DATA ANALYST – PORTFOLIO

Part 1 **MYSQL server**

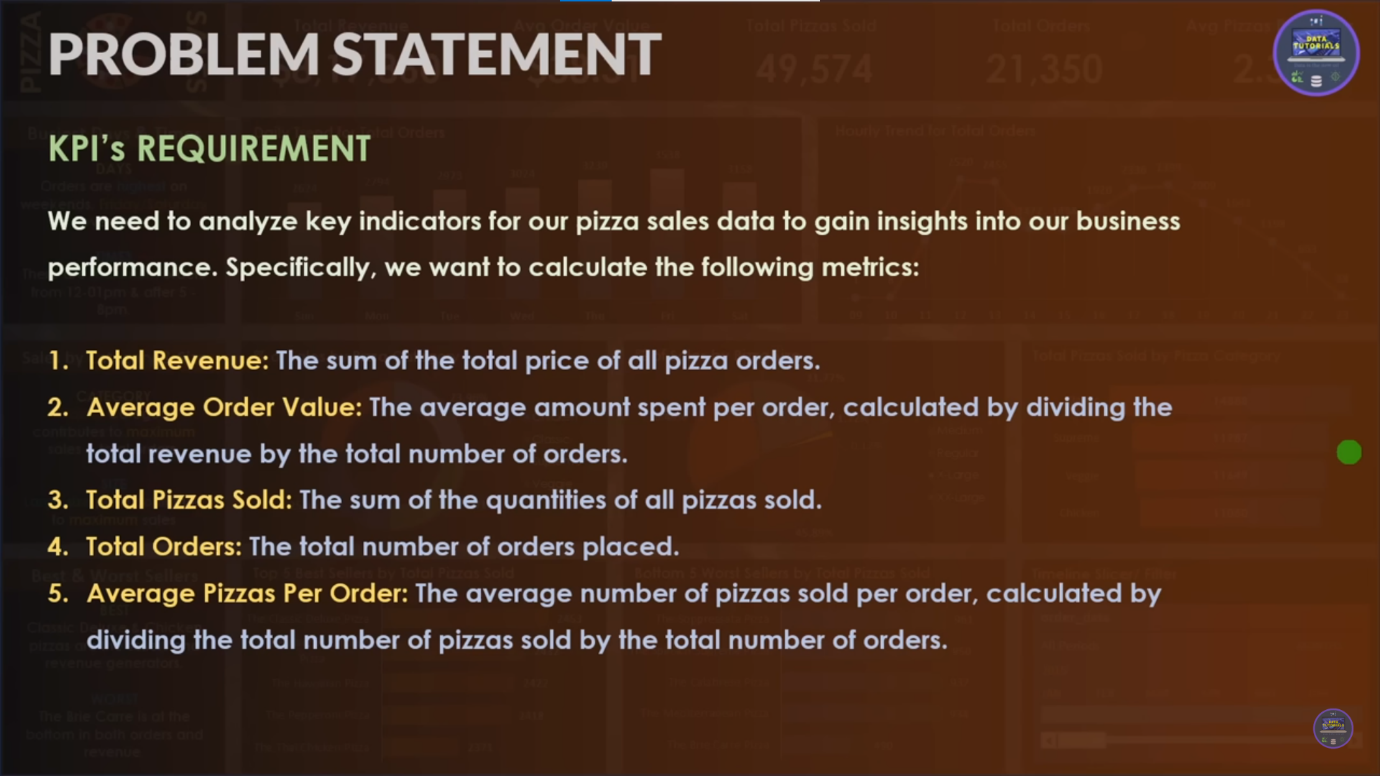
* Import data
* Create database
* Create queries
* Creating report

Part 2 **Power BI**

* Connecting Ms sql server (data source here is ms sql server)
* Data cleaning process (Power querry tool)
* Data processing
* Data visualization

Creating dashboards (we will create 2 dashboards – 1st best selling 2nd worst selling)

