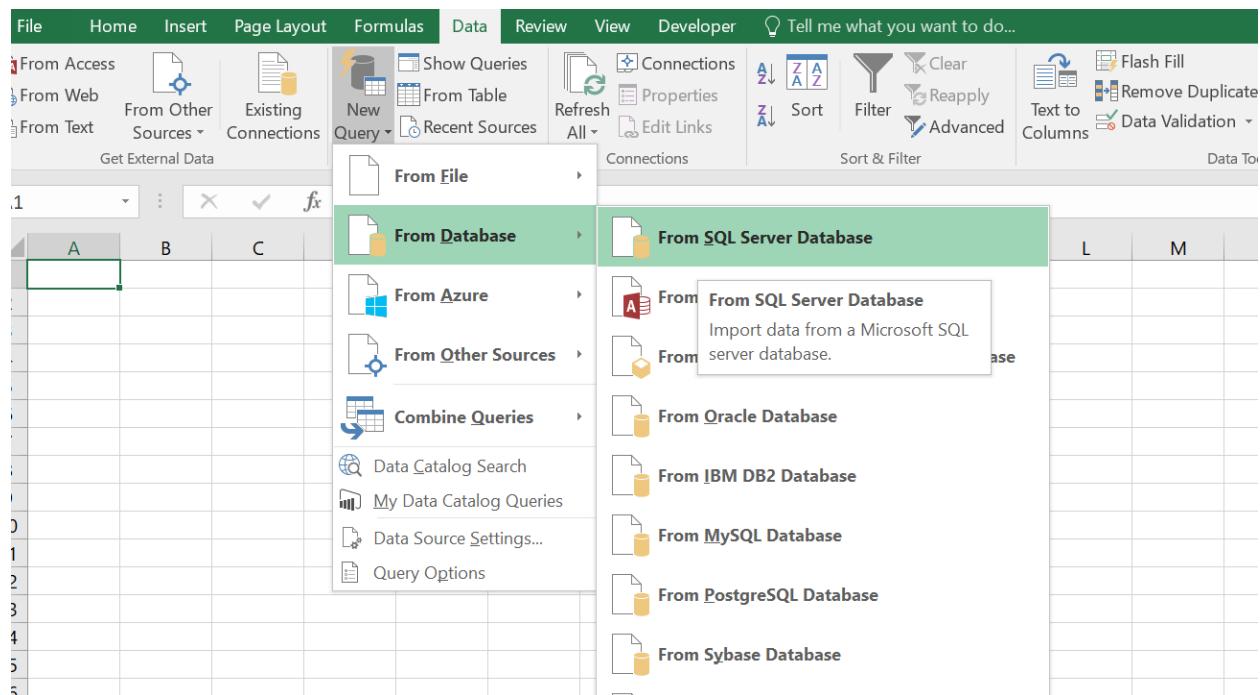


Part 2_ Its all About connections & notes from SQL SERVER to XL & BI

Importing File from SQL SERVER to XL with Screen shots for better understanding



The screenshot shows a Microsoft Excel spreadsheet with the 'pizza_sales' table imported from SQL Server. The table has 20 rows and 7 columns. The columns are: order_date, order_time, unit_price, total_price, pizza_size, pizza_category, and pizza_ingredients. The data includes various pizza orders with their details like date, time, price, size, category, and ingredients.

	order_date	order_time	unit_price	total_price	pizza_size	pizza_category	pizza_ingredients
1	01-01-2015	11:38:36	13.25	13.25	M	Classic	Sliced Tomatoes, Mozzarella, Pepperoni
1	01-01-2015	11:57:40	16	16	M	Classic	Pepperoni, Mozzarella, Tomato, Onion
1	01-01-2015	11:57:40	18.5	18.5	L	Veggie	Mozzarella, Bell Peppers, Onions, Olives, Pineapple
1	01-01-2015	11:57:40	20.75	20.75	L	Supreme	Calabrese, Bacon, Bell Peppers, Onions, Olives, Pineapple
1	01-01-2015	11:57:40	16	16	M	Veggie	Tomato, Onions, Olives, Pineapple
1	01-01-2015	11:57:40	20.75	20.75	L	Chicken	Chicken, Bacon, Bell Peppers, Onions, Olives, Pineapple
1	01-01-2015	12:12:28	16.5	16.5	M	Supreme	Calabrese, Bacon, Bell Peppers, Onions, Olives, Pineapple
1	01-01-2015	12:12:28	20.75	20.75	L	Supreme	Prosciutto, Bacon, Bell Peppers, Onions, Olives, Pineapple
1	01-01-2015	12:16:31	16.5	16.5	M	Supreme	Calabrese, Bacon, Bell Peppers, Onions, Olives, Pineapple
1	01-01-2015	12:21:30	16.5	16.5	M	Supreme	Calabrese, Bacon, Bell Peppers, Onions, Olives, Pineapple
1	01-01-2015	12:29:36	12.75	12.75	S	Chicken	Barbecue, Bacon, Bell Peppers, Onions, Olives, Pineapple
1	01-01-2015	12:29:36	12	12	S	Classic	Kalamata Olives, Mozzarella, Tomato, Onion
1	01-01-2015	12:50:37	12.5	12.5	S	Supreme	Spinach, Bacon, Bell Peppers, Onions, Olives, Pineapple
1	01-01-2015	12:51:37	12.5	12.5	S	Supreme	Spinach, Bacon, Bell Peppers, Onions, Olives, Pineapple
1	01-01-2015	12:52:01	12	12	S	Classic	Pepperoni, Mozzarella, Tomato, Onion
1	01-01-2015	12:52:01	12	12	S	Veggie	Spinach, Bacon, Bell Peppers, Onions, Olives, Pineapple
1	01-01-2015	12:52:01	20.5	20.5	L	Classic	Capricious, Bacon, Bell Peppers, Onions, Olives, Pineapple

Table Name: pizza_sales

Properties Tools External Table Data

Table Tools Query Tools Book1 - Excel (Product Activation Failed)

Design

Query Tell me what you want to do...

Sign in Share

A1 pizza_id

pizza_id	order_id	pizza_name_id	quantity	order_date	order_time	unit_price	total_price	pizza_size	pizza_category	pizza
1306	1305	577 veggie_veg_l	1	10-01-2015	13:45:00	20.25	20.25 L	Veggie	Mus	
1307	1306	578 bbq_ckn_s	1	10-01-2015	13:48:49	12.75	12.75 S	Chicken	Barb	
1308	1307	578 calabrese_m	1	10-01-2015	13:48:49	16.25	16.25 M	Supreme	?duj	
1309	1308	578 pepperoni_l	1	10-01-2015	13:48:49	15.25	15.25 L	Classic	Moz	
1310	1309	578 peppr_salami_m	1	10-01-2015	13:48:49	16.5	16.5 M	Supreme	Gen	
1311	1310	578 the_greek_xl	1	10-01-2015	13:48:49	25.5	25.5 XL	Classic	Kala	
1312	1311	579 green_garden_s	1	10-01-2015	13:51:19	12	12 S	Veggie	Spin	
1313	1312	580 hawaiian_m	1	10-01-2015	13:56:01	13.25	13.25 M	Classic	Slice	
1314	1313	580 southw_ckn_m	1	10-01-2015	13:56:01	16.75	16.75 M	Chicken	Chic	
1315	1314	581 mexicana_l	1	10-01-2015	14:13:01	20.25	20.25 L	Veggie	Tom	
1316	1315	582 mediterraneo_l	1	10-01-2015	14:24:14	20.25	20.25 L	Veggie	Spin	
1317	1316	583 ital_supr_l	1	10-01-2015	14:33:19	20.75	20.75 L	Supreme	Cala	
1318	1317	584 sicilian_s	1	10-01-2015	15:05:29	12.25	12.25 S	Supreme	Coar	
1319	1318	584 soppressata_s	1	10-01-2015	15:05:29	12.5	12.5 S	Supreme	Sopp	
1320	1319	585 brie_carre_s	1	10-01-2015	15:58:42	23.64999962	23.64999962 S	Supreme	Brie	

Query Tab

File Home Insert Page Layout Formulas Data Review View Developer Design Query Tell me what you want to do...

Table Tools Query Tools 1_Connection_From_SQL_SERVER_2_EXCEL - Excel (Product Activation Failed)

Sign in Share

A1 pizza_id

pizza_id	order_id	pizza_name_id	quantity	order_date	order_time	unit_price	total_price	pizza_size	pizza_category	pizza
1306	1305	577 veggie_veg_l	1	10-01-2015	13:45:00	20.25	20.25 L	Veggie	Mus	
1307	1306	578 bbq_ckn_s	1	10-01-2015	13:48:49	12.75	12.75 S	Chicken	Barb	
1308	1307	578 calabrese_m	1	10-01-2015	13:48:49	16.25	16.25 M	Supreme	?duj	
1309	1308	578 pepperoni_l	1	10-01-2015	13:48:49	15.25	15.25 L	Classic	Moz	
1310	1309	578 peppr_salami_m	1	10-01-2015	13:48:49	16.5	16.5 M	Supreme	Gen	
1311	1310	578 the_greek_xl	1	10-01-2015	13:48:49	25.5	25.5 XL	Classic	Kala	
1312	1311	579 green_garden_s	1	10-01-2015	13:51:19	12	12 S	Veggie	Spin	
1313	1312	580 hawaiian_m	1	10-01-2015	13:56:01	13.25	13.25 M	Classic	Slice	
1314	1313	580 southw_ckn_m	1	10-01-2015	13:56:01	16.75	16.75 M	Chicken	Chic	
1315	1314	581 mexicana_l	1	10-01-2015	14:13:01	20.25	20.25 L	Veggie	Tom	
1316	1315	582 mediterraneo_l	1	10-01-2015	14:24:14	20.25	20.25 L	Veggie	Spin	
1317	1316	583 ital_supr_l	1	10-01-2015	14:33:19	20.75	20.75 L	Supreme	Cala	
1318	1317	584 sicilian_s	1	10-01-2015	15:05:29	12.25	12.25 S	Supreme	Coar	
1319	1318	584 soppressata_s	1	10-01-2015	15:05:29	12.5	12.5 S	Supreme	Sopp	
1320	1319	585 brie_carre_s	1	10-01-2015	15:58:42	23.64999962	23.64999962 S	Supreme	Brie	

Now Edit- Change / Modify Data

File Home Transform Add Column View

Close & Load Refresh Preview Advanced Editor Properties Choose Columns Remove Columns Remove Duplicates Keep Rows Remove Rows Remove Errors Sort Data Type: Whole Number Split Column Group By Use First Row As Headers Merge Queries Append Queries Combine Binaries New Source Recent Sources New Query

Queries pizza_sales - Query Editor

Source: [Schema="dbo", Item="pizza_sales"] [Data]

pizza_id	order_id	pizza_name_id	quantity	order_date	order_time	unit_price	total_price	pizza_size	pizza_category	pizza
1	1	1 hawaiian_m	1	01-01-2015	11:38:36	13.25	13.25 M			
2	2	2 classic_dlx_m	1	01-01-2015	11:57:40	16	16 M			
3	3	2 five_cheese_l	1	01-01-2015	11:57:40	18.5	18.5 L			
4	4	2 ital_supr_l	1	01-01-2015	11:57:40	20.75	20.75 L			
5	5	2 mexicana_m	1	01-01-2015	11:57:40	16	16 M			
6	6	2 thai_ckn_l	1	01-01-2015	11:57:40	20.75	20.75 L			
7	7	3 ital_supr_m	1	01-01-2015	12:12:28	16.5	16.5 M			
8	8	3 prsc_argla_l	1	01-01-2015	12:12:28	20.75	20.75 L			
9	9	4 ital_supr_m	1	01-01-2015	12:16:31	16.5	16.5 M			
10	10	5 ital_supr_m	1	01-01-2015	12:21:30	16.5	16.5 M			
11	11	6 bbq_ckn_s	1	01-01-2015	12:29:36	12.75	12.75 S			
12	12	6 the_greek_s	1	01-01-2015	12:29:36	12	12 S			
13	13	7 spinach_supr_s	1	01-01-2015	12:50:37	12.5	12.5 S			
14	14	8 soinach_suor_s	1	01-01-2015	12:51:37	12.5	12.5 S			

pizza_id	order_id	pizza_name_id	quantity	order_date	order_time	unit_price	total_price	pizza_size	pizza_category	pizza_ingredients
1	1	hawaiian_m	1	01-01-2015	11:38:36	13.25	13.25 M	Classic	Sliced Ham, Pineapple, Mozzarella Cheese	
2	2	classic_dlx_m	1	01-01-2015	11:57:40	16	16 M	Classic	Pepperoni, Mushrooms, Red Onions, Red Peppers, Bacon	
3	3	five_cheese_l	1	01-01-2015	11:57:40	18.5	18.5 L	Veggie	Mozzarella Cheese, Provolone Cheese, Smoked Gouda	
4	4	ital_supr_l	1	01-01-2015	11:57:40	20.75	20.75 L	Supreme	Calabrese Salami, Capocollo, Tomatoes, Red Onions, Giardiniera	
5	5	mexicana_m	1	01-01-2015	11:57:40	16	16 M	Veggie	Tomatoes, Red Peppers, Jalapeno Peppers, Red Onions	
6	6	thai_ckn_l	1	01-01-2015	11:57:40	20.75	20.75 L	Chicken	Chicken, Pineapple, Tomatoes, Red Peppers, Thai Sweet Basil	
7	7	ital_supr_m	1	01-01-2015	12:12:28	16.5	16.5 M	Supreme	Calabrese Salami, Capocollo, Tomatoes, Red Onions, Giardiniera	
8	8	prsc_argla_l	1	01-01-2015	12:12:28	20.75	20.75 L	Supreme	Prosciutto di San Daniele, Arugula, Mozzarella Cheese	
9	9	ital_supr_m	1	01-01-2015	12:16:31	16.5	16.5 M	Supreme	Calabrese Salami, Capocollo, Tomatoes, Red Onions, Giardiniera	
10	10	ital_supr_m	1	01-01-2015	12:21:30	16.5	16.5 M	Supreme	Calabrese Salami, Capocollo, Tomatoes, Red Onions, Giardiniera	
11	11	bbq_ckn_s	1	01-01-2015	12:29:36	12.75	12.75 S	Chicken	Barbecued Chicken, Red Peppers, Green Peppers, Tomato	
12	12	the_greek_s	1	01-01-2015	12:29:36	12	12 S	Classic	Kalamata Olives, Feta Cheese, Tomatoes, Garlic, Beef Claws	
13	13	spinach_supr_s	1	01-01-2015	12:50:37	12.5	12.5 S	Supreme	Spinach, Red Onions, Pepperoni, Tomatoes, Artichokes	
14	14	spinach_supr_s	1	01-01-2015	12:51:37	12.5	12.5 S	Supreme	Spinach, Red Onions, Pepperoni, Tomatoes, Artichokes	
15	15	classic_dlx_s	1	01-01-2015	12:52:01	12	12 S	Classic	Pepperoni, Mushrooms, Red Onions, Red Peppers, Bacon	
16										

DATA ANALYST PORTFOLIO PROJECT

PIZZA SALES

PART 2 - EXCEL DASHBOARD

DATA CLEANING

Col – Pizza_Size – Rename

S – Small

L – Large

M- Medium

XL – Extra Large

XXL - Extra ~~Extra~~ Large

Now select Pizza Size – Col Name + Press CTRL + H

Find and Replace

pizza_id									
1									
2									
3									
4									
5									
6									
7									
8									
9	4 ital_supr_m	1	01-01-2015	12:16:31	16.5	16.5	M	Classic	Sliced Ham, Pineapple, Mozzarella Cheese
10	5 ital_supr_m	1	01-01-2015	12:21:30	16.5	16.5	M	Classic	Pepperoni, Mushrooms, Red Onions, Red Peppers, Bacon
11	6 bbq_ckn_s	1	01-01-2015	12:29:36	12.75	12.75	S	Veggie	Mozzarella Cheese, Provolone Cheese, Smoked Gouda, Barbecue Sauce, Bacon
12	6 the_greek_s	1	01-01-2015	12:29:36	12	12	S	Supreme	Calabrese Salami, Capocollo, Tomatoes, Red Onions, Artichoke, Feta Cheese
13	7 spinach_supr_s	1	01-01-2015	12:50:37	12.5	12.5	S	Supreme	Spinach, Red Onion, Feta Cheese, Tomatoes, Artichoke
14	8 spinach_supr_s	1	01-01-2015	12:51:37	12.5	12.5	S	Supreme	Spinach, Red Onion, Feta Cheese, Tomatoes, Artichoke
15	9 classic_dlx_s	1	01-01-2015	12:52:01	12	12	S	Classic	Pepperoni, Mushrooms, Red Onions, Red Peppers, Bacon, Artichoke
16	9 green_garden_s	1	01-01-2015	12:52:01	12	12	S	Veggie	Spinach, Mushrooms, Red Onions, Red Peppers, Bacon, Artichoke
17	9 ital_cpollo_l	1	01-01-2015	12:52:01	20.5	20.5	L	Classic	Capocollo, Red Onion, Feta Cheese, Tomatoes, Artichoke
18	9 ital_supr_l	1	01-01-2015	12:52:01	20.75	20.75	L	Supreme	Calabrese Salami, Capocollo, Tomatoes, Red Onions, Artichoke
19	9 ital_supr_s	1	01-01-2015	12:52:01	12.5	12.5	S	Supreme	Calabrese Salami, Capocollo, Tomatoes, Red Onions, Artichoke
20	9 mexicana_s	1	01-01-2015	12:52:01	12	12	S	Veggie	Tomatoes, Red Onion, Feta Cheese, Artichoke, Jalapeno Peppers
21	9 spicy_ital_l	1	01-01-2015	12:52:01	20.75	20.75	L	Supreme	Capocollo, Tomatoes, Red Onion, Feta Cheese, Artichoke

