



DATA ANALYSIS FOR K PIZZA

*BATCH – B81 SHAIK IRFAN
BY
DATAGYAN*

DATA ANALYSIS FACTORS :-

- * Analyze the difference in total spending between **genders**.*
- *Analyze the best **payment method** based on **reviews**.*
- *Analyze the most selling **timestamp**.*
- *Analyze the most selling **product type**.*
- *Analyze the **location** with the **most customers**.*
- *Analyze sales by **year** and **quarter**.*
- *Analyze the relationship between **money type**, **location**, and **timestamp**.*

DATA PROCEUDRE

*Data collection
from sales team*

Marthali Sales Data Analysis Request

marthi_marthali@Kpizza1.com

Marthali Sales Data Analysis Request

Dear marthi,

Thank you for your prompt response and for providing the required information and dataset. I appreciate the efficiency in addressing our request.

I will immediately commence the analysis of the Marthali sales data to extract insights. If any further clarification is needed or if there are specific points you would like me to focus on, please do not hesitate to let me know.

Looking forward to sharing our findings during the next meeting.

Best regards |

Shaik Irfan
Data Analyst
K Pizza
+91 7038413425

DATA PROCEUDRE

	A
1	Name
2	Deepthi Kelley
3	Deepthi Kelley
4	Andrew Ballard
5	Lester Wilkins
6	Andrew Ballard
7	Lester Wilkins
8	Mable Kelley
9	Darrin Pope
10	Mable Kelley
11	Darrin Pope
12	Raj Sharma
13	Sharad Gandhi
14	Danish D'Souza
15	Rijo Paul
16	Joseph P
17	Aakash Patel
18	Ganesh Rahu
19	Vinudas K.S
20	Divya Kumar
21	Shilpa R
22	Sindhu J.R

Identifying *Duplicate* values using *conditional formating*

Using *“IF”* and *“AND”* Function for getting *“TimeStamp”* Column

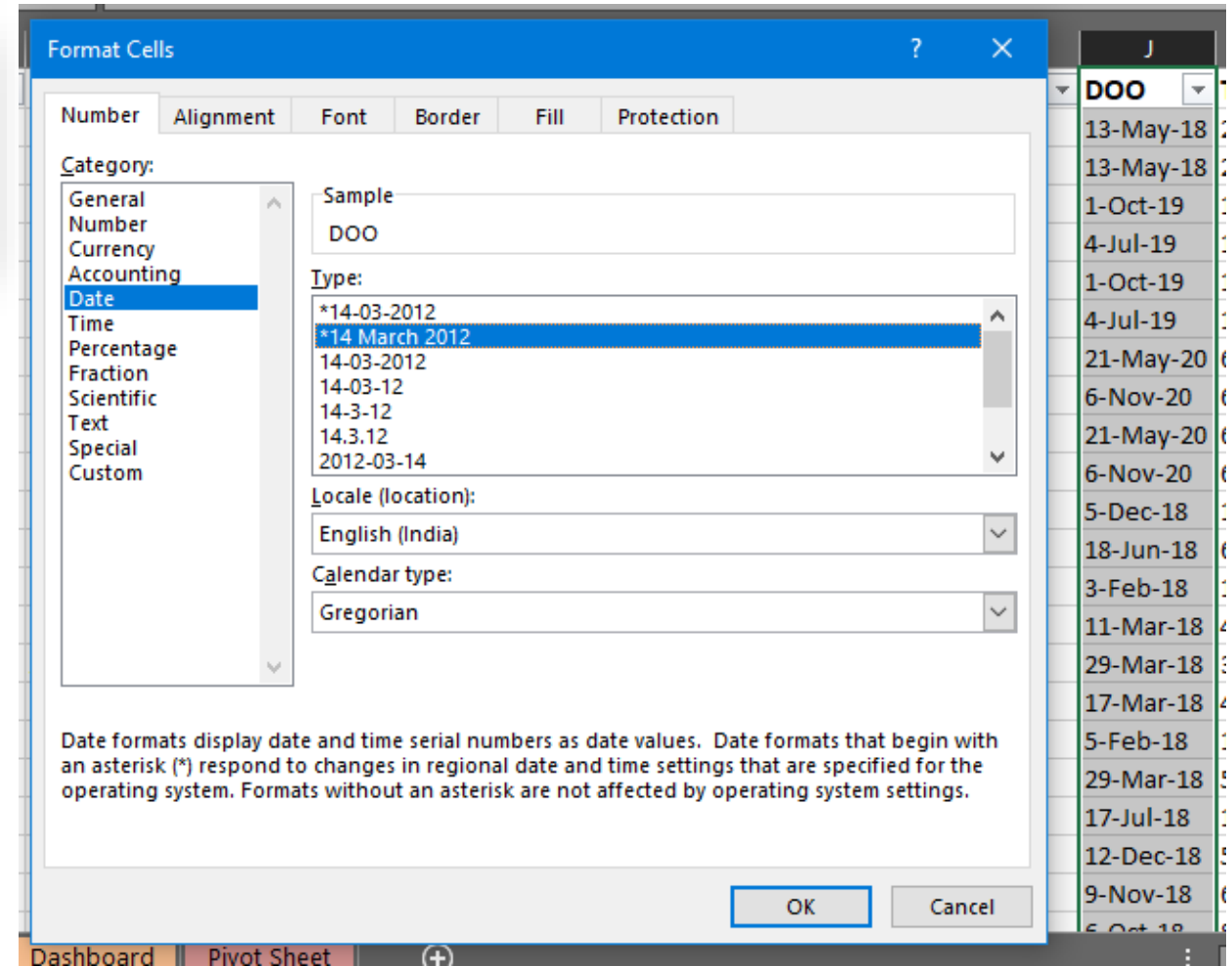
L	M	N	O	P	Q
Time	Gend	Time star	Reviews		
12:05:00	Female	=IF(AND(L2:L101>=TIME(8,0,0),L2:L101<=TIME(12,0,0)),"Morning",			
12:05:00	Female	IF(AND(L2:L101>=TIME(12,0,0),L2:L101<=TIME(17,0,0)),"Afternoon",			
15:10:00	Male	IF(AND(L2:L101>=TIME(17,0,0),L2:L101<=TIME(21,0,0)),"Evening",""))			
15:15:00	Female				
15:10:00	Male				
15:15:00	Female				
17:15:00	Female	Evening			
17:20:00	Male	Evening			
17:15:00	Female	Evening			
17:20:00	Male	Evening			
11:00:00	Male	Morning			
11:05:00	Female	Morning			
11:10:00	Male	Morning			
11:25:00	Male	Morning			
11:30:00	Male	Morning			
11:35:00	Male	Morning			
11:40:00	Male	Morning			
11:45:00	Male	Morning			
11:50:00	Female	Morning			
11:55:00	Female	Morning			
12:00:00	Female	Morning			
12:10:00	Female	Afternoon			
12:25:00	Male	Afternoon			
12:30:00	Male	Afternoon			
12:35:00	Male	Afternoon			
12:40:00	Male	Afternoon			

