YK. MANASA REDDY

DA – ASSIGNMENT – 4

Create some Basic calculations and LOD expressions using Global Superstore data and sample Superstore data.

Basic Calculations

1)

Cost   ✕

```
[Sales] - [Profit]
```

The calculation is valid.   1 Dependency ▾   Apply   OK

Sign of profit   ✕

```
IF SUM([Profit]) > 0
THEN "Profitable"
ELSE "Nonprofitable"
END
```
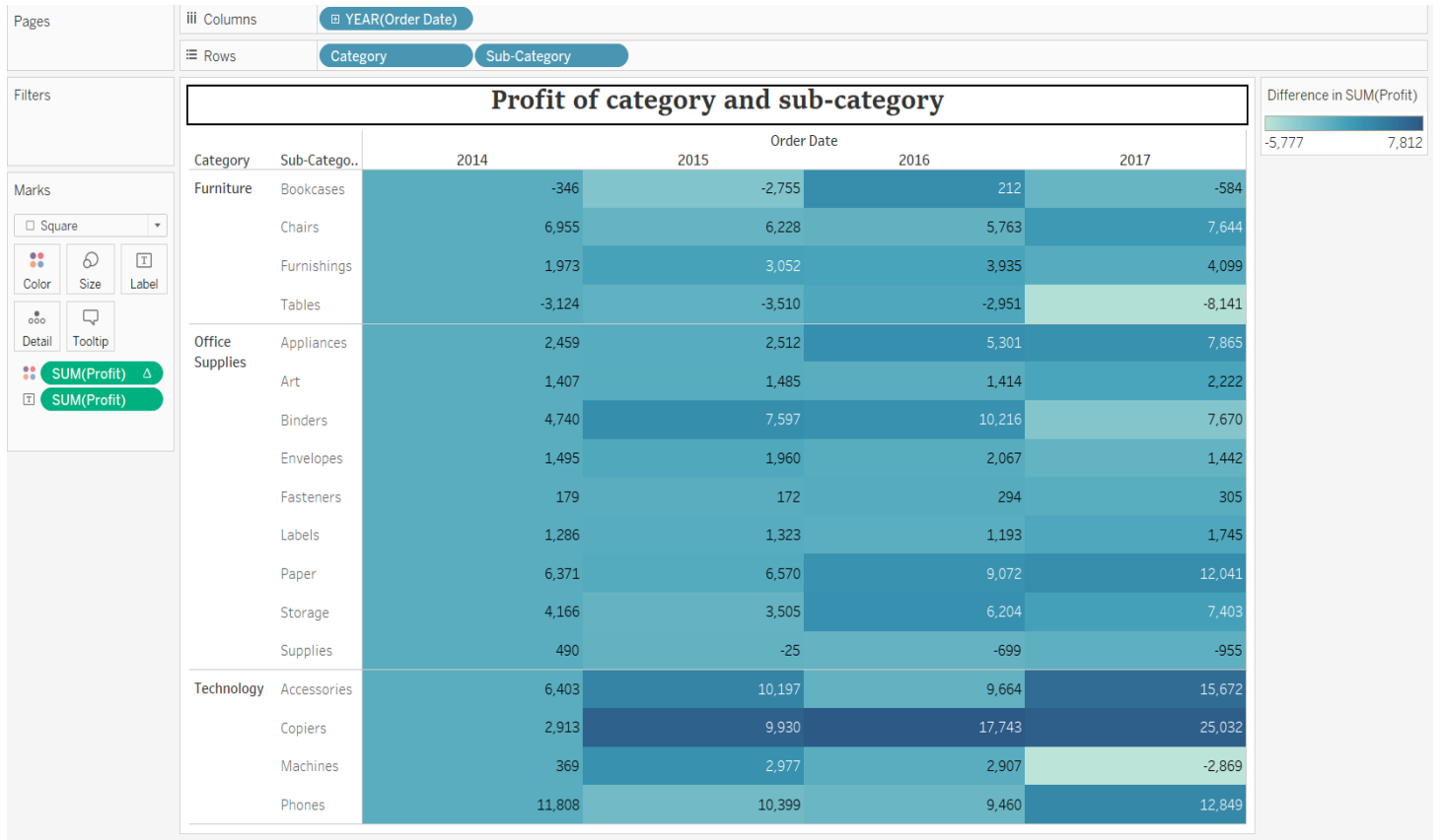
The calculation is valid.   1 Dependency ▾   Apply   OK
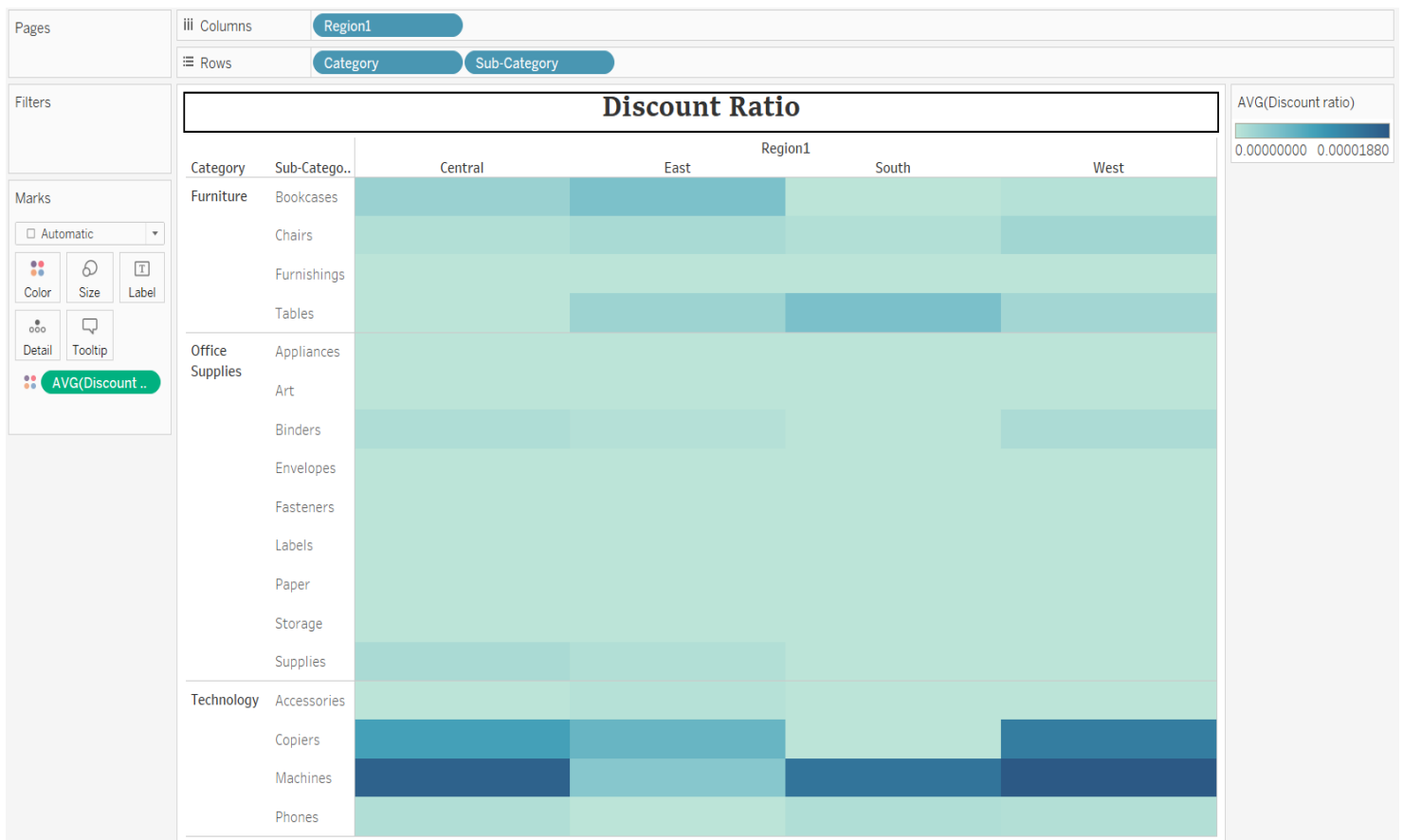

Profit and cost of sub-category and segment

2)

