



# PIZZA SALES ANALYSIS PROJECT



## PART 1

# MS SQL SERVER



Microsoft®  
**SQL Server®**



# MS SQL SERVER



## • IMPORT DATA



Import Flat File 'AdventureWorks2014'

**Introduction**

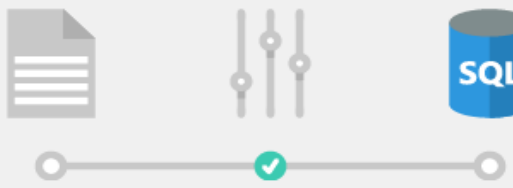
Introduction  
Specify Input File  
Preview Data  
Modify Columns  
Summary  
Results

**Import Flat File**

This wizard will help you import the contents of a file into a new table in your database.

To import data, you must:

- Specify the input file containing the data.
- Preview the automatically generated table schema and optionally modify columns.



To begin importing your data, click Next.

☐ Do not show this page again.

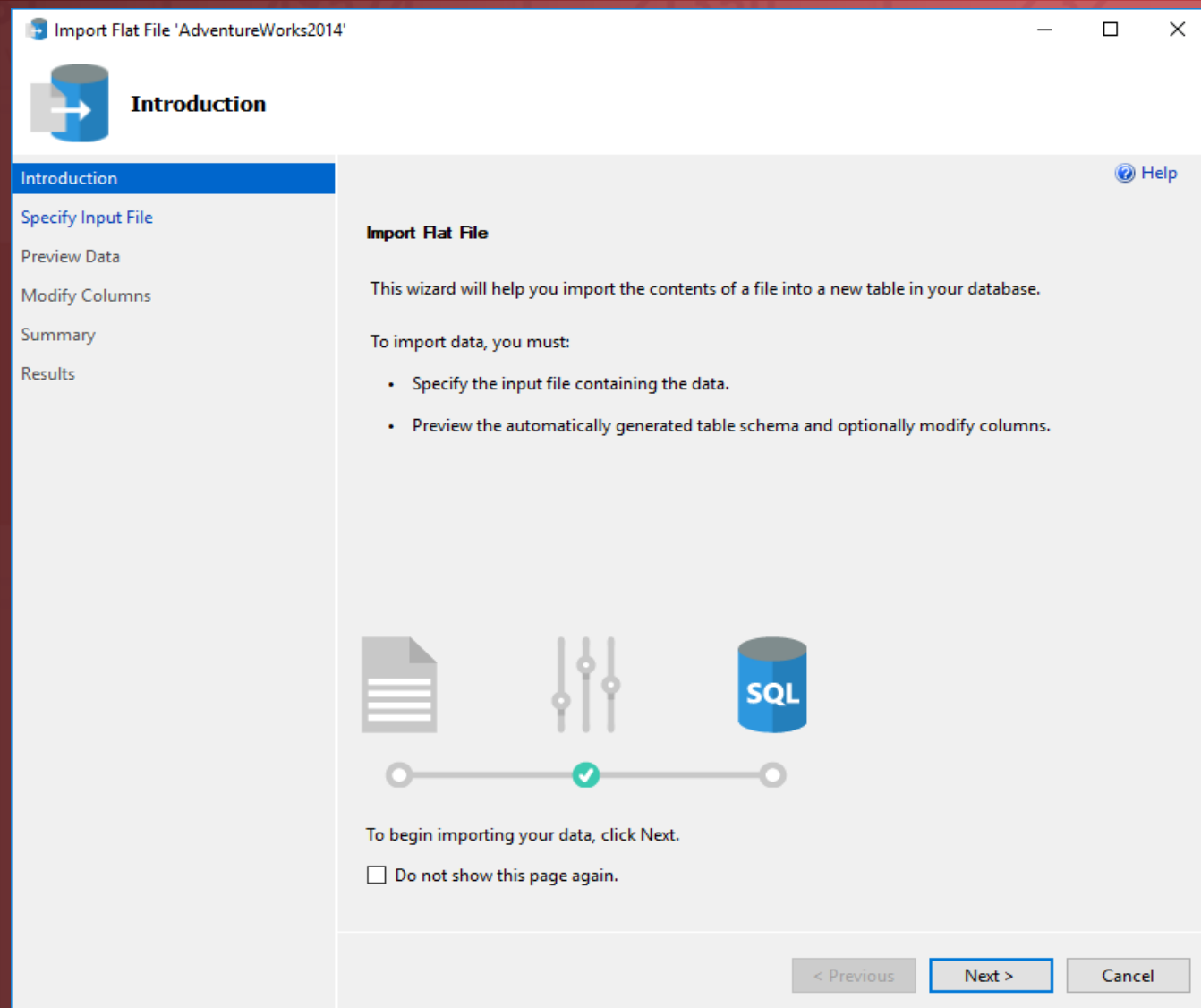
< Previous   **Next >**   Cancel



# MS SQL SERVER



## • CREATING DB





# MS SQL SERVER



## • WRITING QUERIES

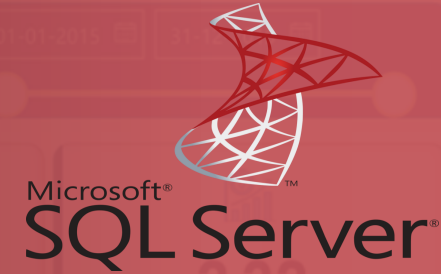
```
SQLQuery1.sql - T...JASWEE\admin (74))* X
SELECT DATENAME(MONTH, order_date) AS Month_name,
COUNT(DISTINCT order_id) AS Total_orders
FROM pizza_sales
GROUP BY DATENAME(MONTH, order_date)
ORDER BY Total_orders DESC;

SELECT pizza_category, SUM(total_price) * 100 / (SELECT SUM(total_price)
FROM pizza_sales) AS PCT
FROM pizza_sales
GROUP BY pizza_category;

SELECT pizza_size, CAST(SUM(total_price) AS DECIMAL(10,2)) AS
Total_revenue, CAST(SUM(total_price) * 100 / (SELECT SUM(total_price)
FROM pizza_sales) AS DECIMAL(10,2)) AS PCT
FROM pizza_sales
GROUP BY pizza_size
ORDER BY pizza_size ; |
```



# MS SQL SERVER



## • CREATING REPORT



Name:- Tejaswee M. Parab

### PIZZA SALES SQL QUERIES

#### A. KPI'S:-

##### 1.Total Revenue:-

```
SELECT SUM(total_price) as total_revenue from pizza_sales;
