PIZZAHUT STORE SALES ANALYSIS USING SQL

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Overview







OBJECTIVE

SCHEMA



05

06

QUESTIONS NEED TO ADDRESS

ANALYSIS

INSIGHTS

INTRODUCTION

This project dedicated to analyzing Pizza Hut sales data using SQL. In this project, we delve into the rich dataset provided by Pizza Hut to uncover valuable insights into customer preferences, sales trends, and operational efficiency.



Objectives

Our primary objective is to utilize SQL queries to extract, transform, and analyze Pizza Hut's sales data. By doing so, we aim to answer key questions such as:

Total number of orders placed.

Total revenue generated from pizza sales.

Identify the highest-priced pizza.

Identify the most common pizza size ordered.

Total quantity of each pizza category ordered.

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

Find total revenue for each pizza category.



QUESTIONS THAT NEED TO ADDRESS

- 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.
- Find the total quantity of each pizza category ordered.
- to find the category-wise distribution of pizzas.
- Determine the top 3 most ordered pizza types based on revenue.
- Find total revenue for each pizza category.

TABLE CREATION

```
CREATE TABLE PIZZA_TYPE

(

PIZZA_TYPE_ID VARCHAR(10) PRIMARY KEY,

NAME VARCHAR(10),

CATEGORY VARCHAR(8));

CREATE TABLE PIZZAS

(

PIZZA_ID VARCHAR (10) PRIMARY KEY,

PIZZA_TYPE_ID VARCHAR (10),

SIZE VARCHAR(8),

PRICE INT(10),

FOREIGN KEY (PIZZA_TYPE_ID) REFERENCES PIZZA_TYPE(PIZZA_TYPE_ID)

);
```

```
CREATE TABLE PIZZA_ORDERS
ORDER_ID VARCHAR (10) PRIMARY KEY,
DATE date(10)
);
CREATE TABLE ORDER_DETAIL
ORDER_DETAIL_ID VARCHAR (10) ,
ORDER_ID VARCHAR (10),
PIZZA_ID VARCHAR(8),
QUANTITY INT(10),
FOREIGN KEY (ORDER_ID) REFERENCES PIZZA_ORDERS(ORDER_ID),
FOREIGN KEY (PIZZA_ID) REFERENCES PIZZAS(PIZZA_ID)
```

VALUES INSERTION

```
INSERT INTO PIZZA_TYPE VALUES( 'bbq_ckn', 'The Barbecue Chicken Pizza', 'Chicken');
INSERT INTO PIZZA_TYPE VALUES( 'cali_ckn', 'The California Chicken Pizza', 'Chicken');
INSERT INTO PIZZA_TYPE VALUES( 'big_meat', 'The Big Meat Pizza', 'Classic');
INSERT INTO PIZZA_TYPE VALUES( 'hawaiian', 'The Hawaiian Pizza', 'Classic');
INSERT INTO PIZZA_TYPE VALUES( 'calabrese', 'The Calabrese Pizza', 'Supreme');
INSERT INTO PIZZA_TYPE VALUES( 'prsc_argla', 'The Prosciutto and Arugula Pizza', 'Supreme');
INSERT INTO PIZZA_TYPE VALUES( 'bmediterraneo', 'The Mediterranean Pizza', 'Veggie');
INSERT INTO PIZZA_TYPE VALUES('spinach_fet', 'The Spinach and Feta Pizza', 'Veggie');
SELECT * FROM PIZZA_TYPE
```