Pages			

	iii Columns	⊞ YEAR(Order Date)	
	☰ Rows	Category	Sub-Category

Profit of category and sub-category

Difference in SUM(Profit)

-5,777 ‖ 7,812

Category	Sub-Catego..	2014	2015	2016	2017
Furniture	Bookcases	-346	-2,755	212	-584
	Chairs	6,955	6,228	5,763	7,644
	Furnishings	1,973	3,052	3,935	4,099
	Tables	-3,124	-3,510	-2,951	-8,141
Office Supplies	Appliances	2,459	2,512	5,301	7,865
	Art	1,407	1,485	1,414	2,222
	Binders	4,740	7,597	10,216	7,670
	Envelopes	1,495	1,960	2,067	1,442
	Fasteners	179	172	294	305
	Labels	1,286	1,323	1,193	1,745
	Paper	6,371	6,570	9,072	12,041
	Storage	4,166	3,505	6,204	7,403
	Supplies	490	-25	-699	-955
Technology	Accessories	6,403	10,197	9,664	15,672
	Copiers	2,913	9,930	17,743	25,032
	Machines	369	2,977	2,907	-2,869
	Phones	11,808	10,399	9,460	12,849

(Order Date)

Filters

Marks

☐ Square ▾

- Color
- Size
- Label
- Detail
- Tooltip

SUM(Profit) △
SUM(Profit)

3)

Discount ratio		✕

```
IIF([Sales] > 2000, [Discount]/[Sales],0)
```

The calculation is valid.　　　1 Dependency ▾　　Apply　　OK

Pages				
	⦙⦙⦙ Columns	Region1		
	≡ Rows	Category	Sub-Category	

Discount Ratio

AVG(Discount ratio)

0.00000000　0.00001880

Category	Sub-Catego..	Central	East	South	West
Furniture	Bookcases				
	Chairs				
	Furnishings				
	Tables				
Office Supplies	Appliances				
	Art				
	Binders				
	Envelopes				
	Fasteners				
	Labels				
	Paper				
	Storage				
	Supplies				
Technology	Accessories				
	Copiers				
	Machines				
	Phones				