A **Key Performance Indicator (KPI)** is a visual cue that communicates the amount of progress made toward a measurable goal



When to use a KPI

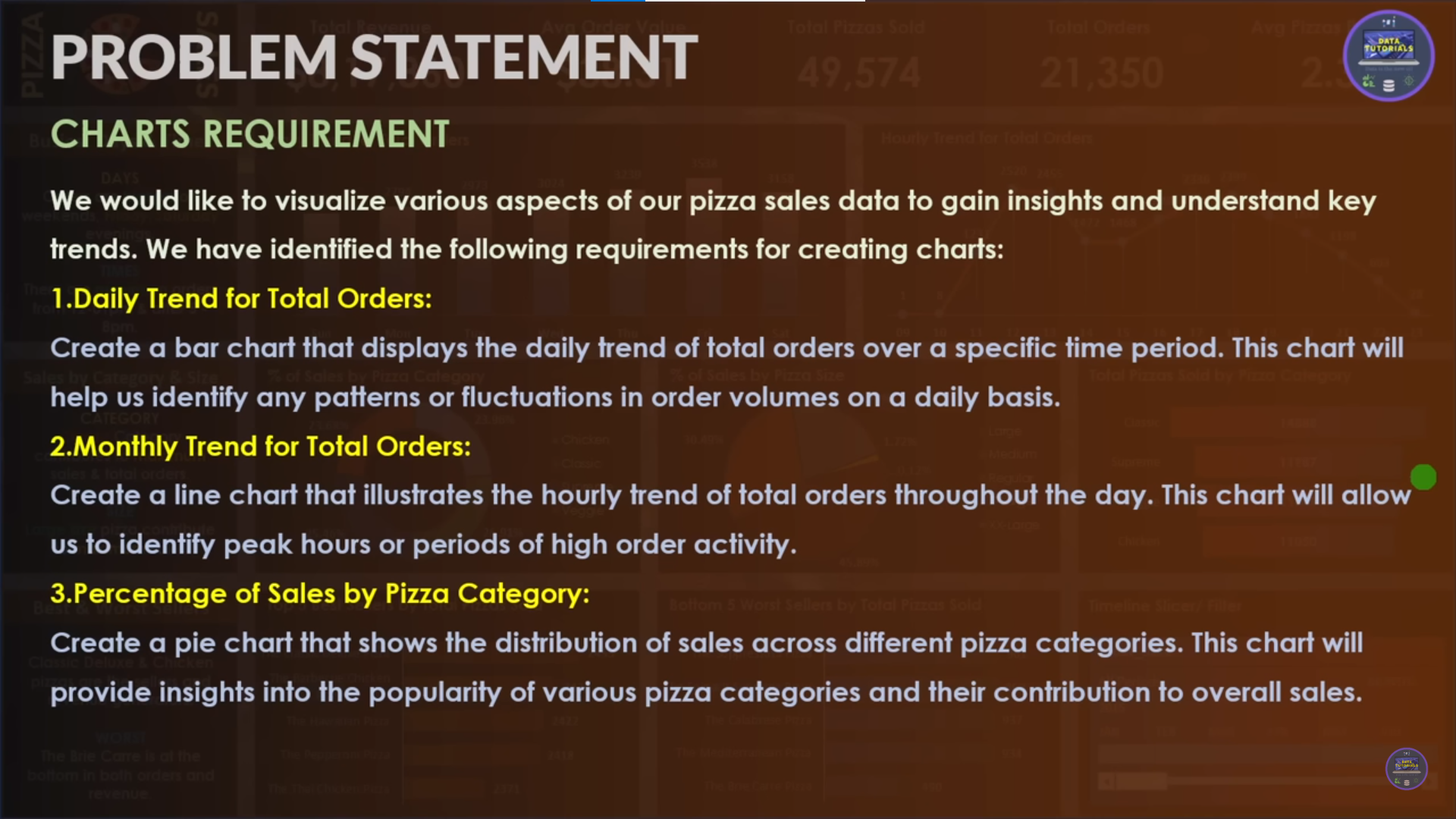
KPIs are a great choice:

* To measure progress. Answers the question, "What am I ahead or behind on?"
* To measure distance to a goal. Answers the question, "How far ahead or behind am I?"