PIZZA_TYPE

PIZZA_TYPE_ID	NAME	CATEGORY
bbq_ckn	The Barbecue Chicken Pizza	Chicken
cali_ckn	The California Chicken Pizza	Chicken
big_meat	The Big Meat Pizza	Classic
hawaiian	The Hawaiian Pizza	Classic
calabrese	The Calabrese Pizza	Supreme
prsc_argla	The Prosciutto and Arugula Pizza	Supreme
bmediterraneo	The Mediterranean Pizza	Veggie
spinach_fet	The Spinach and Feta Pizza	Veggie

```
INSERT INTO PIZZAS VALUES ( 'bbq_ckn_s','bbq_ckn', 'S', 12.75);
INSERT INTO PIZZAS VALUES ( 'bbq ckn l', 'bbq ckn', 'L', 20.75);
INSERT INTO PIZZAS VALUES( 'cali_ckn_s', 'cali_ckn', 'S', 12.75);
INSERT INTO PIZZAS VALUES( 'cali_ckn_l', 'cali_ckn', 'L', 20.75);
INSERT INTO PIZZAS VALUES( 'big_meat_s','big_meat', 'S',12 );
INSERT INTO PIZZAS VALUES( 'big meat l', 'big meat', 'L',20.5);
INSERT INTO PIZZAS VALUES( 'hawaiian s','hawaiian','S' ,10.5);
INSERT INTO PIZZAS VALUES( 'hawaiian l', 'hawaiian', 'L' ,16.5);
INSERT INTO PIZZAS VALUES( 'calabrese s', 'calabrese', 'S', 12.25);
INSERT INTO PIZZAS VALUES( 'prsc_argla_l', 'prsc_argla', 'L', 20.75);
INSERT INTO PIZZAS VALUES( 'bmediterraneo l', 'bmediterraneo', 'L', 20.75);
INSERT INTO PIZZAS VALUES('spinach fet l', 'spinach fet', 'L', 20.75);
SELECT * FROM PIZZAS
```

PIZZAS

PIZZA_ID	PIZZA_TYPE_ID	SIZE	PRICE
bbq_ckn_s	bbq_ckn	S	12.75
bbq_ckn_l	bbq_ckn	L	20.75
cali_ckn_s	cali_ckn	S	12.75
cali_ckn_l	cali_ckn	L	20.75
big_meat_s	big_meat	S	12
big_meat_l	big_meat	L	20.5
hawaiian_s	hawaiian	S	10.5
hawaiian_l	hawaiian	L	16.5
calabrese_s	calabrese	S	12.25
prsc_argla_l	prsc_argla	L	20.75
bmediterraneo_l	bmediterraneo	L	20.75
spinach_fet_l	spinach_fet	L	20.75

```
INSERT INTO PIZZA ORDERS VALUES ( '1', '02-12-2023');
INSERT INTO PIZZA ORDERS VALUES ( '2', '02-12-2023');
INSERT INTO PIZZA ORDERS VALUES ( '3', '02-12-2023');
INSERT INTO PIZZA ORDERS VALUES ( '4', '02-12-2023');
INSERT INTO PIZZA_ORDERS VALUES ( '5', '02-12-2023');
INSERT INTO PIZZA ORDERS VALUES ( '6', '02-12-2023');
INSERT INTO PIZZA ORDERS VALUES ( '7', '02-12-2023');
INSERT INTO PIZZA_ORDERS VALUES ( '8', '02-12-2023');
INSERT INTO PIZZA ORDERS VALUES ( '9', '02-12-2023');
INSERT INTO PIZZA ORDERS VALUES ( '10', '02-12-2023');
INSERT INTO PIZZA ORDERS VALUES ( '11', '02-12-2023');
INSERT INTO PIZZA ORDERS VALUES ( '12', '02-12-2023');
INSERT INTO PIZZA ORDERS VALUES ( '13', '02-12-2023');
INSERT INTO PIZZA_ORDERS VALUES ( '14', '02-12-2023');
INSERT INTO PIZZA ORDERS VALUES ( '15', '02-12-2023');
INSERT INTO PIZZA ORDERS VALUES ( '16', '02-12-2023');
```

```
INSERT INTO PIZZA_ORDERS VALUES ( '11','02-12-2023');
INSERT INTO PIZZA_ORDERS VALUES ( '12', '02-12-2023');
INSERT INTO PIZZA_ORDERS VALUES ( '13', '02-12-2023');
INSERT INTO PIZZA_ORDERS VALUES ( '14', '02-12-2023');
INSERT INTO PIZZA_ORDERS VALUES ( '15', '02-12-2023');
INSERT INTO PIZZA ORDERS VALUES ( '16', '02-12-2023');
INSERT INTO PIZZA_ORDERS VALUES ( '17', '02-12-2023');
INSERT INTO PIZZA ORDERS VALUES ( '18', '02-12-2023');
INSERT INTO PIZZA ORDERS VALUES ( '19', '02-12-2023');
INSERT INTO PIZZA ORDERS VALUES ( '20', '02-12-2023');
SELECT * FROM PIZZA_ORDERS
```