Filters

Marks

☐ Automatic ▾

Color　Size　Label
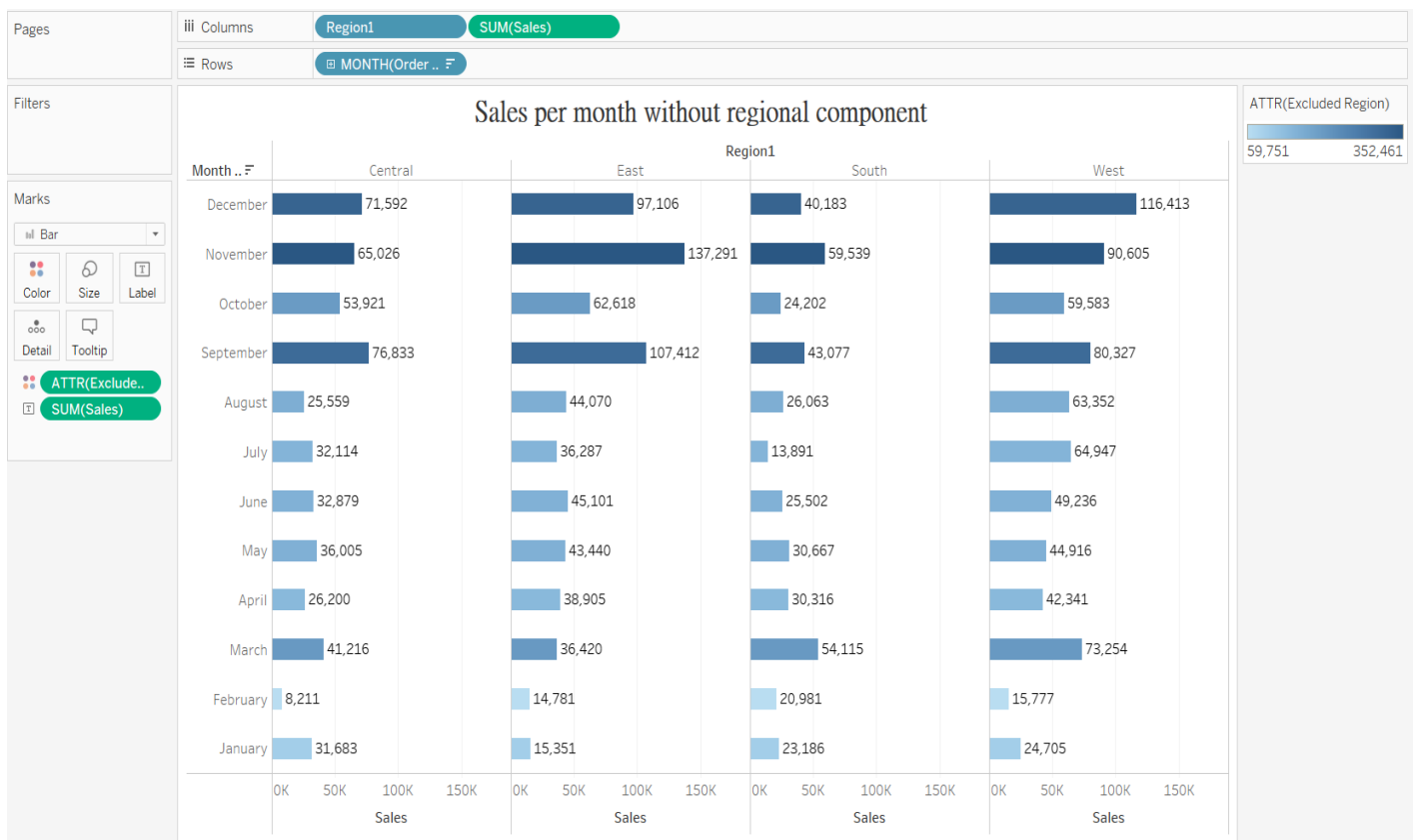
Detail　Tooltip

∷ AVG(Discount ..

LOD(Level of Detail) Expressions

1)

Excluded Region   ✕

`{ EXCLUDE [Region1] : SUM([Sales])}`

▶

The calculation is valid.   1 Dependency ▾   Apply   **OK**

Pages

Columns   Region1   SUM(Sales)

Rows   ⊞ MONTH(Order .. ⚏

Filters

Marks

⏸ Bar ▾

Color   Size   Label

Detail   Tooltip

ATTR(Exclude..

SUM(Sales)

ATTR(Excluded Region)

59,751   352,461

Sales per month without regional component

Month .. ⚏	Central	East	South	West
December	71,592	97,106	40,183	116,413
November	65,026	137,291	59,539	90,605
October	53,921	62,618	24,202	59,583
September	76,833	107,412	43,077	80,327
August	25,559	44,070	26,063	63,352
July	32,114	36,287	13,891	64,947
June	32,879	45,101	25,502	49,236
May	36,005	43,440	30,667	44,916
April	26,200	38,905	30,316	42,341
March	41,216	36,420	54,115	73,254
February	8,211	14,781	20,981	15,777
January	31,683	15,351	23,186	24,705

Region1

OK   50K   100K   150K   OK   50K   100K   150K   OK   50K   100K   150K   OK   50K   100K   150K

Sales   Sales   Sales   Sales

2)

