
Tables

4

Number of
Records

48,620

Number of
Fields

12

PIZZA SALES ANALYSIS



1. RETRIEVE THE TOTAL NUMBER OF ORDERS PLACED.

CODE

```
SELECT  
    COUNT(ORDER_ID) AS TOTAL_NO_OF_ORDERS  
FROM  
    ORDERS;
```



OUTPUT

	TOTAL_NO_OF_ORDERS
▶	21350

PIZZA SALES ANALYSIS



2. CALCULATE THE TOTAL REVENUE GENERATED FROM PIZZA SALES.

CODE

```
SELECT  
    ROUND(SUM(OD.QUANTITY * P.PRICE), 2) AS TOTAL_REVENUE  
FROM  
    ORDER_DETAILS AS OD  
    JOIN  
    PIZZA AS P ON OD.PIZZA_ID = P.PIZZA_ID;
```



OUTPUT

	TOTAL_REVENUE
▶	817860.05

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3. IDENTIFY THE HIGHEST-PRICED PIZZA.

CODE

```
SELECT PT.NAME, PRICE AS PRICE  
FROM PIZZA AS P  
JOIN PIZZA_TYPES AS PT ON PT.PIZZA_TYPE_ID = P.PIZZA_TYPE_ID  
ORDER BY PRICE DESC  
LIMIT 1;
```



OUTPUT

	NAME	PRICE
▶	The Greek Pizza	35.95

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4. IDENTIFY THE MOST COMMON PIZZA SIZE ORDERED.

CODE

```
SELECT  
    P.SIZE, COUNT(OD.ORDER_DETAILS_ID) AS COUNT_OF_COMMON_PIZZA  
FROM  
    ORDER_DETAILS AS OD  
        JOIN  
    PIZZA AS P ON OD.PIZZA_ID = P.PIZZA_ID  
GROUP BY P.SIZE  
ORDER BY COUNT_OF_COMMON_PIZZA DESC;
```



OUTPUT

	SIZE	COMMON_PIZZA
▶	L	18526
	M	15385
	S	14137
	XL	544
	XXL	28

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

CODE

```
SELECT  
    PT.NAME, SUM(OD.QUANTITY) AS ORDERED_QUANTITY  
FROM  
    PIZZA_TYPES AS PT  
        JOIN  
    PIZZA AS P ON PT.PIZZA_TYPE_ID = P.PIZZA_TYPE_ID  
        JOIN  
    ORDER_DETAILS AS OD ON OD.PIZZA_ID = P.PIZZA_ID  
GROUP BY PT.NAME  
ORDER BY ORDERED_QUANTITY DESC  
LIMIT 5;
```



OUTPUT

	NAME	ORDERED_QUANTITY
▶	The Classic Deluxe Pizza	2453
	The Barbecue Chicken Pizza	2432
	The Hawaiian Pizza	2422
	The Pepperoni Pizza	2418
	The Thai Chicken Pizza	2371

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

CODE

```
SELECT PT.CATEGORY, SUM(OD.QUANTITY) AS TOTAL_QUANTITY_PER_CATEGORY
FROM PIZZA_TYPES AS PT
JOIN PIZZA AS P ON PT.PIZZA_TYPE_ID = P.PIZZA_TYPE_ID
JOIN ORDER_DETAILS AS OD ON OD.PIZZA_ID = P.PIZZA_ID
GROUP BY PT.CATEGORY
ORDER BY TOTAL_QUANTITY_PER_CATEGORY DESC;
```



OUTPUT

	CATEGORY	TOTAL_QUANTITY_PER_CATEGORY
▶	Classic	14888
	Supreme	11987
	Veggie	11649
	Chicken	11050

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7. DETERMINE THE DISTRIBUTION OF ORDERS BY HOUR OF THE DAY.

CODE

SELECT

```
HOUR(ORDER_TIME) AS ORDER_TIME,  
COUNT(OD.ORDER_ID) AS ORDERS_PLACED
```

FROM

```
ORDERS AS O
```

JOIN

```
ORDER_DETAILS AS OD ON O.ORDER_ID = OD.ORDER_ID
```

GROUP BY HOUR(ORDER_TIME)

ORDER BY O.ORDER_TIME ASC;



OUTPUT

ORDER_TIME	ORDERS_PLACED
9	4
10	17
11	2672
12	6543
13	6203
14	3521
15	3170
16	4185
17	5143
18	5359
19	4350
20	3487
21	2528
22	1370
23	68

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

CODE

```
SELECT  
    CATEGORY,  
    COUNT(PIZZA_TYPE_ID) AS NO_OF_PIZZA_TYPE_PER_CATEGORY  
FROM  
    PIZZA_TYPES  
GROUP BY CATEGORY
```



OUTPUT

	CATEGORY	NO_OF_PIZZA_TYPE_PER_CATEGORY
▶	Chicken	6
	Classic	8
	Supreme	9
	Veggie	9

