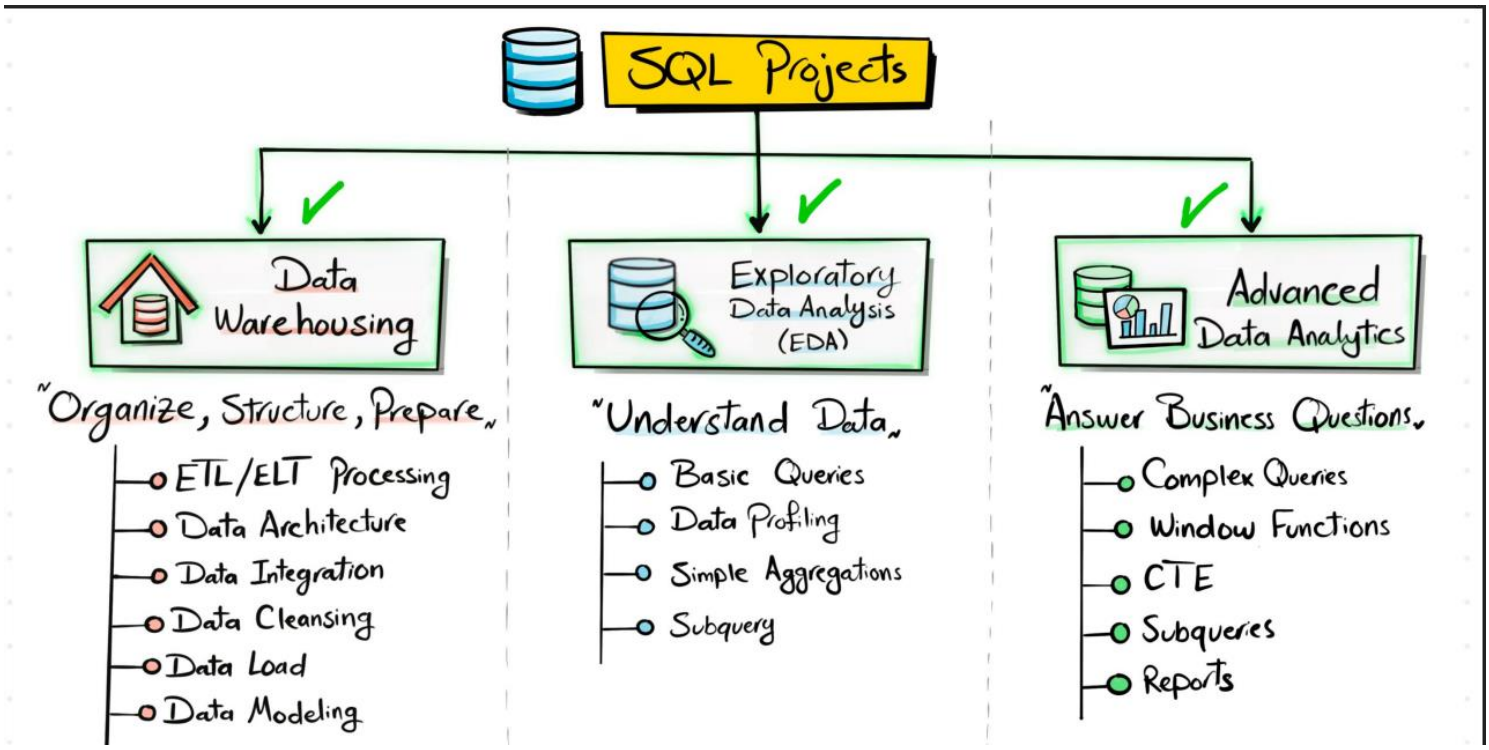
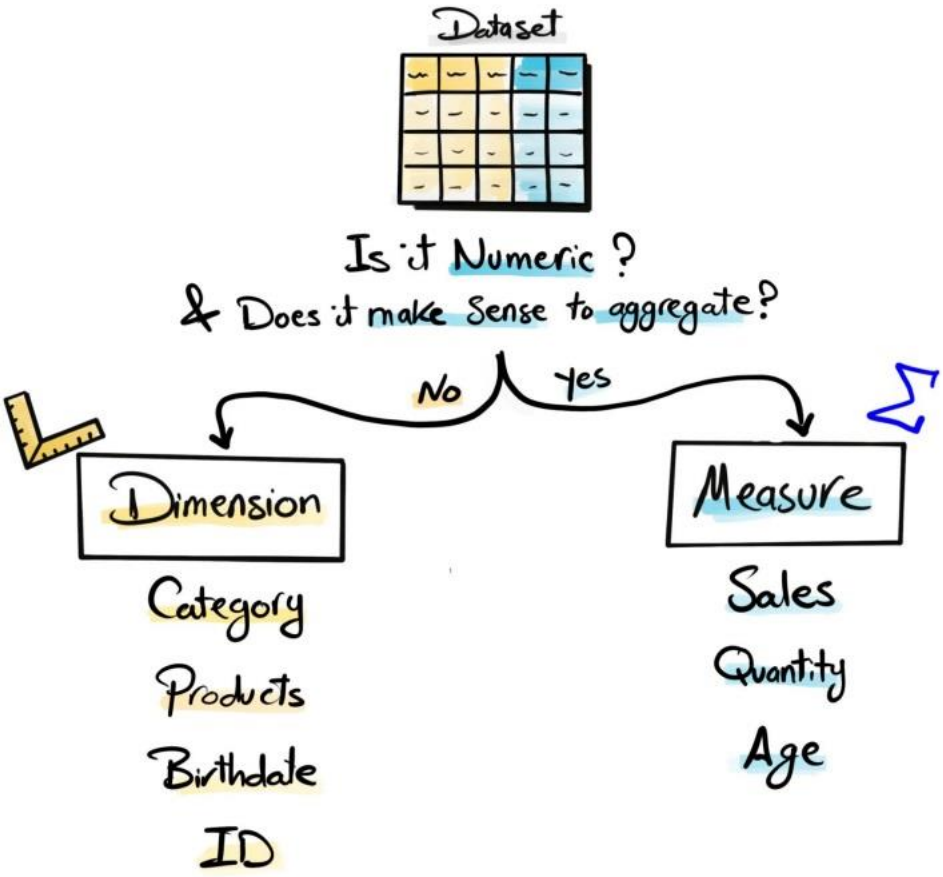
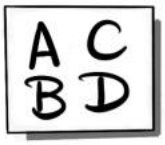
SQL DATA Analytics