Find and Replace

pizza_id									
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12	6 the_greek_s	1	01-01-2015	12:29:36	12	12	Small	Classic	Kalamata Olives, Feta Cheese, Tomatoes, Garlic, Beef
13	7 spinach_supr_s	1	01-01-2015	12:50:37	12.5	12.5	Small	Supreme	Spinach, Red Onions, Pepperoni, Tomatoes, Artichoke
14	8 spinach_supr_s	1	01-01-2015	12:51:37	12.5	12.5	Small	Supreme	Spinach, Red Onions, Pepperoni, Tomatoes, Artichoke
15	9 classic_dlx_s	1	01-01-2015	12:52:01	12	12	Small	Classic	Pepperoni, Mushrooms, Red Onions, Red Peppers, Bacon

pizza_id	order_id	pizza_name_id	quantity	order_date	order_time	unit_price	total_price	pizza_Smallize	pizza_cat
3427	1514	sicilian_m	1	26-01-2015	13:51:21	£12.99	£12.99	A	Supreme
3428	1515	mexicana_m	1	26-01-2015	13:52:36	£12.99	£12.99	Z	Veggie
3429	1516	pepperoni_s	1	26-01-2015	13:54:36	£12.99	£12.99	A	Classic
3430	1516	sicilian_l	1	26-01-2015	13:54:36	£12.99	£12.99	Z	Supreme
3431	1517	southw_ckn_l	1	26-01-2015	13:56:01	£12.99	£12.99	X	Chicken
3432	1518	ital_supr_l	1	26-01-2015	14:00:13	£12.99	£12.99	A	Supreme
3433	1519	the_greek_m	1	26-01-2015	14:21:10	£12.99	£12.99	Z	Classic
3434	1520	cali_ckn_l	1	26-01-2015	14:25:20	£12.99	£12.99	A	Chicken
3435	1520	ckn_alfredo_m	1	26-01-2015	14:25:20	£12.99	£12.99	Z	Chicken
3436	1521	hawaiian_l	1	26-01-2015	14:32:57	£12.99	£12.99	A	Classic
3437	1521	sicilian_l	1	26-01-2015	14:32:57	£12.99	£12.99	Z	Supreme
3438	1522	big_meat_s	1	26-01-2015	14:35:32	£12.99	£12.99	A	Classic
3439	1522	classic_dlx_m	1	26-01-2015	14:35:32	£12.99	£12.99	Z	Classic
3440	1522	classic_dlx_s	1	26-01-2015	14:35:32	£12.99	£12.99	A	Classic
3441	1522	ital_supr_s	1	26-01-2015	14:35:32	£12.99	£12.99	Z	Supreme
3442	1523	prsc_argla_l	1	26-01-2015	14:38:13	£12.99	£12.99	A	Supreme
3443	1524	veggie_veg_m	1	26-01-2015	14:47:17	£12.99	£12.99	Z	Veggie

DATA ANALYST PORTFOLIO PROJECT

PIZZA SALES

PART 2 - EXCEL DASHBOARD

DATA PROCESSING

Why ?? - Requirement – Client – Daily Trend for Total Orders --- Extra Day from the Date Colm

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. Hourly 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.

Insert New Table beside Date & name it as Order Day

XL – Formula -- for Days = TEXT([@Order_Date],"dddd")

dddd—represents Days of the particular Date ...

	A	B	C	D	E	F	G	H	I	J	K
1	pizza_id	order_id	pizza_name_id	quantity	order_date	Order_Day	order_time	unit_price	total_price	pizza_Sma	pizza_category
2	1	1	hawaiian_m	1	01-01-2015	=TEXT([@Order_Date],"dddd")			13.25	Medium	Classic
3	2	2	classic_dlx_m	1	01-01-2015	T	17:40	16	16	Medium	Classic
4	3	2	five_cheese_l	1	01-01-2015	Thursday	11:57:40	18.5	18.5	Large	Veggie
5	4	2	ital_supr_l	1	01-01-2015	Thursday	11:57:40	20.75	20.75	Large	Supreme
6	5	2	mexicana_m	1	01-01-2015	Thursday	11:57:40	16	16	Medium	Veggie
7	6	2	thai_ckn_l	1	01-01-2015	Thursday	11:57:40	20.75	20.75	Large	Chicken
8	7	3	ital_supr_m	1	01-01-2015	Thursday	12:12:28	16.5	16.5	Medium	Supreme
9	8	3	prsc_argla_l	1	01-01-2015	Thursday	12:12:28	20.75	20.75	Large	Supreme
10	9	4	ital_supr_m	1	01-01-2015	Thursday	12:16:31	16.5	16.5	Medium	Supreme
11	10	5	ital_supr_m	1	01-01-2015	Thursday	12:21:30	16.5	16.5	Medium	Supreme
12	11	6	bbq_ckn_s	1	01-01-2015	Thursday	12:29:36	12.75	12.75	Small	Chicken
13	12	6	the_greek_s	1	01-01-2015	Thursday	12:29:36	12	12	Small	Classic
14	13	7	spinach_supr_s	1	01-01-2015	Thursday	12:50:37	12.5	12.5	Small	Supreme
15	14	8	spinach_supr_s	1	01-01-2015	Thursday	12:51:37	12.5	12.5	Small	Supreme
16	15	9	classic_dlx_s	1	01-01-2015	Thursday	12:52:01	12	12	Small	Classic
17	16	9	green_garden_s	1	01-01-2015	Thursday	12:52:01	12	12	Small	Veggie
18	17	9	ital_cpcllo_l	1	01-01-2015	Thursday	12:52:01	20.5	20.5	Large	Classic
19	18	9	ital_supr_l	1	01-01-2015	Thursday	12:52:01	20.75	20.75	Large	Supreme
20	19	9	ital_supr_s	1	01-01-2015	Thursday	12:52:01	12.5	12.5	Small	Supreme
21	20	9	mexicana_s	1	01-01-2015	Thursday	12:52:01	12	12	Small	Veggie

DATA ANALYST PORTFOLIO PROJECT

PIZZA SALES

PART 2 - EXCEL DASHBOARD

DATA ANALYSIS

PROBLEM STATEMENT

KPI's REQUIREMENT

We need to analyze key indicators for our pizza sales data to gain insights into our business performance. Specifically, 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 order, calculated by dividing the total number of pizzas sold by the total number of orders.

Insert Tab – Select – Pivot Table ---

The screenshot shows the Microsoft Excel ribbon with the 'Insert' tab selected. A 'Create PivotTable' dialog box is open, prompting the user to select a table or range. The range 'pizza_sales' is selected. Below this, there are options for external data sources and where to place the report. The main Excel window shows a portion of a data table with columns like pizza_id, order_id, pizza_name_id, total_price, pizza_size, pizza_category, and pizza_ingredients.

The screenshot shows the Microsoft Excel ribbon with the 'Analyze' tab selected. A 'PivotTable Fields' pane is open on the right, showing fields from the data source. The 'total_price' field is selected and placed in the 'VALUES' area of the PivotTable Fields pane. The main Excel window shows a blank sheet with a few cells filled with 'KPI' and some descriptive text.

1. Total Revenue: The sum of the total price of all pizza orders.

The screenshot shows the Microsoft Excel ribbon with the 'Analyze' tab selected. A 'PivotTable Fields' pane is open on the right, showing the 'total_price' field is checked and placed in the 'VALUES' area. The main Excel window shows the results of the PivotTable, with the value '817860.0508' displayed in cell A1. The PivotTable structure is visible with rows and columns defined.

2. Average Order Value The average amount spent per order, calculated by dividing the total revenue by the total number of orders.

The screenshot shows a Microsoft Excel spreadsheet with a PivotTable. A context menu is open over cell A3, specifically the 'Value Field Settings' dialog. In this dialog, the 'Source Name' is set to 'order_id' and the 'Custom Name' is 'Count of order_id'. Under 'Summarize value field by', 'Count' is selected. The main worksheet displays two values: 'Sum of total_price' (817860.0508) and 'Count of order_id' (48620). The PivotTable Fields pane on the right shows the fields being used in the report, with 'Sum of total_price' and 'Count of order_id' in the 'VALUES' section.

Data change to Count Order ID .. We need Distinct Data

order_id	pizza_name_id	quantity	order_date	Order_Day	order_time	unit_price	total_price	pizza_Smallize	pizza_category
1	hawaiian_m	1	01-01-2015	Thursday	11:38:36	13.25	13.25	Medium	Classic
2	classic_dlx_m	1	01-01-2015	Thursday	11:57:40	16	16	Medium	Classic
2	five_cheese_l	1	01-01-2015	Thursday	11:57:40	18.5	18.5	Large	Veggie
2	ital_supr_l	1	01-01-2015	Thursday	11:57:40	20.75	20.75	Large	Supreme
2	mexicana_m	1	01-01-2015	Thursday	11:57:40	16	16	Medium	Veggie
2	thai_ckn_l	1	01-01-2015	Thursday	11:57:40	20.75	20.75	Large	Chicken
3	ital_supr_m	1	01-01-2015	Thursday	12:12:28	16.5	16.5	Medium	Supreme
3	prsc_argla_l	1	01-01-2015	Thursday	12:12:28	20.75	20.75	Large	Supreme
4	ital_supr_m	1	01-01-2015	Thursday	12:16:31	16.5	16.5	Medium	Supreme
5	supr_m	1	01-01-2015	Thursday	12:21:30	16.5	16.5	Medium	Supreme
6	bbq_ckn_s	1	01-01-2015	Thursday	12:29:36	12.75	12.75	Small	Chicken
6	the_greek_s	1	01-01-2015	Thursday	12:29:36	12	12	Small	Classic
7	spinach_supr_s	1	01-01-2015	Thursday	12:50:37	12.5	12.5	Small	Supreme
8	spinach_supr_s	1	01-01-2015	Thursday	12:51:37	12.5	12.5	Small	Supreme
9	classic_dlx_s	1	01-01-2015	Thursday	12:52:01	12	12	Small	Classic
9	green_garden_s	1	01-01-2015	Thursday	12:52:01	12	12	Small	Veggie

Go back to Data& Insert new Col – Total Orders

On Col – Total order – Use COUNTIF(B:B- entire Col , Criteria – 1st cell)

A	B	C	D	E	F	G	H	I	J	K	
pizza_id	order_id	Total_Orders	pizza_name_id	quantity	order_date	Order_Day	order_time	unit_price	total_price	pizza_Smallize	pizza_category
1	1	=COUNTIF(B:B,[@order_id]))	1	01-01-2015	Thursday	11:38:36	13.25	13.25	Medium	Classic	
2	2	=COUNTIF(range, criteria)	dlx	1	01-01-2015	Thursday	11:57:40	16	16	Medium	Classic
3	2		five_cheese	1	01-01-2015	Thursday	11:57:40	18.5	18.5	Large	Veggie
4	2		ital_supr_l	1	01-01-2015	Thursday	11:57:40	20.75	20.75	Large	Supreme
5	2		mexicana_n	1	01-01-2015	Thursday	11:57:40	16	16	Medium	Veggie
6	2		thai_ckn_l	1	01-01-2015	Thursday	11:57:40	20.75	20.75	Large	Chicken
7	3		ital_supr_m	1	01-01-2015	Thursday	12:12:28	16.5	16.5	Medium	Supreme
8	3		prsc_argla_l	1	01-01-2015	Thursday	12:12:28	20.75	20.75	Large	Supreme
9	4		ital_supr_m	1	01-01-2015	Thursday	12:16:31	16.5	16.5	Medium	Supreme
10	5		ital_supr_m	1	01-01-2015	Thursday	12:21:30	16.5	16.5	Medium	Supreme
11	6		bbq_ckn_s	1	01-01-2015	Thursday	12:29:36	12.75	12.75	Small	Chicken
12	6		the_greek_s	1	01-01-2015	Thursday	12:29:36	12	12	Small	Classic
13	7		spinach_supr	1	01-01-2015	Thursday	12:50:37	12.5	12.5	Small	Supreme
14	8		spinach_supr	1	01-01-2015	Thursday	12:51:37	12.5	12.5	Small	Supreme
15	9		classic_dlx_s	1	01-01-2015	Thursday	12:52:01	12	12	Small	Classic
16	9		green_garden_s	1	01-01-2015	Thursday	12:52:01	12	12	Small	Veggie
17	9		ital_cpclo_l	1	01-01-2015	Thursday	12:52:01	20.5	20.5	Large	Classic
18	9		ital_supr_l	1	01-01-2015	Thursday	12:52:01	20.75	20.75	Large	Supreme
19	9		ital_supr_s	1	01-01-2015	Thursday	12:52:01	12.5	12.5	Small	Supreme
20	9		mexicana_s	1	01-01-2015	Thursday	12:52:01	12	12	Small	Veggie
21	9		spicy_ital_l	1	01-01-2015	Thursday	12:52:01	20.75	20.75	Large	Supreme

Clipboard Font Alignment Number Styles Cells Editing Cond_format

C1 Total_Orders

A	B	C	D	E	F	G	H	I	J	K	
pizza_id	order_id	Total_Orders	pizza_name_id	quantity	order_date	Order_Day	order_time	unit_price	total_price	pizza_Smallize	pizza_category
1	1	1	1 hawaiian_m	1	01-01-2015	Thursday	11:38:36	13.25	13.25	Medium	Classic
2	2	2	5 ssic_dlx	1	01-01-2015	Thursday	11:57:40	16	16	Medium	Classic
3	3	2	5 five_cheese	1	01-01-2015	Thursday	11:57:40	18.5	18.5	Large	Veggie
4	4	2	5 ital_supr_l	1	01-01-2015	Thursday	11:57:40	20.75	20.75	Large	Supreme
5	5	2	5 mexicana_n	1	01-01-2015	Thursday	11:57:40	16	16	Medium	Veggie
6	6	2	5 thai_ckn_l	1	01-01-2015	Thursday	11:57:40	20.75	20.75	Large	Chicken
7	7	3	2 ital_supr_m	1	01-01-2015	Thursday	12:12:28	16.5	16.5	Medium	Supreme
8	8	3	2 prsc_argla_l	1	01-01-2015	Thursday	12:12:28	20.75	20.75	Large	Supreme
9	9	4	1 ital_supr_m	1	01-01-2015	Thursday	12:16:31	16.5	16.5	Medium	Supreme
10	10	5	1 ital_supr_m	1	01-01-2015	Thursday	12:21:30	16.5	16.5	Medium	Supreme
11	11	6	2 bbq_ckn_s	1	01-01-2015	Thursday	12:29:36	12.75	12.75	Small	Chicken
12	12	6	2 the_greek_s	1	01-01-2015	Thursday	12:29:36	12	12	Small	Classic
13	13	7	1 spinach_sf	1	01-01-2015	Thursday	12:50:37	12.5	12.5	Small	Supreme
14	14	8	1 spinach_sf	1	01-01-2015	Thursday	12:51:37	12.5	12.5	Small	Supreme
15	15	9	9 classic_dlx	1	01-01-2015	Thursday	12:52:01	12	12	Small	Classic
16	16	9	9 green_gard	1	01-01-2015	Thursday	12:52:01	12	12	Small	Veggie
17	17	9	9 ital_cpcllo_l	1	01-01-2015	Thursday	12:52:01	20.5	20.5	Large	Classic
18	18	9	9 ital_supr_l	1	01-01-2015	Thursday	12:52:01	20.75	20.75	Large	Supreme
19	19	9	9 ital_supr_s	1	01-01-2015	Thursday	12:52:01	12.5	12.5	Small	Supreme
20	20	9	9 mexicana_s	1	01-01-2015	Thursday	12:52:01	12	12	Small	Veggie
21	21	0	9 knirv_ital_l	1	01-01-2015	Thursday	12:52:01	20.75	20.75	Large	Supreme