Data
Cleaning

DATA PROCEDURE

Data Cleaning

For better understanding changing “13-05-18” to “13-May-18”. Using *format cells* option



DATA PROCEUDRE

In mobile column some values are “Not Available” So as per *Shakeholder* condition changing as “Null”

C	D	E	F	G	H
Mob	Email	Money Type	P	Prodcut Type	Location
1032274597	Deepthi@rediffmail.com	Cash	161	Spicy Panner Pizza	Marattha
1032274597	Deepthi@rediffmail.com	Cash	161	Spicy Panner Pizza	Marattha
7280083086	Andrew@g.com	Online	150	Spicy Panner Pizza	Marattha
1491564415	Lester@rediffmail.com	Cash	935	Margherita Pizza	Kormang
7280083086	Andrew@g.com	Online	150	Spicy Panner Pizza	Marattha
1491564415	Lester@rediffmail.com	Cash	935	Margherita Pizza	Kormang
1421179061	Mable@y.com	Online	68	Chicken Pizza	J.P Nagar
7855543695	Darrin@gmail.com	Cash	829	Veggi Pizza	Kormang
1421179061	Mable@v.com	Online	68	Chicken Pizza	J.P Nagar
7855543695	Dar				
9906960566	Raj				
5900874374	Sha				
453601168	Dar				
1664438923	Rij				
Not Available	Jos				
867038371	Aak				
673760051	Gar				
9671602033	Vir				
777063935	Divya@gmail.com	Online	885	Spicy Panner Pizza	Marattha
9446055414	Shilpa@rediffmail.com	Online	480	Chicken Pizza	Kormang
6570070804	Sindhu@rediffmail.com	Cash	042	Veggi Pizza	BTM