```

Output:-

Results		Messages	
total_revenue			
1	817860.05083847		

##### 2.Average Order Value:-

```
SELECT SUM(total_price) / COUNT(DISTINCT order_id) AS  
Avg_Order_Value FROM pizza_sales;
```

Output:-



# PIZZA SALES ANALYSIS PROJECT



## PART 2

# POWER BI





# POWER BI

**CONNECTING TO MS SQL SERVER**



Microsoft®  
**SQL Server®**





# POWER BI

## DATA CLEANING



Table: RemoveColumns("#Inserted Day", {"Day"})

	pizza_id	order_id	pizza_name_id	quantity	order_date	order_time	unit_price
1	1	1	hawaiian_m	1	01-01-2015	11:38:36	
2	2	2	classic_dlx_m	1	01-01-2015	11:57:40	
3	3	3	five_cheese_l	1	01-01-2015	11:57:40	
4	4	4	ital_supr_l	1	01-01-2015	11:57:40	
5	5	5	mexicana_m	1	01-01-2015	11:57:40	
6	6	6	thai_ckn_l	1	01-01-2015	11:57:40	
7	7	7	ital_supr_m	1	01-01-2015	12:12:28	
8	8	8	prsc_argla_l	1	01-01-2015	12:12:28	
9	9	9	ital_supr_m	1	01-01-2015	12:16:31	
10	10	10	ital_supr_m	1	01-01-2015	12:21:30	
11	11	11	bbq_ckn_s	1	01-01-2015	12:29:36	
12	12	12	the_greek_s	1	01-01-2015	12:29:36	
13	13	13	spinach_supr_s	1	01-01-2015	12:50:37	
14	14	14	spinach_supr_s	1	01-01-2015	12:51:37	
15	15	15	classic_dlx_s	1	01-01-2015	12:52:01	
16	16	16	green_garden_s	1	01-01-2015	12:52:01	
17	17	17	ital_cpello_l	1	01-01-2015	12:52:01	
18	18	18	ital_supr_l	1	01-01-2015	12:52:01	
19	19	19	ital_supr_s	1	01-01-2015	12:52:01	
20	20	20	mexicana_s	1	01-01-2015	12:52:01	
21	21	21	spicy_ital_l	1	01-01-2015	12:52:01	
22	22	22	spin_pesto_l	1	01-01-2015	12:52:01	
23	23	23	veggie_veg_s	1	01-01-2015	12:52:01	
24	24	24	mexicana_l	1	01-01-2015	13:00:15	
25	25	25	southw_ckn_l	1	01-01-2015	13:00:15	
26	26	26	bbq_ckn_l	1	01-01-2015	13:02:59	