Divde Total Order By 1 -- Distinct COUNT

C2 =1/COUNTIF(B:B,[@[order_id]])

A	B	C	D	E	F	G	H	I	J	K	
pizza_id	order_id	Total_Orders	pizza_name_id	quantity	order_date	Order_Day	order_time	unit_price	total_price	pizza_Smallize	pizza_category
1	1	1	1 hawaiian_m	1	01-01-2015	Thursday	11:38:36	13.25	13.25	Medium	Classic
2	2	2	0.2 ssic_dlx	1	01-01-2015	Thursday	11:57:40	16	16	Medium	Classic
3	3	2	0.2 five_cheese	1	01-01-2015	Thursday	11:57:40	18.5	18.5	Large	Veggie
4	4	2	0.2 ital_supr_l	1	01-01-2015	Thursday	11:57:40	20.75	20.75	Large	Supreme
5	5	2	0.2 mexicana_n	1	01-01-2015	Thursday	11:57:40	16	16	Medium	Veggie
6	6	2	0.2 thai_ckn_l	1	01-01-2015	Thursday	11:57:40	20.75	20.75	Large	Chicken
7	7	3	0.5 ital_supr_m	1	01-01-2015	Thursday	12:12:28	16.5	16.5	Medium	Supreme
8	8	3	0.5 prsc_argla_l	1	01-01-2015	Thursday	12:12:28	20.75	20.75	Large	Supreme
9	9	4	1 ital_supr_m	1	01-01-2015	Thursday	12:16:31	16.5	16.5	Medium	Supreme
10	10	5	1 ital_supr_m	1	01-01-2015	Thursday	12:21:30	16.5	16.5	Medium	Supreme
11	11	6	0.5 bbq_ckn_s	1	01-01-2015	Thursday	12:29:36	12.75	12.75	Small	Chicken
12	12	6	0.5 the_greek_s	1	01-01-2015	Thursday	12:29:36	12	12	Small	Classic
13	13	7	1 spinach_sf	1	01-01-2015	Thursday	12:50:37	12.5	12.5	Small	Supreme
14	14	8	1 spinach_sf	1	01-01-2015	Thursday	12:51:37	12.5	12.5	Small	Supreme
15	15	9	0.1111111111 classic_dlx	1	01-01-2015	Thursday	12:52:01	12	12	Small	Classic
16	16	9	0.1111111111 green_gard	1	01-01-2015	Thursday	12:52:01	12	12	Small	Veggie
17	17	9	0.1111111111 ital_cpcllo_l	1	01-01-2015	Thursday	12:52:01	20.5	20.5	Large	Classic
18	18	9	0.1111111111 ital_supr_l	1	01-01-2015	Thursday	12:52:01	20.75	20.75	Large	Supreme
19	19	9	0.1111111111 ital_supr_s	1	01-01-2015	Thursday	12:52:01	12.5	12.5	Small	Supreme
20	20	9	0.1111111111 mexicana_s	1	01-01-2015	Thursday	12:52:01	12	12	Small	Veggie
21	21	9	0.1111111111 spicy_ital_l	1	01-01-2015	Thursday	12:52:01	20.75	20.75	Large	Supreme

Total_order – Not been displayed in KPI Sheet – Go to Analyse Option – Refresh...

File Home Insert Page Layout Formulas Data Review Developer Analyze Design Tell me what you want to do... Sign in

votTable Name: Active Field: ivotTable1 Sum of total_price

Options PivotTable Active Field

Analyze Group Selection Ungroup Group Field Insert Slicer Filter Refresh Change Data Source Data Actions Calculations Tools PivotChart Recommended PivotTables PivotTables Tools Field List +/- Buttons Headers Show

A3 Sum of total_price

PivotTable Fields Choose fields to add to report: Search pizza_id order_id Total_Orders pizza_name_id quantity order_date

Drag fields between areas below:

FILTERS COLUMNS

A	B	C	D	E	F	G	H	I
1								
2								
3	Sum of total_price							
4	817860.0508							
5								
6								
7								
8								
9								
0								
1								
2								
3								
4								
5								

A3 B C D E

Sum of total_price Sum of Total_Orders

817860.0508 21350

PivotTable Fields

Choose fields to add to report:

Search

pizza_id
 order_id
 Total_Orders
 pizza_name_id
 quantity
 order_date

Drag fields between areas below:

FILTERS COLUMNS

ROWS VALUES

Σ Values
 Sum of total_price

Σ VALUES
 Sum of Total_Orders

In SQL Query same thing is Reflected Earlier

4. Total Orders

```
SELECT COUNT(DISTINCT order_id) AS Total_Orders FROM pizza_sales
```

Results Messages

Total_Orders
21350

Average Order Value: The average amount spent per order, calculated by dividing the total revenue by the total number of orders.

Sum of total_price Sum of Total_Orders Avg Order Value

817860.0508 21350 =GETPIVOTDATA("Sum of total_price",\$A\$3)/GETPIVOTDATA("Sum of Total_Orders",\$A\$3)

Clipboard Font Alignment Number Styles

D4 : X ✓ fx =GETPIVOTDATA("Sum of total_price",\$A\$3)/GETPIVOTDATA("Sum of Total_Orders",\$A\$3)

A B C D E F G H I

1

2

3 Sum of total_price Sum of Total_Orders Avg Order Value

4 817860.0508 21350 38.30726233

5

6

Sum of total_price	Sum of Total_Orders	Sum of quantity	Avg Order Value
817860.0508	21350	49574	38.30726233

Average Pizzas Per Order: The average number of pizzas sold per order, calculated by dividing the total number of pizzas sold by the total number of orders.

Sum of total_price	Sum of Total_Orders	Sum of quantity	Avg Order Value	Avg Pizza PerOrder
817860.0508	21350	49574	38.30726233	=GETPIVOTDATA("Sum of quantity",\$A\$3)/GETPIVOTDATA("Sum of Total_Orders",\$A\$3)

Sum of total_price	Sum of Total_Orders	Sum of quantity	Avg Order Value	Avg Pizza PerOrder
817860.0508	21350	49574	38.30726233	2.321967213

Validate the Values w.r.t SQL Query we have written

Total_Revenue	Total_Orders	Total_Pizza Sold		
Sum of total_price	Sum of Total_Orders	Sum of quantity	Avg Order Value	Avg Pizza PerOrder
817860.051	21350	49574	38.30726233	2.32196721

Bigger Size

Total_Revenue	Total_Orders	Total_Pizza Sold		
Sum of total_price	Sum of Total_Orders	Sum of quantity	Avg Order Value	Avg Pizza PerOrder
817860.0508	21350	49574	38.30726233	2.321967213

PIZZA SALES SQL QUERIES

A. KPI's

1. Total Revenue:

```
SELECT SUM(total_price) AS Total_Revenue FROM pizza_sales;
```

	Results	Messages
1	Total_Revenue 817860.05083847	

3. Total Pizzas Sold

```
SELECT SUM(quantity) AS Total_pizza_sold FROM pizza_sales
```

	Results	Messages
1	Total_pizza_sold 49574	

4. Total Orders

```
SELECT COUNT(DISTINCT order_id) AS Total_Orders FROM pizza_sales
```

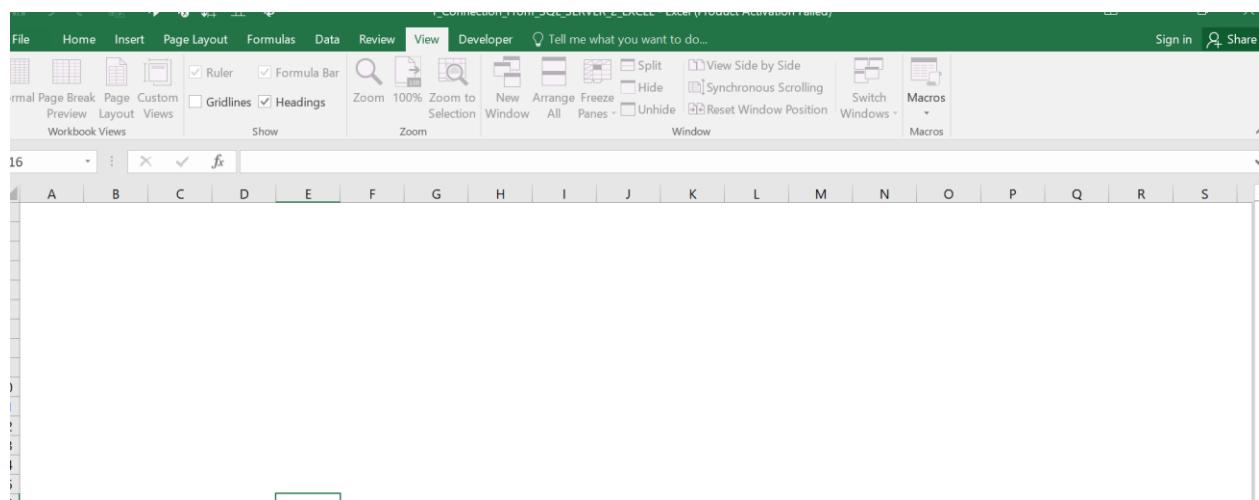
	Results	Messages
1	Total_Orders 21350	

5. Average Pizzas Per Order

```
SELECT CAST(CAST(SUM(quantity) AS DECIMAL(10,2)) /  
CAST(COUNT(DISTINCT order_id) AS DECIMAL(10,2)) AS DECIMAL(10,2))  
AS Avg_Pizzas_per_order  
FROM pizza_sales
```

	Results	Messages
1	Avg_Pizzas_per_order 2.32	

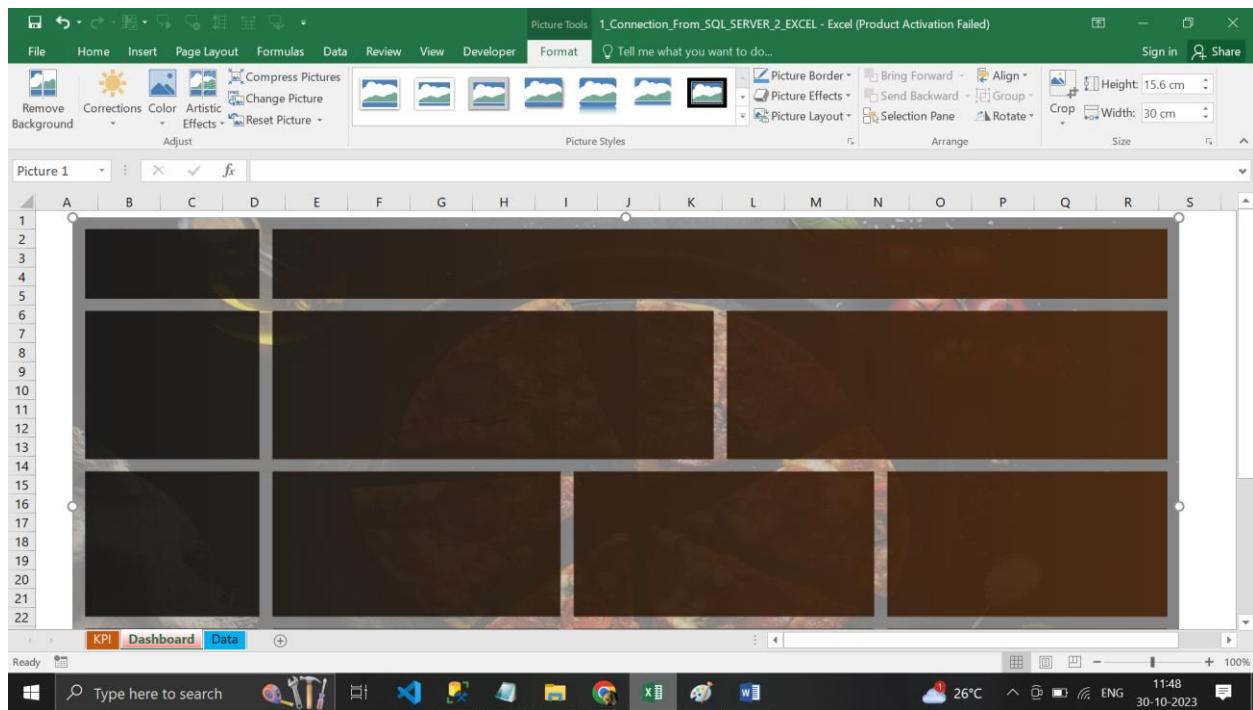
--> Create DASHBOARD – New Page -->



Already Created Brown Background -- Copy & paste it on the Dash board – Go to Format- Choose