Find and Replace

Find Replace

Find what: Not Available

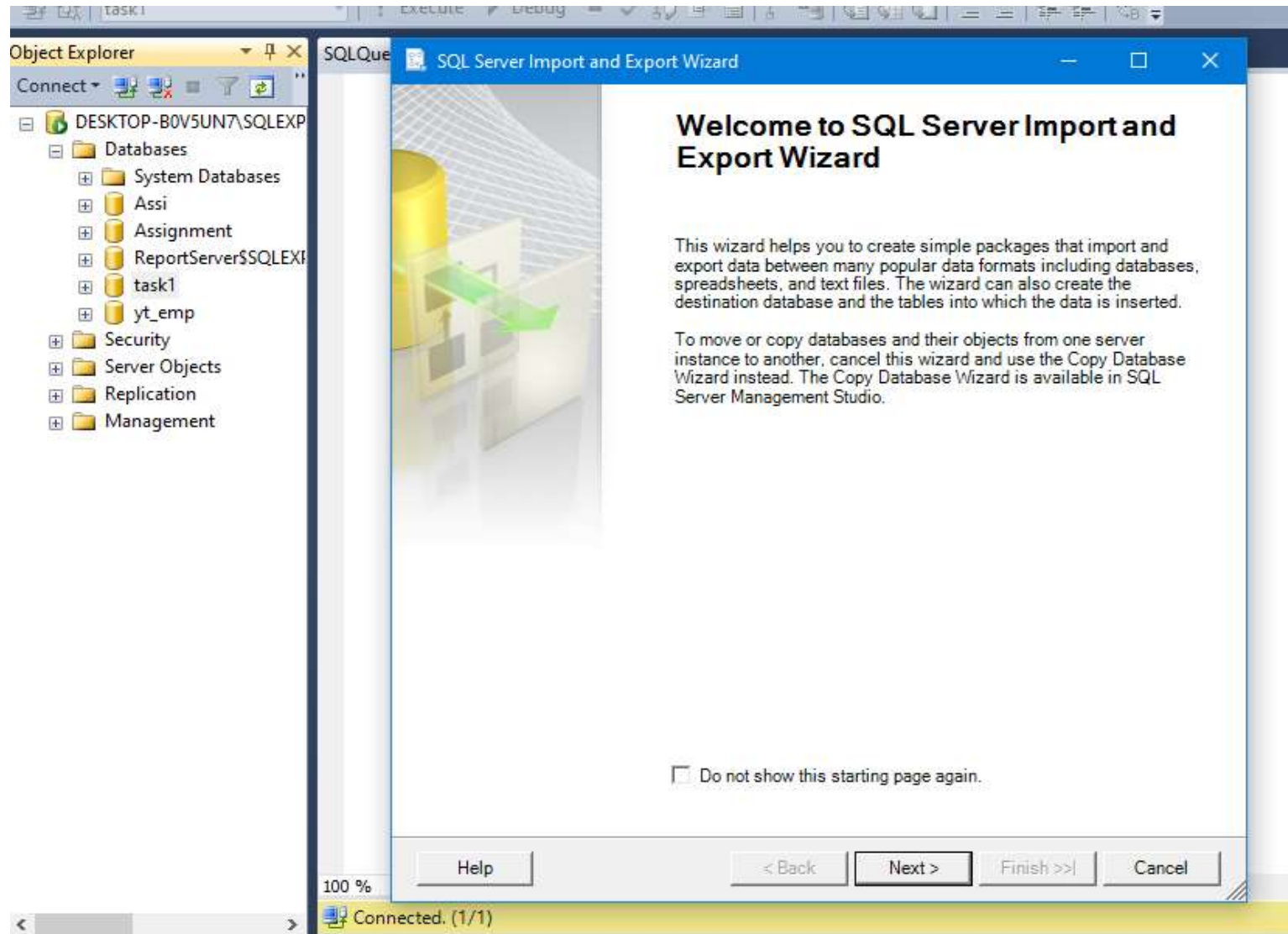
Replace with: Null

Options >>

Replace All Replace Find All Find Next Close

Data
Cleaning

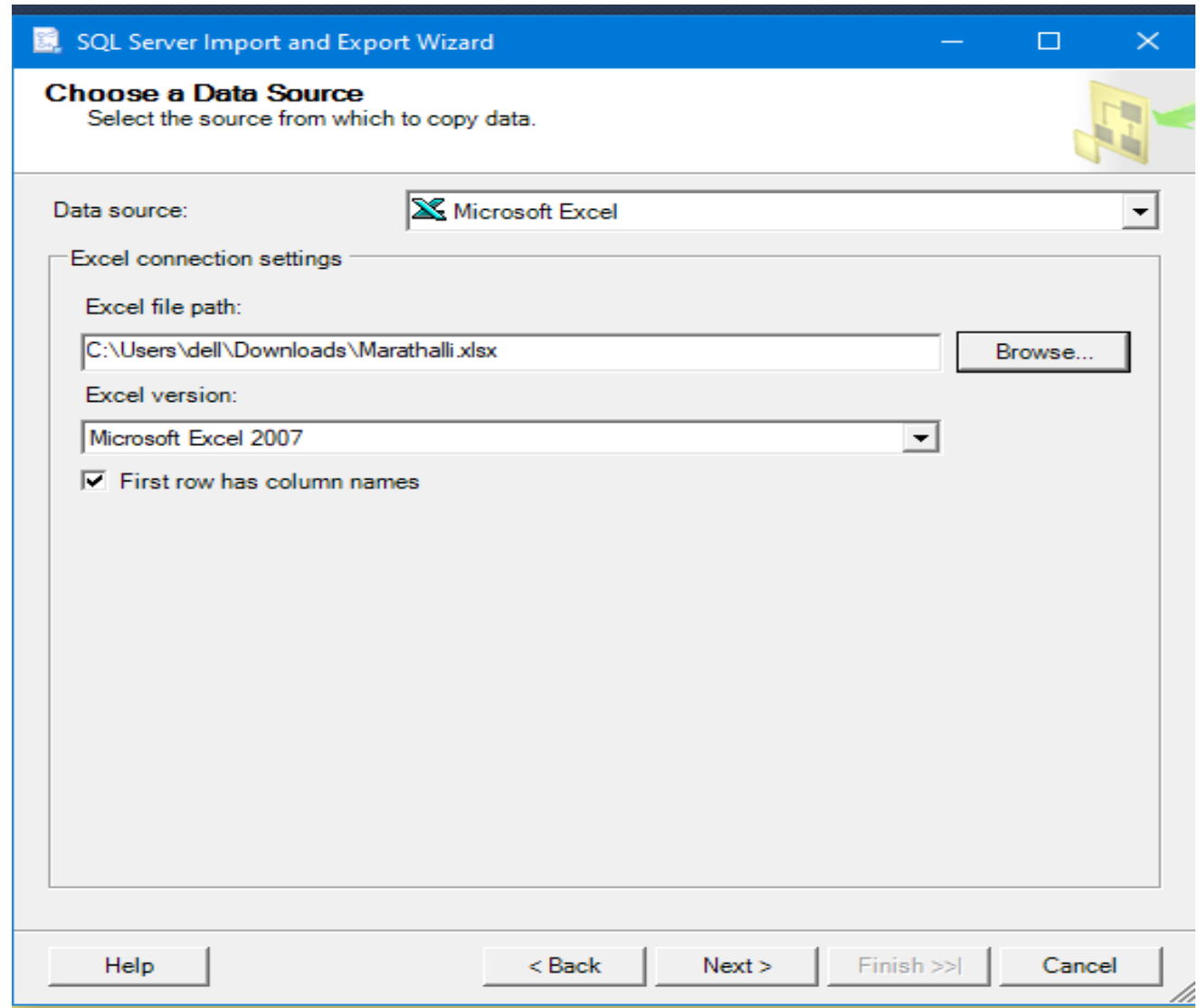
DATA LOADING IN DATABASE SQL SERVER



*Extracting data from a **SQL Server database** using the **SQL Server Import & Export Wizard**. Specify the target database for storing the data during the process*

DATA LOADING IN DATABASE SQL SERVER

After selecting the *data source*, import the data into *Excel*. Copy the path of the *Excel sheet* for further use



The screenshot shows the 'SQL Server Import and Export Wizard' window, specifically the 'Choose a Data Source' step. The window has a blue title bar and a light gray background. The main heading is 'Choose a Data Source' with the instruction 'Select the source from which to copy data.' Below this, the 'Data source:' dropdown menu is set to 'Microsoft Excel'. Under the 'Excel connection settings' section, the 'Excel file path:' text box contains 'C:\Users\dell\Downloads\Marathalli.xlsx', with a 'Browse...' button to its right. The 'Excel version:' dropdown menu is set to 'Microsoft Excel 2007'. A checkbox labeled 'First row has column names' is checked. At the bottom of the window, there are four buttons: 'Help', '< Back', 'Next >', and 'Finish >>|'. A 'Cancel' button is also present on the far right.

SQL Server Import and Export Wizard

Choose a Data Source
Select the source from which to copy data.