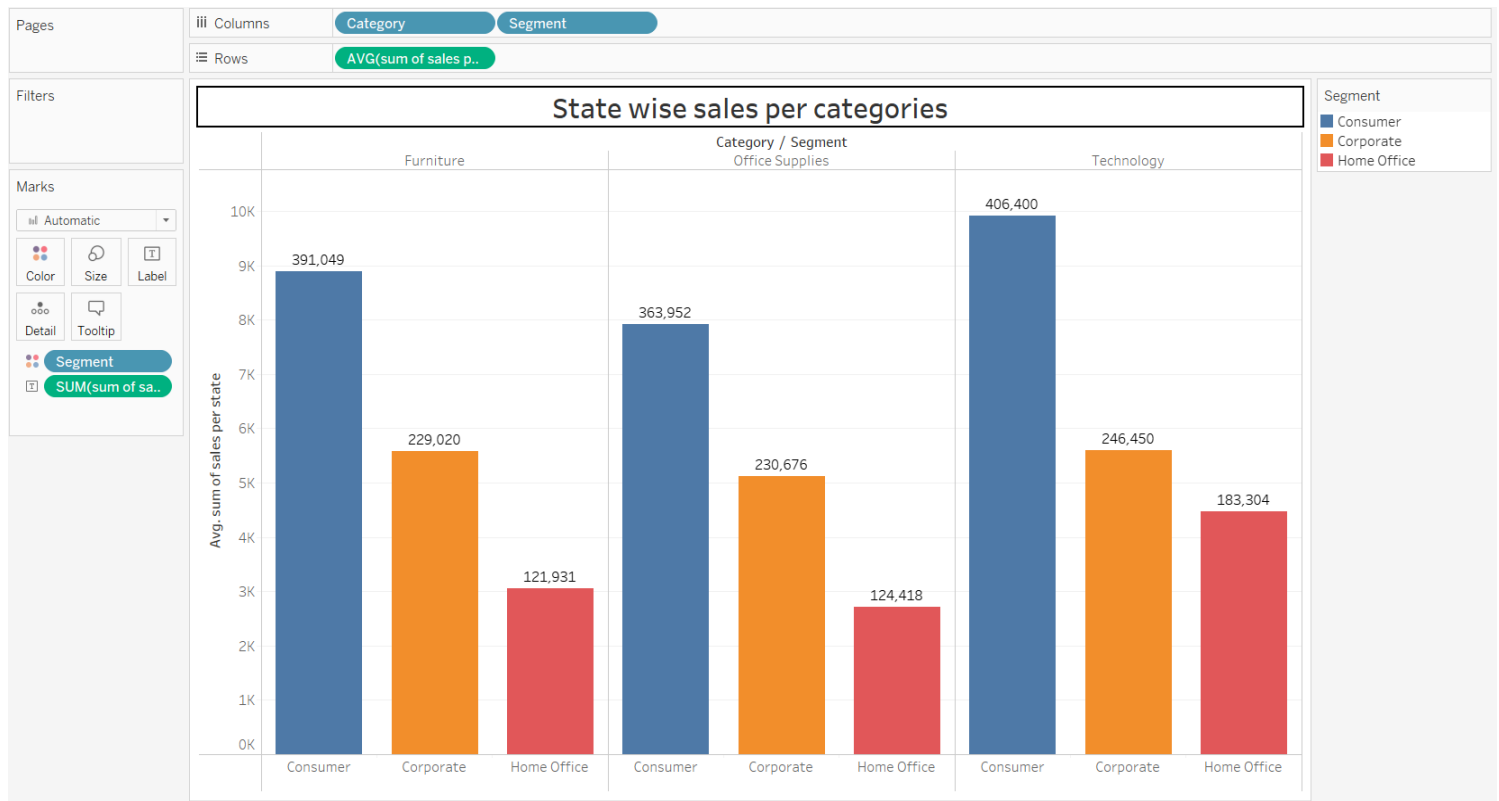sum of sales per state   ✕

{ INCLUDE [State] : SUM([Sales]) }

                                                        ▸

The calculation is valid.   1 Dependency ▾   Apply   OK

	Columns	Category	Segment
	Rows	AVG(sum of sales p..)	

Pages

Filters

Marks

Automatic ▾

| Color | Size | Label |
| Detail | Tooltip | |

Segment

SUM(sum of sa..)

Segment
- Consumer
- Corporate
- Home Office

State wise sales per categories

Category / Segment

| Furniture | Office Supplies | Technology |

Avg. sum of sales per state

- Furniture — Consumer: 391,049
- Furniture — Corporate: 229,020
- Furniture — Home Office: 121,931
- Office Supplies — Consumer: 363,952
- Office Supplies — Corporate: 230,676
- Office Supplies — Home Office: 124,418
- Technology — Consumer: 406,400
- Technology — Corporate: 246,450
- Technology — Home Office: 183,304

10K
9K
8K
7K
6K
5K
4K
3K
2K
1K
0K

| Consumer | Corporate | Home Office | Consumer | Corporate | Home Office | Consumer | Corporate | Home Office |

3)