Height – 20cm // Width – 30cm

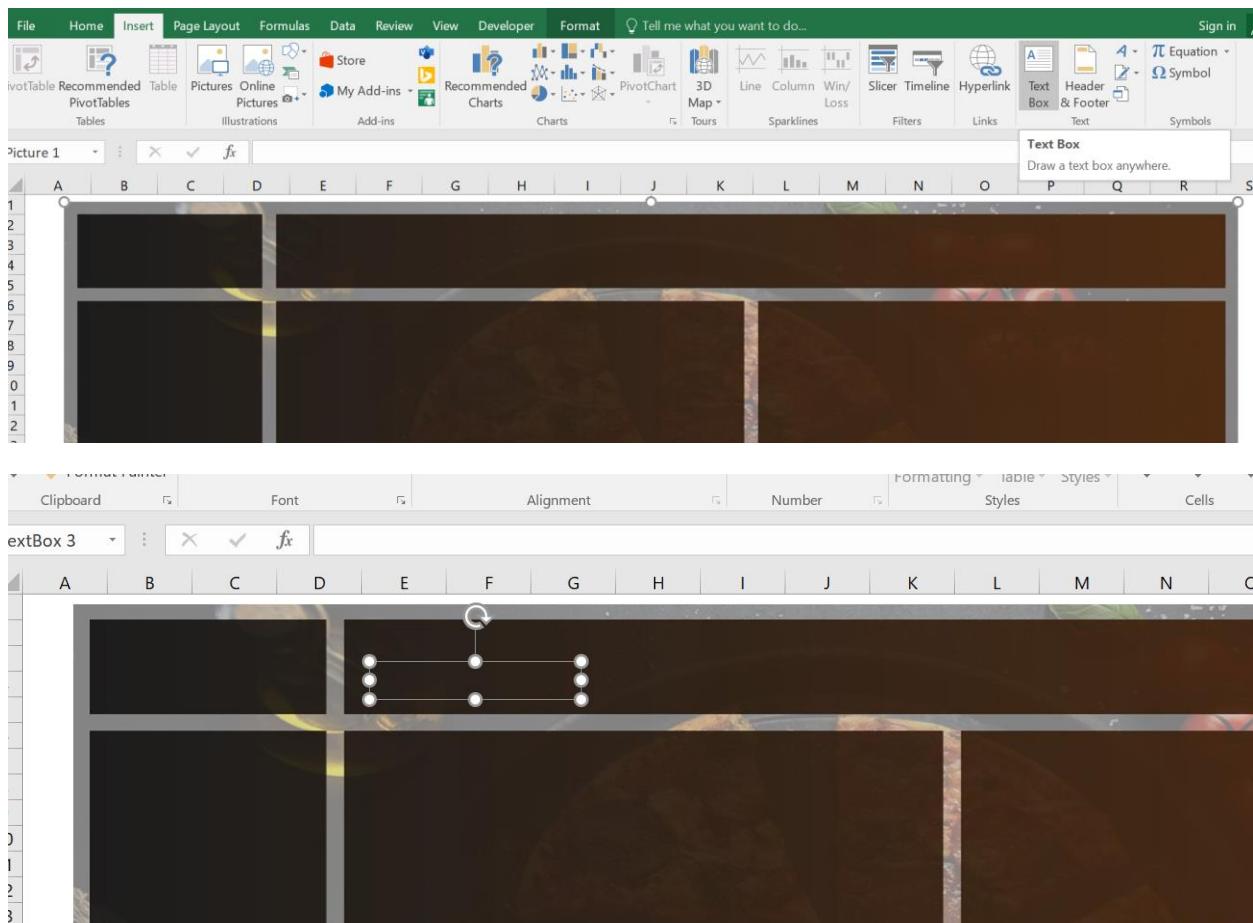




Sample of Dashboard



Insert – Select Text Box

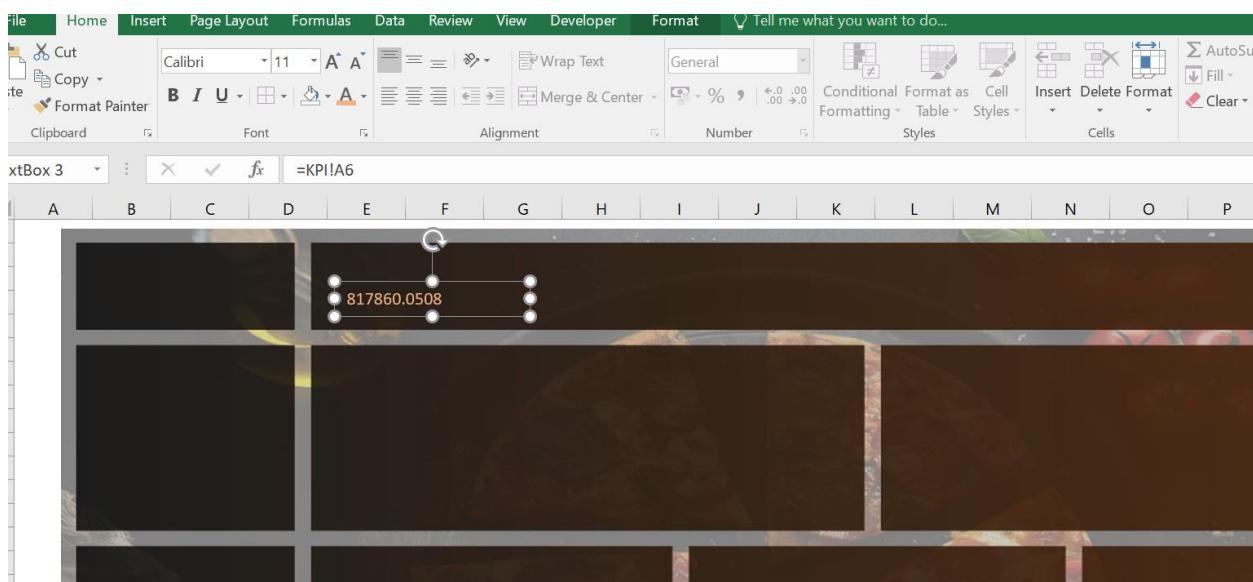
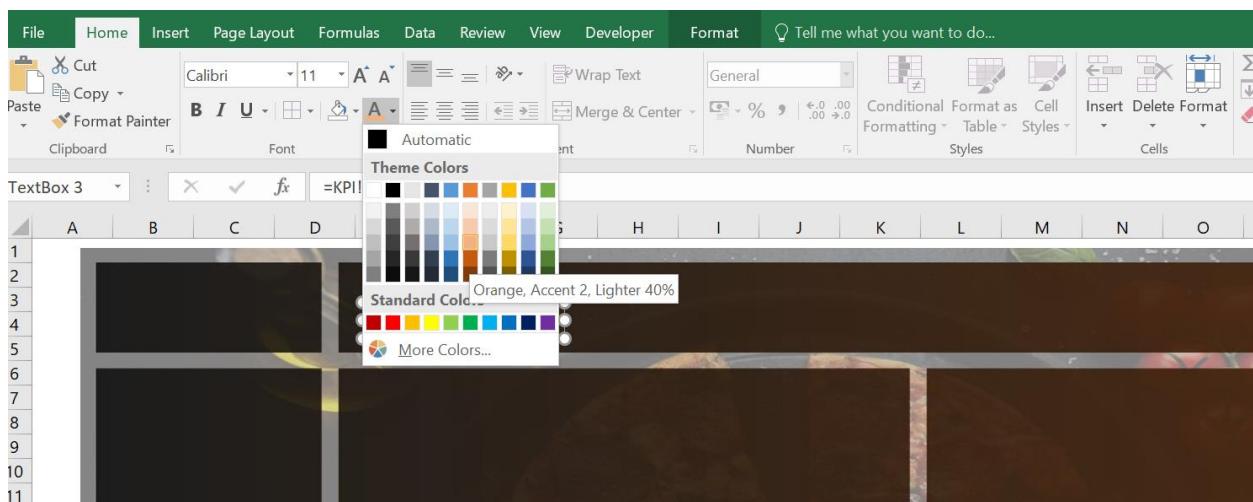
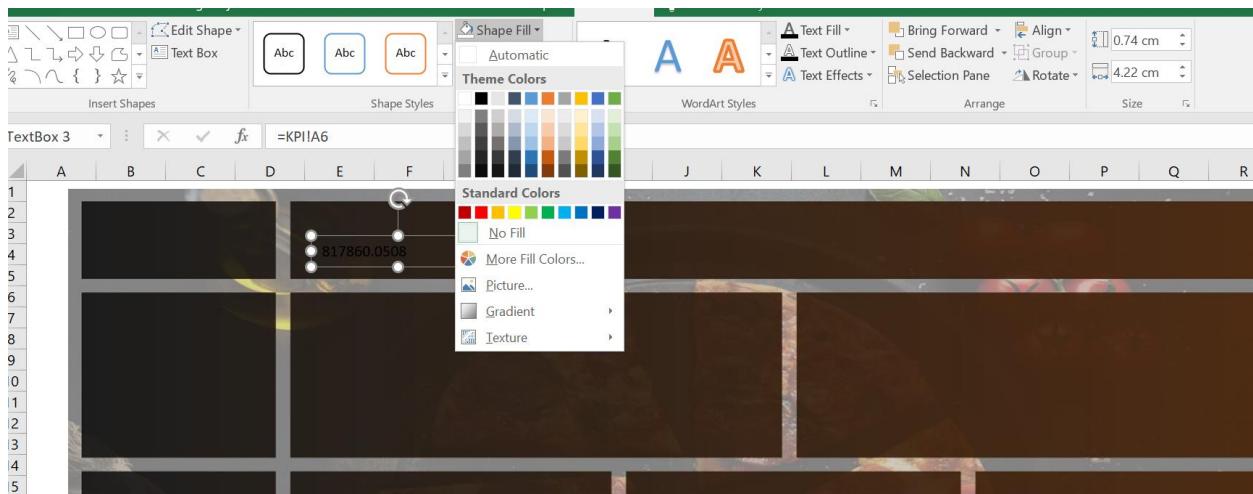


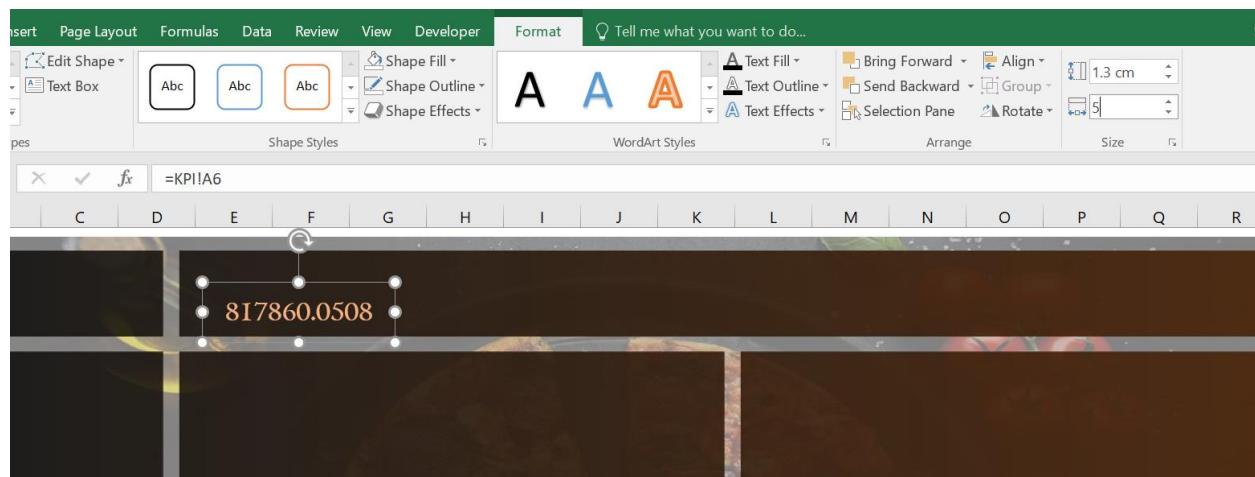
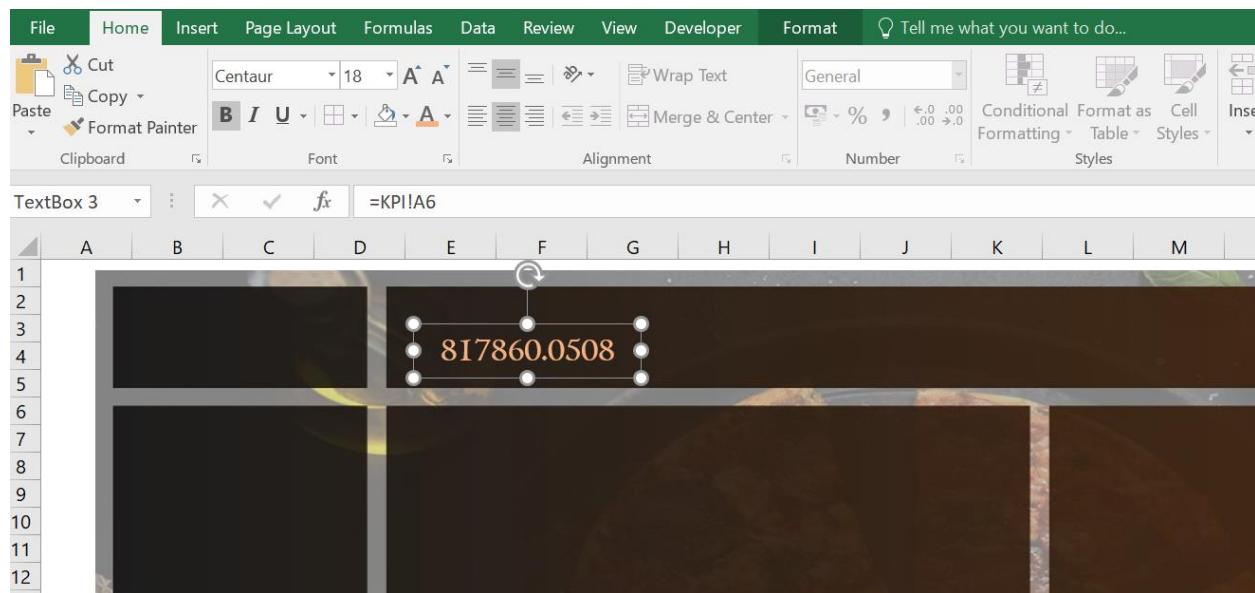
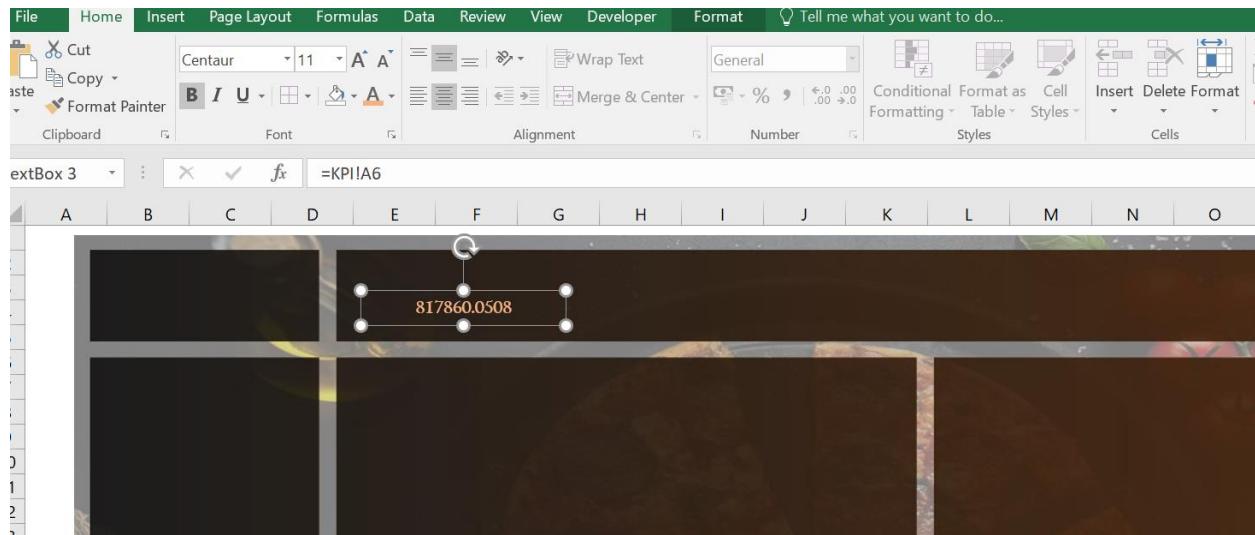
Go – Ouside P- Table Press = & hit Enter

Total_Revenue	Total_Orders	Total_Pizza Sold		
Sum of total_price	Sum of Total_Orders	Sum of quantity	Avg Order Value	Avg Pizza PerOrder
817860.0508	21350	49574	38.30726233	2.321967213
817860.0508	21350	49574		

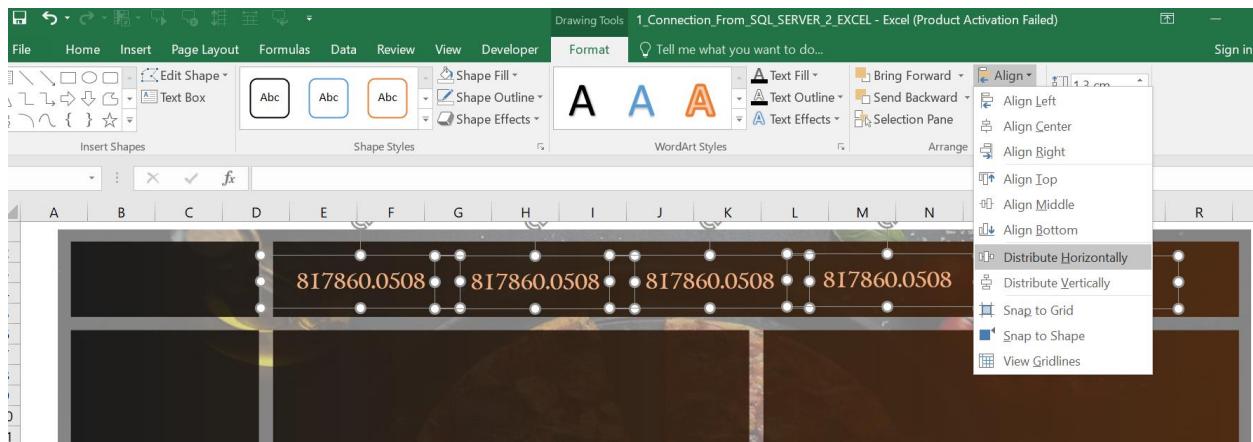
In Dash Board Select Txt- Box – No Cursor inside in Up Formula BAR enter = Sign & Go to KPI Pg-
Select Total_Revenue – Figure & copy to the Text Box