Data source: Microsoft Excel

Excel connection settings

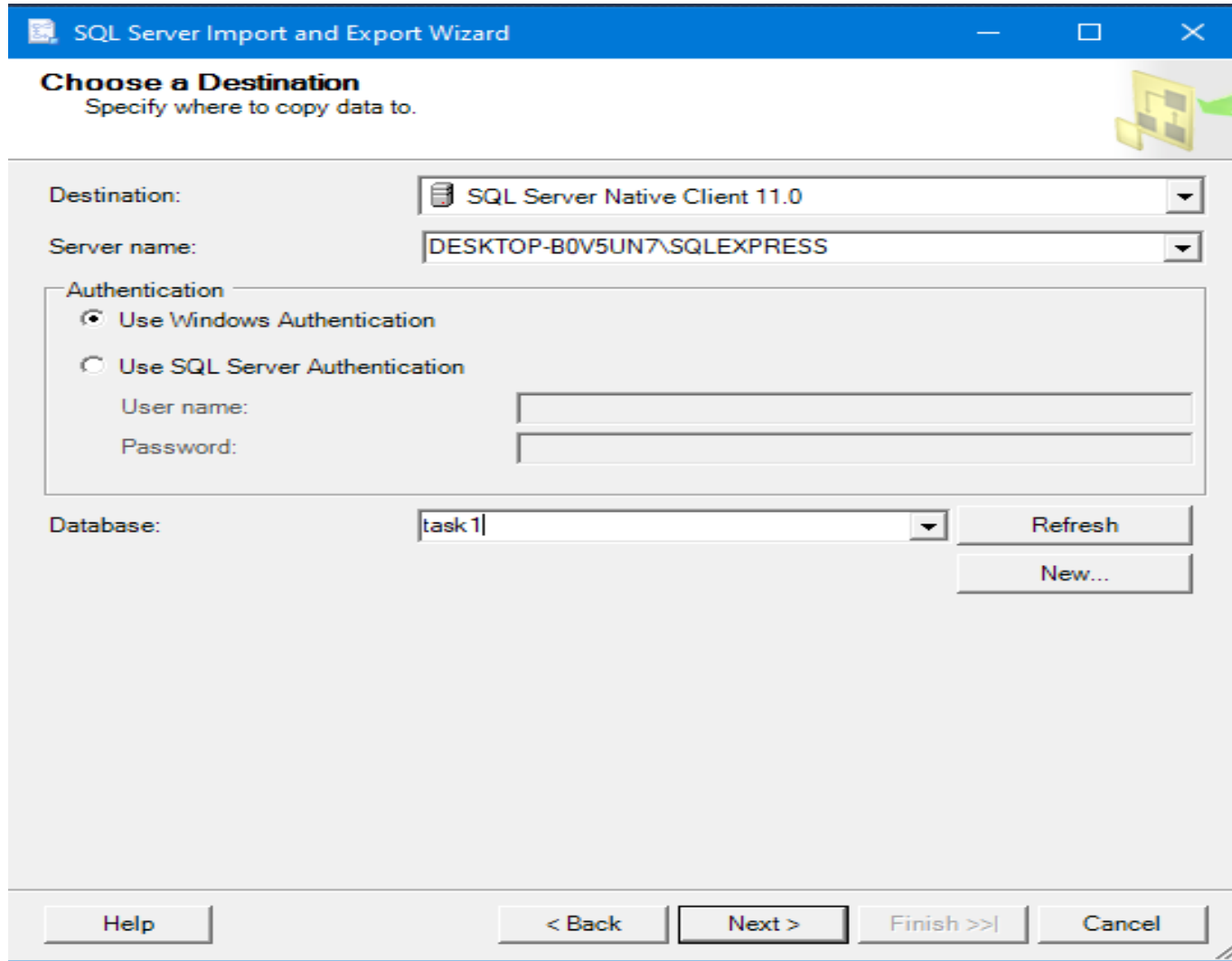
Excel file path:
C:\Users\dell\Downloads\Marathalli.xlsx Browse...

Excel version:
Microsoft Excel 2007

☒ First row has column names

Help < Back Next > Finish >>| Cancel

DATA LOADING IN DATABASE SQL SERVER



The screenshot shows the 'SQL Server Import and Export Wizard' window, specifically the 'Choose a Destination' step. The window has a blue title bar and a yellow folder icon in the top right corner. The main area is light gray and contains the following fields and controls:

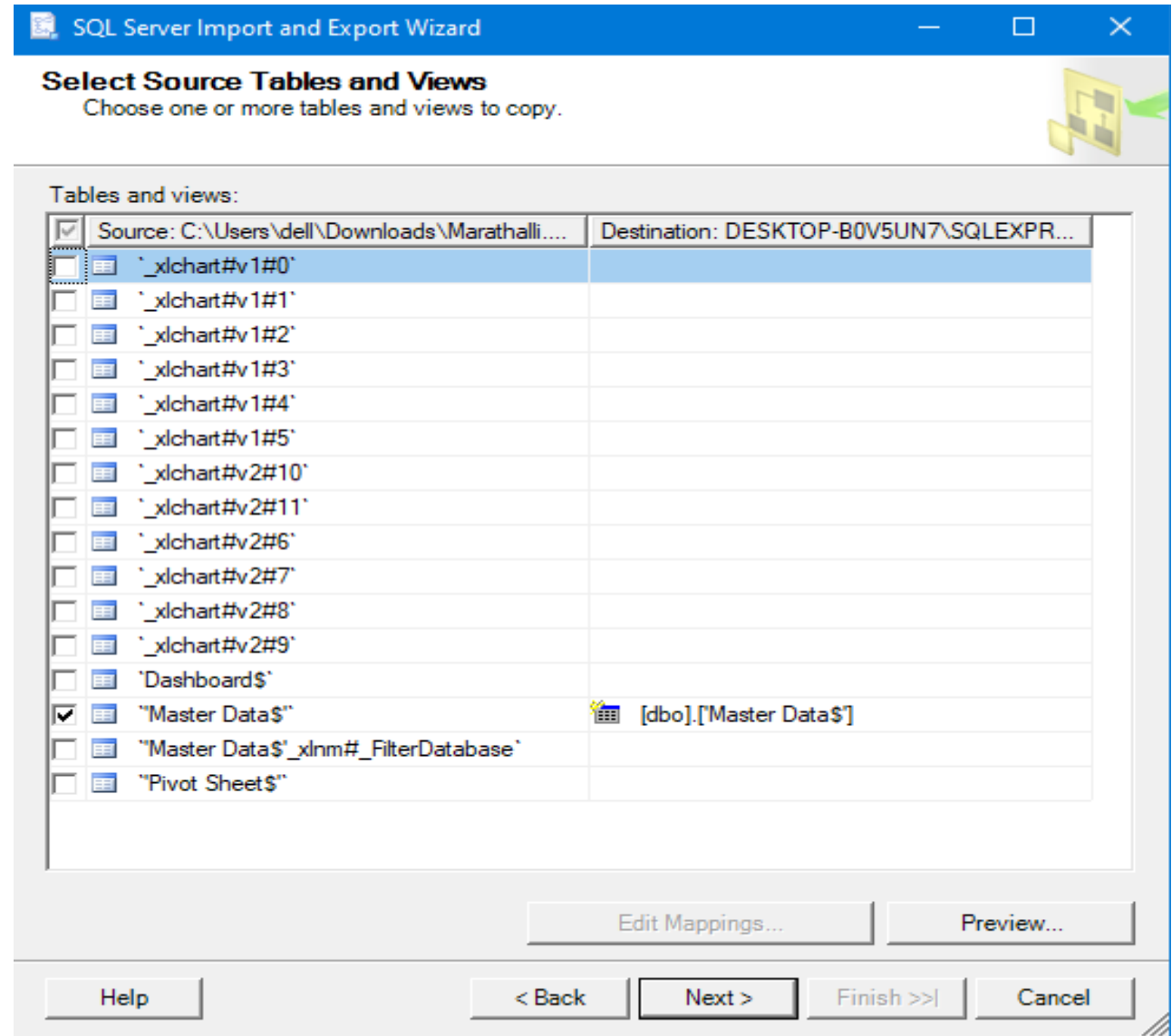
- Destination:** A dropdown menu showing 'SQL Server Native Client 11.0'.
- Server name:** A dropdown menu showing 'DESKTOP-B0V5UN7\SQLEXPRESS'.
- Authentication:** A section with two radio buttons: 'Use Windows Authentication' (selected) and 'Use SQL Server Authentication'. Below the radio buttons are text boxes for 'User name:' and 'Password:'.
- Database:** A dropdown menu showing 'task1'. To its right are 'Refresh' and 'New...' buttons.