KPI requirements

A designer bases a KPI visual on a specific measure. The intention of the KPI is to help you evaluate the current value and status of a metric against a defined target. A KPI visual requires a *base* measure that evaluates to a value, a *target* measure or value, and a *threshold* or *goal*.

**CHARTS REQUIREMENT -**





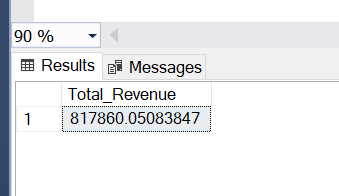


KPI (key performance indicator)USED

QUERRIES USED ARE-

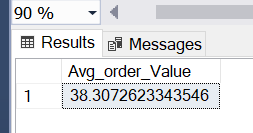
1 . for TOTAL REVENUE – the total Sum Is total revenue

select SUM(total\_price) AS Total\_Revenue from pizza\_sales

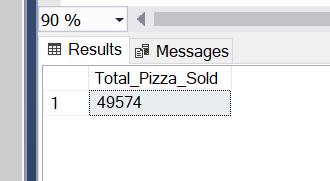


2. AVERAGE ORDER VALUE –

SELECT SUM(total\_price) / COUNT(DISTINCT order\_id) AS Avg\_order\_Value from pizza\_sales

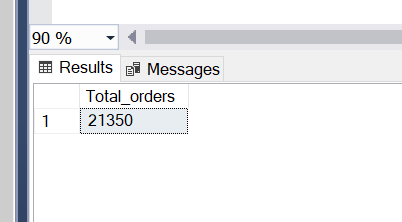


3. TOTAL PIZZA SOLD – sum of all quantities



4. Total ORDER – total orders

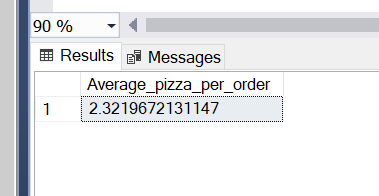
SELECT COUNT(DISTINCT order\_id) AS Total\_orders from pizza\_sales



5. AVERAGE PIZZAS PER ORDER -

SELECT CAST(SUM(quantity) AS DECIMAL (10,2)) /

CAST(COUNT (DISTINCT order\_id) AS DECIMAL(10,2)) AS Average\_pizza\_per\_order from pizza\_sales



(here cast function is used as CAST (X AS DECIMAL(10,2) means upto 10 decimals places but only 2 will be shown as output Here if we cast whole then final output will be in 2 decimals)

**CHART REQUIREMENTS**

1. DAILY TRENDS FOR TOTAL ORDER – all orders placed on all week days

SELECT DATENAME(DW, order\_date) AS order\_day, COUNT(DISTINCT order\_id) AS Total\_orders

from pizza\_sales

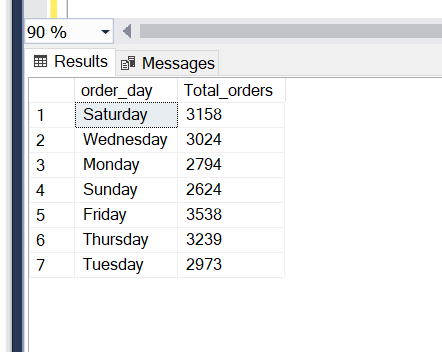
GROUP BY DATENAME(DW, order\_date)

NOTE – whenever u are bringing column and using with aggregate You have to use GROUP BY clause always so it will be grouping

GROUP BY ‘CATEGORICAL FIELD’