Sales per Customer   ×

{ INCLUDE [Customer Name] : SUM([Sales]) }

                                                                    ▶

The calculation is valid.   1 Dependency ▾   Apply   OK

4)

Total Sales by sub-categ ✕

`{FIXED [Sub-Category] : SUM([Sales]) }`

The calculation is valid.   4 Dependencies ▾   Apply   OK

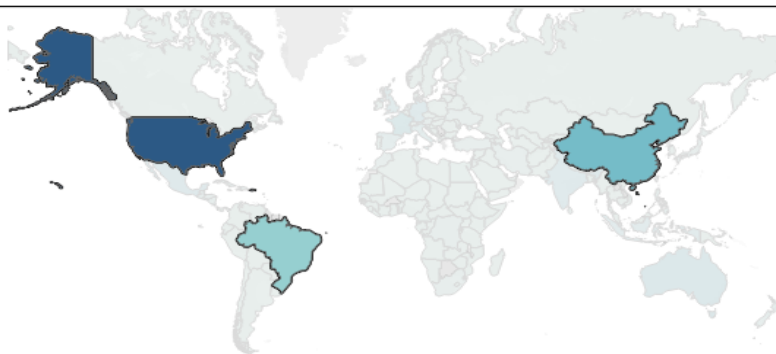Percent of total ✕

`SUM([Sales]) / SUM([Total Sales by sub-category])`
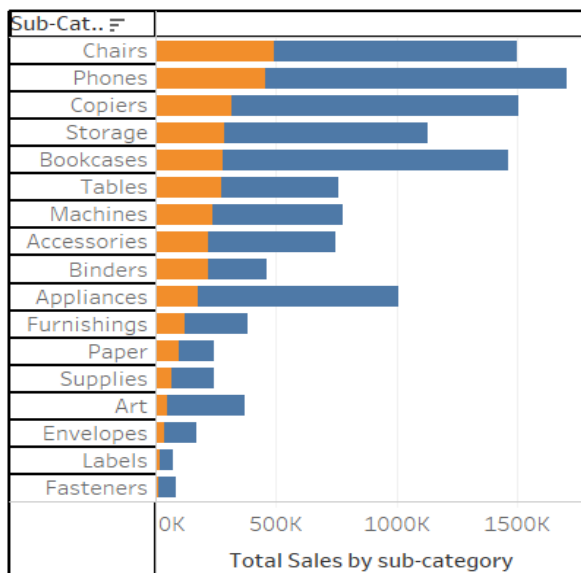
The calculation is valid.   2 Dependencies ▾   Apply   OK

Proporitional brushing

© 2023 Mapbox © OpenStreetMap

Sub-Cat.. ⫶	Total Sales by sub-category
Chairs	
Phones	
Copiers	
Storage	
Bookcases	
Tables	
Machines	
Accessories	
Binders	
Appliances	
Furnishings	
Paper	
Supplies	
Art	
Envelopes	
Labels	
Fasteners	

Sub-Cat.. ⫶	Percent of total ⫶
Binders	179.8%
Paper	
Tables	137.4%
Chairs	123.4%
Furnishings	119.9%
Machines	115.6%
Accessories	110.9%
Supplies	105.0%
Phones	100.2%
Labels	97.5%
Storage	95.5%
Copiers	78.2%
Envelopes	77.3%
Bookcases	71.0%
Appliances	66.4%
Fasteners	52.2%
Art	47.5%

Measure Names
■ Sales
■ Total Sales by s..