At the bottom of the window, there are five buttons: 'Help', '< Back', 'Next >', 'Finish >>', and 'Cancel'.

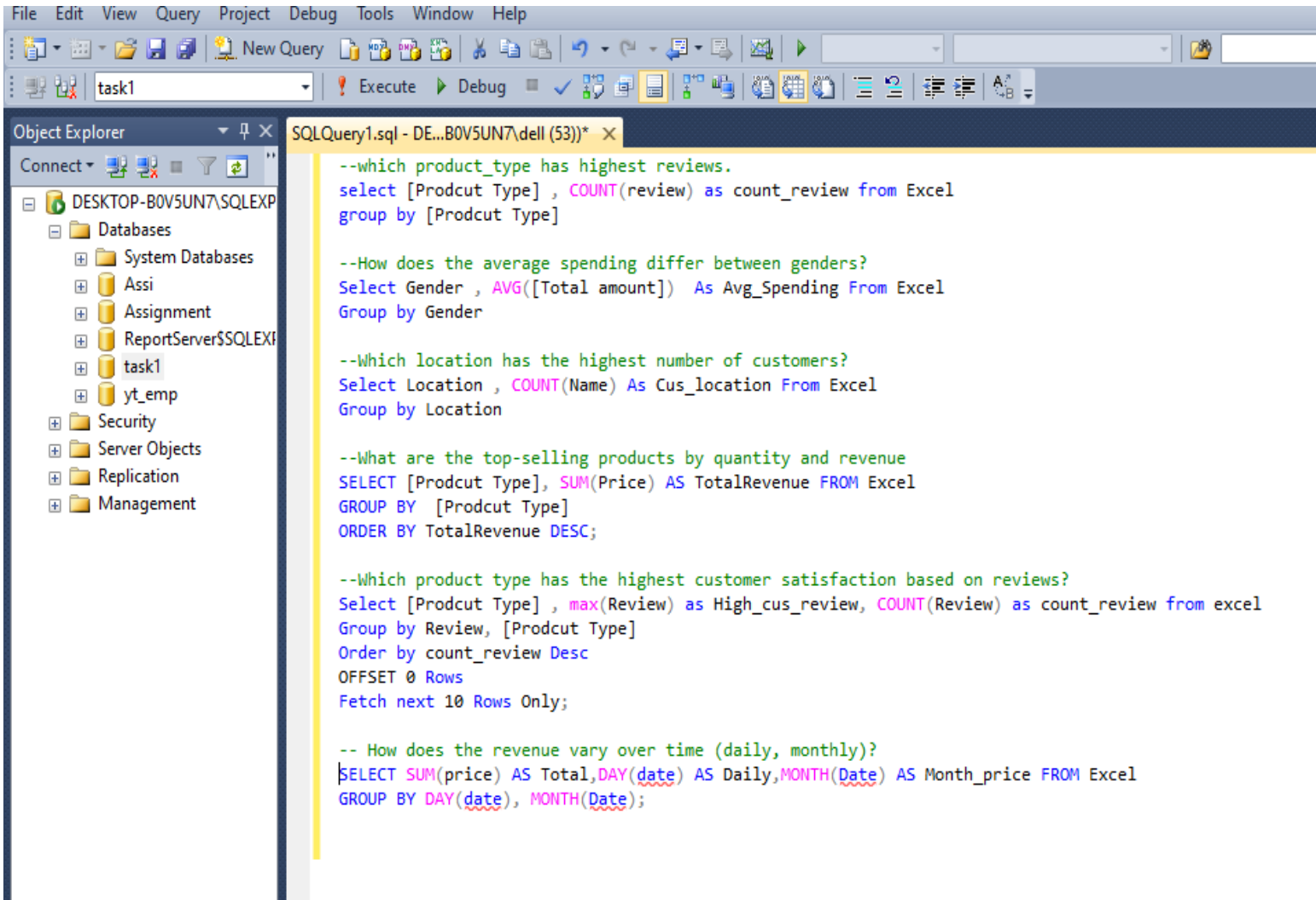
After selecting the *data import* path from Excel, choose the *export* path, specifically using "SQL Server Native Client."
The target database name is "Task 1."

DATA LOADING IN DATABASE SQL SERVER

After exporting, choose the specific **Excel sheet** where your data resides. In my Excel, the sheet is named "**Master Data**".