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

CODE

```
SELECT  
    ROUND(AVG(PIZZA_ORDERED), 0) AS AVG_PIZZA_ORDERED_PER_DAY  
FROM  
    (SELECT  
        O.ORDER_DATE, SUM(OD.QUANTITY) AS PIZZA_ORDERED  
    FROM  
        ORDERS AS O  
    JOIN ORDER_DETAILS AS OD ON O.ORDER_ID = OD.ORDER_ID  
    GROUP BY O.ORDER_DATE) AS SUM_PIZZA;
```



OUTPUT

	AVG_QUANTITY_PIZZA_ORDERED_PER_DAY
▶	138

PIZZA SALES ANALYSIS



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

CODE

```
SELECT  
    PT.NAME, SUM(QUANTITY * PRICE) AS TOTAL_REVENUE  
FROM  
    PIZZA_TYPES AS PT  
        JOIN  
    PIZZA AS P ON P.PIZZA_TYPE_ID = PT.PIZZA_TYPE_ID  
        JOIN  
    ORDER_DETAILS AS OD ON P.PIZZA_ID = OD.PIZZA_ID  
GROUP BY PT.NAME  
ORDER BY TOTAL_REVENUE DESC  
LIMIT 3;
```



OUTPUT

	NAME	TOTAL_REVENUE
▶	The Thai Chicken Pizza	43434.25
▶	The Barbecue Chicken Pizza	42768
▶	The California Chicken Pizza	41409.5

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

CODE

```
SELECT
    PT.CATEGORY,
    ROUND(SUM(OD.QUANTITY * P.PRICE) / (SELECT
        ROUND(SUM(OD.QUANTITY * P.PRICE), 2) AS TOTAL_REVENUE
    FROM
        ORDER_DETAILS AS OD
        JOIN
            PIZZA AS P ON OD.PIZZA_ID = P.PIZZA_ID) * 100,2) AS PERCENTAGE_OF_REVENUE
FROM
    PIZZA_TYPES AS PT
    JOIN
        PIZZA AS P ON P.PIZZA_TYPE_ID = PT.PIZZA_TYPE_ID
    JOIN
        ORDER_DETAILS AS OD ON P.PIZZA_ID = OD.PIZZA_ID
GROUP BY PT.CATEGORY
ORDER BY PERCENTAGE_OF_REVENUE DESC
```



OUTPUT

	CATEGORY	PERCENTAGE_OF_REVENUE
▶	Classic	26.91
	Supreme	25.46
	Chicken	23.96
	Veggie	23.68

PIZZA SALES ANALYSIS



12. ANALYZE THE CUMULATIVE REVENUE GENERATED OVER TIME.

CODE

```
SELECT  
    ORDER_DATE, ROUND(REVENUE,2) AS DAILY_REVENUE,  
    ROUND(SUM(REVENUE) OVER(ORDER BY ORDER_DATE),2) AS CUMMULATIVE_REVENUE  
FROM  
    (SELECT  
        O.ORDER_DATE, SUM(OD.QUANTITY * P.PRICE) AS REVENUE  
        FROM  
        ORDER_DETAILS AS OD  
        JOIN  
        PIZZA AS P ON OD.PIZZA_ID = P.PIZZA_ID  
        JOIN  
        ORDERS AS O ON O.ORDER_ID = OD.ORDER_ID  
        GROUP BY O.ORDER_DATE) AS SALES;
```



OUTPUT

	ORDER_DATE	DAILY_REVENUE	CUMMULATIVE_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	2838.35	19399.05
	2015-01-09	2127.35	21526.4



PIZZA SALES ANALYSIS



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

CODE

```
WITH CTE AS (
    SELECT
        CATEGORY, NAME, REVENUE, RANK() OVER(PARTITION BY CATEGORY ORDER BY REVENUE DESC) AS LIST
    FROM (
        SELECT
            NAME, CATEGORY, ROUND(SUM(QUANTITY*PRICE),2) AS REVENUE
        FROM PIZZA_TYPES AS PT
        JOIN PIZZA AS P
        ON PT.PIZZA_TYPE_ID = P.PIZZA_TYPE_ID
        JOIN ORDER_DETAILS AS OD
        ON OD.PIZZA_ID = P.PIZZA_ID
        GROUP BY PT.NAME, PT.CATEGORY
        ORDER BY CATEGORY,PT.NAME) AS TEMP)

SELECT CATEGORY, NAME, REVENUE FROM CTE WHERE LIST<=3;
```

OUTPUT

	CATEGORY	NAME	REVENUE
▶	Chicken	The Thai Chicken Pizza	43434.25
	Chicken	The Barbecue Chicken Pizza	42768
	Chicken	The California Chicken Pizza	41409.5
	Classic	The Classic Deluxe Pizza	38180.5
	Classic	The Hawaiian Pizza	32273.25
	Classic	The Pepperoni Pizza	30161.75
	Supreme	The Spicy Italian Pizza	34831.25
	Supreme	The Italian Supreme Pizza	33476.75
	Supreme	The Sicilian Pizza	30940.5
	Veggie	The Four Cheese Pizza	32265.7
	Veggie	The Mexicana Pizza	26780.75
	Veggie	The Five Cheese Pizza	26066.5



CONCLUSION



MOST ORDERED PIZZA TYPES:

- CLASSIC DELUXE PIZZA: 2,453 ORDERS
- BARBECUE CHICKEN PIZZA: 2,432 ORDERS
- HAWAIIAN PIZZA: 2,422 ORDERS

THESE ARE THE MOST POPULAR PIZZAS, SUGGESTING A STRONG CUSTOMER PREFERENCE FOR TRADITIONAL AND BBQ FLAVORS.