PIZZA_ORDERS

DATE
02-12-2023
02-12-2023
02-12-2023
02-12-2023
02-12-2023
02-12-2023
02-12-2023
02-12-2023
02-12-2023
02-12-2023
02-12-2023
02-12-2023
02-12-2023
02-12-2023
02-12-2023

```
INSERT INTO ORDER DETAIL VALUES ( '1','1','bbq ckn s',2);
INSERT INTO ORDER DETAIL VALUES ( '2', '1', 'bbq_ckn_s', 8);
INSERT INTO ORDER DETAIL VALUES ( '3', '2', 'bbq ckn l',5);
INSERT INTO ORDER DETAIL VALUES( '4','3','cali ckn s',6);
INSERT INTO ORDER DETAIL VALUES( '5','6','cali ckn l', 4);
INSERT INTO ORDER_DETAIL VALUES( '6','4', 'big_meat_s',5);
INSERT INTO ORDER DETAIL VALUES( '7', '3', 'big meat 1',6);
INSERT INTO ORDER DETAIL VALUES( '8','5','hawaiian s',10);
INSERT INTO ORDER_DETAIL VALUES( '9', '5', 'big_meat_l',5);
INSERT INTO ORDER DETAIL VALUES( '10','7', 'hawaiian l',4);
INSERT INTO ORDER DETAIL VALUES('11','8', 'calabrese s',9);
INSERT INTO ORDER_DETAIL VALUES( '12','9','prsc_argla_l', 6);
INSERT INTO ORDER DETAIL VALUES( '13', '9', 'cali ckn s',6);
INSERT INTO ORDER DETAIL VALUES( '14','10','bmediterraneo_l',2);
INSERT INTO ORDER_DETAIL VALUES('15','11','spinach_fet_l',3);
INSERT INTO ORDER DETAIL VALUES( '16', '12', 'cali ckn s',6);
```

```
INSERT INTO ORDER_DETAIL VALUES('15','11','spinach_fet_l',3);
INSERT INTO ORDER_DETAIL VALUES( '16','12','cali_ckn_s',6);
INSERT INTO ORDER_DETAIL VALUES( '17','12','cali_ckn_l', 2);
INSERT INTO ORDER DETAIL VALUES( '18', '13', 'big meat s',10);
INSERT INTO ORDER_DETAIL VALUES( '19', '14', 'big_meat_l',7);
INSERT INTO ORDER DETAIL VALUES ( '20', '15', 'bbq ckn s',2);
INSERT INTO ORDER DETAIL VALUES ( '21', '16', 'bbq ckn s', 8);
INSERT INTO ORDER DETAIL VALUES ( '22', '17', 'bbq ckn l',9);
INSERT INTO ORDER_DETAIL VALUES( '23','18', 'big_meat_s',5);
INSERT INTO ORDER_DETAIL VALUES( '24', '18', 'big_meat_l',8);
INSERT INTO ORDER_DETAIL VALUES( '25', '19', 'hawaiian_s',10);
INSERT INTO ORDER_DETAIL VALUES( '26', '20', 'big_meat_l',5);
INSERT INTO ORDER DETAIL VALUES( '27', '19', 'hawaiian l',4);
SELECT * FROM ORDER DETAIL
```

ORDER_DETAIL

ORDER_DETAIL_ID	ORDER_ID	PIZZA_ID	QUANTITY
1	1	bbq_ckn_s	2
2	1	bbq_ckn_s	8
3	2	bbq_ckn_l	5
4	3	cali_ckn_s	6
5	6	cali_ckn_l	4
6	4	big_meat_s	5
1	1	bbq_ckn_s	2
2	1	bbq_ckn_s	8
3	2	bbq_ckn_l	5
4	3	cali_ckn_s	6
5	6	cali_ckn_l	4
6	4	big_meat_s	5
7	3	big_meat_l	6
8	5	hawaiian_s	10
1	1	bbq_ckn_s	2
2	1	bbq_ckn_s	8
3	2	bbq_ckn_l	5

Retrieve the total number of orders placed.