DATA LOADING IN DATABASE SQL SERVER



```
File Edit View Query Project Debug Tools Window Help
task1 Execute Debug
Object Explorer
Connect
DESKTOP-B0V5UN7\SQLEXP
Databases
System Databases
Assi
Assignment
ReportServer$SQLEXP
task1
yt_emp
Security
Server Objects
Replication
Management

SQLQuery1.sql - DE...B0V5UN7\dell (53))* x
--which product_type has highest reviews.
select [Prodcut Type] , COUNT(review) as count_review from Excel
group by [Prodcut Type]

--How does the average spending differ between genders?
Select Gender , AVG([Total amount]) As Avg_Spending From Excel
Group by Gender

--Which location has the highest number of customers?
Select Location , COUNT(Name) As Cus_location From Excel
Group by Location

--What are the top-selling products by quantity and revenue
SELECT [Prodcut Type], SUM(Price) AS TotalRevenue FROM Excel
GROUP BY [Prodcut Type]
ORDER BY TotalRevenue DESC;

--Which product type has the highest customer satisfaction based on reviews?
Select [Prodcut Type] , max(Review) as High_cus_review, COUNT(Review) as count_review from excel
Group by Review, [Prodcut Type]
Order by count_review Desc
OFFSET 0 Rows
Fetch next 10 Rows Only;

-- How does the revenue vary over time (daily, monthly)?
SELECT SUM(price) AS Total,DAY(date) AS Daily,MONTH(Date) AS Month_price FROM Excel
GROUP BY DAY(date), MONTH(Date);
```

* Changing the table name to "sheet 1\$" To "Excel" during importing.

*Use query as per required data.

* Using Aggregate function, Date and time function for collecting data as per condition.

DATA LOADING IN DATABASE SQL SERVER

Extracting data using "MAX", "COUNT", "DAY", "MONTH", "YEAR" and "OFFSET", "FETCH" function to restrict results.

SQLQuery1.sql - DE...B0V5UN7\del(53)* X

```
--Which product type has the highest customer satisfaction based on reviews?  
Select [Prodcut Type] , max(Review) as High_cus_review, COUNT(Review) as count_review from excel  
Group by Review, [Prodcut Type]  
Order by count_review Desc  
OFFSET 0 Rows  
Fetch next 10 Rows Only;  
  
-- How does the revenue varv over time (daily, monthly)?
```

100 %

Results Messages

	Prodcut Type	High_cus_review	count_review
1	Veggi Pizza	Good	11
2	Veggi Pizza	Excellent	10
3	Chicken Pizza	Good	9
4	Spicy Panner Pizza	Good	9
5	Margherita Pizza	Average	7
6	Chicken Pizza	Not Available	7
7	Spicy Panner Pizza	Bad	7
8	Chicken Pizza	Excellent	6
9	Veggi Pizza	Average	6
10	Margherita Pizza	Good	5

File Edit View Query Project Debug Tools Window Help

task1

Execute Debug

Object Explorer

Connect

DESKTOP-B0V5UN7\SQLEXP

Databases

System Databases

Assi

Assignment

ReportServerSQLEXP

task1

yt_emp

Security

Server Objects

Replication

Management

SQLQuery1.sql - DE...B0V5UN7\del(53)* X

Fetch next 10 Rows Only;

```
-- How does the revenue vary over time (daily, monthly)?  
SELECT SUM(price) AS Total, DAY(date) AS Daily, MONTH(Date) AS Month_price , YEAR(Date) As Year_price FROM Excel  
GROUP BY DAY(date), MONTH(Date) , YEAR(Date)
```

100 %

Results Messages

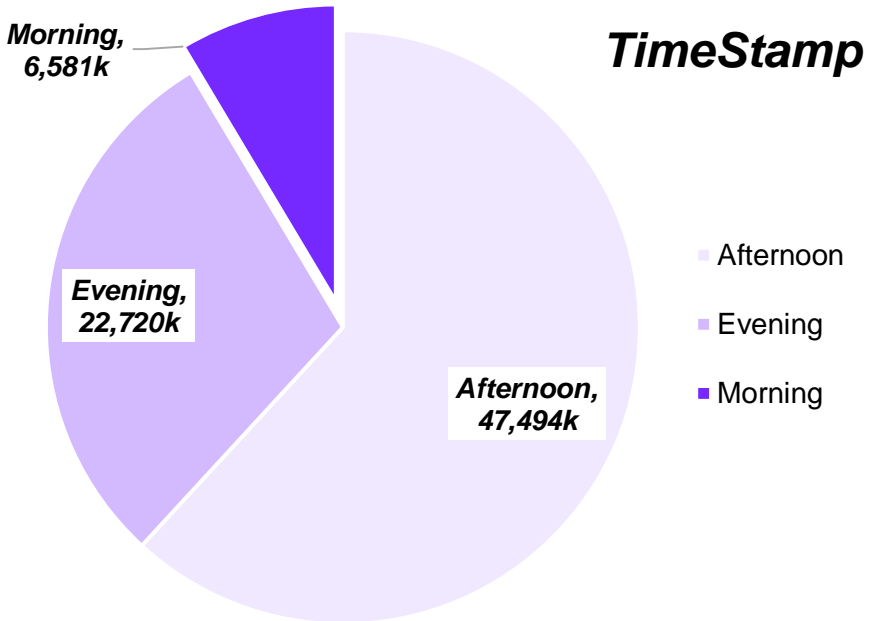
	Total	Daily	Month_price	Year_price
1	150	1	5	2019
2	280	1	10	2019
3	150	2	1	2019
4	120	2	1	2020
5	200	2	3	2018
6	140	3	2	2018
7	200	3	2	2019
8	200	4	5	2019
9	150	4	6	2019
10	240	4	7	2019
11	150	4	10	2020
12	120	5	2	2018
13	150	5	6	2018
14	120	5	6	2019
15	150	5	9	2020
16	200	5	12	2018
17	200	6	8	2018
18	120	6	10	2018
19	200	6	10	2020