TOP REVENUE-GENERATING PIZZA:

THAI CHICKEN PIZZA: THIS PIZZA HAS GENERATED THE HIGHEST REVENUE AT \$43,434.25. DESPITE NOT BEING THE MOST ORDERED, ITS HIGHER PRICE POINT CONTRIBUTES SIGNIFICANTLY TO REVENUE.

MOST COMMON PIZZA SIZE:

THE LARGE (L) SIZE IS THE MOST COMMONLY ORDERED PIZZA SIZE. THIS INDICATES A PREFERENCE FOR LARGER PORTIONS, POSSIBLY FOR GROUP DINING OR VALUE FOR MONEY.



PEAK ORDER TIMES:

12-1 PM AND 5-6 PM: THESE ARE THE PEAK HOURS FOR ORDERS, LIKELY CORRESPONDING TO LUNCH AND DINNER TIMES.

REVENUE CONTRIBUTION:

CLASSIC PIZZA TYPE: GENERATES 26.91% OF TOTAL REVENUE, SHOWING THAT THIS CATEGORY IS A MAJOR CONTRIBUTOR TO THE OVERALL SALES.

MOST ORDERED CATEGORY:

CLASSIC CATEGORY: WITH A TOTAL OF 14,888 ORDERS, THE CLASSIC CATEGORY IS THE MOST ORDERED. THIS INDICATES THAT TRADITIONAL PIZZA FLAVORS ARE HIGHLY FAVORED BY CUSTOMERS.

RECOMMENDATIONS:



FOCUS ON POPULAR SIZES AND TYPES:

- **STOCK MANAGEMENT:** ENSURE THAT LARGE-SIZED PIZZAS, ESPECIALLY THE CLASSIC DELUXE, BARBECUE CHICKEN, AND HAWAIIAN, ARE WELL-STOCKED AND READILY AVAILABLE DURING PEAK HOURS TO AVOID SHORTAGES.
- **PROMOTIONS:** CREATE TARGETED PROMOTIONS AND COMBO DEALS FEATURING THESE POPULAR PIZZAS TO BOOST SALES FURTHER.

ENHANCE PEAK HOUR OPERATIONS:

- **STAFFING:** INCREASE STAFF DURING PEAK HOURS (12-1 PM AND 5-6 PM) TO HANDLE THE HIGH VOLUME OF ORDERS EFFICIENTLY.
- **ORDER PROCESSING:** OPTIMIZE THE ORDER PROCESSING AND DELIVERY SYSTEM TO REDUCE WAIT TIMES DURING THESE HOURS.

EXPAND AND INNOVATE CLASSIC OFFERINGS:

- **NEW VARIETIES:** INTRODUCE NEW VARIETIES WITHIN THE CLASSIC CATEGORY TO KEEP THE MENU FRESH AND EXCITING FOR REPEAT CUSTOMERS.
- **SEASONAL SPECIALS:** LAUNCH LIMITED-TIME OFFERS OR SEASONAL SPECIALS WITHIN THE CLASSIC CATEGORY TO ATTRACT MORE ORDERS.

CUSTOMER ENGAGEMENT AND FEEDBACK

- **SURVEYS AND REVIEWS:** COLLECT CUSTOMER FEEDBACK REGULARLY TO UNDERSTAND THEIR PREFERENCES AND AREAS FOR IMPROVEMENT.
- **LOYALTY PROGRAMS:** IMPLEMENT LOYALTY PROGRAMS THAT REWARD FREQUENT CUSTOMERS WITH DISCOUNTS OR FREE ITEMS, ENCOURAGING REPEAT BUSINESS.

REVENUE OPTIMIZATION:

- **PREMIUM PIZZAS:** PROMOTE HIGH-REVENUE PIZZAS LIKE THE THAI CHICKEN PIZZA THROUGH SPECIAL OFFERS AND MARKETING CAMPAIGNS TO ATTRACT MORE SALES.
- **UPSELLING:** TRAIN STAFF TO UPSELL PREMIUM TOPPINGS OR SIDE DISHES THAT PAIR WELL WITH HIGH-REVENUE PIZZAS.

MARKETING AND PROMOTIONS:

- **SOCIAL MEDIA CAMPAIGNS:** USE SOCIAL MEDIA PLATFORMS TO PROMOTE POPULAR PIZZAS AND NEW MENU ITEMS, ENGAGING WITH CUSTOMERS AND ATTRACTING NEW ONES.
- **EMAIL MARKETING:** SEND PERSONALIZED OFFERS AND UPDATES TO CUSTOMERS BASED ON THEIR ORDERING HISTORY, INCREASING THE CHANCES OF REPEAT ORDERS.

THANK YOU