SELECT COUNT(ORDER_DETAIL.ORDER_DETAIL_ID) AS TOTAL_ORDERS FROM ORDER_DETAIL

Output TOTAL_ORDERS 41

Calculate the total revenue generated from pizza sales.

```
SELECT SUM((P.PRICE* OD.QUANTITY))AS TOTAL_REVENUE
FROM ORDER_DETAIL OD , PIZZAS P
WHERE P.PIZZA_ID= OD.PIZZA_ID
```

Output

TOTAL_REVENUE

3585

Identify the highest-priced pizza.

```
SELECT PT.NAME, MAX(P.PRICE)

FROM PIZZAS P, PIZZA_TYPE PT

WHERE P.PIZZA_TYPE_ID= PT.PIZZA_TYPE_ID
```

Output	
NAME	MAX(P.PRICE)
The Barbecue Chicken Pizza	20.75

Identify the most common pizza size ordered.

```
SELECT P.SIZE, COUNT(OD.ORDER_DETAIL_ID)

FROM PIZZAS P, ORDER_DETAIL OD

WHERE OD.PIZZA_ID = P.PIZZA_ID

GROUP BY P.SIZE;
```

Output	
SIZE	COUNT(OD.ORDER_DETAIL_ID)
L	19
S	22

Top 5 most ordered pizzas along with their quantities.

```
SELECT PT.NAME, OD.QUANTITY
FROM ORDER_DETAIL OD, PIZZA_TYPE PT
ORDER BY OD.QUANTITY DESC
LIMIT 5;
```

NAME	QUANTITY
The Barbecue Chicken Pizza	10
The California Chicken Pizza	10
The Big Meat Pizza	10
The Hawaiian Pizza	10
The Calabrese Pizza	10

Find total quantity of each pizza category ordered.

```
SELECT PT.CATEGORY, SUM(OD.QUANTITY) AS TOTAL_QUAN_CAT

FROM PIZZA_TYPE PT JOIN PIZZAS P

ON P.PIZZA_TYPE_ID = PT.PIZZA_TYPE_ID

JOIN ORDER_DETAIL OD

ON P.PIZZA_ID = OD.PIZZA_ID

GROUP BY PT.CATEGORY

ORDER BY OD.QUANTITY DESC;
```

CATEGORY	TOTAL_QUAN_CAT
Supreme	15
Classic	105
Veggie	3
Veggie	2
Chicken	108

Find the category-wise distribution of pizzas.

```
SELECT PT.NAME, SUM(OD.QUANTITY *P.PRICE) AS REV
FROM PIZZA_TYPE PT JOIN PIZZAS P
ON P.PIZZA_TYPE_ID = PT.PIZZA_TYPE_ID
JOIN ORDER_DETAIL OD
ON OD.PIZZA_ID = P.PIZZA_ID
GROUP BY PT.NAME ORDER BY REV DESC LIMIT 3
```

NAME	REV
The Big Meat Pizza	1118.5
The Barbecue Chicken Pizza	1008
The California Chicken Pizza	673

Find the total revenue for each pizza category.

```
SELECT PT.CATEGORY, SUM(OD.QUANTITY *P.PRICE) AS REV
FROM PIZZA_TYPE PT JOIN PIZZAS P
ON P.PIZZA_TYPE_ID = PT.PIZZA_TYPE_ID
JOIN ORDER_DETAIL OD
ON OD.PIZZA_ID = P.PIZZA_ID
GROUP BY PT.CATEGORY ORDER BY REV DESC
```

CATEGORY	REV
Chicken	1681
Classic	1565.5
Supreme	234.75
Veggie	62.25

THANK YOU