Sales
151 [   ] 2M
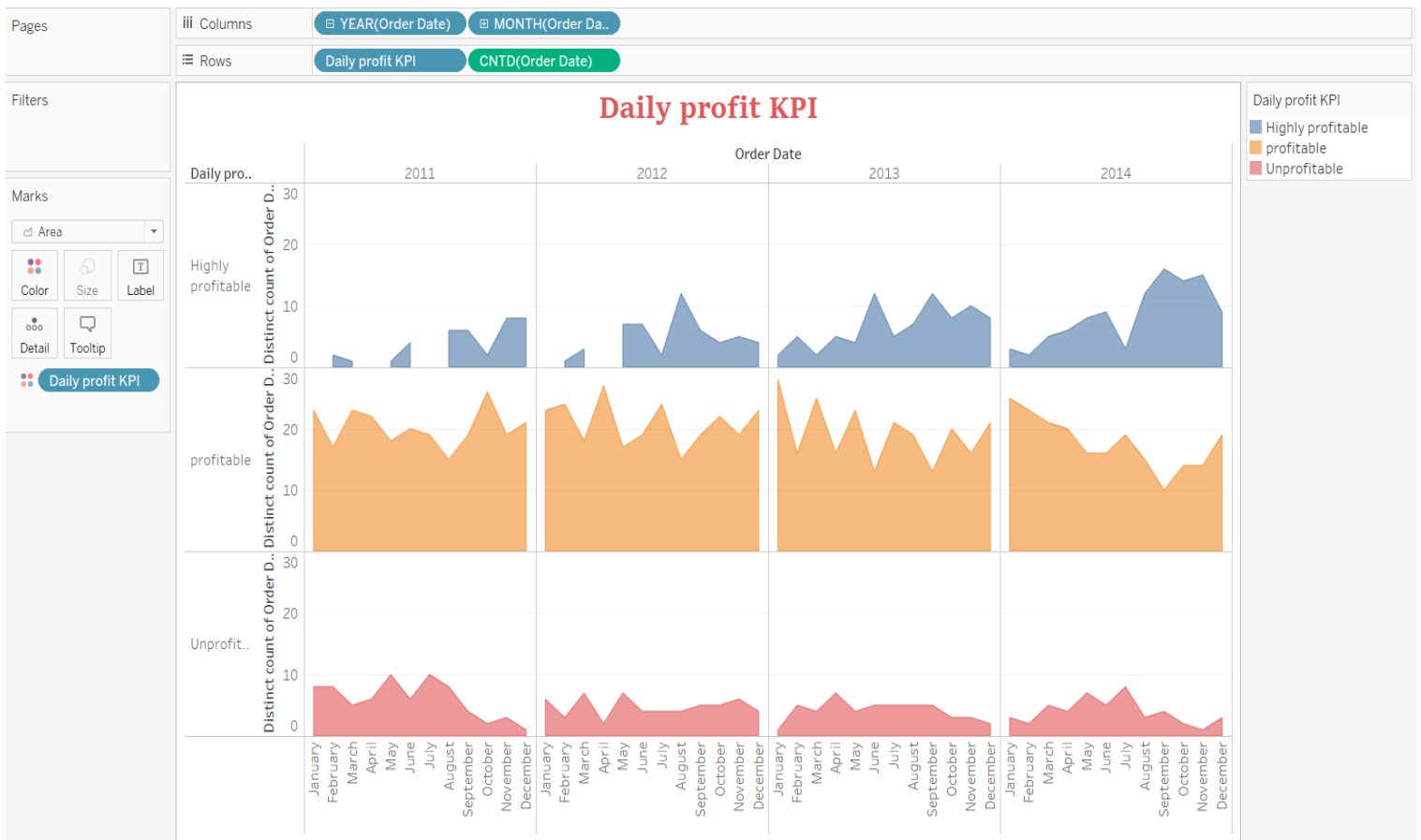
5)

Daily profit KPI   ✕

```
IF [Profit per day] > 2000 THEN "Highly profitable"
ELSEIF [Profit per day] <=0 THEN "Unprofitable"
ELSE "profitable"
END
```

▶

The calculation is valid.   1 Dependency ▾   Apply   **OK**

Profit per day   ✕

```
{ FIXED [Order Date] : SUM([Profit]) }
```

▶

The calculation is valid.   2 Dependencies ▾   Apply   **OK**

Pages

Columns   ⊟ YEAR(Order Date)   ⊞ MONTH(Order Da..

Rows   Daily profit KPI   CNTD(Order Date)

Filters

Marks

Area ▾

Color   Size   Label

Detail   Tooltip

Daily profit KPI

Daily profit KPI

Order Date

Daily profit KPI
- Highly profitable
- profitable
- Unprofitable

6)

customer Acquisition Da ✕

`{ FIXED [Customer ID] : MIN([Order Date]) }`

▶

The calculation is valid.   3 Dependencies ▾   Apply   OK

Cohort analysis