DATE Name function is used here

Above querry DW is used to retrieve name of week

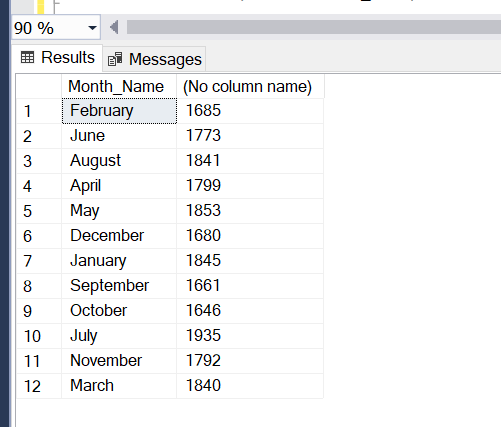


2. MONTLY TREND OF TOTAL ORDERS - DATENAME function will be used , parameter1 will be MONTH, for which month so parameter2 order\_date

SELECT DATENAME(MONTH, order\_date) AS Month\_Name, COUNT(DISTINCT order\_id) AS Total\_Orders

FROM pizza\_sales

GROUP BY DATENAME(MONTH, order\_date)



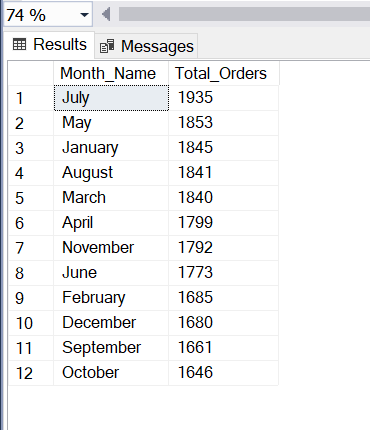
To know which month has high we can order Total\_Orders as decending order

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



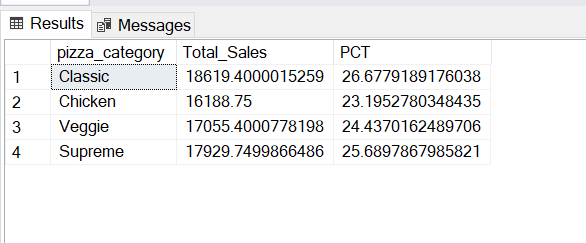
3. Percentage of Sales by Pizza Category –

SELECT pizza\_category, SUM(total\_price) as Total\_Sales, SUM(total\_price) \* 100 / (SELECT SUM(total\_price) from pizza\_sales WHERE MONTH(order\_date)=1 ) AS PCT