For Shape – Color Go to Format & select No Color – No Shape Outline

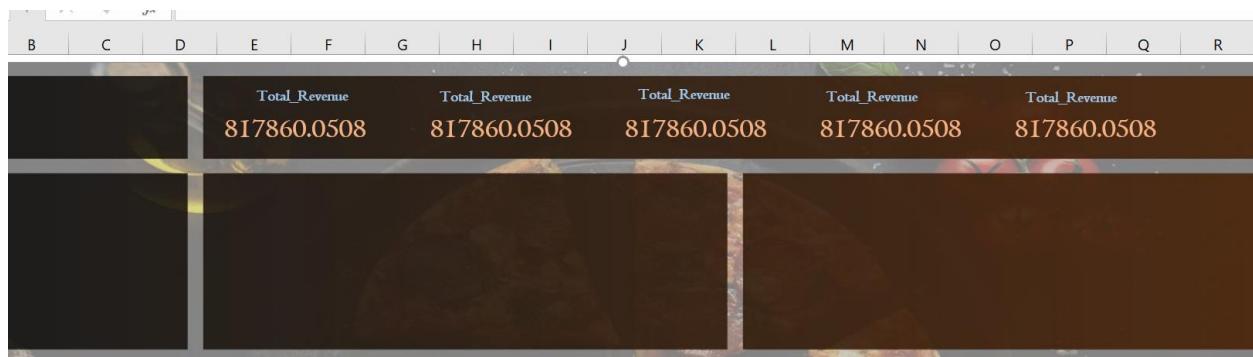
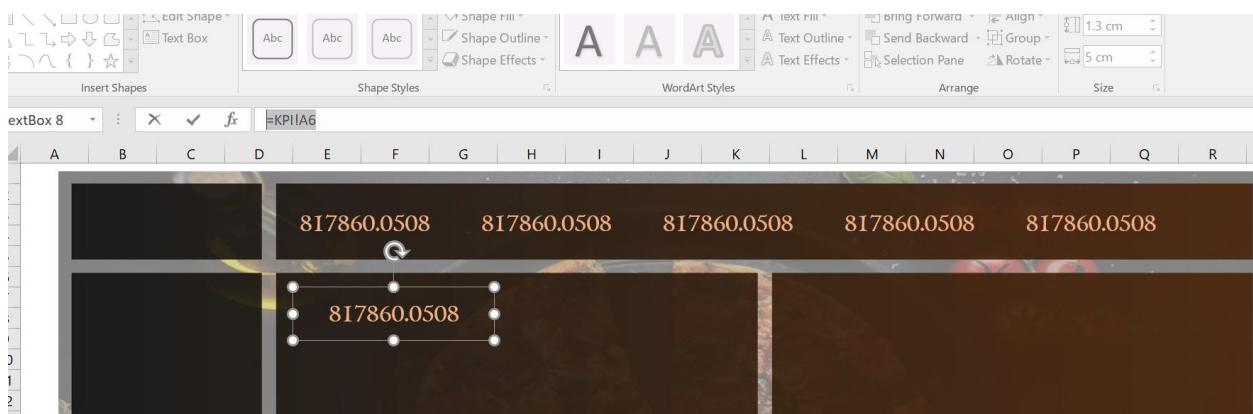




Align Middle + Horizontal



Rename



Now Change Value--- from Dashboard to KPI --- Then blank Screen appears – Go to Home – Formatted Painter --- & Enable the Color in other Text Boxes - Values

Clipboard | Font | Alignment | Number | Styles | Cells

A6 : X ✓ fx =GETPIVOTDATA("Sum of total_price",\$A\$3)

A	B	C	D	E	F	G
1	Total Revenue					
2	Sum of total_price	of quantity	Avg Order Value	Avg Pizza PerOrder		
3	817860.0508	49574	38.31	2.32		
4	817860.0508	49574	38.31	2.32		
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						

A6 : X ✓ fx =GETPIVOTDATA("Sum of total_price",\$A\$3)

Format Cells ? X

Number	Alignment	Font	Border	Fill	Protection
Category: General					
Number					
Currency					
Accounting					
Date					
Time					
Percentage					
Fraction					
Scientific					
Text					
Special					
Custom					

Sample: \$8,17,860

Type: #,##|

General
0
0.00
.##0
.##0.00
.##0;-#.##0
.##0;[Red]-#.##0
.##0.00;#.##0.00
.##0.00;[Red]-#.##0.00
₹ .##0;₹ -#.##0
₹ .##0;[Red]₹ -#.##0

Delete

Order Value	Avg Pizza PerOrder
38.31	2.32

	B	Format Cells	G	H
	Total_Orders			
	Sum of Total_Orders			
	21350			
.7,860	21350			

Format Cells

Number Alignment Font Border Fill Protection

Category: General Number Currency Accounting Date Time Percentage Fraction Scientific Text Special Custom

Sample \$38.31

Type: \$#.00

[\$-x-systime]h:mm:ss AM/PM
0.0000000000
0.0000000000
0.0000000000
0.00000000
0.0000000
0.000000
0.00000
0.0000
0.000
0.0000
\$#,###
\$#.00

Delete

Type the number format code, using one of the existing codes as a starting point.

Total_Pizza Sold		
Sum of quantity	Avg Order Value	Avg Pizza PerOrder
49574	\$38.31	2.32

Now =-- Name to DASHBOARD

PIZZA SALES	Total_Revenue	Average_Order_Value	Total_Pizza_Sold	Total_Orders	Average_Pizzas_Per_order
	\$8,17,860	\$38.31	49574	21350	2.32

Now Charts

& Go to DATA Sheet .. Select PIVOT – To Track== DAILY ORDERS

— INSERT P- Pivot TABLE

The screenshot shows the Microsoft Excel interface with the 'Create PivotTable' dialog box open. The dialog box allows selecting a table or range ('pizza_sales') and choosing where to place the report ('New Worksheet'). The 'PivotTable Fields' pane on the right lists various fields from the data source. The main worksheet area displays a sample of the 'pizza_sales' data.

time	unit_price	total_price	pizza_size	pizza_category
L:38:36	13.25	13.25	Medium	Classic
L:57:40	16	16	Medium	Classic
L:57:40	18.5	18.5	Large	Veggie
L:57:40	20.75	20.75	Large	Supreme
L:57:40	16	16	Medium	Veggie
L:57:40	20.75	20.75	Large	Chicken
2:12:28	16.5	16.5	Medium	Supreme
2:12:28	20.75	20.75	Large	Supreme
2:16:31	16.5	16.5	Medium	Supreme
2:21:30	16.5	16.5	Medium	Supreme
2:29:36	12.75	12.75	Small	Chicken
2:29:36	12	12	Small	Classic
2:50:37	12.5	12.5	Small	Supreme
2:51:37	12.5	12.5	Small	Supreme
2:52:01	12	12	Small	Classic
2:52:01	12	12	Small	Veggie
12:52:01	20.5	20.5	Large	Classic

1st - Find Out Daily Trend – Go to DATA SHEET -- select – Order Day & Total Orders

B6 A B C D

Row Labels Sum of Total_Orders

Monday	2794
Tuesday	2973
Wednesday	3024
Thursday	3239
Friday	3538
Saturday	3158
Sunday	2624
Grand Total	21350

PivotTable Fields

Choose fields to add to report:

Search

Total.Orders
 pizza_name_id
 quantity
 order_date
 Order.Day
 order_time
 ...

Drag fields between areas below:

FILTERS ROWS VALUES

ROWS Order.Day
VALUES Sum of Total_Orders

Now—Data- Validation – Go back to SQL Query & Check the Data –

B. Daily Trend for Total Orders

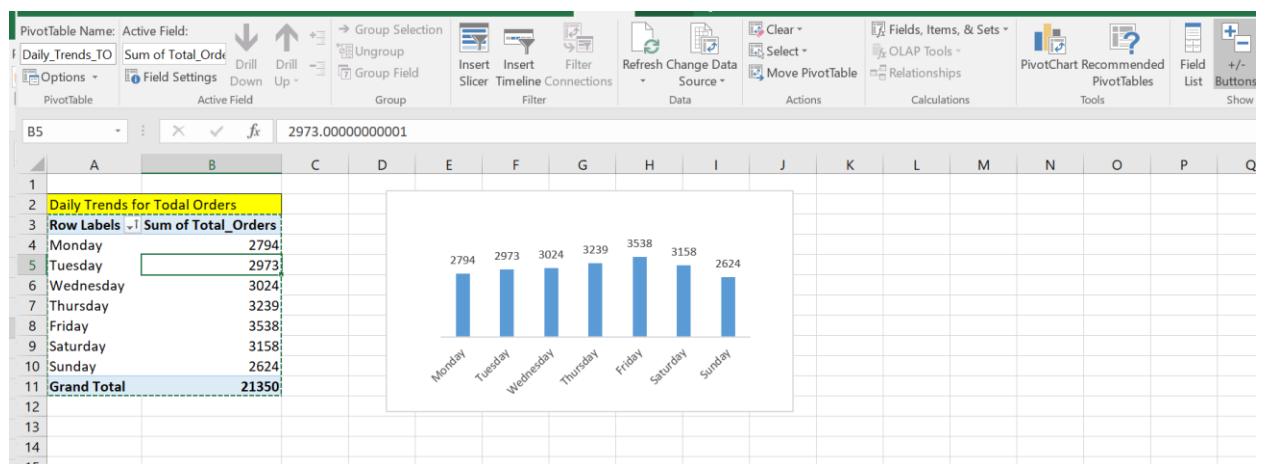
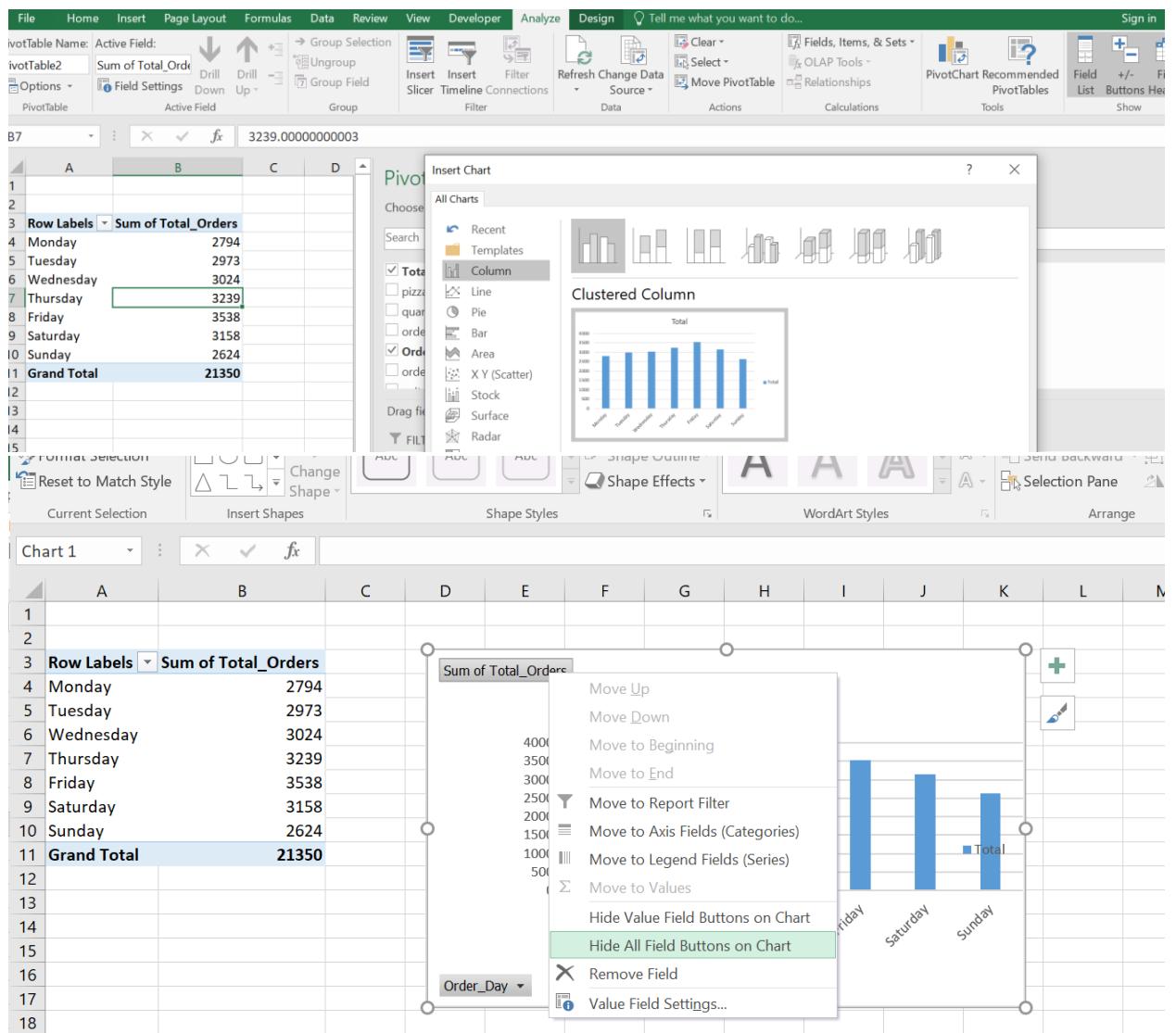
```
SELECT DATENAME(DW, order_date) AS order_day, COUNT(DISTINCT order_id) AS
total_orders
FROM pizza_sales
GROUP BY DATENAME(DW, order_date)
```

Output:

Results Messages

	order_day	total_orders
1	Saturday	3158
2	Wednesday	3024
3	Monday	2794
4	Sunday	2624
5	Friday	3538
6	Thursday	3239
7	Tuesday	2973

■ Go to P-Chart



Hourly Trends

Row Labels

A	B	C	D
5	Daily Trends for Total Orders		
7	Row Labels	Sum of Total_Orders	
3	09	1	
9	:10 09 (Hours)	8	
0	:11 Row: 09	1231	
1	:12	2520	
2	:13	2455	
3	:14	1472	
4	:15	1468	
5	:16	1920	
7	:17	2336	
3	:18	2399	
3	:19	2009	
9	:20	1642	
0	:21	1198	
1	:22	663	
2	:23	28	
3	Grand Total	21350	

PivotTable Fields

Choose fields to add to report:

Search

Total.Orders
 pizza_name_id
 quantity
 order_date
 Order_Day
 order_time

Drag fields between areas below:

FILTERS

ROWS

Hours Minutes

COLUMNS

VALUES

Sum of Total_Orders

Daily Trends for Total Orders

Row Labels Sum of Total_Orders

09		
:52	1	
10		
:25	1	
:34	1	
:43	1	
:50	1	
:52	1	
:54	3	
11		
:02	1	

Data Validation from SQL Query to Pivot Data Analysis

```
... 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 ...
```

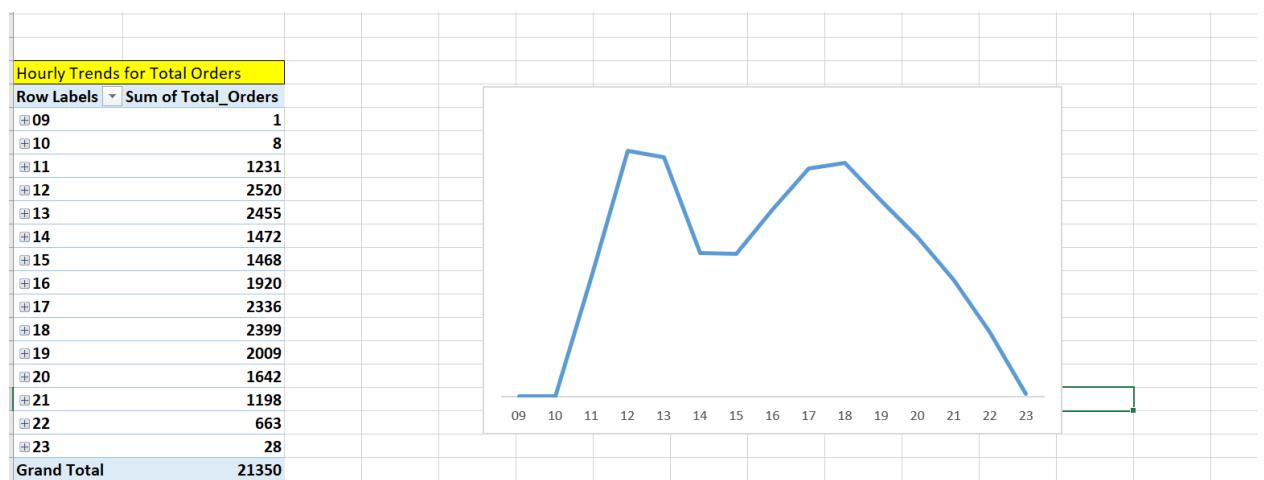
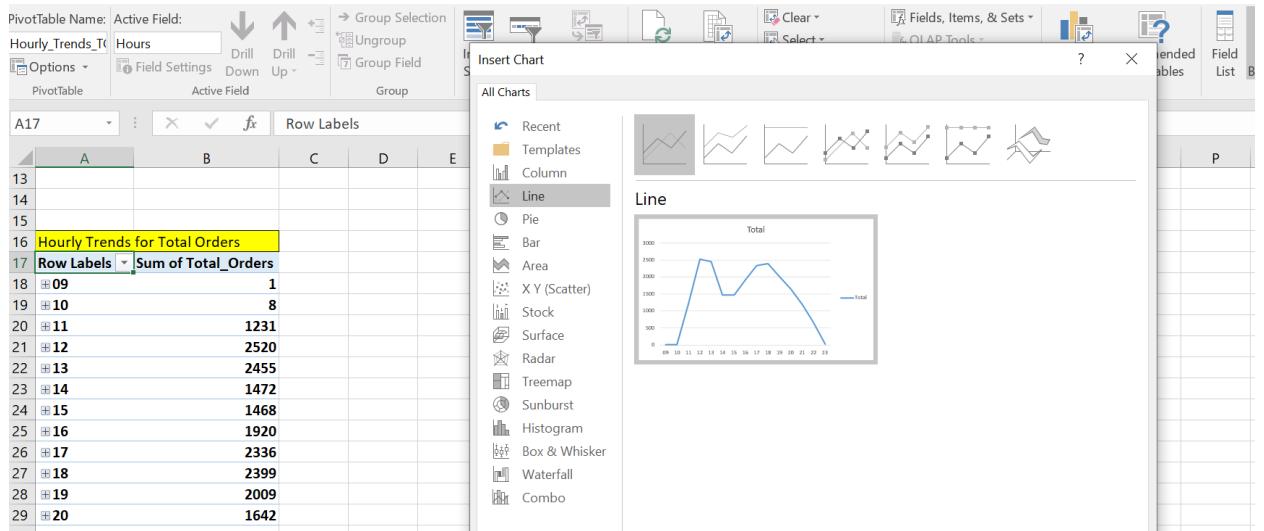
C. Hourly Trend for Orders

```
SELECT DATEPART(HOUR, order_time) as order_hours, COUNT(DISTINCT order_id)
as total_orders
from pizza_sales
group by DATEPART(HOUR, order_time)
order by DATEPART(HOUR, order_time)
```