**PROPERTIES**

Name: pizza\_sales

**APPLIED STEPS**

- Source
- Navigation
- Replaced Value
- Replaced Value1
- Replaced Value2
- Filtered Rows
- Replaced Value3
- Filtered Rows1
- Replaced Value4
- Filtered Rows2
- Inserted Day Name
- Added Conditional Column
- Filtered Rows3
- Inserted Month Name
- Inserted Month
- Renamed Columns
- Inserted Day
- Removed Columns





# POWER BI

## DATA PROCESSING



Table: RemoveColumns("#Inserted Day",{"Day"})

	1.2 pizza_id	1.2 order_id	1.2 pizza_name_id	1.2 quantity	1.2 order_date	1.2 order_time	1.2 unit_price
1	1	1	hawaiian_m	1	01-01-2015	11:38:36	
2	2	2	classic_dlx_m	1	01-01-2015	11:57:40	
3	3	3	five_cheese_l	1	01-01-2015	11:57:40	
4	4	4	ital_supr_l	1	01-01-2015	11:57:40	
5	5	5	mexicana_m	1	01-01-2015	11:57:40	
6	6	6	thai_chn_l	1	01-01-2015	11:57:40	
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9	9	9	ital_supr_m	1	01-01-2015	12:16:31	
10	10	10	ital_supr_m	1	01-01-2015	12:21:30	
11	11	11	bbq_chn_s	1	01-01-2015	12:29:36	
12	12	12	the_greek_s	1	01-01-2015	12:29:36	
13	13	13	spinach_supr_s	1	01-01-2015	12:50:37	
14	14	14	spinach_supr_s	1	01-01-2015	12:51:37	
15	15	15	classic_dlx_s	1	01-01-2015	12:52:01	
16	16	16	green_garden_s	1	01-01-2015	12:52:01	
17	17	17	ital_cpello_l	1	01-01-2015	12:52:01	
18	18	18	ital_supr_l	1	01-01-2015	12:52:01	
19	19	19	ital_supr_s	1	01-01-2015	12:52:01	
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22	22	22	spin_pesto_l	1	01-01-2015	12:52:01	
23	23	23	veggie_veg_s	1	01-01-2015	12:52:01	
24	24	24	mexicana_l	1	01-01-2015	13:00:15	
25	25	25	southw_chn_l	1	01-01-2015	13:00:15	
26	26	26	bbq_chn_l	1	01-01-2015	13:02:59	
27							

**PROPERTIES**

Name: pizza\_sales

All Properties

**APPLIED STEPS**

- Source
- Navigation
- Replaced Value
- Replaced Value1
- Replaced Value2
- Filtered Rows
- Replaced Value3
- Filtered Rows1
- Replaced Value4
- Filtered Rows2
- Inserted Day Name
- Added Conditional Column
- Filtered Rows3
- Inserted Month Name
- Inserted Month
- Renamed Columns
- Inserted Day
- Removed Columns



# POWER BI

- **DATA VISUALIZATION**





# POWER BI

# REPORT/DASHBOARD



## PIZZA SALES REPORT

Jan/15 - Dec/15

pizza\_category

All

01-01-2015

31-12-2015



Home



Best/Worst Sellers

### BUSIEST DAYS AND TIMES

#### DAYS

Orders are **highest** on weekends, **Friday/Saturday** Evenings.

#### MONTHLY

There are **maximum** orders from month of **July** and **January**.

