

DATA ANALYTICS

ASSIGNMENT 4

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Challenge: Create calculations and LODs using Global Dataset in
Tableau

Calculations:

1. Model: Trend line and Reference line with the average

Trend Lines Options

Model Type

☐ Linear

☒ Logarithmic

☐ Exponential

☐ Power

☐ Polynomial Degree: 3

Factors

Build separate trend lines based on the following dimensions:

Options

☒ Show tooltips

☐ Show confidence bands

☒ Allow a trend line per color

☒ Show recalculated line for highlighted or selected data points

☐ Force y-intercept to zero

OK

Edit Reference Line, Band, or Box

Line

Band

Distribution

Box Plot

Scope

☒ Entire Table

☐ Per Pane

☐ Per Cell

Line

Value: SUM(Sales)

Average

Label: Computation

Tooltip: Automatic

Line only

SS

Formatting

Line:

Fill Above:

Fill Below:

☒ Show recalculated line for highlighted or selected data points

OK

Visualization:



2. Model: Used SUM(Quantity) Quick Table Calculation>Percentile Quantity>Filter>Range from 0.2 to 1

This implies we are selecting only from the range 20% to 100%

Filter [Percentile of Quantity]

Range of values

0.2 1

0% 100%

☐ Include Null Values

Reset OK Cancel Apply

Visualization:



Level of Detail (LOD):

1. Model:

LOD Expression:

```
IF(AVG([Sales])>500 AND AVG([Profit])>50)
THEN 'Accept'
ELSE 'Not'
END
```



Visualization:

The screenshot shows a Tableau visualization of a table. The table has columns for Sub-Category, Market, and Profit. The Profit column is color-coded based on the LOD expression. The legend on the right indicates that 'Accept' is represented by a blue square and 'Not' by an orange square.

Sub-Category	Africa	APAC	Canada	EMEA	EU	LA7AM	US
Accessories	150	250	120	180	100	110	110
Appliances	20	23	88	13	74	61	54
Art	429	910	498	443	983	564	221
Binders	25	125	140	20	149	81	39
Bookcases	62	94	80	55	112	88	34
Chairs	8	11	15	2	21	11	8
Copiers	90	85	50	39	79	44	134
Envelopes	4	13	18	4	19	5	20
Fasteners	426	809	443	413	751	476	504
Furniture	57	108	103	36	117	88	13
Labels	306	528	187	219	480	328	582
Machines	59	84	73	2	43	30	43
Paper	467	250	574	422	785	503	2,199
Phones	69	124	203	43	121	60	818
Storage	17	38	57	46	31	62	10
Supplies	3	8	17	4	28	8	27
Tables	26	42	27	27	47	58	14
Tools	8	3	8	1	10	4	4
Trainers	28	237	84	133	179	188	98
Writing	11	25	8	8	89	8	14
Labels	52	31	17	18	34	22	34
Machines	4	3	5	2	7	4	13
Phones	184	535	628	280	529	388	1,846
Paper	39	75	47	13	41	17	29
Storage	66	88	108	50	86	61	57
Supplies	10	10	22	1	20	10	25
Tables	432	706	304	388	634	461	871
Trainers	67	118	104	10	66	48	30
Writing	264	264	212	153	268	177	269
Labels	20	30	58	5	21	25	25
Machines	58	202	77	88	138	71	248
Phones	4	4	14	4	34	44	4

2. Model:

LOD Expression:

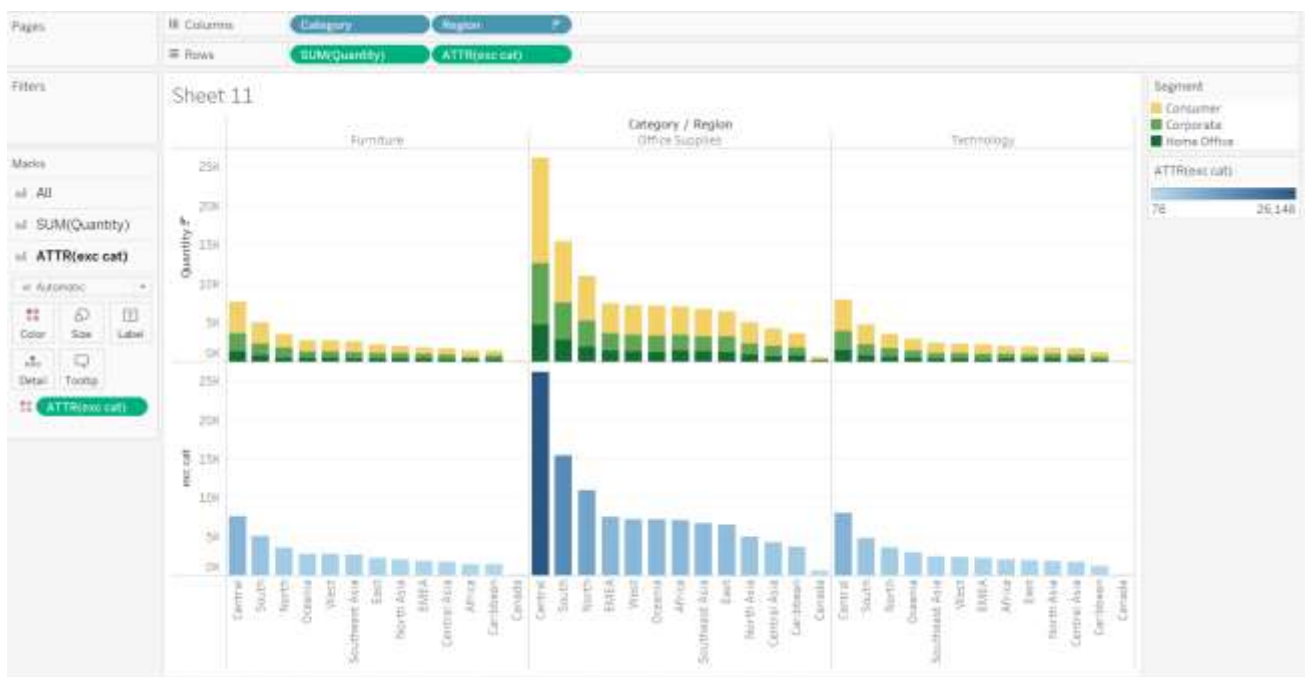
{ EXCLUDE [Segment]: SUM([Quantity]) }

✕

```
{ EXCLUDE [Segment]: SUM([Quantity]) }
```

The calculation is valid. 1 Dependency ▾ Apply OK

Visualization:



As we can observe here in the first row we passed the segment in colour and in the second row we passed our new calculated field “exc cat”. That is the reason we are not having a specific segment in the second visualization because we have excluded it in the LOD expression.

3. Model:

LOD Expression:

```
{ INCLUDE [Region]:AVG([Profit]) }
```

avg profit in region

×

```
{ INCLUDE [Region]:AVG([Profit]) }
```

The calculation is valid.

1 Dependency ▾

Apply

OK

Visualization:



We are including the region in average profit where the default minimum value is -179.3 and the maximum value is 321.7.