Output

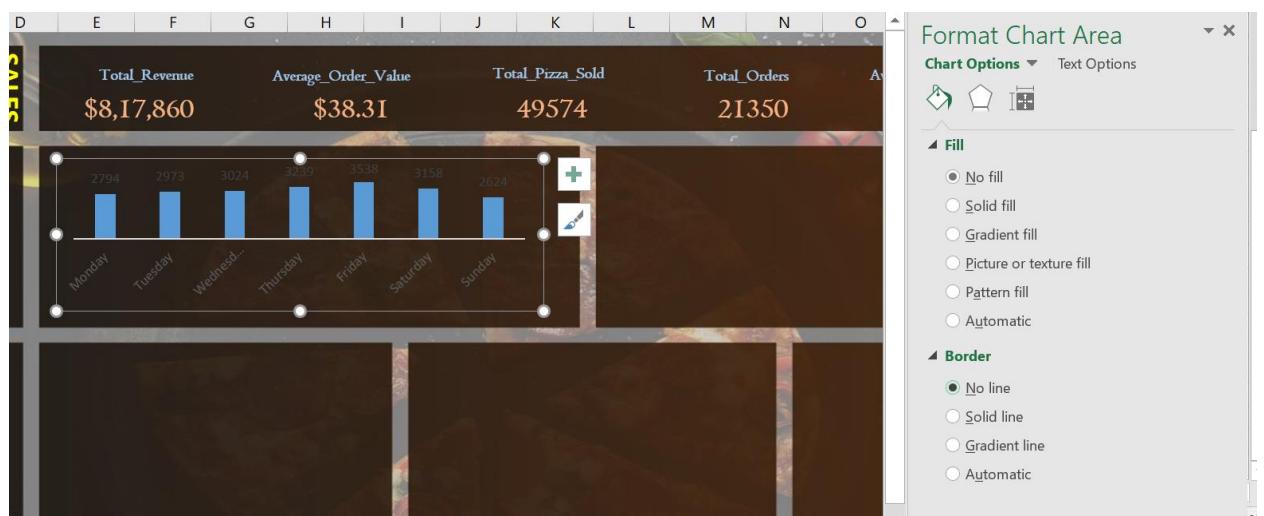
	order_hours	total_orders
1	9	1
2	10	8
3	11	1231
4	12	2520
5	13	2455
6	14	1472
7	15	1468
8	16	1920
9	17	2336
10	18	2399
11	19	2009
12	20	1642
13	21	1198
14	22	663
15	23	28

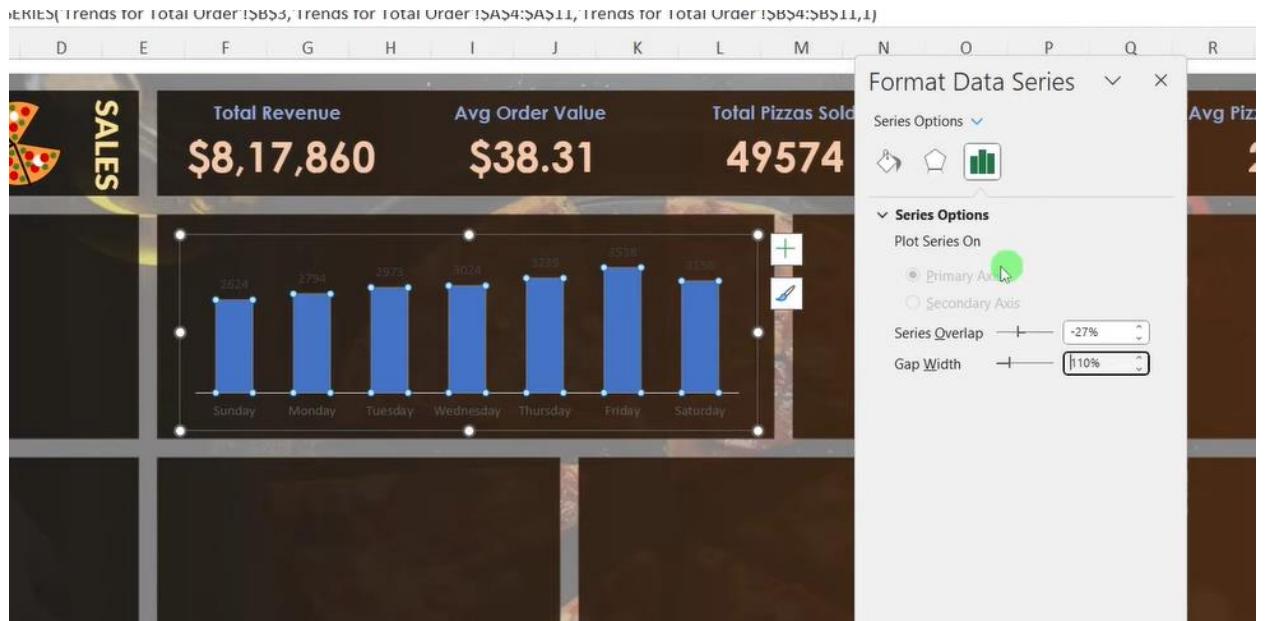
Daily Trends for Total Orders	
Row Labels	Sum of Total_Orders
⊕ 09	1
⊕ 10	8
⊕ 11	1231
⊕ 12	2520
⊕ 13	2455
⊕ 14	1472
⊕ 15	1468
⊕ 16	1920
⊕ 17	2336
⊕ 18	2399
⊕ 19	2009
⊕ 20	1642
⊕ 21	1198
⊕ 22	663
⊕ 23	28



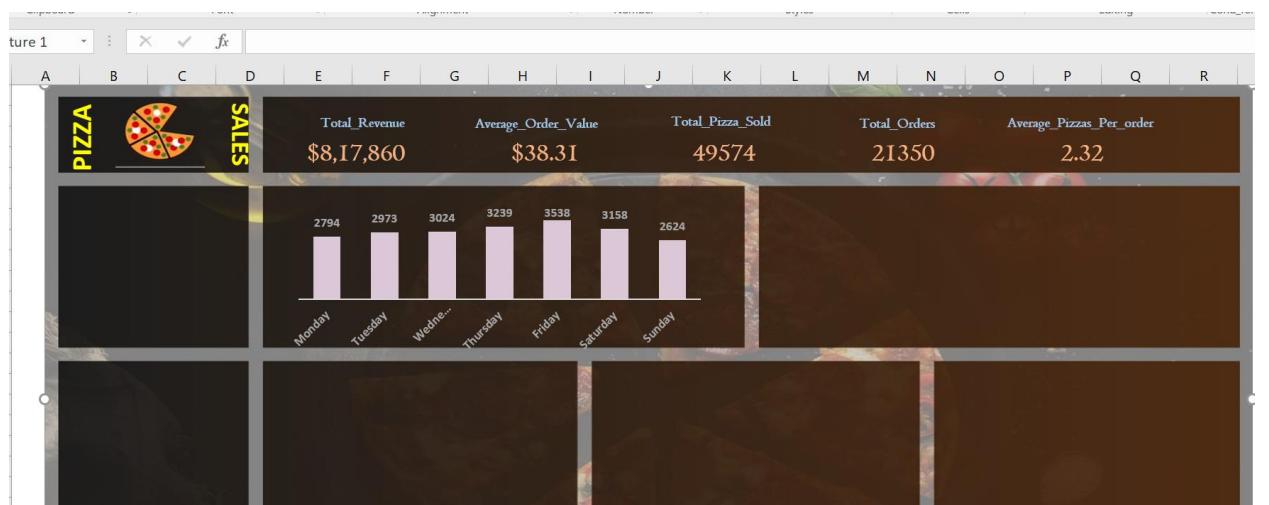
Bring—Charts to Dashboard

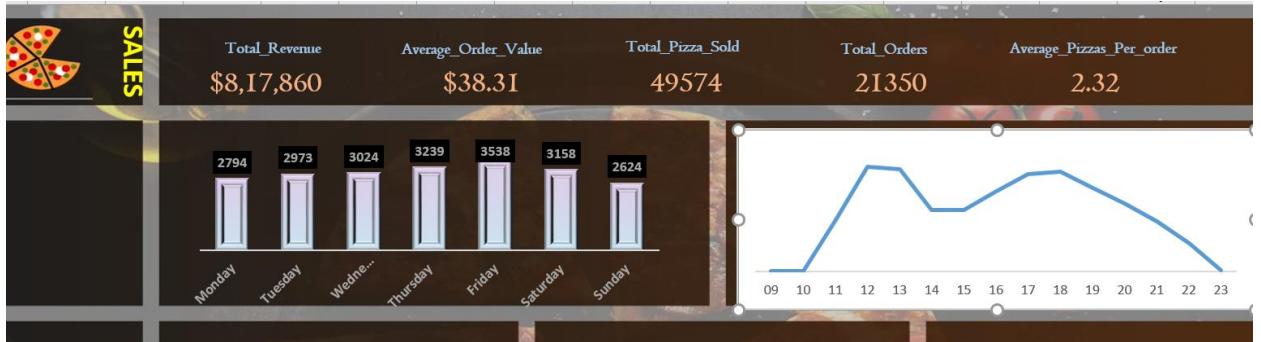
Chart – R- Click





Color Option for Bars





Design – go to

File Home Insert Page Layout Formulas Data Review View Developer Analyze Design Format Tell me what you want to do... Sign in Sh

Chart Tools

Chart Styles

Style 4

Chart 31

A B C D E F G H I J K L M N O P Q R S

PIZZA SALES

Total_Revenue: \$8,17,860 | Average_Order_Value: \$38.31 | Total_Pizza_Sold: 49574 | Total_Orders: 21350 | Average_Pizzas_Per_order: 2.32

Day	Sales
Monday	2794
Tuesday	2973
Wednesday	3024
Thursday	3239
Friday	3538
Saturday	3158
Sunday	2624

09 10 11 12 13 14 15 16 17 18 19 20 21 22 23

Format Chart Area

Chart Options Text Options

Fill

- No fill
- Solid fill
- Gradient fill
- Picture or texture fill
- Pattern fill
- Automatic

Border

- No line
- Solid line
- Gradient line
- Automatic

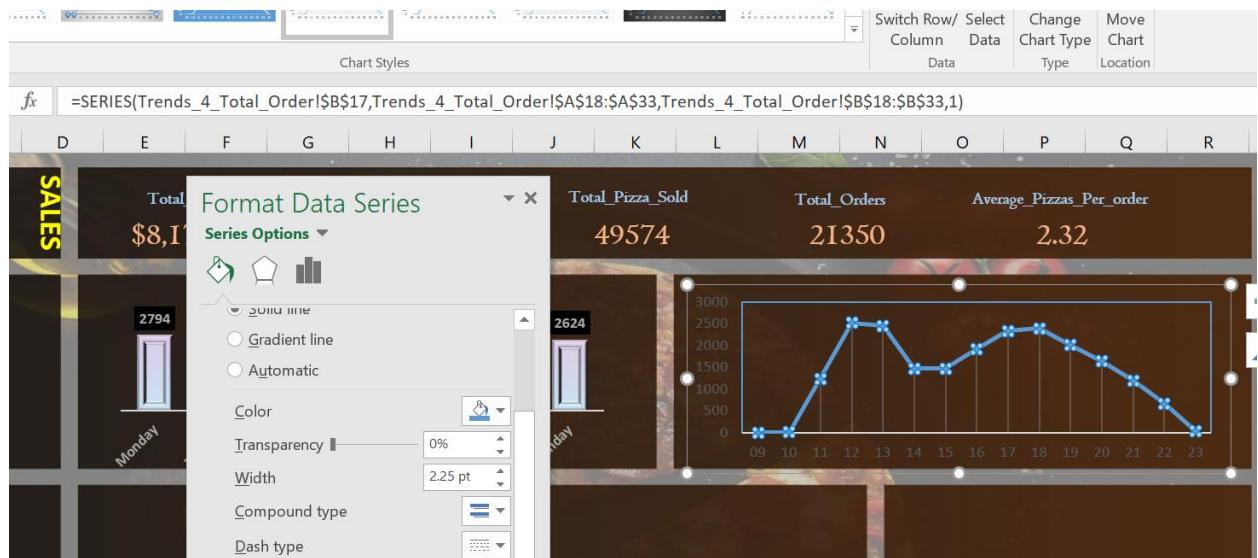
Average_Pizzas_Per_order: 2.32

PIZZA SALES

Total_Revenue: \$8,17,860 | Average_Order_Value: \$38.31 | Total_Pizza_Sold: 49574 | Total_Orders: 21350 | Average_Pizzas_Per_order: 2.32