Project



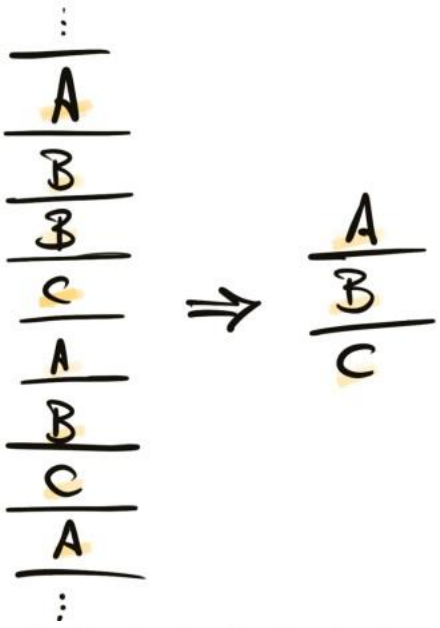

Dataset
Is it Numeric ?
& Does it make Sense to aggregate?
No
Yes
Dimension
Category
Products
Birthdate
ID
Measure
Sales
Quantity
Age

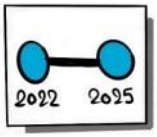


Dimensions Exploration

DISTINCT [Dimension]

DISTINCT Country
DISTINCT Category
DISTINCT Product

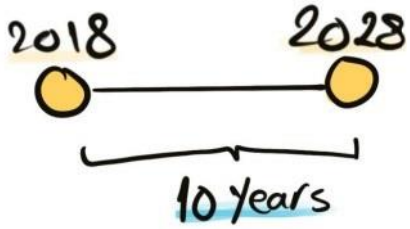




Date Exploration

MIN/MAX [Date Dimension]

MIN Order_date
MAX Create_date
MIN Birthdate

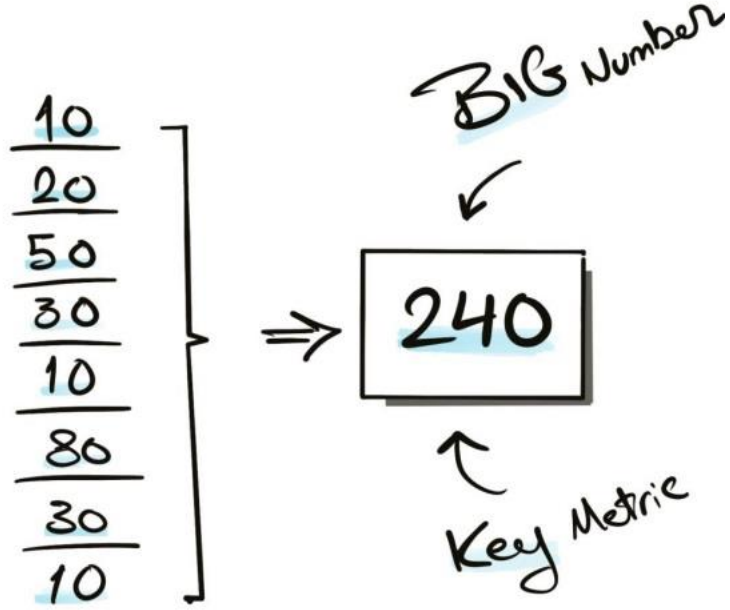


DATEDIFF

999 Measures Exploration

$\sum$ [Measure]