FROM pizza\_sales

WHERE MONTH(order\_date) = 1

GROUP BY pizza\_category

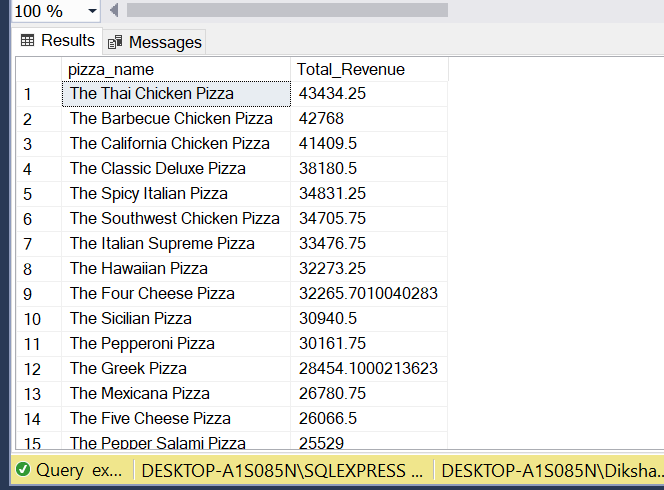


4. TOP 5 BEST SELLER BY REVENUE-

SELECT pizza\_name, SUM(total\_price) AS Total\_Revenue FROM pizza\_sales

GROUP BY pizza\_name

ORder BY Total\_Revenue DESC

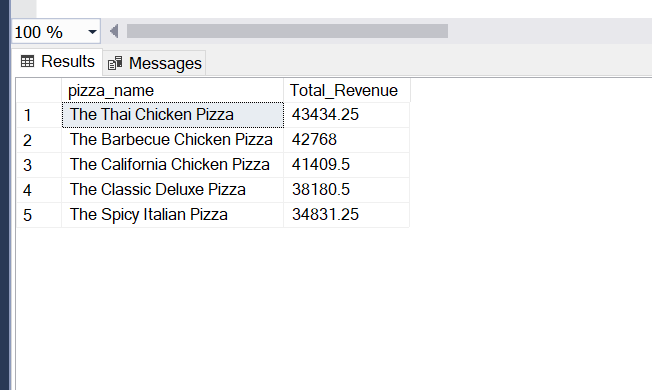


**FOR TOP 5 we will use TOP command**

SELECT TOP 5 pizza\_name, SUM(total\_price) AS Total\_Revenue FROM pizza\_sales

GROUP BY pizza\_name

ORder BY Total\_Revenue DESC

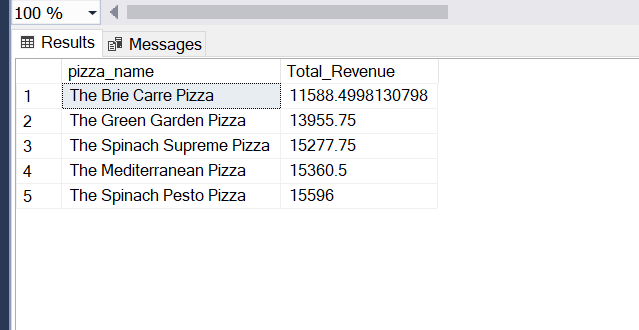
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**FOR Bottom 5 we will use TOP command – just remove desc or add ASC in last line**

SELECT TOP 5 pizza\_name, SUM(total\_price) AS Total\_Revenue FROM pizza\_sales

GROUP BY pizza\_name

ORder BY Total\_Revenue ASC

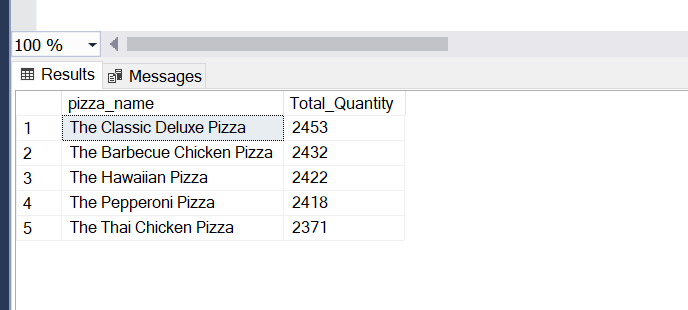
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TOP 5 BEST SELLER BY Quantity

SELECT TOP 5 pizza\_name, SUM(quantity) AS Total\_Quantity FROM pizza\_sales

GROUP BY pizza\_name

ORder BY Total\_Quantity DESC

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**PART 2 - POWER BI (DASHBOARD)**

1. Connect database to power bi
2. We will perform data transform first then

3)

Data Cleaning will be done

Eg = 1st replace-ment done

Like XLarge converted to X-Large

Like M to Medium

1. Apply changes
2. Go to visuals
3. First we will just make all the KPI structure
4. Go to Measure and create them all
5. TOTAL REVENUE - For this we need Total number of orders

Calculate the total number of orders i.e so find 4th KPI first

Total Revenue = SUM(pizza\_sales[total\_price]

1. Average Order Value - For this we need Total number of orders is number of id i.e distinct id

Calculate the total number of orders i.e so find 4th KPI first

Querry are used as -

Order Day = UPPER(LEFT(pizza\_sales[Day Name],3))