Day	Sales
Monday	2794
Sunday	2624

09 10 11 12 13 14 15 16 17 18 19 20 21 22 23



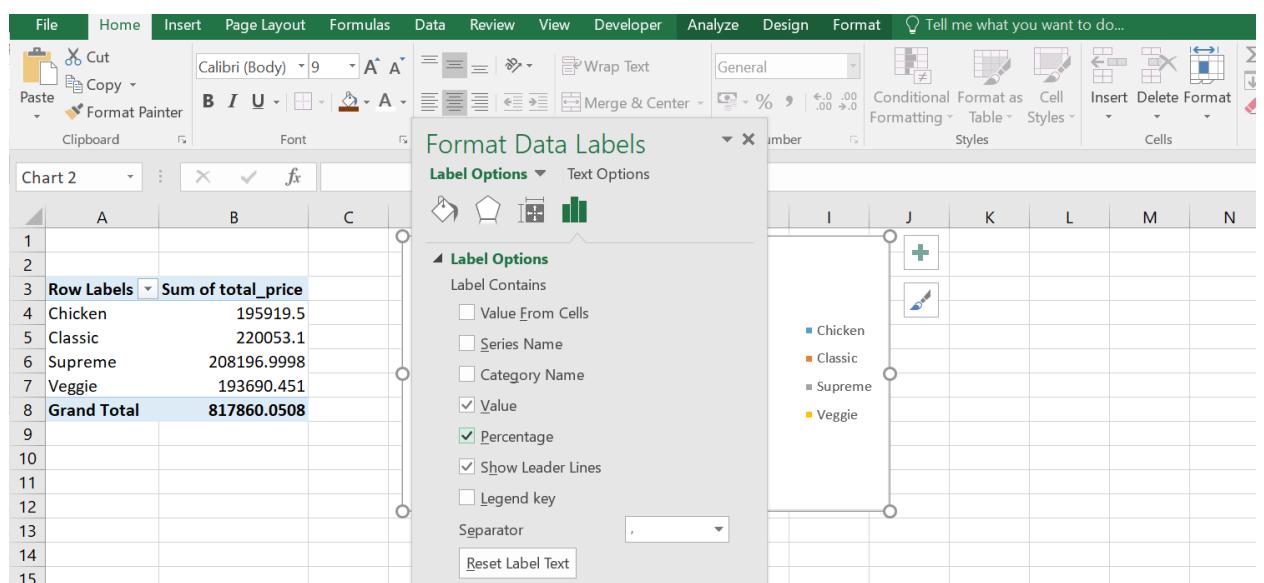
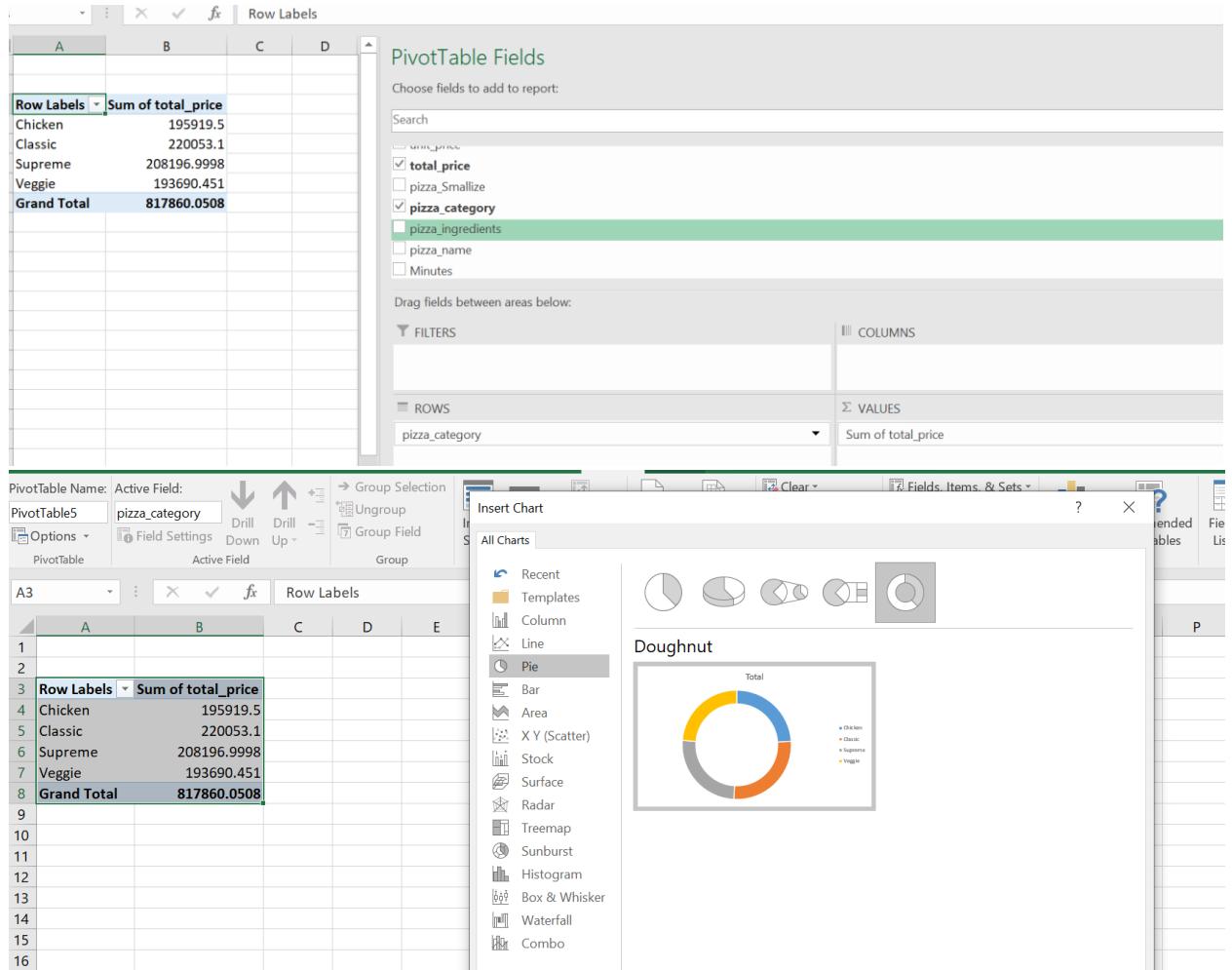
3rd Chart

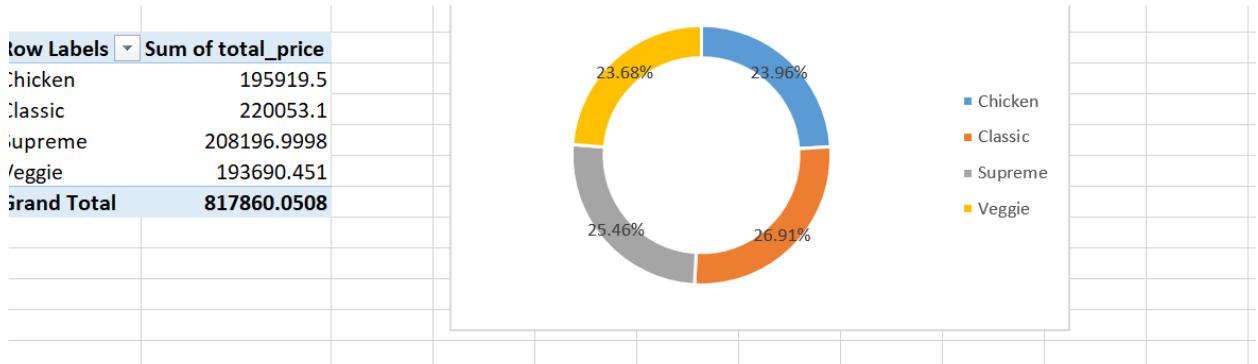
Problem Statement

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.

order_time	unit_price	total_price	pizza_smallize	pizza_category
11:38:36	13.25	13.25	Medium	Classic
11:57:40	16	16	Medium	Classic
11:57:40	18.5	18.5	Large	Veggie
11:57:40	20.75	20.75	Large	Supreme
11:57:40	16	16	Medium	Veggie
11:57:40	20.75	20.75	Large	Chicken
12:12:28	16.5	16.5	Medium	Supreme
12:12:28	20.75	20.75	Large	Supreme
12:16:31	16.5	16.5	Medium	Supreme
12:21:30	16.5	16.5	Medium	Supreme
12:29:36	12.75	12.75	Small	Chicken
12:29:36	12	12	Small	Classic
12:50:37	12.5	12.5	Small	Supreme
12:51:37	12.5	12.5	Small	Supreme
12:52:01	12	12	Small	Classic





Check for Data Validation in SQL Query

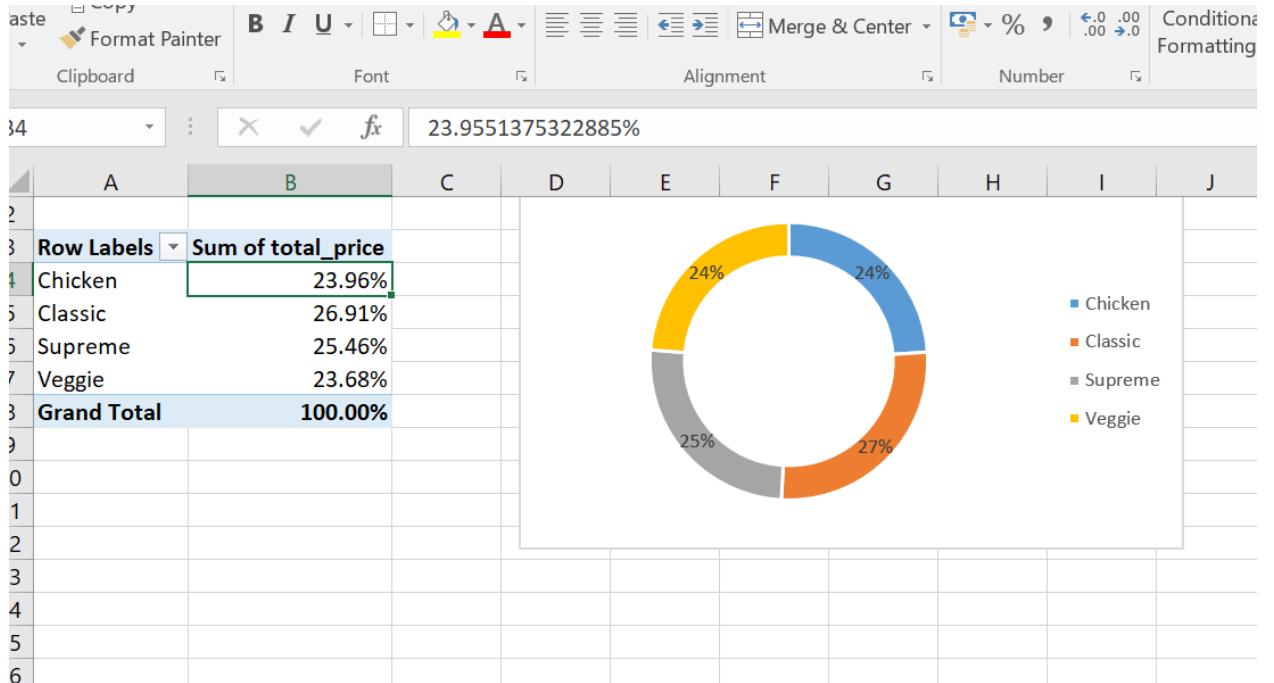
PivotTable Data:

	Sum of total_price
Chicken	195919.5
Classic	220053.1
Supreme	208196.9998
Veggie	193690.451
Grand Total	817860.05

Context Menu Options for Cell B4 (195919.5):

- No Calculation (checked)
- % of Grand Total
- % of Column Total
- % of Row Total
- % Of...
- % of Parent Row Total
- % of Parent Column Total
- % of Parent Total...
- Difference From...
- % Difference From...
- Running Total In...
- % Running Total In...
- Rank Smallest to Largest...

Percentage from Excel to SQL Query



D. % of Sales by Pizza Category

```
SELECT pizza_category, 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_category
```

Output

Results		Messages	
	pizza_category	total_revenue	PCT
1	Classic	220053.10	26.91
2	Chicken	195919.50	23.96
3	Veggie	193690.45	23.68
4	Supreme	208197.00	25.46

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.

PivotTable Fields

Choose fields to add to report:

Search

order_time
 unit_price
 total_price
 pizza_Size
 pizza_category
 pizza_ingredients
 pizza_name

Drag fields between areas below:

FILTERS

COLUMNS

ROWS

VALUES

Sum of total_price

Percentage of Sales Pizza Category

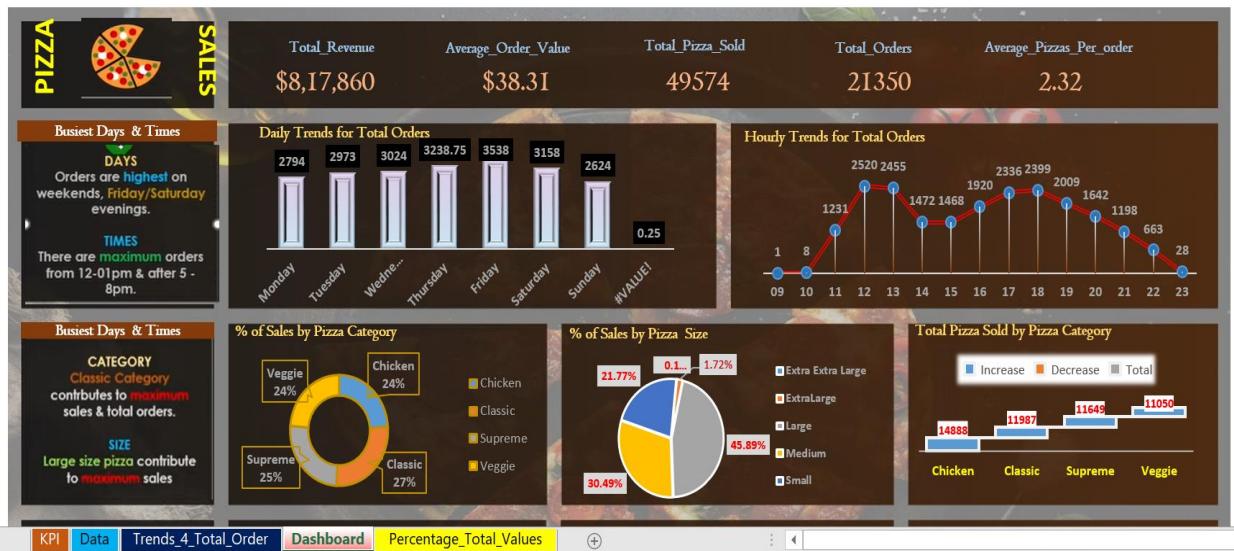
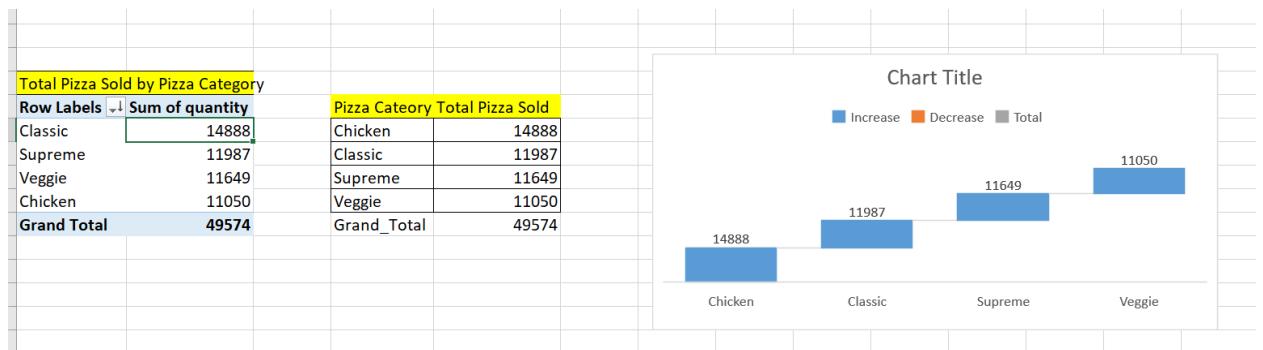
Row Labels	Sum of total_price
Chicken	23.96%
Classic	26.91%
Supreme	25.46%
Veggie	23.68%
Grand Total	100.00%

Percentage of Sales Pizza Size

Row Labels	Sum of total_price
Extra Extra Large	0.12%
Extralarge	1.72%
Large	45.89%
Medium	30.49%

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.



Last Part

6. Top 5 Best Sellers by Total Pizzas Sold:

Create a bar chart highlighting the top 5 best-selling pizzas based on the total number of pizzas sold.

This chart will help us identify the most popular pizza options.

7. Bottom 5 Worst Sellers by Total Pizzas Sold:

Create a bar chart showcasing the bottom 5 worst-selling pizzas based on the total number of pizzas sold. This chart will enable us to identify underperforming or less popular pizza options.

The screenshot shows the Microsoft Excel ribbon at the top with various tabs like Home, Insert, Page Layout, etc. A 'PivotTable Recommended' dialog box is open over the main worksheet area. The dialog has several sections: 'Choose the data that you want to analyze' (radio button selected for 'Select a table or range' with 'pizza_sales' chosen), 'Choose where you want the PivotTable report to be placed' (radio button selected for 'New Worksheet'), and 'Choose whether you want to analyze multiple tables' (checkbox unchecked). At the bottom right of the dialog are 'OK' and 'Cancel' buttons, with 'OK' being highlighted.

Select Desc – Asc--- (Sort) + Filter Top 5 best selling

The screenshot shows a PivotTable in the center of the screen. The PivotTable Fields pane on the right side lists fields under 'ROWS': 'pizza_name' is selected. Under 'VALUES', 'Sum of quantity' is listed. The main PivotTable grid shows a list of pizza names and their corresponding total quantities. A 'Top 10 Filter (pizza_name)' dialog box is open, with 'Top' selected, '5' items, and 'by Sum of quantity'. The 'OK' button in this dialog is highlighted.