### SALES PERFORMANCE

#### CATEGORY

**Classic Category** contributes to **maximum** sales & total orders.

#### SIZE

**Large size pizza** contributes to **maximum** sales.



817.86K

Total Revenue



38.31

Avg Order Value



49574

Total Pizzas Sold



21350

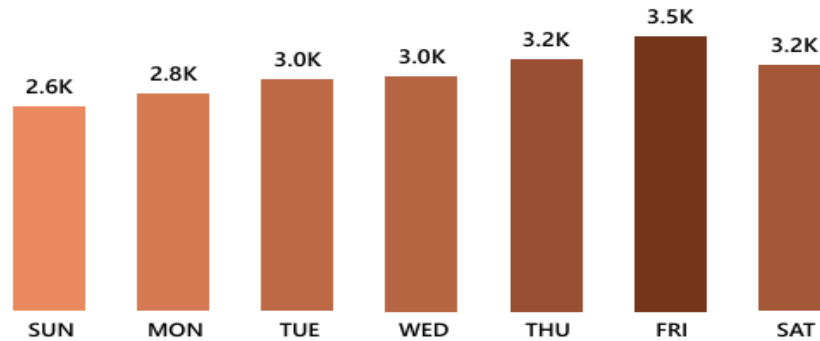
Total Orders



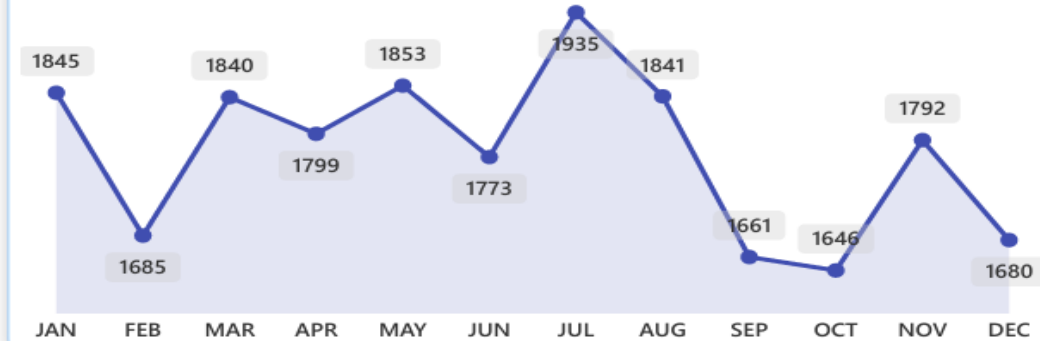
2.32

Avg Pizzas Per Order

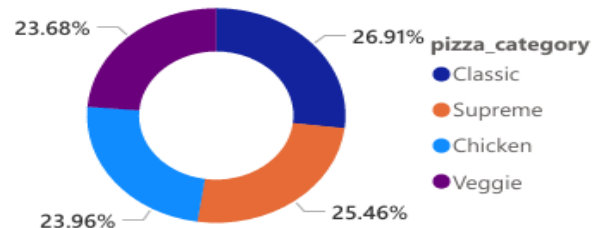
#### Daily Trend for Total Orders



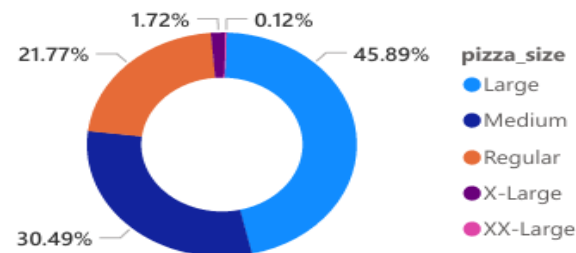
#### Monthly Trend for Total Orders



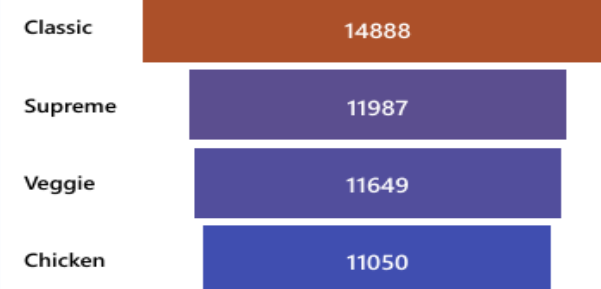
#### % of Sales by Pizza Category



#### % of Sales by Pizza Size



#### Total Pizzas Sold by Pizza Category





# POWER BI

# REPORT/DASHBOARD



## PIZZA SALES REPORT

Jan/15 -Dec/15

pizza\_category

All

01-01-2015

31-12-2015

Home

Best/Worst Sellers

817.86K

Total Revenue

38.31

Avg Order Value

49574

Total Pizzas Sold

21350

Total Orders

2.32

Avg Pizzas Per Order

### BEST SELLERS

#### REVENUE

The Thai Chicken Pizza contributes to maximum Revenue.

