

Tableau Lecture 5: Level of Detail calculation

- Adding interactivity to visuals using Parameters
- Data Aggregation and Granularity
- Level of Detail calculation
 - FIXED LOD
 - INCLUDE LOD
 - EXCLUDE LOD

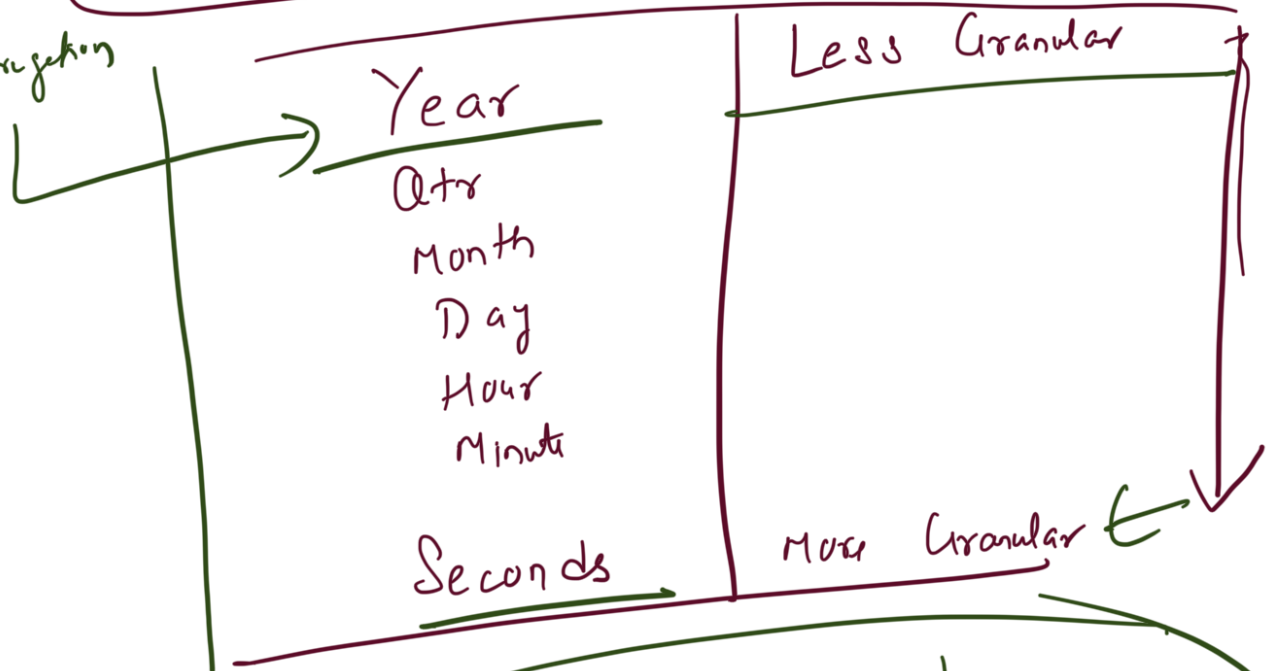


Data Granularity

↳ is a measure of level of detail in a data structure

More detail → higher the granularity
Less detail → lower the granularity

Aggregation



Granularity \propto $\frac{1}{\text{aggregation}}$

Which of these features gives the most granular result?

4 options

Active Duration(Most preferred: 30 seconds)

A Country

B State

C City

Which of these features gives the most aggregated result?

A Category

B Sub-Category

C Product ID

→ Aggregated Result

Level of Details

↳ Fixed

↳ Include

* ↳ Exclude Sales

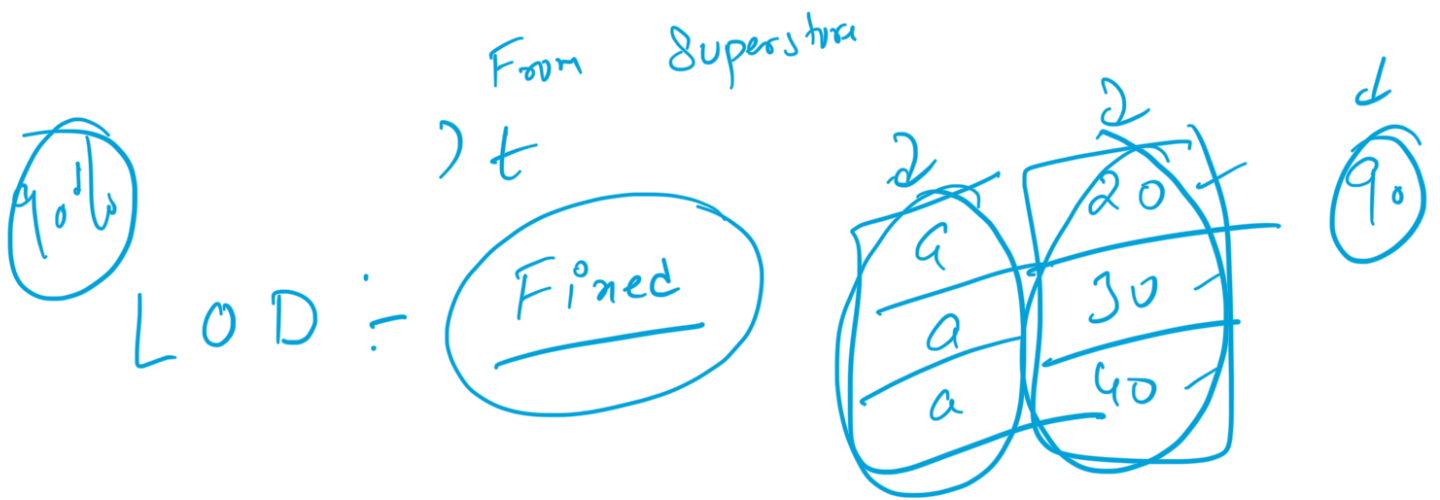
Category	Sub Category	Sales	% Contb
A	x	20	23%
A	y	30	34%
A	z	40	45%
B	m	15	40
B	n	25	40
C	x	7	46.67
C	y	5	33.33
C	z	3	20

Qn.1 what is the % Contribution of Sub Category to its parent?

$$\frac{20}{20+30+40} \times 100 \Rightarrow \frac{20}{90} \times 100 \approx 22.2$$

Qn.2. Select *, (Sales / total) * 100 as percentage - date

SQL: $\text{Select } *, \text{Sum(Sales)} \text{ over (Partition by Category)} \text{ as total}$



Category

Syntax = $\{ \text{LOD type: Aggregation} \}$

Fined (90%)	Include (8%)	Exclude (2%)
<p>→ Computes a value, using the Specified dimension, <u>without regard</u> to the dimension in view.</p> <p>→ It allows you to Create a Calculation that is <u>independent</u> of the view level of detail.</p>	<p>→ It Compute a value using the Specified dimension, but <u>Include the dimension</u> in view.</p> <p>→ It allows you to add additional dimensions to the computation while <u>maintaining</u> the original level of detail.</p>	<p>→ It Computes a value using the Specified dimension but <u>exclude</u> that dimension from the view.</p> <p>→ It allows you to remove dimension from the computation while <u>maintaining</u> the original level of detail.</p>

in isolate Specific

- Fixed :- use when you need to use dimensions in calculation. (category)
- Include :- use when you want to factor in additional dimensions dynamically along with view.
- Exclude :- use when you want to calculate values without the influence of a particular dimension.

Find the difference between the total sales for each region and average sales per customer for each region.

Ans. 2

$$M = \text{Sales} \rightarrow \text{Total - avg}$$

$$D = \text{Region, Customer} = X$$