PivotTable2		Sum of quantity	Drill	Drill	Ungroup	Insert	Insert	Filter	Refresh	Change Data	Select	OLAP Tools		
Options		Field Settings	Down	Up	Group Field	Slicer	Timeline	Connections	Source	Actions	Move PivotTable	Relationships		
PivotTable		Active Field		Group		Filter			Data		Actions		Calculations	
B5	:	X	✓	f(x)	2432									
A	B	C	D	E	F	G	H	I	J	K	L			
1														
2														
3	Row Labels	Sum of quantity												
4	The Classic Deluxe Pizza	2453												
5	The Barbecue Chicken Pizza	2432												
6	The Hawaiian Pizza	2422												
7	The Pepperoni Pizza	2418												
8	The Thai Chicken Pizza	2371												
9	Grand Total	12096												
10														
11														
12														
13														
14														
15														
16														

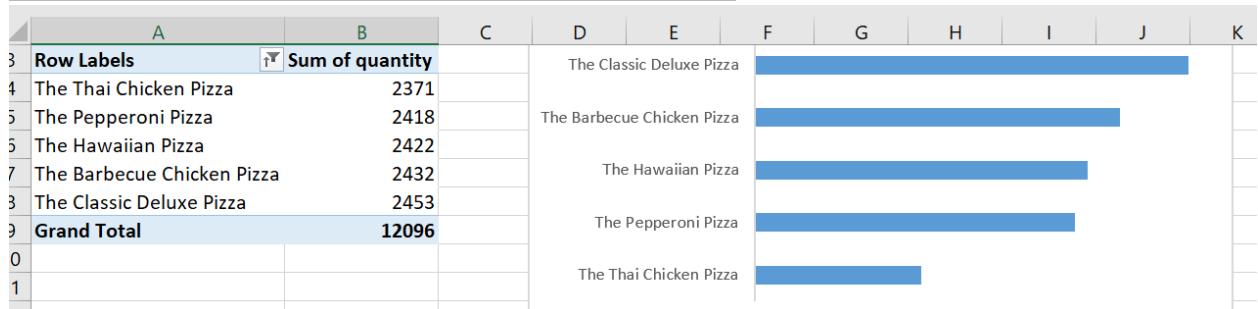
Data Validation with SQL Query

G. Top 5 Best Sellers by Total Pizzas Sold

```
SELECT Top 5 pizza_name, SUM(quantity) AS Total_Pizza_Sold
FROM pizza_sales
GROUP BY pizza_name
ORDER BY Total_Pizza_Sold DESC
```

Output

	pizza_name	Total_Pizza_Sold
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



Top 5 Worst Sellers

The screenshot shows a Microsoft Excel spreadsheet titled "Top 5 Worst Seller". The data is organized into two main sections: "Top 5 Worst Seller" and "Top 5 Best Seller". The "Top 5 Worst Seller" section contains a PivotTable with the following data:

	Sum of quantity
Thai Chicken Pizza	2371
Pepperoni Pizza	2418
Hawaiian Pizza	2422
Barbecue Chicken Pizza	2432
Classic Deluxe Pizza	2453
Total	12096

A "PivotTable Fields" dialog box is open, specifically the "Top 10 Filter (pizza_name)" section. It is set to show the bottom 5 items by sum of quantity. The "ROWS" area of the PivotTable Fields pane shows the "pizza_name" field, and the "VALUES" area shows the "Sum of quantity" field.

Data Validation --- From SQL Query

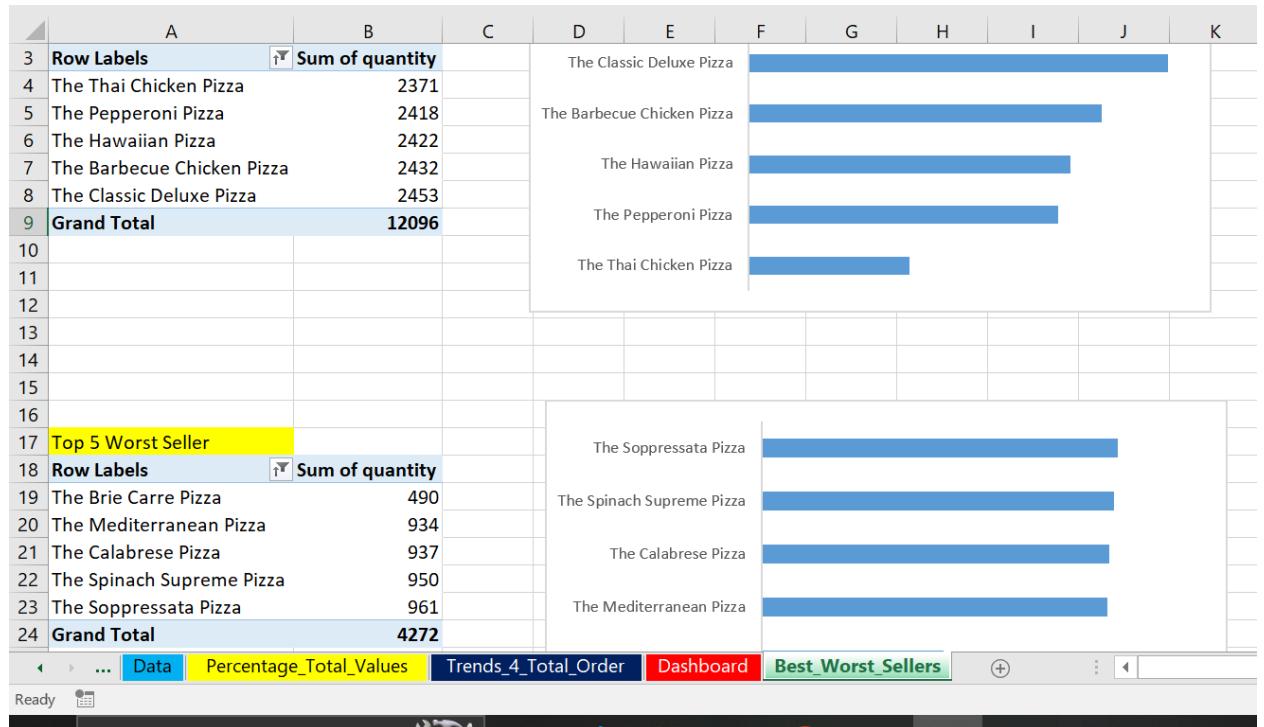
H. Bottom 5 Best Sellers by Total Pizzas Sold

```
SELECT TOP 5 pizza_name, SUM(quantity) AS Total_Pizza_Sold
FROM pizza_sales
GROUP BY pizza_name
ORDER BY Total_Pizza_Sold ASC
```

Output

The screenshot shows the SSMS Results tab displaying the output of the SQL query. The results are as follows:

	pizza_name	Total_Pizza_Sold
1	The Brie Carre Pizza	490
2	The Mediterranean Pizza	934
3	The Calabrese Pizza	937
4	The Spinach Supreme Pizza	950
5	The Soppressata Pizza	961



Activate Report Connections

The screenshot shows a Microsoft Excel dashboard with several charts and a 'Report Connections' dialog box.

Report Connections (order_date)

Select PivotTable and PivotChart reports to connect to this filter:

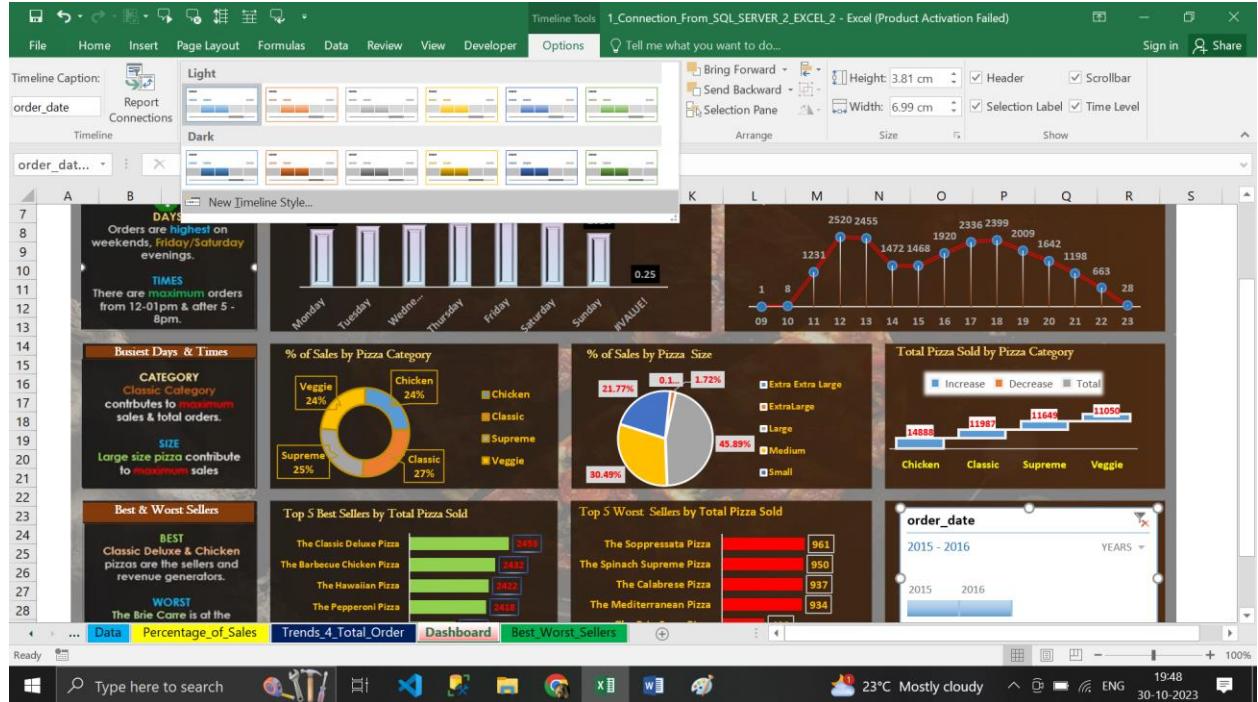
Name	Sheet
Top Seller	Best and Worst Sellers
Worst Sellers	Bx
KPI	I0
% of sales by category	Percentage of Sales
% of sales by pizza size	Percentage of Sales
Total Pizzas Sold by Pizza Category	Percentage of Sales
Daily Trend	Trends for Total Order
Hourly Trend	Trends for Total Order

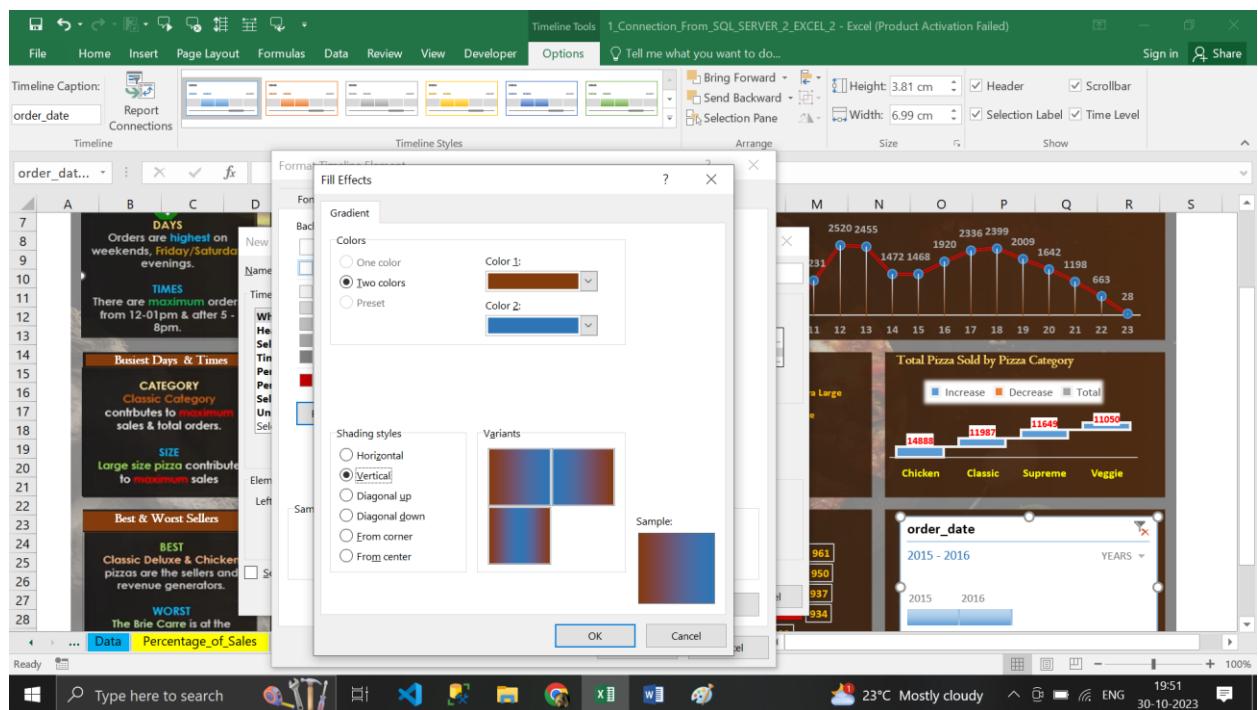
Dashboard charts visible in the background:

- Sales by Category:** A pie chart showing pizza categories: Large (21.7%), Medium (17.2%), Regular (0.12%), Extra Large (1.12%), and XX-Large (61.89%).
- Total Pizzas Sold by Pizza Category:** A horizontal bar chart showing sales volume for Classic (~14488), Supreme (~11587), Veggie (~11640), and Chicken (~11050).
- Worst Sellers by Total Pizzas Sold:** A horizontal bar chart showing sales volume for Soppressata (~961), Supreme (~950), Hawaiian (~937), and Brie Carre (~490).
- order_date:** A date range selector for the dashboard.

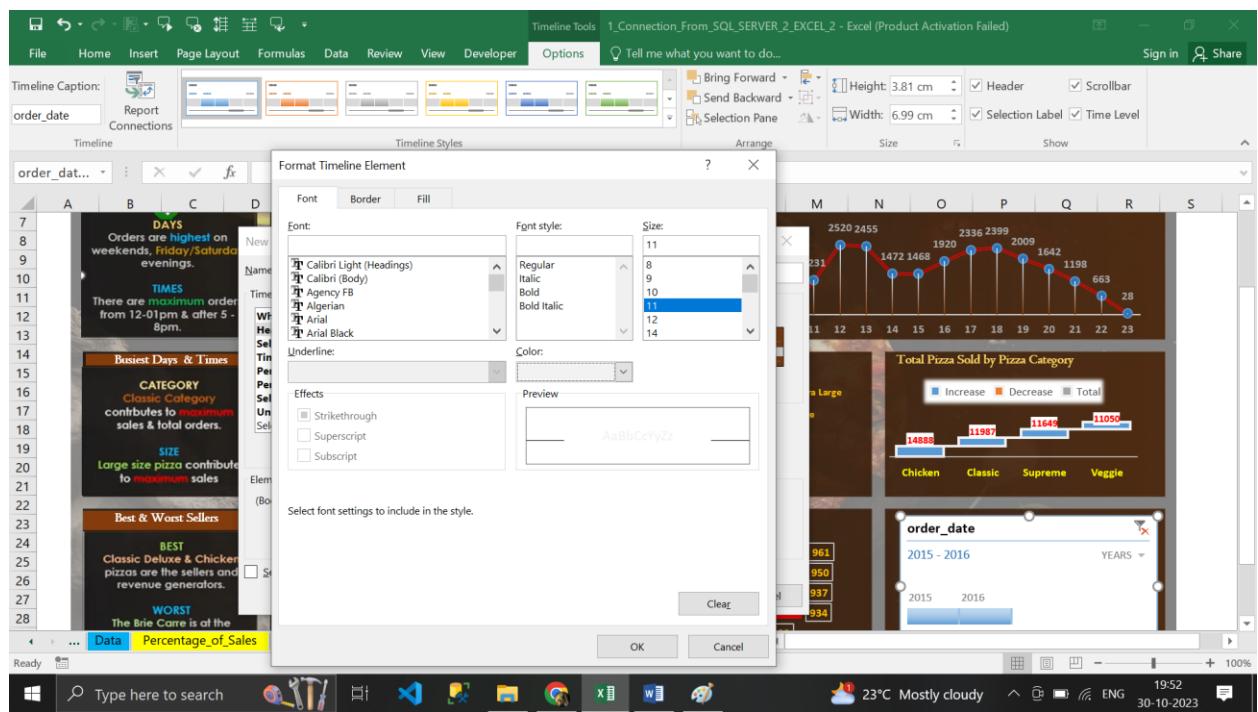


Last Part – Pizza Slicer





Header – White Color



Final Report



... Data Percentage_of_Sales Trends_4_Total_Order Dashboard Best_Worst_Sellers