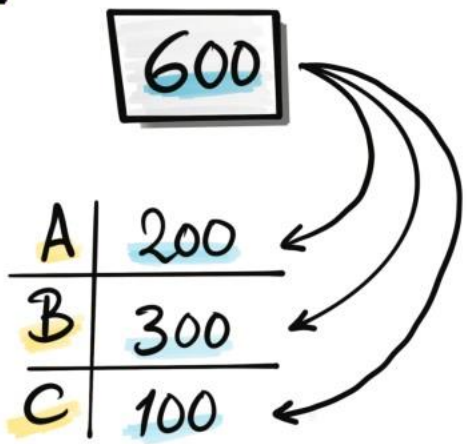
SUM (Sales)
AVG (Price)
SUM (Quantity)

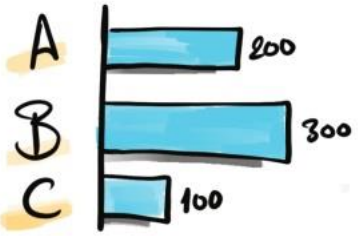


Magnitude

$\sum$ [Measure] By [Dimension]

- Total Sales By Country
- Total Quantity By Category
- Average Price By Product
- Total Orders By Customer



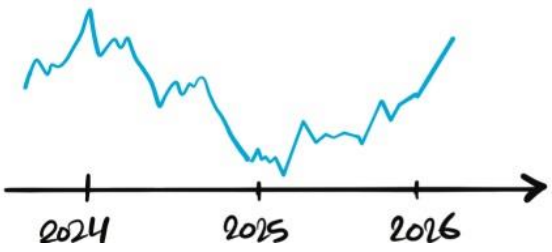


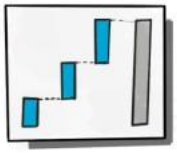
Change-Over-Time "Trends"

$\sum$ [Measure] By [Date Dimension]

- Total Sales By Year
- Average Cost By Month

2024	300
2025	100
2026	200





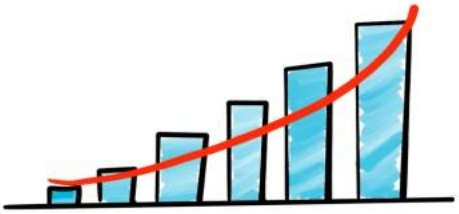
Cumulative Analysis

$\sum$ [Cumulative Measure] By [Date Dimension]

Running Total Sales By Year

Moving Average of Sales By Month

2024	300	300
2025	100	400
2026	200	600



WINDOW FUNCTIONS

Performance Analysis

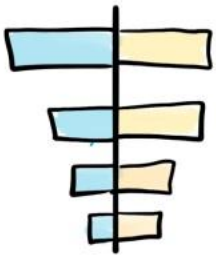
Current [Measure] – Target [Measure]

Current Sales – Average Sales

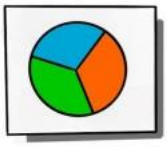
Current Year Sales – Previous Year Sales

Current Sales – lowest Sales

A	200	200	0
B	300	200	100
C	100	200	-100



WINDOW FUNCTIONS



Part-to-Whole

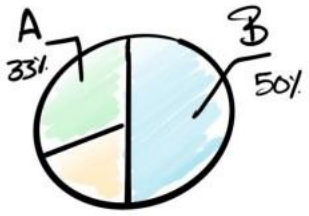
Proportional Analysis

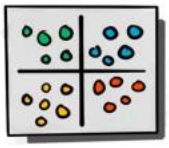
([Measure] / Total [Measure]) * 100 By [Dimension]

(Sales / Total Sales) * 100 By Category

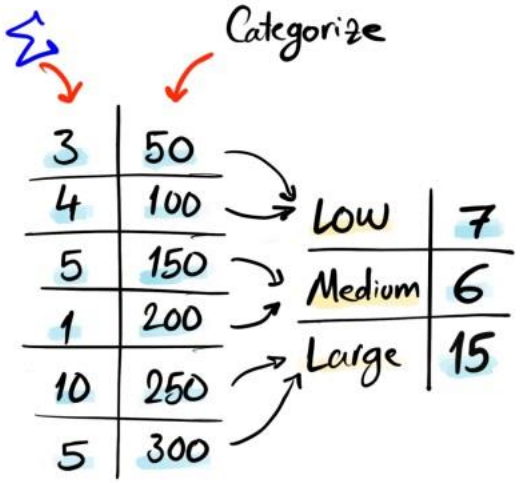
(Quantity / Total Quantity) * 100 By Country

A	200	33%
B	300	50%
C	100	17%





Data Segmentation



[Measure] By [Measure]

Total Products By Sales Range

Total Customers By Age

CASE WHEN STATEMENT