#### QUANTITY

The Classic Deluxe Pizza contributes to maximum Total Quantities.

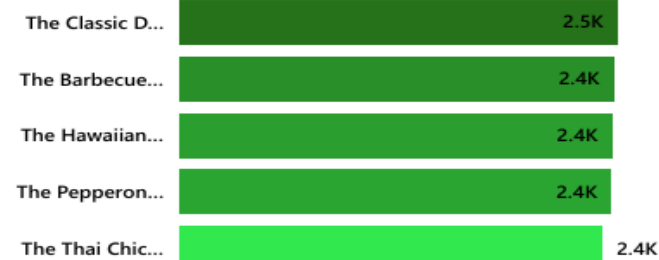
#### TOTAL ORDERS

The Classic Deluxe Pizza contributes to maximum Total Orders.

### Top 5 Pizzas by Revenue



### Top 5 Pizzas by Quantity



### Top 5 Pizzas by Total Orders



### WORST SELLERS

#### REVENUE

The Brie Carre Pizza contributes to minimum Revenue.

#### QUANTITY

The Brie Carre Pizza contributes to minimum Total Quantities.

#### TOTAL ORDERS

The Brie Carre Pizza contributes to minimum Total Orders.

### Bottom 5 Pizzas by Revenue



### Bottom 5 Pizzas by Quantity



### Bottom 5 Pizzas by Total Orders



# PROBLEM STATEMENT

## • KPI'S REQUIREMENT

We need to analyze key indicators for our pizza sales data to gain insights into our business performance. Specially, we want to calculate the following metrics:

1. **Total Revenue:** The sum of the total price of all pizza orders.
2. **Average Order Value:** The average amount spent per order, calculated by dividing the total revenue by the total number of orders.
3. **Total Pizzas Sold:** The sum of the quantities of all pizzas sold.
4. **Total Orders:** The total number of orders placed.
5. **Average Pizzas Per Order:** The average number of pizzas sold per day, calculated by dividing the total number of pizzas sold by the total number of orders.

# PROBLEM STATEMENT

## • CHARTS REQUIREMENT

We would like to visualize various aspects of our pizza sales data to gain insights and understand key trends. We have identified the following requirements for creating charts:

### 1. Daily Trend for Total Orders:

Create a bar chart that displays the daily trend of total orders over a specific time period. This chart will help us identify any patterns or fluctuations in order volumes on a daily basis.

### 2. Monthly Trend for Total Orders:

Create a line chart that illustrates the hourly trend of total orders throughout the day. This chart will allow us to identify peak hours or periods of high order activity.

### 3. Percentage of Sales by Pizza Category:

Create a pie chart that shows the distribution of sales across different pizza categories. This chart will provide insights into the popularity of various pizza categories and their contribution to overall sales.



# PROBLEM STATEMENT

- CHARTS REQUIREMENT

## 4. Percentage of Sales by Pizza Size:

Generate a pie chart that represents the percentage of sales attributed to different pizza sizes. This chart will help us understand customer preferences for pizza sizes and their impact on sales.

## 5. Total Pizzas Sold by Pizza Category:

Create a funnel chart that presents the total number of pizzas sold for each pizza category. This chart will allow us to compare the sales performance of different pizza categories.

## 6. Top 5 Best Sellers by Revenue, Total Quantity and Total Orders:

Create a bar chart highlighting the top 5 best-selling pizzas based on the Revenue, Total Quantity, Total Orders. This chart will help us identify the most popular pizza options.

## 7. Bottom 5 Best Sellers by Revenue, Total Quantity and Total Orders:

Create a bar chart showcasing the bottom 5 worst-selling pizzas based on the Revenue, Total Quantity, Total Orders. This chart will enable us to identify underperforming or less popular pizza options.

# SOFTWARE USED

**MS OFFICE/ EXCEL: VERSION 2019**

**MS SQL SERVER: 20.0**

**SQL SERVER MANAGEMENT STUDIO – 20.2.30.0**

**POWER BI: JUNE 2024 VERSION**



# THANK YOU!!