DATA VISULIZATION USING EXCEL

Review	Count_Review	Row Labels	Sum of Total amount	Row Labels	Sum of Total amount	Row Labels	Sum of Total amount
Average	18	Afternoon	47494	2006	400	Afternoon	47494
Bad	13	Evening	22720	Qtr2	400	Chicken Pizza	10600
Excellent	22	Morning	6581	2018	24485	Margherita Pizza	13770
Good	34	Grand Total	76795	Qtr1	9568	Spicy Panner Pizza	13374
Not Available	13			Qtr2	4804	Veggi Pizza	9750
				Qtr3	7600	Evening	22720
				Qtr4	2513	Chicken Pizza	5550
Location	Cus_location	Row Labels	Sum of Total amount	2019	31390	Margherita Pizza	2400
BTM	30	Afternoon	47494	Qtr1	2870	Spicy Panner Pizza	5900
J.P Nagar	9	BTM	12370	Qtr2	12500	Veggi Pizza	8870
Kormangala	23	Cash	3970	Qtr3	6900	Morning	6581
Maratthahalli	32	Online	8400	Qtr4	9120	Chicken Pizza	913
Not Available	6	J.P Nagar	2870	2020	20520	Margherita Pizza	181
		Cash	1000	Qtr1	2700	Spicy Panner Pizza	3400
		Online	1870	Qtr2	5280	Veggi Pizza	2087
Prodcut Type	TotalRevenue	Kormangala	11170	Qtr3	8000	Grand Total	76795
Chicken Pizza	5400	Cash	5770	Qtr4	4540		
Veggi Pizza	4620	Online	5400	Grand Total	76795		
Spicy Panner Pizza	3160	Maratthahalli	20904				
Margherita Pizza	2280	Cash	9334	Row Labels	Sum of Pid		
		Online	11570	Average	9960		
		Not Available	180	Bad	4983		
		Evening	22720	Excellent	9384		
		BTM	6940	Good	13056		
		Cash	2300	Not Available	7003		
		Online	4640	Grand Total	44386		
		J.P Nagar	1800				
		Online	1800				
		Kormangala	8780				
		Cash	1600				
		Online	7180				
		Maratthahalli	3700				
		Cash	2300				

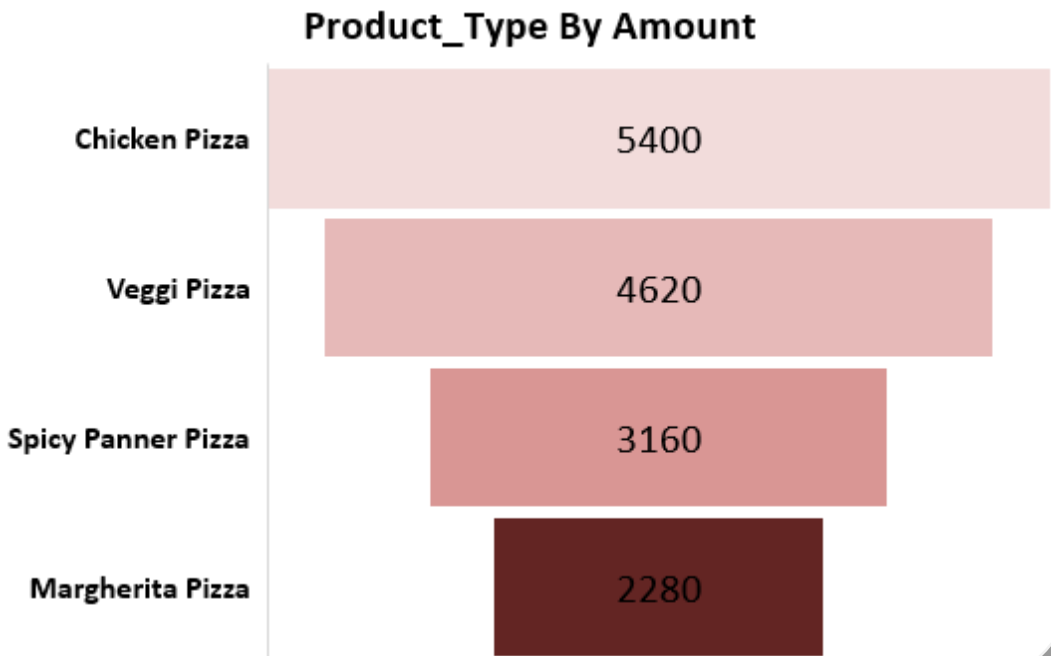
DATA VISULIZATION USING EXCEL

UPON VISUALLY ANALYZING THE DATA FROM K PIZZA RESTAURANT, IT IS OBSERVED THAT.

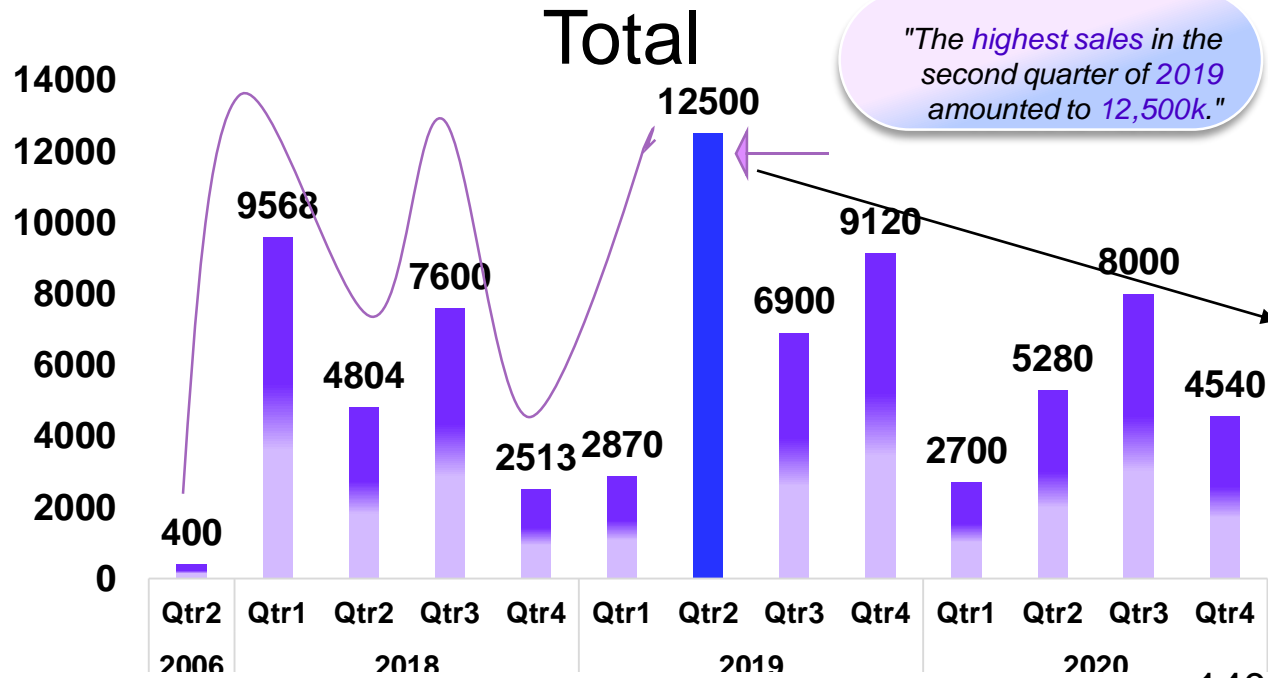


The *timestamp* with the highest sales was in the *afternoon*, reaching a total of "47,494k"

Chicken pizza is the most favored, with a total of "5400," while *Margherita pizza* is the least favored, with "2280".

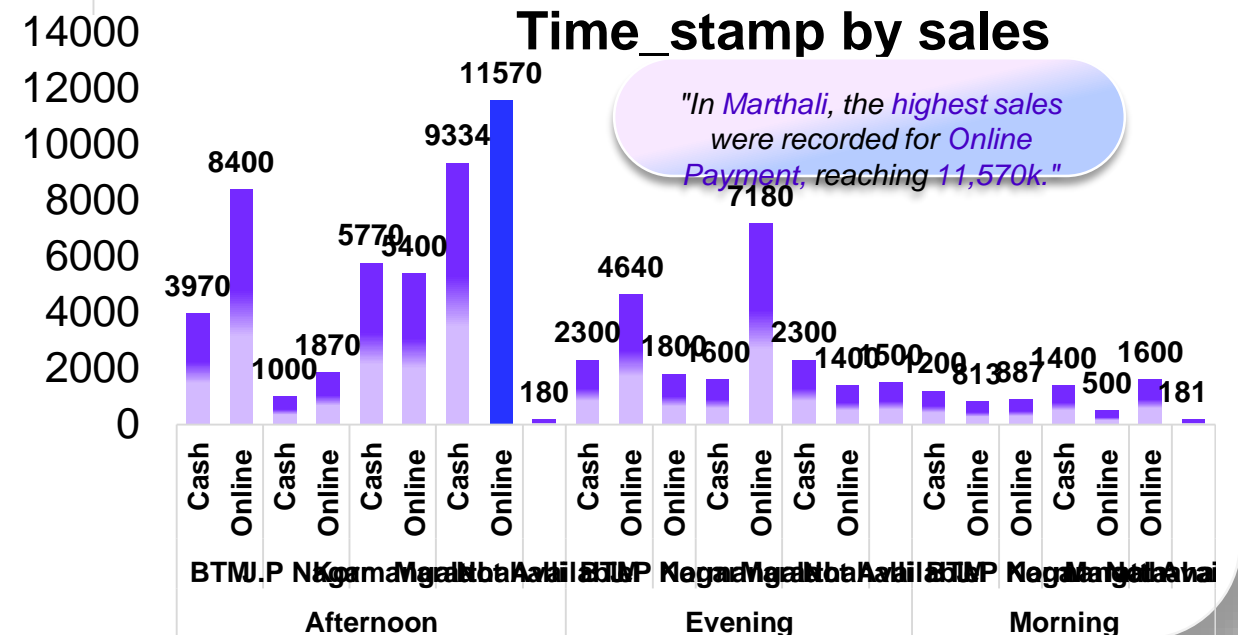


DATA VISULIZATION USING EXCEL



In 2019 Qtr 2, the highest sales were recorded at "12500." However, from Qtr 3 in 2019 onwards up to Qtr 4 in 2020, we observe a decline in sales. We need to investigate the reasons behind this trend

"In Marthali, the highest sales were recorded for Online Payment, reaching 11,570k."



DASHBOARD OF K PIZZA



Sales Dashboard

Time stamp

Afternoon Evening Morning

Review

Average Bad Excellent Good Not Available

Total Amount

80375k

Year

2006
2018
2019
2020
<24-05-...
>01-01-...
2007
2008
2009

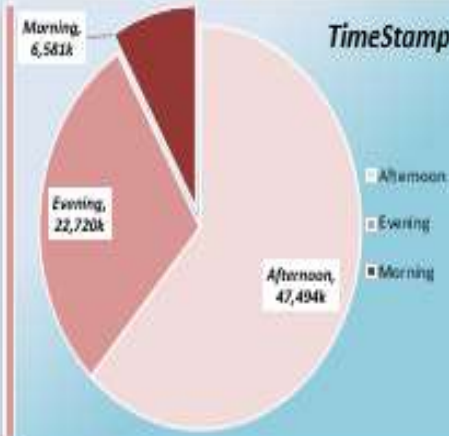
Month

Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec

Reviews



TimeStamp



Count_Reviews



Product_Type By Amount



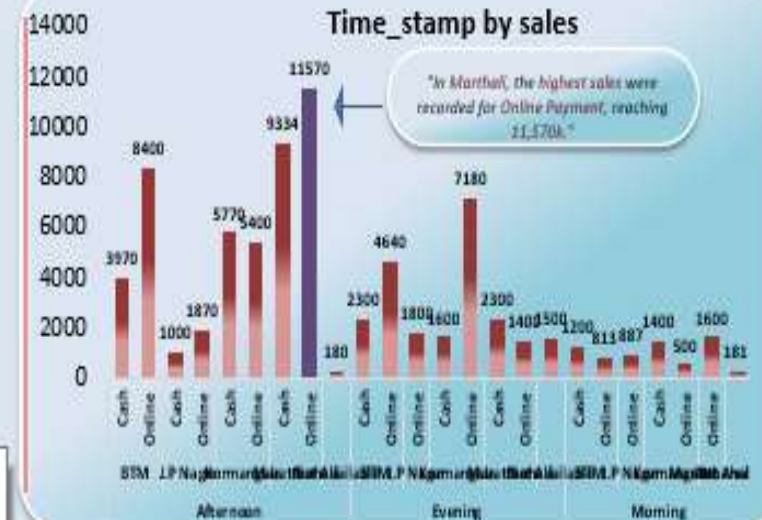
Cus_location



Total



Time_stamp by sales



THANK YOU

